HIGH SCHOOL COURSE CATALOG

2022-2023

Fort Worth
INDEPENDENT SCHOOL DISTRICT
www.fwisd.org

Kent Paredes Scribner, Ph.D.
Superintendent of Schools
Fort Worth Independent School District
100 N. University Dr., Ste. SW 207, Fort Worth, Texas 76107
OFFICE 817.814.1900 FAX 817.814.1905
www.fwisd.org

Fort Worth
INDEPENDENT SCHOOL DISTRICT

January, 2022

TO THE PARENTS OF SECONDARY SCHOOL STUDENTS:

The mission of the Fort Worth Independent School District is to prepare ALL students for success in college, career and community leadership. We are committed to working with you in order to ensure that every student is provided the appropriate rigorous learning opportunities in order to fulfill that mission.

The information contained within this course catalog is designed to assist students, parents, and school staff in understanding the Fort Worth Independent School District and Texas State Graduation Requirements along with the courses and programs available to fulfill these requirements. Students and parents are urged to review this information and to work closely with the student's academic advisor to develop a long-range educational plan.

Students are required to earn an endorsement as part of their Foundation Graduation Diploma program. An endorsement allows a student to focus his/her studies to include a sequence of four courses/credits with selected advanced level courses aligned to his/her career and college interests. Various courses are available to meet each student's needs. Information regarding these courses is described across available disciplines and levels including advanced placement and dual credit courses.

Fort Worth Independent School District has developed an electronic student course scheduling system which includes pre-programmed graduation course progression plans. This scheduling system will facilitate a student's enrollment in the respective courses required for graduation, with a focus on a selected endorsement. This system will also assist students in understanding the timely course completion needed to qualify for certifications or licensures in specialized career fields. Therefore, it is recommended that students and their parents begin with the student's understanding of the career and college pathways information provided in this catalog.

Wise planning and decision-making concerning programs and course selections during the secondary school years increases the probability of successfully achieving academic and/or career goals. We look forward to working with you and your child.

Sincerely,

Kent P. Scribner, Ph.D.

BOARD OF EDUCATION

Tobi Jackson..... Board President, District 2

Quinton Phillips..... First Vice President, District 3

Vacant..... Second Vice President

Carin Evans..... Board Secretary, District 5

Jacinto Ramos, Jr. – District 1

Anne Darr – District 6

Anael Luebanos – District 8

Vacant – District 4

Dr. Michael Ryan – District 7

Roxanne Martinez – District 9

Kent P. Scribner, Ph.D.

Superintendent of Schools

Cover Artwork By:

Samuel Cavazos

Leonard Middle School Art Teacher

TABLE OF CONTENTS

BOARD OF EDUCATION 1
HIGH SCHOOL GENERAL INFORMATION 4
PUBLIC NOTICES 4
COLLEGE AND CAREER PREPARATION 4
PLANNING YOUR HIGH SCHOOL CAREER 6
EARNING COURSE CREDIT 6
CLASS RANKING, GPA-EXEMPT COURSES, WEIGHTED CLASSES, LATIN HONORS, HIGHEST RANKING GRADUATE 6
CLASS RANK BEGINNING WITH THE GRADUATION CLASS OF 2024 6
CLASS RANK CALCULATIONS FOR THE GRADUATING CLASS OF 2022 AND 2023 7
GPA-EXEMPT COURSES 11
WEIGHTED GRADE POINT AVERAGE FOR THE CLASS OF 2022 13
UNWEIGHTED GRADE POINT AVERAGE FOR THE CLASS OF 2022 13
WEIGHTED GRADE POINT AVERAGE BEGINNING WITH THE CLASS OF 2023 14
UNWEIGHTED GRADE POINT AVERAGE BEGINNING WITH THE CLASS OF 2023 14
LOCAL GRADUATION HONORS 15
HIGHEST RANKING GRADUATE 15
STUDENT CLASSIFICATION 15
AUTOMATIC ADMISSION INTO FOUR-YEAR PUBLIC UNIVERSITIES AND COLLEGES IN TEXAS 15
THREE YEAR/ EARLY GRADUATES 16
TRANSCRIPTS FOR SENIORS 16
ATTENDANCE REQUIREMENTS 16
GRADING GUIDELINES 17
HIGH SCHOOL GRADING GUIDELINES 17
Calculation of Six-Weeks Grades 17
Recording Grades in FOCUS 17
Semester Exams 17
Calculation of Semester Grades 17
Semester Exam Exemptions 18
Redoing Assignments or Retaking Tests 18
HIGH SCHOOL ASSESSMENTS 19
HIGH SCHOOL TESTING REQUIREMENTS 19
Texas English Language Proficiency Assessment System (TELPAS) 19
High School STAAR End of Course (EOC) Requirements 19
OPTIONAL HIGH SCHOOL TESTING 19
Credit by Examination 19
With Prior Instruction 19
Without Prior Instruction 20
HIGH SCHOOL ACADEMIC PROGRAMS 21
ADVANCED LEVEL COURSES 21
OPPORTUNITIES FOR COLLEGE CREDIT 21
ADVANCED PLACEMENT 22
EARLY COLLEGE HIGH SCHOOL 22
PTECH PROGRAM 22
DISTANCE LEARNING AND CORRESPONDENCE COURSES 22
DUAL CREDIT 22
DUAL ENROLLENT – OnRAMPS UT AUSTIN PROGRAM 23
TEXAS VIRTUAL SCHOOL NETWORK (TxVSN) 23
AVID 23
DYSLEXIA & RELATED DISORDERS 23
UNIVERSITY INTERSCHOLASTIC LEAGUE (UIL) NO PASS, NO PLAY WAIVERS 23
ENGLISH AS A SECOND LANGUAGE (ESL) 23
WORLD LANGUAGES 23

SPECIAL EDUCATION AND SECTION 504 24
HIGH SCHOOL DIPLOMA PROGRAM AND COLLEGE SCHOLARSHIPS 24
NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA) ELIGIBILITY 24
FOUNDATION GRADUATION PLANS 25
Endorsements and Performance Acknowledgments are available to all students. 25
REQUIRED COURSES FOR EACH GRADUATION PLAN 26
PERFORMANCE ACKNOWLEDGEMENTS 31
Distinguished Level of Achievement 32
Notations on Foundation Student Transcript 32
HIGH SCHOOL COURSE DESCRIPTIONS 33
Academic Preparatory Programs 33
English Language Arts 35
Reading 51
Speech Graduation Requirements 53
Mathematics 56
Science 66
Social Studies, Government, and Economics 85
Fine/Visual & Performing Arts 98
World Languages 138
Health and Physical Education 152
JROTC 166
Career and Technical Education 170
P TECH 327
T-STEM 376
Other Electives – Local Credit Only 388

HIGH SCHOOL GENERAL INFORMATION

The information contained in this catalog is subject to change without notice. For the most up-to-date catalog, please visit our website at **https://www.fwisd.org**.

PUBLIC NOTICES

The Fort Worth ISD offers Career and Technical Education programs in the following Career Areas:

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, Audio Video Technology, and Communications (Arts A/V)
- Business, Marketing, and Finance
- Education and Training
- Energy (P-Tech Program only)
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law and Public Service
- Manufacturing
- Science, Technology, Engineering, and Mathematics (STEM);
- Transportation, Distribution, and Logistics.

Admission to the above programs is based on interest, lottery selection, age appropriateness, and class space availability.

It is the policy of the District not to discriminate on the basis of race, color, religion, gender, national origin, age, sexual orientation, disability, gender identity and expression, military/veteran status, or any other basis prohibited by law in its vocational programs, services, or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.

Fort Worth ISD will take steps to assure that the lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs.

The Fort Worth Independent School District prohibits discrimination, including harassment, against any employee on the basis of race, color, religion, gender, national origin, age, sexual orientation, disability, gender identity and expression, military/veteran status, or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of District policy. The following persons have been designated to handle inquiries regarding the non-discrimination policies:

Patricia Sutton Director of Special Services 100 N. University Dr. Fort Worth, TX 76107 817.814.2458 Patricia.sutton@fwisd.org	Kevin Greene Director of Title IX 100 N. University Dr. Fort Worth, TX 76107 817.514.1830 Kevin.greene@fwisd.org	Lisa Langston Director of UIL Compliance 1501 University Dr. Fort Worth, TX 76107 817.815.7307 Lisa.langston@fwisd.org

COLLEGE AND CAREER PREPARATION

Middle School students receive guidance from a school counselor to develop a six-year graduation plan. This plan assists students in monitoring their progress toward graduation goals and post-secondary opportunities. As students enter high school, they should annually review and revise the plan as necessary.

Gr 6 - 7 **Begin** to investigate college/career goals and objectives and to discuss interests, possible careers, Career and Technical Education (CTE) Programs of Study, Gold Seal Program and Schools of Choice (GSPOC), high school offerings, and college options.

Gr 7 - 8 **Work** with parents and counselors as you create a six-year progression plan and investigate the various offerings within each of the career clusters. Select high school courses based on your chosen pathway or program selection. Review college catalogs, publications and websites. Take advantage of district programs and scholarships. Start researching scholarships and financial requirements. Students in grade 8 will take the PSAT8.

Gr 9 **Review** and revise your six-year progression plan with parents and counselors. The online course progression mapping will assist students in completing necessary course work to earn certifications or licensures, where such options exist. Begin building a high school transcript. Research colleges and universities of interest. Attend the District College Night to learn more about your opportunities.

Gr 10 **Review** and revise your six-year progression plan with parents and counselors. Participate in an individual academic conference with parent(s) and counselors to decide on courses for the 11th grade. Research colleges and universities of interest. Attend the District College Night to learn more about your opportunities. Students will take the PSAT during 10th grade.

Gr 11 **Review** academic plans and narrow college choices. Participate in an individual academic conference with parent(s) and the senior high school counselor to decide on courses for your senior year and to discuss post-graduation plans. Attend College Night. Take the PSAT in OCTOBER (National Merit Qualifying Test) Take the SAT or ACT in the late spring. Explore scholarship opportunities.

Gr 12 **Review** post-secondary options. Confer with counselor in early fall. Attend College Night. Take the SAT or ACT in the early fall. Send college applications early in the fall semester. Be mindful of college application deadlines. Submit housing application in the early fall. Attend financial aid programs. Send federal financial aid applications in October.

PLANNING YOUR HIGH SCHOOL CAREER

Your high school years will be a time to explore your interests for future career directions as well as to build a solid foundation of knowledge and skills through the courses you take. High school is an exciting time as you investigate who you are and what you like to do. You have control over your future. Will you make good choices? You will if you take advantage of opportunities to explore your areas of interest and to develop skills that prepare you for success in high school and beyond.

Some suggestions for beginning your plan now are…

- Discuss you interests, career possibilities, and goals with you parents, teachers, and school counselors;
- Develop good study habits and keep your grades up;
- Take core courses at the most challenging level you can handle to build on and extend your skills in reading, writing, listening, speaking, and thinking analytically;
- Take electives that will help you learn new skills and explore different career areas;
- Learn about the many different high school options available and begin to consider which one is right for you;
- Get involved in school and community activities that will help you learn;
- Talk to high school students and graduates to find out what they have learned about the future;
- Investigate colleges and universities that offer programs relating to your interests; and
- Start a savings plan to help you meet your goals.

Decisions made about courses taken in middle school are important. By paying careful attention to your course choices, students and parents can ensure that a wide range of options are available in high school. You may be asking, "Why do I need to be involved in making an Educational Plan?" That's a great question! Think about this. You gain knowledge and learn skills you will use for the rest of your life during high school. You don't have a choice about most of the courses you take; they are requirements necessary for graduation from high school. An educational plan that includes electives based on your interests can help you become whatever YOU want to become.

Core courses provide you with an academic foundation that you will use in any career you choose. Electives provide you with a variety of opportunities and experiences so you can discover where your talents and abilities lie. Career and Technical Education (CTE) courses provide you with opportunities to learn concepts and skills needed for success in your chosen career fields. You will also learn to make good decisions and set goals for your future.

EARNING COURSE CREDIT

A student in grades 9 – 12, or in a lower grade when a student is enrolled in a high school credit-bearing course, will earn credit for a course only if the final grade is 70 or above and the attendance requirements for the course are met.

When a student fails one semester of a two-semester course, the District will award credit for both semesters if the student passes the other semester with a grade high enough so that the combined average of the two semesters is 70 or higher. If the combined average of the two semesters is not at least a 70, the student will only receive credit for the semester with a 70 or higher.

CLASS RANKING, GPA-EXEMPT COURSES, WEIGHTED CLASSES, LATIN HONORS, HIGHEST RANKING GRADUATE

CLASS RANK BEGINNING WITH THE GRADUATION CLASS OF 2024

The District includes in the calculation of class rank the eight highest eligible semester grades earned in high school courses taken in grades 9 – 12 in each of the following subjects only

- English language arts,
- Mathematics,
- Science, and
- Social Studies

If the student has earned fewer than eight eligible semester grades in one or more of these subjects in grades 9 – 12, the District shall use eligible semester grades earned before grade 9, as necessary, for a total of eight grades in each of these subjects.

The calculation of class rank excludes grades earned in or by:

- A local credit course;
- A course for which a pass/fail grade is assigned;
- Credit by examination, with, or without prior instruction;
- Distance learning and traditional correspondence courses, and
- Dual credit courses taken through a college with which the District does not have a partnership agreement.

LIST OF COURSES INCLUDED IN CLASS RANK BEGINNING WITH THE CLASS OF 2024

MATH COURSES

LONG COURSE TITLE	GRAD SUBJECT AREA
Algebra I (Honors, Basic, Applied Math)	Math
Algebra I (Applied Math)	Math
Algebra II (OnRamps, Honors, Basic)	Math
Geometry (Honors, Basic, Applied Math)	Math
Precalculus (Honors, OnRamps, Dual Credit)	Math
Mathematical Models with Applications	Math
Independent Study in Mathematics (First Time Taken)	Math
Logic Design Using Boolean Algebra	Math
Electrical Circuit Theory	Math
Modeling Using Computer Simulation	Math
Multivariable Calculus and Its Applications	Math
Honors Number Theory	Math
Calculus Based Statistics	Math
Dual Credit Calculus Based Statistics	Math
Honors Linear Algebra	Math
Astrophysics	Math
History of Mathematics	Math
Optics	Math
Survey of Mathematics	Math
Dual Credit Linear Algebra	Math
Independent Study in Mathematics (Second Time Taken)	Math
Ordinary Differential Equations and their Applications	Math
Independent Study in Mathematics (Third Time Taken)	Math
Astrophysics	Math
Honors Thermodynamics	Math
Advanced Quantitative Reasoning (Honors)	Math
Discrete Mathematics for Problem Solving	Math
Statistics	Math
Algebraic Reasoning	Math
AP Calculus AB (Dual Credit)	Math
AP Calculus BC (Dual Credit)	Math
AP Statistics (OnRamps)	Math

CTE AND TECHNOLOGY COURSES THAT SATISFY MATH REQUIREMENTS

Engineering Math (Honors)	Math
CP Math	Math
Digital Electronics (Honors, Dual Credit)	Math
Accounting 2 (Honors)	Math
Robotics 2 (Honors, Dual Credit)	Math
Discrete Mathematics for Computer Science (Honors)	Math
Applied Math for Tech Professionals (Dual Credit)	Math
AP Computer Science	Math

SCIENCE COURSES

Biology (Applied Science, Basic, Honors)	Science
Biology (Applied Science)	Science
Aquatic Science (Dual Credit)	Science
Chemistry (Applied Science, Honors, Dual Credit, On Ramps)	Science
Physics (Applied Science, Honors, OnRamps, Dual Credit)	Science
Astronomy (Honors, Dual Credit)	Science
Earth and Space Science (OnRamps, Dual Credit)	Science
Integrated Physics and Chemistry (Basic, Honors, Dual Credit)	Science
AP Biology (OnRamps)	Science
AP Chemistry (OnRamps)	Science
AP Physics C: Electricity and Magnetism	Science
AP Physics C: Mechanics	Science
AP Physics 1: Algebra Based	Science
AP Physics 2: Algebra Based (OnRamps)	Science
AP Environmental Science	Science

CTE AND TECHNOLOGY COURSES THAT SATISFY SCIENCE REQUIREMENTS

Engineering Science (Honors)	Science
Environmental Systems (Dual Credit)	Science
Medical Microbiology (Honors, Dual Credit)	Science
Pathophysiology (Honors, Dual Credit)	Science
Scientific Research and Design (Honors, Dual Credit)	Science
Intel Science Talent Search	Science
Dual Credit Biology for Non-Science Majors + Lab	Science
Project Based in Botany and Sustainable Horticulture	Science
Dual Credit General College Physics I + Lab	Science
Dual Credit General Chemistry I + Lab	Science
Introduction to Cell Biology	Science
Interaction of Radiation with Matter	Science
Scientific Research and Design II (Honors, Dual Credit)	Science
Dual Credit Biology II for Non-Science Majors + Lab	Science
General College Physics II + Lab	Science
General Chemistry II + Lab	Science
Scientific Research and Design III (Honors)	Science
Talent Search	Science
Electrical Circuit Theory	Science
Introduction to Optics and Lasers	Science
Advanced Animal Science (Honors)	Science
Advanced Plant and Soil Science (Honors, Dual Credit)	Science
Anatomy and Physiology (Honors, Dual Credit)	Science
Food Science (Honors)	Science
Forensic Science (Honors)	Science
Principles of Technology (Honors)	Science
Engineering Design and Problem Solving (Honors)	Science
Biotechnology I (Honors)	Science
Biotechnology II	Science

SOCIAL STUDIES COURSES

World Geography Studies (Basic, Community Citizenship, Honors, Dual Credit)	Social Studies
United States Government (Dual Credit)	Social Studies
United States History Studies Since 1877 (Basic, Honors, Dual Credit)	Social Studies
United States History Studies Since 1877 (Community Citizenship)	Social Studies
World History Studies (Basic, Community Citizenship, Honors, Dual Credit)	Social Studies
Special Topics in Social Studies: Honors Latino Studies	Social Studies
Special Topics in Social Studies Latino Studies	Social Studies
Dual Credit Special Topics in Social Studies: Latino Studies	Social Studies
Ethnic Studies: Mexican American Studies (Honors)	Social Studies
Ethnic Studies: African American Studies (Honors)	Social Studies
Economics with Emphasis on the Free Enterprise System and Its Benefits (Dual Credit)	Economics
AP Human Geography	Social Studies
AP Modern World History	Social Studies
AP US History (OnRamps)	Social Studies
AP Government	Social Studies
AP Macroeconomics	Economics
AP Microeconomics	Economics

ENGLISH LANGUAGE ARTS COURSES

English I (Basic, Honors)	English Language Arts
English I (Communications IV)	English Language Arts
English II (Basic, Honors)	English Language Arts
English II (Communications V)	English Language Arts
English III (Basic, Communications VI, Honors, Dual Credit, OnRamps)	English Language Arts
English IV (Basic, Communications VII, Dual Credit, OnRamps)	English Language Arts
English for Speakers of Other Languages I	English Language Arts
English for Speakers of Other Languages I	English Language Arts
English for Speakers of Other Languages II	English Language Arts
English for Speakers of Other Languages II	English Language Arts
AP Language and Composition	English Language Arts
AP Literature and Composition	English Language Arts
College Prep English	English Language Arts
Humanities (Honors, Dual Credit)	English Language Arts
Dual Credit Independent Study in English: American Literature	English Language Arts
Dual Credit Independent Study in English: British Literature I	English Language Arts
Dual Credit Independent Study in English: British Literature II	English Language Arts

CLASS RANK CALCULATIONS FOR THE GRADUATING CLASS OF 2022 AND 2023

The District includes in the calculation of class rank all grades earned in high school credit courses taken in grades 9 – 12. Except grades earned in or by:

- A local credit course;
- A course for which a pass/fail grade is assigned;
- Credit by examination, with, or without prior instruction;
- Grades earned prior to grade 9*;
- Distance learning and traditional correspondence courses, and
- Dual credit courses taken through a college with which the District does not have a partnership agreement.

*Beginning with students entering sixth grade in the 2018 – 2019 school year, grades earned in AP courses taken in middle school ***will be included*** in the calculation of high school GPA and class rank.

GPA-EXEMPT COURSES

Beginning with first time freshman entering high school in the 2017 – 2018 school year, students may be eligible to take courses on a GPA-exempt basis. To be eligible, the student must:

- Be a senior, and
- Have completed all prerequisite courses required for the GPA-exempt course, and
- Complete the GPA-exempt Request Form and submit it to the appropriate counselor by the timeline established annually.

A qualifying senior student can select up to two semester-long courses to take on a GPA-exempt basis each of those two years.

For the 2022 - 2023 school year, qualifying sseniors may take the following courses on a GPA-exempt basis:

English Language Arts	**Mathematics**	**Social Studies**
• Debate III (& Honors) • Advanced Journalism: Newspaper III (& Honors) • Advanced Journalism: Literary Magazine III (& Honors) • Advanced Journalism: Yearbook III (& Honors)	• AP Calculus BC • Honors Multivariable Calculus • Honors Mathematical Modeling Using Computer Simulation • Honors Number Theory • Honors Calculus Based Statistics • Honors Logic Design Using Boolean Algebra • Honors Linear Algebra • Honors Electrical Circuit Theory	• Special Topics: Latino American Studies • Special Topics: African American Historical Perspectives and Contributions • Special Topics: Historical Contributions of Women in United States History • Special Topics: American Indian Studies • Special Topics: A History of Health and Medicine
Science	**World Languages**	**Health/PE**
• Honors Modern Physics • AP Physics C: Mechanics • AP Physics C: Electricity & Magnetism • Honors Organic Chemistry	• Any Honors III and above language course	• Advanced Health

JROTC	CTE	Fine Arts
• Army JROTC III • Army JROTC IV • Navy JROTC III • Navy JROTC IV • Air Force Honors JROTC IV	Architecture & Construction • Architectural Design II/d • Construction Technology II/d Arts A/V • Audio/Video Production II or Audio/Video Production II Lab/d • Digital Audio Technology II • Graphic Design and Illustration II or Graphic Design and Illustration II Lab/d • Animation I or Animation I Lab/d Business, Marketing & Finance • Business Information Management II • Business Management • Accounting I • Advanced Marketing/d Hospitality & Tourism • Culinary Arts/d Information Technology • N/A Transportation • Automotive Technology I/d • Collision, Repair/d • Aircraft Technology/d Education & Training • Instructional Practices in Education and Training/d Human Services - Cosmetology • Cosmetology I or Cosmetology I Lab/t Health Science • Pathophysiology • Honors Medical Intervention STEM • Engineering Design and Presentation II/d	Music III and IV Courses in: • Concert Choir & Honors • A Capella Choir & Honors • Vocal Ensemble Show Choir (& Honors) • Vocal Ensemble Treble Choir (& Honors) • Vocal Ensemble Tenor Choir (& Honors • Band (Varsity & Non-Varsity, and Honors & SubNon-Varsity) • Mariachi (& Honors) • Guitar (& Honors) • Piano (& Honors) • Instrumental Ensemble (& Honors) • Jazz Ensemble (& Honors) • Orchestra (Varsity & Non-Varsity, and Honors & Sub Non-Varsity) • Dance III & IV (& Honors) • Theatre Arts III & IV (& Honors) • Theatre Production III & IV (& Honors) • Musical Theatre III & IV (& Honors) • Technical Theatre III & IV (& Honors)

The grades earned in these courses will be displayed on the report card and the transcript but will not be included in the calculation of GPA or class rank. Students will complete all assigned work, including semester exams, unless exempt under the second-semester exam exempt provision for senior students.

WEIGHTED GRADE POINT AVERAGE FOR THE CLASS OF 2022

The District categorizes and weights courses as Tier I, Tier II, and Tier III in accordance with policy EIC (LOCAL). The Weighted GPA is used to determine local graduation honors and the highest-ranking graduate.

Tier I courses include Advanced Placement (AP) courses, International Baccalaureate (IB) courses, dual credit courses, any courses for which a Tier I course is a prerequisite, and other rigorous District-designated courses.

Tier II courses include high school Honors courses and other courses locally designated as honor courses.

Tier III courses include all other courses not designated as Tier I or Tier II courses.

The District converts semester grade points and calculates a weighted GPA in accordance with the following chart:

Grade	TIER I	TIER II	TIER III
97 and above	5.0	4.5	4.0
94–96	4.8	4.3	3.8
91–93	4.6	4.1	3.6
87–90	4.4	3.9	3.4
84–86	4.2	3.7	3.2
81–83	4.0	3.5	3.0
77–80	3.8	3.3	2.8
74–76	3.6	3.1	2.6
71–73	3.4	2.9	2.4
70	3.0	2.5	2.0
69 or below	0	0	0

UNWEIGHTED GRADE POINT AVERAGE FOR THE CLASS OF 2022

The District also calculates an unweighted GPA using a simple whole-number scale.

Grade	Unweighted Simple 4.0 GPA Scale
91 – 100	4.0
81 – 90	3.0
70 – 80	2.0
69 or below	0.0

WEIGHTED GRADE POINT AVERAGE BEGINNING WITH THE CLASS OF 2023

The District categorizes and weights courses as Tier I, Tier II, and Tier III in accordance with policy EIC (LOCAL). The Weighted GPA is used to determine local graduation honors and the highest-ranking graduate.

Tier I courses include Advanced Placement (AP) courses, International Baccalaureate (IB) courses, dual credit courses, any courses for which a Tier I course is a prerequisite, and other rigorous District-designated courses.

Tier II courses include high school Honors courses and other courses locally designated as honor courses.

Tier III courses include all other courses not designated as Tier I or Tier II courses.

The District converts semester grade points and calculates a weighted GPA in accordance with the following chart:

Grade	TIER I	TIER II	TIER III
97 and above	5.0	4.5	4.0
94–96	4.8	4.3	3.8
90–93	4.6	4.1	3.6
87–89	4.4	3.9	3.4
84–86	4.2	3.7	3.2
80–83	4.0	3.5	3.0
77–79	3.8	3.3	2.8
74–76	3.6	3.1	2.6
71–73	3.4	2.9	2.4
70	3.0	2.5	2.0
69 or below	0	0	0

UNWEIGHTED GRADE POINT AVERAGE BEGINNING WITH THE CLASS OF 2023

The District also calculates an unweighted GPA using a simple whole-number scale.

Grade	Unweighted Simple 4.0 GPA Scale
90 – 100	4.0
80 – 89	3.0
70 – 79	2.0
69 or below	0.0

LOCAL GRADUATION HONORS

The Valedictorian and Salutatorian are the eligible students from each school with the highest and second highest ranking senior students, respectively at the end of the 5th six-weeks. To be eligible for the recognition, a student must:

- Have completed the foundation program with the distinguished level of achievement; and
- Have completed 19 credits before the first day of the school year in which graduation requirements are completed; and
- Have been continuously enrolled in the same high school in the District for the entire two school years preceding graduation.

Latin honors at each District high school are awarded to students completing the foundation program with the distinguished level of achievement as follows:

Summa Cum Laude	The top highest two percent of the graduating class
Magna Cum Laude	The next highest three percent of the graduating class
Cum Laude	The next highest five percent of the graduating class

HIGHEST RANKING GRADUATE

The highest-ranking graduate is the graduating student at each high school campus with the highest rank after all six-week grades have been posted. This student will receive a Highest-Ranking Graduate Certificate and free tuition to a Texas public college or university during both semesters of the first regular session immediately following the student's high school graduation. [See §54.201 of the Texas Education Code]

STUDENT CLASSIFICATION

After the ninth grade, students are classified according to the number of credits earned toward graduation. The following chart displays the credits needed for classification. Only courses counting toward state graduation credits are included; local credit courses do not count.

Grade Level Classification	Required State Course Credits Earned
9th Grade	0 credits
10th Grade	6 credits
11th Grade	12 credits
12th Grade	19 credits

AUTOMATIC ADMISSION INTO FOUR-YEAR PUBLIC UNIVERSITIES AND COLLEGES IN TEXAS

For two school years following his/her graduation, a district student who graduates in the top ten percent, and in some cases, the top 25 percent, of his or her class is eligible for automatic admission into four-year public universities and colleges in Texas if the student:

- Completes the distinguished level of achievement under the foundation graduation program. This means that a student must graduate with at least one endorsement and must have taken Algebra II as one of the four required math courses.
- Completes the ACT College Readiness Benchmarks or earns a minimum score on the SAT as determined by the State.

The student must submit a completed application for admission in accordance with the deadline established by the college or university.

The University of Texas at Austin may limit the number of students automatically admitted to 75 percent of the University's enrollment capacity for incoming resident freshman. For students who are eligible to enroll in the University during the fall 2020 and 2021 terms, the University will be admitting the top six percent of the high school's graduating class who meet the above requirements. Additional applicants will be considered by the University through a holistic review process.

Students should contact the school counselor for further information about automatic admission, the application process, and deadlines.

THREE YEAR/ EARLY GRADUATES

Occasionally a student qualifies to graduate within three years. To qualify as a three-year graduate, the student must meet the following criteria:

- Complete state required testing, and
- Be on target to earn enough credits to graduate in three years under the Foundation High School graduation program with endorsement.

Grade point averages for students who complete the high school graduation program requirements in fewer than four years will be figured according to the GPA chart in effect for the graduating class, regardless of the school year in which a student entered grade 9. [See EIC (LOCAL)]. The early graduate's GPA will be used to determine the class rank within the class in which the student graduates.

A student considering an early graduation is required to meet with his/her counselor to determine if he/she has completed all requirements. A Fort Worth ISD Early Graduation Request Form is to be completed by the student.

TRANSCRIPTS FOR SENIORS

Transcripts for current seniors will be distributed in September/October and at the end of January. The transcripts will include class ranking and a weighted and unweighted GPA. A final transcript will be available in June after all senior grades have been posted. A student can request a transcript without class rank.

ATTENDANCE REQUIREMENTS

A high school student who is not in attendance at least 90 percent of the days the class is offered in a semester may lose credit for the course. Please see the school handbook or District Policy FEA and FEC for further information.

GRADING GUIDELINES

HIGH SCHOOL GRADING GUIDELINES

Calculation of Six-Weeks Grades

Grades are calculated based on weights established by the teacher and approved by the principal. The weighting system established by each teacher should be shared with students and parents annually.

A minimum number of eight grades are required to be documented each six-weeks. At least four grades must be recorded each three weeks. This does not include the six-weeks test or the semester exams.

Homework cannot count more than ten percent of the six-weeks grade. No one assignment can count more than 20% of the six-weeks grade. A teacher must include sufficient grades for each type of category to guarantee that no one assignment will be worth more than twenty percent of the six-week grade.

Example:

Category	Weight	Minimum # of Assignments Required to Ensure that No One Assignment is Worth More than 20%
Homework	10%	1
Quizzes	25%	2
Labs	45%	3
Tests	20%	1

Recording Grades in FOCUS

Teachers must post grades to FOCUS and provide feedback to students within five school days from the day a student turns in an assignment. The date the student turns in an assignment is day 0. Complex assignments, essays, or assignments that require extensive teacher feedback may require up to seven school days to return to students and post in the online grade book. Any deviation from this procedure requires principal approval and notification to students.

Semester Exams

All high school students are required to take a semester examination and/or complete a culminating activity in each course. The grade earned on the semester exam or culminating activity is worth 1/7 of the semester grade.

Middle school students enrolled in high school courses will be required to take a semester exam or complete a culminating activity. The semester exam or culminating activity grade will be worth 1/7 of the semester grade.

Calculation of Semester Grades

The grade the student earns on the semester examination or culminating activity will be used to determine the semester grade for the course. The semester grade for students with six reporting periods will be calculated as follows:

1st Six Weeks Grade	2/7 of Semester Grade (28.5%)
2nd Six Weeks Grade	2/7 of Semester Grade (28.5%)
3rd Six Weeks Grade	2/7 of Semester Grade (28.5%)
Semester One Exam	1/7 of Semester Grade (14.5%)
4th Six Weeks Grade	2/7 of Semester Grade (28.5%)
5th Six Weeks Grade	2/7 of Semester Grade (28.5%)
6th Six Weeks Grade	2/7 of Semester Grade (28.5%)
Semester Two Exam	1/7 of Semester Grade (14.5%)

Example:

Item	Grade	Weight	Points
1st Six Weeks	92	2/7 (28.5%)	26.2
2nd Six Weeks	85	2/7 (28.5%)	24.2
3rd Six Weeks	80	2/7 (28.5%)	22.8
Semester One Exam or Culminating Activity	78	1/7 (14.5%)	11.3
First Semester Grade			**84.6 = 85**

Semester Exam Exemptions

A senior student may be granted an exemption from taking the semester exam during the second semester (spring semester) if the student:

- Has maintained a grade of 85 or higher in the course for the spring semester (calculated by averaging the 4th, 5th, and 6th six-weeks grades up until the semester exam); and
- Has not been suspended or assigned to an alternative program during the entire school year.

Redoing Assignments or Retaking Tests

Board Policy allows a student who receives a failing grade on a test or assignment, except for semester exams, the opportunity to redo the assignment or retake the test. The student or parent must initiate the request according to the following parameters:

- The student and/or parent must request to redo an assignment or retake a test within five days from the earlier of the date the assignment or test was returned to the student or grade entered into the student grading system.
- The student will be provided an opportunity for tutoring or re-teaching prior to retesting. This may occur during class time, before or after school, or at another time agreed upon by the teacher and student.
- A teacher may require the student to complete missed homework, test corrections, or other items as part of the re-teaching process.
- A student must redo the assignment or retake the test within five school days from the earlier of the date the assignment or test was returned to the student or the date the grade was entered into the student grading system.
- A teacher may provide longer than five school days if necessary.
- Assignments offered for redo or retaken tests may be different from the original assignment or test so long as the concepts/content assigned or tested are the same.
- Re-testing or redo assignment guidelines do not apply to grades received due to failure to adhere to the established late work guidelines approved by the principal and disseminated to students.
- Any retests will be administered on campus.
- The grade the student receives on the redone assignment or retaken test will be no higher than a 70.
- A failed semester exam cannot be retaken.

HIGH SCHOOL ASSESSMENTS

HIGH SCHOOL TESTING REQUIREMENTS

In addition to the high school graduation course requirements, the state has mandated testing requirements.

Texas English Language Proficiency Assessment System (TELPAS)

TELPAS requires teachers of English learners (ELs) to rate writing collections for these students according to indicators set by the state for English language in Grades K – 12. Based on state law passed in 1999 and new State Board of Education rules, all students in grades 2 – 12 who are identified as an English learner will take the TELPAS assessment in listening, speaking, reading, and writing. This includes ELs whose parents have denied the program. EL students served through special education will also participate unless their Admission, Review, and Dismissal (ARD) committee exempts them on the basis that their disability prevents appropriate measurement in one or more domains. English learners will participate until they meet the English Proficiency exit criteria. Students served by special education may be eligible for assessment using the TELPAS Alternate assessment.

High School STAAR End of Course (EOC) Requirements

The following high school courses require a STAAR EOC exam:

English Language Arts	Mathematics	Science	Social Studies
English I and English II	Algebra I	Biology	US History

OPTIONAL HIGH SCHOOL TESTING

Credit by Examination

A Credit by Examination (CBE) is an exam a student can choose to take to earn credit for a course in which the student has not received instruction or retrieve/earn credit for a course in which the student has had prior instruction. District-wide exams are administered multiple times per year. The student can also take a CBE to satisfy a prerequisite for a course. The CBE must be taken and passed prior to the beginning of the school year. There may be a fee for the exam. See the school counselor for more information.

Successful course credit will be indicated on the transcript with the actual grade earned, but the grade will not be used in the calculation of GPA. If credit is not awarded, documentation of the examination will be placed in the student's academic achievement folder.

With Prior Instruction

A student can take a CBE when the student has had prior instruction and when:

- The student is enrolling in the District from a non-accredited school or home school; or
- The district needs to determine the proper placement of the student; or
- The student failed a subject or course; or
- The student has earned a passing grade in a subject or course but failed to earn credit due to excessive absences.

To receive credit for the course, a student must score a 70 or above on the CBE. Examinations will assess the student's mastery of the essential knowledge and skills and will be administered according to established District procedures.

Prior to offering a student an opportunity to demonstrate mastery or to earn credit by this method, an appropriate District employee will review the student's educational record to determine whether the student has had prior instruction in the subject or course.

Without Prior Instruction

Students can take a Credit by Exam to earn credit for a course without prior instruction. No prior instruction is defined as having no formal instruction in the specific course content and/or grade for which the examination is given. In order to receive credit, a student must earn a score of 80 or above. Award of credit for a two-semester course is based upon successful passing scores on CBEs for both semesters.

Students will only be administered the tests for which they have an official registration verified and signed by their counselor. Students cannot register to take a CBE while concurrently enrolled in the course for which they are taking the exam. CBEs are not recognized by the NCAA for athletic eligibility purposes.

HIGH SCHOOL ACADEMIC PROGRAMS

ADVANCED LEVEL COURSES

The District provides an array of appropriately challenging learning experiences for students. Secondary students who are formally identified as gifted/talented and those with the potential to achieve at higher levels are expected to take advanced level courses that are commensurate with their abilities and interests.

Honors, AP, International Baccalaureate (IB), Advanced Technical Credit (ATC), OnRamps courses, and Dual Credit courses are described in the course description section with specific course requirements for enrollment. All students enrolled in these advanced courses must be enrolled in the course no later than 10 days from the first day of class or within 10 days of the student enrolling in the school.

Exit Procedures for Advanced Level Courses

Prior to the end of the first six weeks of the course, a student-parent-teacher conference must be held for students failing to maintain a passing grade of 70. Options to be discussed at the conference include:

- developing a plan for the improvement of the student's performance that includes alternative instructional strategies, tutorials, and specific target dates for progress reports to student and parent; or
- exiting the student from the course and placing the student in another appropriate course.

Any recommendations to move students from Honors, OnRamps, AP, or IB courses after the first six weeks of instruction are to be made only after a conference, which includes student, teacher, parent, coordinator, and principal.

Student Schedule Change

Students may request a course change within the first ten days of school if on a traditional schedule, or first five days of school if on a block schedule.

An Add/Drop request made after the tenth day of class (or after five days if on a block schedule), will result in a grade of 60 being reported on the transcript and calculated into the GPA unless there are extenuating circumstances approved by the school principal or designee.

For extenuating circumstances, a course request change may be made after the deadline, but no later than the 2nd or 4th six-week grading periods, with or without penalty, as determined by the principal or designee. Course changes made after the 2nd or 4th six-week grading periods will result in a grade of 60 posted to the student's transcript.

OPPORTUNITIES FOR COLLEGE CREDIT

Students have opportunities to earn college credit through the following methods:

- Advanced Placement (AP),
- Enrollment in an Early College High School (ECHS);
- Enrollment in a Pathways in Technology Early College High Schools (P-TECH) program;
- Enrollment in Dual Credit courses;
- Enrollment in an AP or dual credit course through the Texas Virtual School Network;
- Enrollment in OnRamps courses provided through a collaboration with UT Austin;
- Enrollment in courses taught at other colleges or universities; and
- Enrollment in Dual Credit CTE courses.

All of these methods have eligibility requirements and must be approved prior to enrollment in the course. Depending on the student's grade level and the course, a state-mandated end-of-course assessment may be required for graduation.

It is important to keep in mind that not all colleges and universities accept credit earned in all dual credit or AP courses taken in high school. Students and parents should check with the prospective college or university to determine if a particular course will count toward the student's desired degree plan.

ADVANCED PLACEMENT

The District offers more than 40 College Board Advanced Placement courses. Upon completion of an AP course, the student will take a College Board Advanced Placement exam over the contents of the course. Students who score a 3, 4, or 5 on the College Board AP Exam may receive college credit upon enrollment at a college or university. AP course offerings vary by high school. For general information about the Advanced Placement program, students and parents are encouraged to visit the following website: http://student.collegeboard.org/

EARLY COLLEGE HIGH SCHOOL

Early College High Schools (ECHS) are open-enrollment high schools that allow students least likely to attend college an opportunity to receive both a high school diploma and either an associate degree or at least 60 credit hours toward a baccalaureate degree. Early College High Schools:

- Enroll Historically underserved students, targeting at-risk and economically disadvantaged
- Provide dual credit at no cost to students
- Offer rigorous instruction and accelerated courses
- Provide academic and social support services to help students succeed
- Provide students with highly personalized attention
- Increase college readiness
- Partner with Texas institutions of higher education (IHEs) to reduce barriers to college access

PTECH PROGRAM

Pathways in Technology Early College High Schools (P-TECH) are innovative open-enrollment high schools that allow students least likely to attend college an opportunity to receive both a high school diploma, an associate degree or at least 60 credit hours and industry certifications and credentials. The hallmark of the P-TECH model is its career focus and the provision of work-based education. P-TECH programs:

- Enroll historically underserved students, targeting at-risk and economically disadvantaged
- Provide students grade 9 through 12 the opportunity to complete a course of study that combines high school and post-secondary courses
- Enable students to earn a high school diploma, along with an associate degree, Level 1 or Level 2 certificate, or industry-based certification within six years
- Offer age-appropriate work-based learning opportunity in every grade level
- Allow students to gain work experience through an internship, apprenticeship, or other job training program
- Align to regional workforce needs, guiding students into high-demand, high-wage careers
- Partner with Texas Institutions of Higher Education (IHEs) and regional businesses and industries, giving students access to post-secondary education and workforce training opportunities

DISTANCE LEARNING AND CORRESPONDENCE COURSES

Distance learning and correspondence courses include courses that meet the state-required essential knowledge and skills but are taught through multiple technologies and alternative methodologies such as mail, satellite, internet, video-conferencing, and instructional television.

If a student wishes to enroll in a correspondence course or a distance learning course that is not provided through the Texas Virtual School Network (TxVSN) as described below, the student must receive written permission from the principal prior to enrolling. Not all correspondence courses meet state-requirements and thus prior approval is required. Grades earned in these courses are recorded on the transcript but are not used in the calculation of GPA.

DUAL CREDIT

High school students may be eligible to earn college credit while still in high school by enrolling in dual credit courses. A variety of dual credit course options are available. Dual credit courses may be offered at:

- Some high school campuses with the courses taught by an approved high school or college instructor;
- Tarrant County College sites through Dual Credit Academies;
- Texas Virtual School Network;
- Various campus sites: Tarrant County College District, Texas Wesleyan University, and University of Texas at Arlington taught by college instructors; and
- An online dual credit program taught through the University of Texas at Arlington instructors.

To be eligible for enrollment in college courses and also be awarded credit toward high school state graduation requirements, a student must meet qualifications set by the District and the participating institution, select courses approved by the District, and have approval of the high school principal. Post-secondary Success Specialists will provide students with current information regarding approved dual credit courses. Grades earned in dual credit courses are used in the calculation of the high school grade point average.

DUAL ENROLLENT – OnRAMPS UT AUSTIN PROGRAM

OnRamps is a dual-enrollment program that bring rigorous courses aligned with the high standards and expectations of the University of Texas at Austin. The program uses a dual-enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher. Dual-enrollment through UT OnRamps allows students to earn college credit while in high school and is different from Dual Credit. OnRamps courses will transfer to any public college or university.

- The OnRamps Dual Enrollment Program allows high school students to experience college academic rigor by taking actual college exams created by a UT professor.
- Dual enrollment students receive two grades: one from the high school teacher and one from the UT professor; dual credit students receive the same grade earned in high school on their college transcripts.
- Dual enrollment students may *choose* to have the college grade transcripted on their UT transcripts; Dual credit students' grades *will* be recorded on the college transcripts.

TEXAS VIRTUAL SCHOOL NETWORK (TxVSN)

The Texas Virtual School Network (TxVSN) has been established by the state as one method of distance learning. A student has the option, with certain limitations, to enroll in a course offered through the TxVSN to earn course credit for graduation. There may be fees to take courses through the TxVSN. Grades earned in these courses are recorded on the transcript but are not used in the calculation of GPA. Students should see their counselor for more information.

AVID

Advancement Via Individual Determination (AVID) is an academic elective course that prepares students for college readiness and success. Scheduled during the regular school day as a year-long course, AVID strengthens academic skills and build strategies for post-secondary success. Students engage in rigorous curriculum while being provided supports with writing and research skills, organization, and study skills along with experiencing a college-going culture. Additionally, the AVID class provides access to information about colleges and universities through college field trips, guest speakers, tutors, college exam practice and testing, scholarship information and opportunities, and college admission information.

DYSLEXIA & RELATED DISORDERS

Students identified by the Dyslexia Services Department are eligible for certain courses and other support services. Questions or concerns should be brought to the attention of the diagnostician, school counselor or principal.

UNIVERSITY INTERSCHOLASTIC LEAGUE (UIL) NO PASS, NO PLAY WAIVERS

A student shall be suspended from participation in any extracurricular activity sponsored or sanctioned by the District or the UIL after a grade evaluation period in which the student received a grade lower than a 70 in any class other than Exempt Courses. An Exempt Course is an AP, IB, Honors, or a dual credit course in the subject areas of English language arts, mathematics, science, social studies, economics, or a language other than English. Districts can identify additional honors courses.

ENGLISH AS A SECOND LANGUAGE (ESL)

FWISD offers numerous ESL courses and support services. Placement and eligibility for ESL services and courses is determined by a home language survey, referral to the Language Assessment center for evaluation, and LPAC Committee recommendations. English for Speakers of Other Languages (ESOL) I and II may be substituted for English I and II for students with limited English proficiency who are at the beginning or intermediate levels of English language proficiency. Contact the ESL Department for additional information.

WORLD LANGUAGES

To meet the needs of an ever-growing global economy, FWISD offers students the opportunity to study multiple languages. For Native Spanish Speakers, there are several opportunities to earn high school credit and in some cases even qualify for college credit while in middle school.

SPECIAL EDUCATION AND SECTION 504

Special Education offers specially designed instruction and a full continuum of services to meet a variety of student needs. Programs range from support in general education classrooms to fully self-contained learning environments. A student's graduation plan, developed by the ARD/IEP Committee, determines how the student will meet credit and curriculum requirements of the state and district for graduation.

HIGH SCHOOL DIPLOMA PROGRAM AND COLLEGE SCHOLARSHIPS

Informed decisions regarding the development of a student academic portfolio towards a graduation program and successful completion of course work will assist students in qualifying for college scholarships. The Foundation High School Graduation Program completed with the required endorsements may qualify a student for a variety of academic and athletic scholarships at colleges and universities. Additional information is available at these websites www.collegeforalltexans.com and www.gentx.org.

Websites for further college research:

http://www.collegeforalltexans.com/	www.collegeboard.org	www.achievetexas.org	www.act.org
www.eligibilitycenter.org	www.ncaa.org	www.fafsa.ed.gov	gentx.org

NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA) ELIGIBILITY

National Collegiate Athletic Association (NCAA) eligibility standards specify core courses that students must have successfully completed. Each individual high school has a list of the courses that qualify for the Division I (16 Core-Course Rule) and Division II (16 Core-Course Rule). Talk with your counselor or find your school list on the NCAA website. High school classes taken in Grade 8 may also qualify to count as a core course. Only NCAA core courses are used in the calculation of the student's grade point for NCAA eligibility; SAT or ACT test scores are also required.

FOUNDATION 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. The foundation graduation program also allows for a "distinguished level of achievement," which reflects the completion of at least one endorsement and Algebra II as one of the required advanced mathematics credits. The criteria for earning these performance acknowledgments are prescribed by state rules, and the school counselor can provide more information about these acknowledgments.

Fort Worth ISD offers three (3) Graduation Plans for students entering high school in or after 2014:

1. Distinguished Level of Achievement (DLA) - 26 credits (Recommended for all students)

To earn the DLA:

- You are required to take at least 4 courses (4 credits) in a sequence specific to at least one **Endorsement.**
- You are required to take **Algebra II.**

You may also earn Performance Acknowledgements.

The DLA makes you a **more competitive applicant** at the most selective colleges and universities.	The DLA positions you to be among those **first in line** for a Texas Grant and other financial aid options.	The DLA prepares you better for coursework at **community/technical colleges or universities**.	The DLA develops a strong foundation to successfully complete an **industry workforce credential or college degree**.

2. Foundation High School Program +Endorsements - 26 credits

To earn the Foundation Degree PLUS Endorsements:

- You are required to take at least 4 courses (4 credits) in a sequence specific to at least one Endorsement.

You may also earn Performance Acknowledgements.

3. Foundation High School Program - 22 credits (Only available after the completion of sophomore year)

To earn the basic Foundation Degree:

- You must have selected this option only after completing your sophomore year.

You may also earn Performance Acknowledgements.

Endorsements and Performance Acknowledgments are available to all students.

Endorsements are made up of four courses or four or more credits taken in a coherent sequent providing advanced or more in-depth knowledge and skills in a curriculum area. Middle school students should explore career information related to the endorsement areas listed below so they may begin to think about what areas they will want to take more in-depth coursework during their educational career in high school.

Note: High school courses needed to satisfy an endorsement may also be used to satisfy foundation named course subject requirements. Students may enroll in courses under more than one endorsement before the student's junior year.

Performance Acknowledgements will be noted on the student's transcript and diploma to note a student's outstanding performance in areas such as Dual Credit; Bilingualism and Biliteracy; AP or IB exams; PSAT, ACT-Aspire, SAT or ACT testing; or Certifications and Licensures.

REQUIRED COURSES FOR EACH GRADUATION PLAN

	Foundation Program 22 Credits	Foundation + Endorsements 26 Credits	Distinguished Level of Achievement (Recommended for All students) 26 Credits
ELA 4 Credits	• English I • English II • English III • One advanced English course	• English I • English II • English III • One advanced English course	• English I • English II • English III • One advanced English course
MATH 3 – 4 Credits	• Algebra I • Geometry • Additional math course	• Algebra I • Geometry • Additional math course • Additional math course toward Endorsement	• Algebra I • Geometry • Algebra II * • Additional math course toward Endorsement
SCIENCE 3 – 4 Credits	• Biology • IPC or Chemistry or Physics • Additional science course	• Biology • IPC or Chemistry or Physics • Additional science course • Additional science course toward Endorsement	• Biology • IPC or Chemistry or Physics • Additional science course • Additional science course toward Endorsement
SOC STUD 4 Credits	• World/Human Geography • World History/Ethnic Studies • US History • Government & Economics	• World/Human Geography • World History/Ethnic Studies • US History • Government & Economics	• World/Human Geography • World History/Ethnic Studies • US History • Government & Economics
NON-CORE 8 – 10 Credits	• 2 credits, World Language *** • 1 credit, Physical Education ** • 1 credit, Fine Arts • 0.5 credit, Health • 0.5 credit, Speech • 3 credits, Electives	• 2 credits, World Language *** • 1 credit, Physical Education ** • 1 credit, Fine Arts • 0.5 credit, Health • 0.5 credit, Speech • 5 credits, Electives	• 2 credits, World Language *** • 1 credit, Physical Education ** • 1 credit, Fine Arts • 0.5 credit, Health • 0.5 credit, Speech • 5 credits, Electives

Miscellaneous	Available Endorsements****:
	Science, Technology, Engineering, and Mathematics Business and Industry Public Services Arts and Humanities Multidisciplinary Studies

* In order to obtain the distinguished level of achievement under the foundation graduation program, which will be denoted on a student's transcript and is a requirement to be considered for automatic admission purposes to a Texas four-year college or university, a student must complete an endorsement and take Algebra II as one of the 4 mathematics credits.

** A student who is unable to participate in physical activity due to a disability or illness may be able to substitute a course in English language arts, mathematics, science, social studies, or another locally determined credit-bearing course for the required credit of physical education. This determination will be made by the student's ARD committee, Section 504 committee, or other campus committee, as applicable.

*** Students are required to earn two credits in the same language other than English to graduate. Any student may substitute approved computer-programming languages for these credits. In limited circumstances, a student may be able to substitute this requirement with other courses, as determined by a district committee authorized by law to make these decisions for the student.

**** A student must specify upon entering grade 9 the endorsement he or she wishes to pursue.

FWISD/Texas Graduation Requirements:
Foundation High School Program for Students Entering Grade 9 in 2014-2015 and Thereafter

Foundation Courses Required = 22 plus 4 for an Endorsement = 26 credits for graduation.
Each Endorsement is to consist of a coherent sequence of courses totaling 4 to 5 credits.

English (4 Credits)

Three of the credits must consist of: English I, II, and III

(May substitute AP Language & Composition, AP Literature & Composition, OnRamps English, IB Language and Literature, or Dual Credit English Composition for English III)

Students with limited English proficiency who are at the beginning or intermediate level of English language proficiency may satisfy the English I and II requirements by successfully completing English I and II for Speakers of Other Languages

The 4th credit may be selected from 1 full credit or a combination of 2 half credits from 2 different courses, subject to prerequisite requirements:

English IV
Research & Technical Writing
Humanities
AP Language and Composition
AP Literature and Composition
OnRamps English
IB Language and Literature
Business English
College Preparatory English (Integrated Reading & Writing)
Eligible Dual Credit English substitutions*

**See the English section for a complete list of Dual Credit Substitutions.*

Mathematics (3 credits; 4 credits for endorsement)

Two of the credits must include: Algebra I & Geometry

The additional credit may be selected from 1 full credit or a combination of 2 half credits from 2 different courses, subject to prerequisites from this list ***OR*** from the fourth credit list further below.

Mathematical Models w/Applications
Mathematical Applications in Agriculture, Food, and Natural Resources;
Digital Electronics;
Robotics Programming and Design;
Financial Mathematics;
Applied Mathematics for Technical Professionals;
Accounting II
Manufacturing Engineering Technology II;
Robotics II

Four math credits are required for an endorsement. Algebra II is required for the Distinguished Level of Achievement

The additional credit may be selected from 1 full credit or a combination of 2 half credits from 2 different courses, subject to prerequisites:

Algebra II
Precalculus
Advanced Quantitative Reasoning
Independent Study in Mathematics
Discrete Math for Problem Solving
Algebraic Reasoning
Statistics
AP Computer Science A
IB Computer Science Higher Level
Engineering Mathematics
Statistics & Business Decision Making
Mathematics for Medical Professionals
Discrete Math for Computer Science
AP Statistics
AP Calculus AB
AP Calculus BC
IB Applications and Interpretation, Year 1
IB Analysis and Approaches, Year 1
IB Analysis and Approaches, Year 2
College Preparatory Math
OnRamps PreCalculus
OnRamps Statistics
OnRamps College Algebra
Eligible Dual Credit math substitutions*

**See the Math section for a complete list of Dual Credit Substitutions.*

Science (3 credits; 4 credits for endorsement)

Three of the credits to include:

One Biology credit:
Biology, AP Biology, or IB Biology

One credit to be selected from the following laboratory-based courses:
Integrated Physics & Chemistry;
Chemistry, AP Chemistry, IB Chemistry, OnRamps Chemistry, or Dual Credit Chemistry;
Physics, OnRamps Physics, AP Physics I, IB Physics, or Dual Credit Physics;
Principles of Technology

Four science credits are required for an Endorsement.

The additional credit may be selected from 1 full credit or a combination of 2 half credits from 2 different courses, subject to prerequisites:

Chemistry
Physics
Aquatic Science
Astronomy
Earth & Space Science
Environmental Systems
Advanced Animal Science
Advanced Plant and Soil Science
Anatomy & Physiology
Medical Microbiology
Pathophysiology
Food Science
Forensic Science
Biotechnology I and II
Principles of Technology
Scientific Research & Design
Engineering Design & Problem Solving
Engineering Science
AP Biology
AP Chemistry
AP Physics I
AP Physics 2
AP Physics C –Mechanics
AP Physics C – E&M
AP Environmental Science
IB Biology, Year 1 and Year 2
IB Physics, Year 1 and Year 2
OnRamps Physics, OnRamps Physics II
OnRamps Chemistry I, OnRamps Chemistry II
OnRamps Biology,
OnRamps Earth & Space Science
Dual Credit science courses*

**See the Science section for a complete list of Dual Credit Substitutions.*

FWISD/Texas Graduation Requirements: Foundation High School Program

Foundation Courses Required = 22 plus 4 or 5 for an Endorsement = 26 credits for graduation
Each Endorsement is to consist of a coherent sequence of courses totaling 4 to 5 credits

Social Studies (4 Credits)	2 credits	Fine Arts (1 credit)
Must consist of: **3 credits of the following:** World Geography Studies OR AP Human Geography OR Dual Credit World Geography U.S. History Studies Since 1877 OR AP U.S. History OR Dual Credit US History OR OnRamps US History OR IB History of the Americas, Year 1 U.S. Government OR AP U.S. Government OR Dual Credit U.S. Government (1/2 credit) Economics OR AP Microeconomics OR AP Macroeconomics OR Dual Credit Economics (1/2 credit) **1 credit selected from the following:** World History OR AP Modern World History OR Dual Credit World History OR Ethnic Studies course pairing STSS: African and African-American Perspectives and Historical Contributions (.5 credits) AND STSS: Latino/a Studies (.5 credits)	**The credits may be selected from:** Any two levels in the same language; or Two credits in computer programming languages selected from Computer Science I, II, and III, AP Computer Principles, or AP Computer Science A, IB Computer Science Standard Level and IB Computer Science Higher Level; **If a student, in completing the first credit of LOTE, demonstrates that the student is unlikely to be able to complete the second credit, the student may substitute another appropriate course as follows:** • **Special Topics in Language and Culture** • **Another credit selected from a different LOTE** • **Computer programming languages, including computer coding** The determination regarding a student's ability to complete the second credit of LOTE must be agreed by: • **The teacher of the first LOTE course, the principal or designee, and the student's parent;** • **The ARD or 504 committee, if applicable** A student, who due to a disability, is unable to complete 2 credits in the same LOTE, may substitute a combination of 2 credits from ELA, math, science or social studies (can be from 1 area or 2 areas) or 2 credits in CTE or technology applications for the LOTE requirement. (Cannot combine a credit from the ELA, math, science, and social studies areas with a credit from the CTE/technology applications area.) The determination regarding the student's ability to complete the LOTE requirement will be made by the ARD or 504 committee, as applicable.	**Credit may be from the following courses:** Art, Level I, II, III, or IV; Dance, Level I, II, III, or IV; Music, Level I, II, III, or IV; Musical Studies Music Theory Music Production Music & Media Communications AP Music Theory Theatre, Level I, II, III, or IV; Musical Theatre, Level I, II, III, or IV; Technical Theatre, Level I, II, III, or IV; Floral Design; Digital Art and Animation 3-D Modeling and Animation
Physical Education (1 Credit) May be selected from the following: PE courses; or PE substitutions; or District-Approved Off Campus Programs; or Approved Dual Credit PE Courses	**Health (0.5 Credit) FWISD Requirement** May be selected from the following: Health (0.5 credit) or Principles of Health Science (1 credit) or Honors Principles of Health Science or Approved Dual Credit Health Course	**Speech (0.5 Credit) FWISD Requirement** May be selected from the following: Communications Applications; Professional Communications; Debate I (or Honors) Public Speaking Independent Study in Speech or Approved Dual Credit Speech Course

Elective Credits may be selected from:
State approved TEKS courses for grades 9 – 12;
State approved innovative courses (these courses only meet elective requirements and will not meet state specific named course requirements);
Junior Reserve Officer Training Corp (1 – 4 credits); or
Reading I, II, and III based on assessed individual needs (up to 3 credits)

Available Endorsements

Science, Technology, Engineering, and Mathematics

Business and Industry

Public Services

Arts and Humanities

Multidisciplinary Studies

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM)	Includes courses directly related to: • Science, including environmental science • CTE Technology courses, including Computer Science • Engineering • Math	Must complete Algebra II, Chemistry, Physics or Principles of Technology, and one of the following: 1. A coherent sequence of courses for 4 or more credits in CTE that consists of at least 2 courses in the same career cluster and at least 1 advanced CTE course. The final course in the sequence must be selected from the STEM career cluster. See CTE Programs of Study Alignment to Endorsements on the tea.texas.gov site. 2. A coherent sequence of four credits in selected Computer Science courses. 3. A total of 5 credits in Math by successfully completing Algebra I, Geometry, Algebra II, and 2 additional Math courses for which Algebra II is a prerequisite. 4. A total of 5 credits in science by successfully completing biology, chemistry, physics, and 2 additional Science courses. 5. In addition to Algebra II, Chemistry, and Physics, a coherent sequence of 3 additional credits from no more than two of the three areas listed in 1, 2, 3, and 4 above.
BUSINESS AND INDUSTRY	Includes courses directly related to: • Agriculture, Food, & Natural Resources • Architecture & Construction • Arts, Audio/Video Technology, & Communications • Business, Marketing & Finance • Energy • Hospitality & Tourism • Information Technology • Manufacturing • Marketing • Transportation, Distribution, & Logistics • Career Pre I or II and Project-Based Research	Must complete one of the following: 1. Coherent sequence of courses for 4 or more credits in CTE. The final course in the sequence must be selected from one of the courses listed to the left. See CTE Programs of Study Alignment to Endorsements on the tea.texas.gov site. 2. Four English elective credits by selecting three levels in one of the following areas: • Advanced Broadcast Journalism • Advanced Journalism: Newspaper • Advanced Journalism: Yearbook • Advanced Journalism: Literary Magazine • Debate • Public Speaking 3. Four technology application credits listed below: • 3-D Modeling & Animation • Digital Art & Animation • Digital Communication in the 21st Century; • Digital Design & Media Production • Digital Video & Audio Design • Independent Study in Evolving/Emerging Technologies • Web Communication • Web Design • Web Game Development 4. Coherent sequence of four credits from 1, 2, or 3.

PUBLIC SERVICE	Includes courses directly related to: • Education & Training • Health Sciences • Human Services • Law, Public Safety, Corrections & Security	Must complete one of the following: 1. Coherent sequence of courses for 4 or more credits in CTE that consists of at least two courses in the same cluster and at least one advanced CTE course. The final course in the sequence must be selected from one of the courses listed to the left. See CTE Programs of Study Alignment to Endorsements on the tea.texas.gov site. 2. Four courses in JROTC.
ARTS & HUMANITIES	Includes courses directly related to: • Cultural studies • English Literature • Fine arts • History • Political science • World languages	Must complete one of the following: 1. Total of 5 social studies credits 2. Four levels of the same language in language other than English (LOTE) 3. Two levels of the same language in LOTE and two levels in a different language in LOTE 4. Four levels of American Sign Language 5. Coherent sequence of 4 credits by selecting courses from 1 or 2 categories or disciplines in fine arts or innovative courses approved by the commissioner 6. Four English elective credits by selecting from the following: • English IV • Independent Study in English • Research & Technical Writing • Humanities • Communication Applications • AP English Literature & Composition • AP English Language & Composition • IB Language Studies AI Higher Level
MULTIDISCIPLINARY	Allows a student to select courses from the curriculum of each endorsement area and earn credits in a variety of advanced courses from multiple content areas sufficient to complete the distinguished level of achievement	Must complete one of the following: 1. 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. 2. Four credits in each of the four foundation subject areas to include English IV and Chemistry and/or Physics and English IV or a comparable AP or IB English course. 3. Four credits in Advanced Placement, International Baccalaureate, or dual credit selected from English, mathematics, science, social studies, economics, languages other than English, or fine arts.

PERFORMANCE ACKNOWLEDGEMENTS

Transcripts and diplomas will include Foundation Program Performance Acknowledgements.

Students can earn performance acknowledgements for dual credit, bilingualism and biliteracy, AP or IB exams, PSAT, SAT or ACT testing, or certifications and licensures.

DUAL CREDIT	Successful completion of: 1. At least 12 hours of college academic courses, including those taken for dual credit as part of the Texas core curriculum, and advanced technical courses, including locally articulated courses, with a grade of the equivalent of 3.0 or higher on a scale of 4.0; or 2. An associate degree while in high school
BILINGUALISM AND BILTERACY	Demonstrate proficiency in accordance with District grading policy in two or more languages by: 1. Completing all English language requirements and maintaining a minimum grade point average (GPA) of the equivalent of 80 on a scale of 100; and 2. Satisfying one of the following: a. Completion of a minimum of three credits in the same language other than English with a minimum GPA of the equivalent of 80 on a scale of 100; or b. Demonstrate proficiency in the Texas Essential Knowledge and Skills for Level IV or higher in a language other than English with a minimum GPA of the equivalent of 80 on a scale of 100; or c. Completion of at least three credits in foundation subject area courses in a language other than English with a minimum GPA of 80 on a scale of 100; or d. Demonstrate proficiency in one or more languages other than English through one of the following methods: i. Score of 3 or higher on a College Board AP exam for a language other than English; or ii. Score a 4 or higher on an IB exam for a higher-level language other than English course; or iii. Performance on a national assessment of language proficiency in a language other than English of at least Intermediate High or its equivalent In addition to meeting the requirements to earn a performance acknowledgement in bilingualism and biliteracy, an English language learner must also have: 1. Participated in and met the exit criteria for a bilingual or English as a second language (ESL) program; and 2. Scored at the Advanced High level on the Texas English Language Proficiency Assessment System (TELPAS).
AP or IB TEST	Earn a: 1. Score of 3 or above on a College Board advanced placement examination. 2. Score of 4 or above on an International Baccalaureate examination.

PSAT ACT-ASPIRE SAT ACT	1. Score on the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT®) that qualifies the student for recognition as a commended scholar or higher by the College Board and National Merit Scholarship Corporation, as part of the National Hispanic Recognition Program (NHRP) of the College Board or as part of the National Achievement Scholarship Program of the National Merit Scholarship Corporation. 2. Achieve the ACT readiness benchmark score on at least three of the five subject tests on the ACT-ASPIRE® examination. 3. Earn a total score of at least 1310 on the SAT®; or 4. Earn a composite score on the ACT® examination of 28 (excluding the writing sub score)
CERTIFICATION OR LICENSE	Earn a nationally or internationally recognized business or industry certification or license with: 1. Performance on an examination or series of examinations sufficient to obtain a nationally or internationally recognized business or industry certification; or 2. Performance on an examination sufficient to obtain a government-required credential to practice a profession.

Distinguished Level of Achievement

A student may earn a distinguished level of achievement by successfully completing:

- A total of four credits in mathematics, which must include Algebra II
- A total of four credits in science
- The remaining curriculum requirements
- The curriculum requirements for at least one endorsement

A student must earn a distinguished level of achievement to be eligible for top 10% automatic admission

Notations on Foundation Student Transcript

The Foundation High School transcript for a student who satisfies the applicable requirements will include the following types of achievement:

- Distinguished Level of Achievement
- Endorsements, and
- Performance Acknowledgements

Academic Preparatory Programs

AVID I (ADVANCEMENT VIA INDIVIDUAL DETERMINATION I AB) (AVID I AB)	0660 AB
The 9th grade AVID Elective course will serve as a review of the AVID philosophy and strategies. Students will work on academic and personal goals, communication, and adjusting to the high school setting. Students will increase awareness of their personal contributions to their learning, as well as their involvement in their school and community. There is an emphasis on analytical writing, focusing on personal goals and thesis writing. Students will work in collaborative settings, learning how to participate in collegial discussions and use sources to support their ideas and opinions. Students will prepare for and participate in college entrance and placement exams, while refining study skills and test-taking, note-taking, and research techniques. They will take an active role in field trips and guest speaker preparations and presentations. Their college research will include financial topics and building their knowledge of colleges and careers of interest.	N1290001 Grade level: 9 HS Credit(s): 1.0 College Hour(s): N/A **Tier III**
Instructional Material: *Materials provided through contract with AVID Center* Prerequisites: Middle School AVID, or Application to and Acceptance into 9th Grade AVID program *AVID is a state-approved academic elective credit course.* What's next? AVID II AB (Advancement Via Individual Determination)	

AVID II (ADVANCEMENT VIA INDIVIDUAL DETERMINATION II AB) (AVID II AB)	0661 AB
During the 10th grade AVID Elective course, students will refine the AVID strategies to meet their independent needs and learning styles. Students will continue to refine and adjust their academic learning plans and goals, increasing awareness of their actions and behaviors. As students increase the rigorous course load and school/community involvement, they will refine their time management and study skills accordingly. Students will expand their writing portfolio to include: analyzing prompts, supporting arguments and claims, character analysis and detailed reflections. Students will also analyze various documents, in order to participate in collaborative discussions and develop leadership skills in those settings. Students will expand their vocabulary use, continuing to prepare for college entrance exams. Text analysis will focus on specific strategies to understand complex texts. Lastly, students will narrow down their college and careers of interest, based on personal interests and goals.	N1290002 Grade level: 10 HS Credit(s): 1.0 College Hour(s): N/A **Tier III**
Instructional Material: *Materials provided through contract with AVID Center* Prerequisites: AVID I, or Application to and Acceptance into 10th Grade AVID *AVID is a state-approved academic elective credit course.* What's next? AVID III AB (Advancement Via Individual Determination)	

AVID III (ADVANCEMENT VIA INDIVIDUAL DETERMINATION III AB) (AVID III AB)	0671 AB
The 11th grade AVID Elective course is the first part in a junior/senior seminar course that focuses on writing and critical thinking expected of first- and second-year college students. This course is organized around the theme of "Leadership as a Catalyst for Change in Society." Students study, in depth, exceptional leaders in contemporary society and examine the effect that these individuals have had on culture, politics, education, history, science and the arts. The course requires that students read essays, speeches, articles and letters by these leaders, as well as at least one full-length work by the leader or about the leader. Also, each student is required to conduct a research project that is presented in the senior year. In addition to the academic focus of the AVID seminar, there are college-bound activities, methodologies and tasks that should be undertaken during the junior year to support students as they apply to four-year universities and confirm their postsecondary plans.	N1290030 Grade level: 11 HS Credit(s): 1.0 College Hour(s): N/A **Tier III**
Instructional Material: *Materials provided through contract with AVID Center* Prerequisites: Successful completion of AVID II; No students are admitted "new" to AVID junior year without AVID District Director approval *AVID is a state-approved academic elective credit course.* What's next? AVID IV AB (Advancement Via Individual Determination)	

AVID IV (ADVANCEMENT VIA INDIVIDUAL DETERMINATION IV AB) (AVID IV AB)	0664 AB
The AVID Elective 12th grade course is the second part in a junior/senior seminar course that focuses on writing and critical thinking expected of first- and second-year college students. This course continues around the theme of "Leadership as a Catalyst for Change in Society." Students will complete a final research essay project from research conducted in their junior year in AVID. In addition to the academic focus of the AVID senior seminar, there are college-bound activities, methodologies and tasks that should be achieved during the senior year that support students as they apply to four-year universities and confirm their postsecondary plans. All AVID seniors are required to develop and present a portfolio representing their years of work in the AVID program, as well as complete the requirements for the seminar course. The AVID Senior Seminar (AVID IV) is the culmination of a student's years in the AVID program and involves substantial critical reading and writing, and preparation for external exams. Students receive assistance in completing their college and financial aid/scholarship applications. In addition, students will make oral presentations to the class on topics related to college entrance, contemporary issues, and social concerns.	N1290033 Grade level: 12 HS Credit(s): 1.0 College Hour(s): N/A **Tier III**
Instructional Material: *Materials provided through contract with AVID Center* Prerequisites: Successful completion of AVID III; no students are admitted "new" to AVID senior year without AVID District Director approval	

AVID is a state-approved academic elective credit course.

DUAL CREDIT COLLEGE TRANSITION AB (CLGTRN AB DC) **TCC Course: College Learning Framework (EDUC 1300)**	**0668 AB**
A study of the research and theory in the psychology of learning, cognition, and motivation; factors that impact learning; and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned.	N1290050 Grade level: 9-12 HS Credit(s): 1.0 College Hour(s): 3 hours **Tier I**
Instructional Material: *Contact Content Director* Prerequisites: None *This is a regular college-level Education course in which dual credit will be awarded for College Education and high school College Transition. The student will receive 3 hours college credit and 1 high school credit when completed successfully.*	

PREPARING STUDENTS FOR ADVANCED TESTING I T (PSAT I T)	**8221 T**
Provides students an opportunity to develop test-taking strategies for use on *PSAT, SAT,* and other college entrance examinations. Skills addressed help improve performance on standardized tests. Includes vocabulary building, reading improvement, mathematics, and reasoning skills.	Local Credit Only Grade level: 9-12 HS Credit(s): 0
Instructional Material: *Contact Content Director* Prerequisites: Student interest *Local credit only. No credit is earned toward graduation for this course.*	College Hour(s): NA **Tier III**

ENGLISH LANGUAGE ARTS GRADUATION REQUIREMENTS

ALL STUDENTS ARE REQUIRED to take English I (EOC) & English II (EOC) or EngSOL I & II

FOUNDATION PLANS

All Foundation Plans (22 & 26 credits) Require 4 English credits

The 3rd English credit may be selected from the following:

- English III
- AP Language & Composition
- DC English Composition
- AP Literature & Composition
- OnRamps English Rhetoric & Writing - 3044AB
  (may only take once for Eng III OR Eng IV - 1 credit)

Possible Endorsement Opportunities:

- Multidisciplinary
- Business & Industry
- Arts & Humanities

The 4th English credit may be selected from one full credit or a combination of two half credits from two different courses, subject to prerequisite requirements.

The 4th English credit may be selected from the following:

- English IV
- Humanities
- AP Language & Composition
- AP Literature & Composition
- OnRamps English Rhetoric & Writing - 3045AB
  (may only take once for Eng III OR Eng IV - 1 credit)
- Business English
- College Preparatory English
- DC English Composition
- DC Research & Technical Writing
- DC British Literature
- DC American Literature

English Language Arts Recommended Course Sequence and Testing Guide

	Traditional		Honors		Advanced Placement (AP) / Dual Credit (DC)	
6th	Gr 6 ELAR: 0041	STAAR Gr 6	Honors Gr 6 ELAR: 0015	STAAR Gr 6	Honors Gr 6 ELAR: 0015	STAAR Gr 6
7th	Gr 7 ELAR: 0042	STAAR Gr 7	Honors Gr 7 ELAR: 0019	STAAR Gr 7	Honors Gr 7 ELAR: 0019	STAAR Gr 7
8th	Gr 8 ELAR: 0043	STAAR Gr 8	Honors Gr 8 ELAR: 0025	STAAR Gr 8	Honors English I: 3090	Eng I EOC
9th	English I: 3011	Eng I EOC	Honors English I: 3090	Eng I EOC	Honors English II: 3092	Eng II EOC PSAT
10th	English II: 3013	Eng II EOC	Honors English II: 3092	Eng II EOC PSAT	Honors English III: 3094 Advanced ELAR	Exams vary by course
11th	English III: 3015	PSAT SAT ACT	Honors English III: 3094 AP/DC ELAR Elective or Advanced ELAR	Exams vary by course	OnRamps English (may only take once for Eng III or Eng IV – 1 credit) AP/DC ELAR Elective or Advanced ELAR	Exams vary by course
12th	English IV: 3017 College Preparatory English: 3131	PSAT SAT ACT TSI	OnRamps English (may only take once for Eng III or Eng IV – 1 credit) AP/DC ELAR Elective or Advanced ELAR	Exams vary by course	AP/DC ELAR Elective OnRamps English (may only take once for Eng III or Eng IV – 1 credit)	Exams vary by course

ENGLISH I AB **SHELTERED ENGLISH I AB** **ENGLISH I AB** **EngSOL I AB**	**3011 AB** **0546 AB** **30115 AB** **0541 AB**
Provides students opportunities to continue increasing and refining their written and oral communication skills. Students read and learn from world literature that represents a variety of cultures. Students address reading, writing, research, listening, speaking, and oral and written conventions that are reflected in the TEKS.	03220100
Instructional Material: *McGraw Hill Study Sync, Grade 9 TX Std, ISBN 9781265535973* Prerequisites: None What's Next? English II AB; Honors English II AB *Students will take the English I EOC.* Teachers with an English Learner enrolled in the course must be English and ESL certified.	Grade level: 9 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ENGLISH I AB **SHELTERED HONORS ENGLISH I AB**	**3090 AB** **3089 AB**
As required by the state, this course goes beyond the TEKS in depth and complexity vertically aligned to the Advanced Placement courses of English Language and Literature and SAT skills. This course includes enrichment opportunities such as research, projects, and independent study.	03220100
Instructional Material: *McGraw Hill Study Sync, Grade 9 TX Std, ISBN 9781265535973* *Additional resources available through required attendance of at least 1 AP or NMSI summer institute.* Prerequisites: FWISD is an inclusive district in that any stakeholder (teacher, student, parent, etc.) can request access to our most advanced courses and have at least a provisional placement issued. There are no prerequisite requirements that would limit this course's availability to a student with such a request. Prior learning to consider in placement: previous Honors course; top 25% - 40% achievement data (using local norms) on any state or national exam of reading and/or writing.	Grade level: 9 Credit(s): 1 College Hour(s): NA **Tier II**

What's Next? Honors English II AB
Students will take English I EOC.
Course taught by locally certified gifted teacher who has attended at least one AP or NMSI Summer Institute for the course.
Teachers with an English Learner enrolled in the course must be English and ESL certified.

ENGLISH II AB **SHELTERED ENGLISH II AB** **ENGLISH II AB** **EngSOL II AB**	**3013 AB** **0548 AB** **30135 AB** **0543 AB**
Provides students opportunities to continue increasing and refining their communication skills. Students read and write literary and informational genres. Students read and learn from world literature that represents a variety of cultures while also learning literary forms and terms from the selections read. Students address the writing, reading, research, listening, speaking, oral, and written conventions that are reflected in the TEKS.	03220200
Instructional Material: *McGraw Hill Study Sync, Grade 10 TX Std, ISBN 9781265535973* Prerequisites: English I What's Next? English III AB; Honors English III AB; Humanities I AB *Students will take English II EOC.* Teachers with an English Learner enrolled in the course must be English and ESL certified.	Grade level: 9 – 10 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ENGLISH II AB	**3092 AB**
As required by the state, this course goes beyond the TEKS in depth and complexity vertically aligned to the Advanced Placement courses of English Language and Literature and SAT skills. This course includes enrichment opportunities such as research, projects, and independent study.	03220200
Instructional Material: *McGraw Hill Study Sync, Grade 10 TX Std, ISBN 9781265535973* *Additional resources available for teachers through required attendance at least 1 AP or NMSI summer institute.* Prerequisites: English I or Honors English I FWISD is an inclusive district in that any stakeholder (teacher, student, parent, etc.) can request access to our most advanced courses and have at least a provisional placement issued. There are no prerequisite requirements that would limit this course's availability to a student with such a request. Prior learning to consider in placement: previous Honors course; top 25% - 40% achievement data (using local norms) on any state or national exam of reading and/or writing.	Grade level: 9 – 10 Credit(s): 1 College Hour(s): NA **Tier II**

What's Next? Honors English III AB, AP English Language and Composition, Dual Credit English, AP Literature & Composition
Students will take English II EOC.
Course taught by locally certified gifted teacher who has attended at least one AP or NMSI Summer Institute for the course.
Teachers with an English Learner enrolled in the course must be English and ESL certified.

ENGLISH III AB **SHELTERED ENGLISH III AB (EL students in Newcomer Program)** **SHELTERED ENGLISH III AB** **ENGLISH III AB**	**3015 AB** **0544 AB** **0549 AB** **30155 AB**
Provides opportunities for students to continue increasing and refining their communication skills. Students read and write literary and informational genres. Students read extensively in multiple genres from American and World Literature while learning literary forms and terms from the selections read. Students address the writing, reading, speaking, listening, viewing, and representing skills that are reflected in the TEKS.	03220300 Grade level: 10 – 11
Instructional Material: *McGraw Hill Study Sync, Grade 11 TX Std, ISBN 9781265535973* Prerequisites: English II What's Next? English IV AB; Dual Credit English Composition; Research/Technical Writing Teachers with an English Learner enrolled in the course must be English and ESL certified.	Credit(s): 1 College Hour(s): NA **Tier III**
OnRamps ENGLISH RHETORIC & WRITING AB	**3044 AB**
This Rhetoric and Writing course provides opportunities for students to learn to analyze the various positions held in any public debate and learn to advocate their own positions effectively. Students explore the ethics of argumentation and what it means to "fairly" represent someone with whom they disagree. Students are then ready to analyze and compose arguments about American identity and identity formation, both personal and cultural. The goal is to foster students' abilities to analyze arguments presented by others and to write sound and effective arguments of their own — abilities that contribute meaningfully to their academic, professional, personal, and civic lives. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher. **THIS COURSE MAY COUNT FOR ENGLISH III CREDIT.**	03220300 Grade level: 10 - 11 Credit(s): 1.0 College Hour(s): 6 **Tier I**

Instructional Material: Selected and provided by the University of Texas at Austin
Prerequisites: English I, English II, and teacher recommendation – **may only take OnRamps English Rhetoric & Writing once for 1 credit – Either an English III OR an English IV credit.**
What's Next? Dual Credit English Composition; Dual Credit Research/Technical Writing; AP English Language and Composition; AP English Literature and Composition

OnRamps ENGLISH RHETORIC & WRITING AB	**3045 AB**
This Rhetoric and Writing course provides opportunities for students to learn to analyze the various positions held in any public debate and learn to advocate their own positions effectively. Students explore the ethics of argumentation and what it means to "fairly" represent someone with whom they disagree. Students are then ready to analyze and compose arguments about American identity and identity formation, both personal and cultural. The goal is to foster students' abilities to analyze arguments presented by others and to write sound and effective arguments of their own — abilities that contribute meaningfully to their academic, professional, personal, and civic lives. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher. **THIS COURSE MAY COUNT FOR ENGLISH IV CREDIT.**	03220400
Instructional Material: Selected and provided by the University of Texas at Austin Prerequisites: English III or AP English Language and Composition or AP English Literature and Composition – **may only take OnRamps English Rhetoric & Writing once for 1 credit – Either an English III OR an English IV credit.** What's Next? Any advanced English course	Grade level: 11 - 12 Credit(s): 1.0 College Hour(s): 6 **Tier I**

HONORS ENGLISH III AB	**3094 AB**
As required by the state, this course goes beyond the TEKS in depth and complexity vertically aligned to the Advanced Placement courses of English Language and Literature and SAT skills. This course includes enrichment opportunities such as research, projects, and independent study.	03220300
Instructional Material: *McGraw Hill Study Sync, Grade 11 TX Std, ISBN 9781265535973* *Additional resources available through required attendance at least 1 AP or NMSI summer institute.* Prerequisites: English II or Honors English II FWISD is an inclusive district in that any stakeholder (teacher, student, parent, etc.) can request access to our most advanced courses and have at least a provisional placement issued. There are no prerequisite requirements that would limit this course's availability to a student with such a request. Prior learning to consider in placement: previous Honors course; top 25% - 40% achievement data (using local norms) on any state or national exam of reading and/or writing	Grade level: 10 – 11 Credit(s): 1 College Hour(s): NA **Tier II**

What's Next? Dual Credit English Composition; Dual Credit Research/Technical Writing; AP English Language Composition; AP English Literature Composition
Course taught by locally certified gifted teacher who has attended at least one AP or NMSI Summer Institute for the course.
Teachers with an English Learner enrolled in the course must be English and ESL certified.

COLLEGE PREPARATORY ENGLISH AB	**3131 AB**
This is a College Preparatory course for seniors only intended to help students hone their skills prior to taking the TSIA college placement exam.	CP110100
Instructional Material: TCC stipulates the resources and requires teacher training Prerequisites: Students who have not yet met college readiness standards What's Next? NA Credits may or may not be available to count toward your graduation plan - see your counselor for more details. Students on the *Foundation HS Graduation Plan* may earn advanced English Language Arts credit for an *ELAR College Preparatory* course (both semesters are required) only if the student has already completed the three previous English Language Arts credit requirements for the *Foundation HS Graduation Plan* prior to taking these courses. • This course is a preparation course for success on TSIA and will no longer provide exemption at TCCD. • English Language Arts college preparatory courses only provide high school credit if the student completes both semesters with at least a 70 average for both and if qualifications noted below in #3 are met. • This college ELAR preparatory course is developmental and will not provide any dual credit. See the decision point situations listed below that a student should consider when determining if this course will provide the benefits he/she needs.	Grade level: 12 only Credit(s): 0.5 - 1 College Hour(s): NA **Tier III**

1. If the student has not passed the English I and English II EOC, then it is recommended that students complete all coursework required in order to pass the EOC exams prior to enrolling in this course. (Students who have not passed English I or II EOC can be scheduled into the course for their senior year.)
2. Students on the *Recommended HS Graduation Plan* or *Distinguished Achievement Graduation Plan* who complete an English Language Arts college preparatory course may not use the credit earned to satisfy an advanced ELAR credit.
3. Students on the *Foundation HS Graduation Plan* may earn advanced ELAR credit for an English Language Arts college preparatory course (both semesters required =1 credit) only if the student has already completed the three previous ELAR credit requirements for the *Foundation Graduation Plan* prior to taking this class.
4. This course will be taught on a high school campus, and follows curricular guidance from Tarrant County Community College but follows all FWISD grading guidelines.

Teachers with an English Learner enrolled in the course must be English and ESL certified.

Texas College Bridge English (Online) AB	**9005 AB**
This is a College Preparatory course for seniors only intended to help students hone their skills prior to collegiate level English courses.	CP110100
Instructional Material: *Texas College Bridge stipulates the resources and requires teacher training* Prerequisites: Students who have not yet met college readiness standards What's Next? N/A *Credits for this program alone are not available to count toward graduation.* • This course is a preparation course for success in collegiate level English and will provide exemption at Higher Ed Institutions that partner with Texas College Bridge. • Students will receive a certificate of completion up finishing both Stage 1 and Stage 2 to share with colleges or universities that partner with Texas College Bridge and the student intends to enroll. These College Preparatory courses are developmental courses and will not provide any dual credit. See the decision-point situations listed below that a student should consider in determining if this course will provide the benefits he/she needs. 1. If the student is not enrolled in a program that offers a certification/licensure. 2. If the student is not within 3 college credit hours in Math/English or 9 college credit hours in other. 3. If student is not enrolled in a Dual Credit, IB, AP, nor OnRamps Course or if student grades and/or test scores are not aligned with success for the student enrolled in the course. 4. If student intends to enlist in the military and no other CCMR pathway is assigned. 5. If student is not enrolled in any CCMR course or programs. 6. If student wants to participate in the program for TSIA prep or other reasons.	Grade level: 12 Credit(s): 0.5 College Hour(s): N/A **Tier III**

Texas College Bridge English (Distance Learning) AB	**9007 AB**
This is a College Preparatory course for seniors only intended to help students hone their skills prior to collegiate level English courses.	CP110100
Instructional Material: *Texas College Bridge stipulates the resources and requires teacher training* Prerequisites: Students who have not yet met college readiness standards What's Next? N/A *Credits for this program alone are not available to count toward graduation.* • This course is a preparation course for success in collegiate level English and will provide exemption at Higher Ed Institutions that partner with Texas College Bridge. • Students will receive a certificate of completion up finishing both Stage 1 and Stage 2 to share with colleges or universities that partner with Texas College Bridge and the student intends to enroll. These College Preparatory courses are developmental courses and will not provide any dual credit. See the decision-point situations listed below that a student should consider in determining if this course will provide the benefits he/she needs. 1. If the student is not enrolled in a program that offers a certification/licensure. 2. If the student is not within 3 college credit hours in Math/English or 9 college credit hours in other. 3. If student is not enrolled in a Dual Credit, IB, AP, nor OnRamps Course or if student grades and/or test scores are not aligned with success for the student enrolled in the course. 4. If student intends to enlist in the military and no other CCMR pathway is assigned. 5. If student is not enrolled in any CCMR course or programs. 6. If student wants to participate in the program for TSIA prep or other reasons.	Grade level: 12 Credit(s): 0.5 College Hour(s): N/A **Tier III**

DUAL CREDIT ENGLISH III A **TCC Course: English Composition I (ENGL 1301)** **TWU Course: Composition and Rhetoric (ENG 1301)**	**3039 A**
Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis.	03220300 Grade level: 11 - 12
Instructional Material: NA FWISD Prerequisites: English II TCC Prerequisites: TSI compliant in writing and reading TWU Prerequisites: Only offered at Dunbar What's Next? ENGL 1302 *Course taught by an approved adjunct instructor*	ECHS: 9 – 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT ENGLISH III B **TCC Course: English Composition II (ENGL 1302)** **TWU Course: Composition and Literature (ENG 1302)**	**3039 B**
Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions.	03220300 Grade level: 11 – 12 ECHS: 9 – 12
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1301 TWU Prerequisites: ENG 1301; Only offered at Dunbar What's Next? ENGL 2322 or ENGL 2327 *Course taught by an approved adjunct instructor*	Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
ENGLISH IV AB	**3017 AB**
Provides students opportunities to continue to increase and refine their communication skills. Students use the writing process to practice a variety of forms of writing including business, personal, literary, and persuasive texts. Students read extensively in multiple genres from British and other world literature while learning literary forms and terms from the selections being read. Students address the writing, reading, speaking, listening, viewing, and representing skills that are reflected in the TEKS.	03220400
Instructional Material: *1079 – Holt McDougal Literature Texas, British Literature, a division of Houghton Mifflin Harcourt Publishing Company, ISBN: 9780547115825; 1080 – Prentice Hall Writing Coach, Texas Edition, Grade 12, Pearson Education, Inc., publishing as Prentice Hall, ISBN: 9780132534888* Prerequisites: English III What's Next? AP Literature and Composition, AP Language and Composition and any other advanced English course. Teachers with an English Learner enrolled in the course must be English and ESL certified.	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
DUAL CREDIT ENGLISH IV A **TCC Course: English Composition I (ENGL 1301)** **TWU Course: Composition and Rhetoric (ENG 1301)**	**3040 A**
Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions.	03220400
Instructional Material: NA FWISD Prerequisites: English III, Honors English III ACT, Honors English III, or AP English Language and Composition and student interest. TCC Prerequisites: TSI compliant in writing and reading TWU Prerequisites: Only offered at Dunbar What's Next? ENGL-1302 *Course taught by an approved adjunct instructor*	Grade level: 11 – 12 ECHS: 9 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**

DUAL CREDIT ENGLISH IV B **TCC Course: English Composition II (ENGL 1302)** **TWU Course: Composition and Literature (ENG 1302)**	**3040 B**
Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions.	03220400 Grade level: 11 – 12 ECHS: 9 - 12
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1301 TWU Prerequisites: ENG 1301; Only offered at Dunbar What's Next? ENGL 2322 or ENGL 2327 *Course taught by an approved adjunct instructor*	Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT ENGLISH IV A **TCC Course: British Literature I to 1800 (ENGL 2322)**	**3041 A**
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.	03220400 Grade level: 11 – 12 ECHS: 9-12
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1302 What's Next? ENGL 2323 *Course taught by an approved adjunct instructor*	Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT ENGLISH IV B **TCC Course: British Literature II since 1800 (ENGL 2323)** **TWU Course: British Literature (ENG 2328)**	**3041 B**
A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.	03220400 Grade level: 11 – 12
Instructional Material: NA FWISD Prerequisites: ENGL 2322 TCC Prerequisites: ENGL 1302 TWU Prerequisites: ENG 2326; Only offered at Dunbar What's Next? NA *Course taught by an approved adjunct instructor*	ECHS: 9 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT ENGLISH IV A **TCC Course: American Literature I to 1865 (ENGL 2327)** **TWU Course: American Literature (ENG 2326)**	**3046 A**
A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.	03220400 Grade level: 11 – 12 ECHS: 9 -12
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1302 TWU Prerequisites: Only offered at Dunbar What's Next? ENGL 2328 *Course taught by an approved adjunct instructor*	Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT ENGLISH IV B **TCC Course: American Literature II since 1865 (ENGL 2328)**	**3046 B**
A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.	03220400 Grade level: 11 – 12 ECHS: 9 -12
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 130 What's Next? NA *Course taught by an approved adjunct instructor*	Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
AP ENGLISH LANGUAGE AND COMPOSITION AB	**3062 AB**
Prepares students for the College Board Language and Composition Examination. Designed for highly motivated students who wish to complete the equivalent of an introductory college course in language, rhetoric, and expository writing. Engages students as skilled readers of various literary works that are written in a variety of periods, disciplines, and rhetorical contexts. Engages students as skilled writers who compose for a variety of purposes. Requires the use of appropriate and sophisticated grammatical conventions and linguistic choices in effective critical writing.	A3220100

Instructional Material: *The Language of Composition: Reading, Writing Rhetoric, Bedford, Freeman and Worth, ISBN 1319104371* Prerequisites: English II (or Honors); or English III (or Honors); student interest What's Next? Advanced English Course Teachers with an English Learner enrolled in the course must be English and ESL certified.	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
AP ENGLISH LITERATURE AND COMPOSITION AB	**3064 AB**
Prepares students for the College Board Literature and Composition Examination. Designed for highly motivated students who wish to complete the equivalent of an introductory college course in literature and expository writing. Includes narrative, exploratory, expository, and argumentative writing. Emphasizes critical analysis and research. Explores representative works from various genres and periods, particularly world literature, with a concentration on works of recognized literary merit. Focuses on critical thinking, critical reading, and critical writing about selected prose and poetry.	A3220200 Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
Instructional Material: *1043 – AP Literature and Composition, Bedford, Freeman, & Worth, ISBN: 1451682516* Prerequisites: English II (or Honors), English III (or Honors), or AP English Language & Composition, and student interest What's Next? Advanced English Course Teachers with an English Learner enrolled in the course must be English and ESL certified.	
HUMANITIES AB	**3117 AB**
Humanities is an interdisciplinary course in which students recognize writing as an art form. Students read widely to understand how various authors craft compositions for various aesthetic purposes. This course includes the study of major historical and cultural movements and their relationship to literature and the other fine arts. Humanities is a rigorous course of study in which high school students respond to aesthetic elements in texts and other art forms through outlets such as discussions, journals, oral interpretations, and dramatizations. Students read widely to understand the commonalities that literature shares with the fine arts. In addition, students use written composition to show an in-depth understanding of creative achievements in the arts and literature and how these various art forms are a reflection of history. All students are expected to participate in classroom discussions and presentations that lead to an understanding, appreciation, and enjoyment of critical, creative achievements throughout history. Understanding is demonstrated through a variety of media.	03221600 Grade level: 11 – 12 Credit(s): 0.5- 2 College Hour(s): NA **Tier III**
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: English II, English III or AP Literature or AP Language – may count as the 4th English credit What's Next? Any offered elective Teachers with an English Learner enrolled in the course must be English and ESL certified.	
HONORS HUMANITIES ABH	**3119 ABH**
Includes the study of major historical and cultural movements and their relationship to literature and the other fine Arts. Offers academically motivated students' opportunities to write extensively for a variety of purposes and audiences with emphasis on rhetorical terminology and strategies and a focus on understanding creative achievements in the arts and literature and how these various art forms are a reflection of history. Emphasizes critical and analytical response to various artistic, literary, philosophical, and political works. Addresses universal themes through critical reading and writing. Students will engage in original research that is to culminate in a project that meets the requirements for a Distinguished Achievement Program diploma advanced measure. Approval to add this honors course to a campus must be granted by the Secondary English Arts/Literacy Director.	03221600 Grade level: 11 – 12 Credit(s): 0.5- 2
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: English II, English III or AP Literature or AP Language – may count as the 4th English credit What's Next? AP Literature, AP Language, AP World History, AP United States History, or any offered elective. Teachers with an English Learner enrolled in the course must be English and ESL certified.	College Hour(s): NA **Tier II**
DUAL CREDIT LITERARY HUMANITIES AB **TCC Course: Introduction to Humanities (HUMA 1301)** **TWU Course: The Human Experience (HUM 2340)**	**3118 AB**
A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.	03221600 Grade level: NA ECHS: 9 – 12
Instructional Material: NA FWISD Prerequisites: English II TCC Prerequisites: NA TWU Prerequisites: Only offered at Dunbar	Credit(s): 0.5 College Hour(s): 3 hours **Tier I**

What's Next? NA
Course taught by an approved adjunct instructor

INDEPENDENT STUDY IN ENGLISH AB	**3138**
Students enrolled in Independent Study in English will focus on a specialized area of study such as the work of a particular author or genre. Students will read and write in multiple forms for a variety of audiences and purposes. High school students are expected to plan, draft, and complete written compositions on a regular basis and carefully examine their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English. Independent Study in English may be repeated with different content for up to three state elective credits.	03221800 Grade level: 12
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: Creative and Imaginative Writing IT What's Next? Any offered elective *32218## 1st Time taken: ##=00, 2nd Time taken: ##=10, 3rd Time taken: ##=21* Teachers with an English Learner enrolled in the course must be English and ESL certified.	Credit(s): 0.5 - 1 College Hour(s): NA **Tier III**

HONORS INDEPENDENT STUDY IN ENGLISH: CRITICAL THINKING FOR COLLEGE READINESS ABH	**3066 ABH**
Students will use Honors, AP, and other nationally recognized strategies to analyze, synthesize, evaluate and develop the reading and writing skills needed to increase their vocabulary and improve their test taking skills on the SAT. Using the skills they develop, students will research a self-selected topic, develop a professional quality project proposal, and present it to a panel, which will satisfy the requirements necessary for the Distinguished Achievement Program. Independent Study in English may be repeated with different content for up to three state elective credits.	03221800 Grade level: 11 - 12
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: Enrollment in at least one Honors or AP course What's Next? Any offered elective *32218## 1st Time taken: ##=00, 2nd Time taken: ##=10, 3rd Time taken: ##=22* Teachers with an English Learner enrolled in the course must be English and ESL certified.	Credit(s): 0.5-1 College Hour(s): NA **Tier II**

INDEPENDENT STUDY IN ENGLISH: LINGUISTICS AB	**3063 AB**
This course is designed to mirror a college-level introductory course in linguistics, with the entire rigor one expects at that level, but with the advantage of meeting five days a week. The topics covered provide a firm foundation for students who wish to engage in further study of linguistics, computer science, foreign languages, social studies, the humanities and psychology. Linguistics is a multi-disciplinary science and students develop proficiency in the kinds of thinking central to many different fields. Students learn to apply objective reasoning to language problems and begin to see the interconnectedness of disciplines many have seen only as separate classes.	03221800 Grade level: 11 – 12
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: AP English Language and Composition, AP English Literature and Composition, or Dual Credit English What's Next? NA *32218## 1st Time taken: ##=00, 2nd Time taken: ##=10, 3rd Time taken: ##=22* *Offered only at: Paschal High School* Teachers with an English Learner enrolled in the course must be English and ESL certified.	Credit(s): 1 College Hour(s): NA **Tier I**

INDEPENDENT STUDY IN ENGLISH: PHILOSOPHY AND LITERATURE	**3042 AB**
This is an advanced course, with an AP English course as a requirement. Using primary source reading from various stages in the history of philosophy as a model, students will apply observed patterns of thought to questions of knowledge, language, and free will found in the thematic material of literary texts.	03221810 Grade level: 12
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: AP English Language and Composition, AP English Literature and Composition, or Dual Credit English What's Next? NA *Offered only at Paschal High School*	Credit(s): 1 College Hour(s): NA **Tier I**

DUAL CREDIT INDEPENDENT STUDY IN ENGLISH: AMERICAN LITERATURE T TCC Course: American Literature II to 1865 (ENGL 2328)	**3048 T**
A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.	03221800 Grade level: 11 – 12
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1302	ECHS: 9 - 12 Credit(s): 0.5

What's Next? NA *Course taught by an approved adjunct instructor.* *32218## 1st Time taken: ##=00, 2nd Time taken: ##=10, 3rd Time taken: ##=20*	College Hour(s): 3 hours **Tier I**
INDEPENDENT STUDY IN ENGLISH: INTRODUCTION TO BIBLICAL LITERACY: HEBREW BIBLE AND NEW TESTAMENT AB	**3150 AB**
Students will gain familiarity with the narratives and other literary texts of the Hebrew Scriptures and New Testament. Discussion and study will take place from an academic and secular perspective that endorses no particular variety of faith. Class activities will emphasize the need for mutual respect, inquiry, and tolerance of divergent opinions. Students will become familiar with the Biblical stories, images and tropes that have profoundly influenced world literature, art, culture, politics and art, and will also encounter the major trends in academic study of the Bible.	03221800 Grade level: 10 - 12
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: English I and World Geography What's Next? Any offered elective *32218## 1st Time taken: ##=00, 2nd Time taken: ##=10, 3rd Time taken: ##=22* Teachers with an English Learner enrolled in the course must be English and ESL certified.	Credit(s): 0.5-1 College Hour(s): NA **Tier III**
DUAL CREDIT INDEPENDENT STUDY IN ENGLISH: BRITISH LITERATURE A **TCC Course: British Literature I to 1800 (ENGL 2322)**	**3142 A**
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.	03221800 Grade level: 11 – 12 ECHS: 9 - 12
Instructional Material: *NA* FWISD & TCC Prerequisites: ENGL 1302 What's Next? ENGL 2323 *Course taught by an approved adjunct instructor.*	Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT INDEPENDENT STUDY IN ENGLISH: BRITISH LITERATURE B **TCC Course: British Literature II Since 1800 (ENGL 2323)**	**3142 B**
A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.	03221800
Instructional Material: NA FWISD Prerequisites: ENGL 2322 TCC Prerequisites: ENGL 1302 What's Next? NA *Course taught by an approved adjunct instructor* *32218## 1st Time taken: ##=00, 2nd Time taken: ##=10, 3rd Time taken: ##=22*	Grade level: 11 - 12 ECHS: 9 – 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT INDEPENDENT STUDY IN ENGLISH: MEXICAN-AMERICAN LITERATURE T **TCC Course: Mexican-American Literature (ENGL 2351)**	**3144 T**
A survey of Mexican-American/Chicano/a literature including fiction, non-fiction, poetry, and drama.	03221800
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1302 What's Next? NA *Course taught by an approved adjunct instructor* *32218## 1st Time taken: ##=00, 2nd Time taken: ##=10, 3rd Time taken: ##=22*	Grade level: NA ECHS: 9 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT INDEPENDENT STUDY IN ENGLISH: WORLD LITERATURE IT **TCC Course: World Literature I to 1650 (ENGL 2332)**	**3146 T**
A survey of world literature from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.	03221800 Grade level: NA
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1302 What's Next? NA *Course taught by an approved adjunct instructor* *32218## 1st Time taken: ##=00, 2nd Time taken: ##=10, 3rd Time taken: ##=22*	ECHS: 9 – 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**

DUAL CREDIT INDEPENDENT STUDY IN ENGLISH: WORLD LITERATURE IIT DC **TCC Course: World Literature II From 1650 (ENGL 2333)**	**3147 T**
A survey of world literature from the seventeenth century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.	03221800 Grade level: NA
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1302 What's Next? NA *Course taught by an approved adjunct instructor.* *32218## 1st Time taken: ##=00, 2nd Time taken: ##=10, 3rd Time taken: ##=22*	ECHS: 9 – 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT INDEPENDENT STUDY IN ENGLISH: FORMS OF LITERATURE IT **TCC Course: Forms of Literature I (ENGL 2342)**	**3148 T** 03221800
The study of one or more literary genres including, but not limited to, poetry, fiction, drama and film.	Grade level: NA
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1302 What's Next? NA *Course taught by an approved adjunct instructor* *32218## 1st Time taken: ##=00, 2nd Time taken: ##=10, 3rd Time taken: ##=22*	ECHS: 9 – 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT INDEPENDENT STUDY IN ENGLISH: FORMS OF LITERATURE IIT **TCC Course: Forms of Literature II (ENGL 2343)**	**3149 T**
The study of one or more literary genres including, but not limited to, poetry, fiction, drama and film.	03221810
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1302 What's Next? NA *Course taught by an approved adjunct instructor* *32218## 1st Time taken: ##=00, 2nd Time taken: ##=10, 3rd Time taken: ##=22*	Grade level: NA ECHS: 9 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT INDEPENDENT STUDY IN ENGLISH: RESEARCH & TECHNICAL WRITING T **TCC Course: Technical & Business Writing (ENGL 2311)**	**3152 T**
Students enrolled in this course will focus on developing skills necessary for writing persuasive and informative texts. This rigorous composition course asks high school students to skillfully research a topic or a variety of topics and present that information through a variety of media. All students are expected to demonstrate an understanding of the recursive nature of the writing process, effectively applying the conventions of usage and the mechanics of written English. The students' evaluation of their own writing as well as the writing of others ensures that students completing this course are able to analyze and discuss published and unpublished pieces of writing, develop and apply criteria for effective writing, and set their own goals as writers.	03221810 Grade level: 11 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1301 What's Next? NA *Course taught by an approved adjunct instructor*	
DUAL CREDIT INDEPENDENT STUDY IN ENGLISH: CREATIVE WRITING T **TCC Course: Creative Writing I (ENGL 2307)**	**3151 T**
Students enrolled in this course will focus on a rigorous composition course that asks high school students to demonstrate their skill in such forms of writing as fictional writing, short stories, poetry, and drama. All students are expected to demonstrate an understanding of the recursive nature of the writing process, effectively applying the conventions of usage and the mechanics of written English. The students' evaluation of their own writing as well as the writing of others ensures that students completing this course are able to analyze and discuss published and unpublished pieces of writing, develop peer and self-assessments for effective writing, and set their own goals as writers.	03221800 Grade level: 11 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
Instructional Material: NA FWISD & TCC Prerequisites: ENGL 1301 What's Next? NA *Course taught by an approved adjunct instructor.*	
JOURNALISM AB	**3515 AB**
Students will become analytical consumers of media and technology to enhance their communication skills. Writing, technology, visual and electronic media are used as tools for learning as students create, clarify, critique, write, and produce effective communications. Students will learn journalistic traditions, research self-selected topics, write journalistic texts, and learn the principles of publishing.	03230100

Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: English I What's Next? Advanced Journalism: Newspaper I AB; Honors Advanced Journalism: Newspaper I ABH; Advanced Journalism: Yearbook or Literary Magazine I AB; Honors Advanced Journalism: Yearbook or Literary Magazine I ABH; any offered elective	Grade level: 9 - 12 Credit(s): 0.5 - 1 College Hour(s): NA **Tier III**
HONORS JOURNALISM ABH	**3514 ABH**
The Journalism I AB Honors course provides a means for students seeking a more rigorous curriculum to earn Honors credit upon successful completion. This course will also count as a pre-requisite to enroll in the Honors Newspaper or Yearbook courses (Newspaper or Yearbook I AB). The Journalism I AB Honors course will build on the Journalism I AB curriculum by allowing students to become analytical consumers of media and technology to enhance their communications skills through the application and use of the Associated Press stylebook, journalistic writing assignments, and hands-on projects.	03230100 Grade level: 9 – 12
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Honors English I What's Next? Placement in Honors Yearbook or Newspaper I AB	Credit(s): 0.5 - 1 College Hour(s): NA **Tier II**
ADVANCED JOURNALISM: NEWSPAPER I AB	**3518 AB**
Course emphasizes advanced work involving reporting, advertising campaigns, in-depth research, career journalism, and original projects. Centers around advanced instruction in advertising, editorial writing, in-depth reporting, and individual projects.	03230140
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Journalism IA or IB What's Next? Advanced Journalism; Newspaper II AB; Honors Advanced Journalism; Newspaper II AB; Any offered elective.	Grade level: 9 - 12 Credit(s): 0.5 - 1 College Hour(s): NA **Tier III**
HONORS ADVANCED JOURNALISM: NEWSPAPER I ABH	**3519 ABH**
Provides instruction in all phases of newspaper journalistic production including the study of various career opportunities and job types.	03230140
Instructional Material: 1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042 Prerequisites: Journalism I and/or submission of a portfolio. What's Next? Advanced Journalism: Newspaper II AB Students will create portfolios containing exemplars of their work.	Grade level: 10 - 12 Credit(s): 0.5-1 College Hour(s): NA **Tier II**
ADVANCED JOURNALISM: NEWSPAPER II AB	**3520 AB**
This course includes detailed study of communication via the printed media, writing styles in content and conventions, news analysis, photography, page and section design and production, and techniques in marketing, sales, and distribution. It emphasizes career opportunities available in the field of publications. It allows students to become competent in various publishing programs and the technology necessary to implement them.	03230150 Grade level: 10 - 12
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: Advanced Journalism; Newspaper I; and either Touch System Data Entry; Business Information Management I; Principles of Information Technology What's Next? Any offered elective.	Credit(s): 0.5 - 1 College Hour(s): NA **Tier III**
HONORS ADVANCED JOURNALISM: NEWSPAPER II ABH	**3522 ABH**
In-depth study and practice in the process of creating an edition of a newspaper. Students will better define the skills necessary to produce a newspaper such as researching, writing, editing, photography, layout, sales, and marketing plus the technology described in Advanced Journalism: Newspaper II AB. Honors students will also assume leadership positions such as editors, chief photographers, sales managers, etc. to direct the work of the newspaper staff and will take on additional assignments and projects to earn honors credit.	03230150
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: Advanced Journalism: Newspaper I AB or Honors Advanced Journalism: Newspaper I AB; and four of the following; English I or English II; Touch System Data Entry; Business Information Management I; Principles of Information Technology; student interest. What's Next? Honors Advanced Journalism: Newspaper III AB; Any offered elective.	Grade level: 10 – 12 Credit(s): 0.5 - 1 College Hour(s): NA **Tier II**
HONORS ADVANCED JOURNALISM: NEWSPAPER III ABH	**3524 ABH**
Honors Advanced Journalism: Newspaper III AB/H will go beyond the Newspaper II AB/H requirements to focus primarily on developing student's leadership abilities in guiding incoming staff in producing at least six issues of a student newspaper for the school year. Students will: 1) continue to apply the writing, editing, and photography skills learned in Newspaper II AB/H; 2) assume overall leadership responsibilities including the editor-in–chief, co-	03230160

editor-in chief, business manager, or managing editor; 3) work to train all incoming staff members in areas such as copyediting, technology, design themes, newspaper writing, and style; 4) and come up with creative ideas to reach new advertisers. The portfolio submitted for review prior to enrollment will include two examples of journalistic writing and/or 5-10 examples of journalistic photography with captions prior to being enrolled in the honors class. The portfolio will be evaluated by journalism/publications teacher using standard journalistic style considerations.	
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Advanced Journalism: Newspaper II AB and submission of portfolio for evaluation, and student must have held a leadership position for a publication for at least one year prior. What's Next? Any offered elective.	Grade level: 10 – 12 Credit(s): 0.5 - 1 College Hour(s): NA **Tier II**
ADVANCED JOURNALISM: LITERARY MAGAZINE I AB	**3544 AB**
Course emphasizes advanced work involving reporting, advertising campaigns, in-depth research, career journalism, and original projects. Centers around advanced instruction in advertising, editorial writing, in-depth reporting, and individual projects.	03230170
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Journalism IA or IB What's Next? Advanced Journalism; Newspaper II AB; Honors Advanced Journalism; Newspaper II AB; Any offered elective	Grade level: 9 - 12 Credit(s): 0.5 - 1 College Hour(s): NA **Tier III**
HONORS ADVANCED JOURNALISM: LITERARY MAGAZINE I ABH	**3546 ABH**
Course emphasizes advanced work and leadership positions such as section editors involved in reporting, advertising campaigns, in-depth research, career journalism, and original projects. Centers around advanced instruction in advertising, editorial writing, in-depth reporting, and individual projects. This honors level I course will go beyond the regular course requirements providing a rigorous in-depth focus requiring the students to 1) Continue to apply the writing, editing, and photography skills learned in Journalism I AB; 2) Assume leadership positions such as section editors; 3) Work collaboratively with the editor(s)-in-chief to direct the work of the newspaper staff; 4) Take on additional assignments such as advertising sales and section design and layout using necessary technology to produce each issue of the newspaper; 5) Submit a portfolio for review including: 2 examples of journalistic writing and/or 5 – 10 examples of journalistic photography with captions prior to being enrolled in the honors class. The portfolio will be evaluated by journalism/publications teacher using standard journalistic style considerations.	03230170 Grade level: 10 – 12 Credit(s): 0.5 - 1 College Hour(s): NA
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Journalism I and/or submission of a portfolio What's Next? Advanced Journalism; Newspaper II AB; Honors Advanced Journalism; Newspaper II AB; Any offered elective	**Tier II**
ADVANCED JOURNALISM: LITERARY MAGAZINE II AB	**3548 AB**
This course includes detailed study of communication via the printed media, writing styles, news analysis, photography, page and section design, production, and techniques in marketing, sales, and distribution. It emphasizes career opportunities available in the field of publications. It allows students to become competent in various publishing programs and the technology necessary to implement them.	03230180
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Advanced Journalism; Newspaper I; and either Touch System Data Entry; Business Information Management I; Principles of Information Technology What's Next? Any offered elective.	Grade level: 10 - 12 Credit(s): 0.5 - 1 College Hour(s): NA **Tier III**
HONORS ADVANCED JOURNALISM: LITERARY MAGAZINE II ABH	**3550 ABH**
In-depth study and practice in the process of creating an edition of a newspaper. Students will better define the skills necessary to produce a newspaper such as researching, writing, editing, photography, layout, sales, and marketing plus the technology described in Advanced Journalism: Newspaper II AB. Honors students will also assume leadership positions such as editors, chief photographers, sales managers, etc. to direct the work of the newspaper staff and will take on additional assignments and projects to earn honors credit.	03230180
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Advanced Journalism: Newspaper I or Honors Advanced Journalism; Newspaper I; and four of the following: English I or English II: Touch System Data Entry; Business Information Management I; Principles of Information Technology; student interest. What's Next? Honors Advanced Journalism: Newspaper III AB; Any offered elective.	Grade level: 10 – 12 Credit(s): 0.5 - 1 College Hour(s): NA **Tier II**

ADVANCED JOURNALISM: LITERARY MAGAZINE III T	3552 T
Provides instruction in all phases of magazine-type journalistic production, including the literary magazine.	03230190 Grade level: 10 - 12
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Advanced Journalism; Literary Magazine II What's Next? Any offered elective	Credit(s): 0.5 College Hour(s): NA **Tier III**
HONORS ADVANCED JOURNALISM: LITERARY MAGAZINE III ABH	**3554 ABH**
Honors Literary Magazine will go beyond the Literary Magazine II requirements to focus primarily on developing students' leadership abilities in guiding incoming staff in producing the school yearbook or literary magazine publication. Students will: 1) assume overall leadership responsibilities including the editor-in-chief, co-editor-in-chief, or business ads/sales manager 2) train all incoming staff members in areas such as copy editing, technology, design themes, writing, and overall style for the yearbook; 3) have overall responsibility for maintaining/increasing sales and ad sales; 4) come up with creative ideas to reach new advertisers; and 5) develop an overall theme for the yearbook and create sections and pages that represent this theme throughout the yearbook.	03230190 Grade level: 10 - 12
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Advanced Journalism: Yearbook or Literary Magazine II, student must have held a leadership position for the publication for at least a year prior, and submit a portfolio for evaluation. What's Next? Any offered elective	Credit(s): 0.5 - 1 College Hour(s): NA **Tier II**
ADVANCED JOURNALISM: YEARBOOK I AB	**3558 AB**
Students will plan, draft, and complete written and/or visual communications on a regular basis, carefully examining their copy for clarity, engaging language, and the correct use of the conventions and mechanics of written English while learning ethics and standards. Writing, technology, and visual and electronic media are used as tools for learning as students create, clarify, critique, write, and produce effective communications. Students refine and enhance journalistic skills, research self-selected topics, and plan, organize, and prepare a project(s).	03230110 Grade level: 10 - 12 Credit(s): 0.5 - 1
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Taken in sequence What's Next? Advanced Journalism: Yearbook II or Advanced Journalism; Literary Magazine; Any offered elective.	College Hour(s): NA **Tier III**
HONORS ADVANCED JOURNALISM: YEARBOOK I ABH	**3556 ABH**
Provides instruction in all phases of magazine-type journalistic production, including the literary magazine.	03230110
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Advanced Journalism: Yearbook or Literary Magazine I and four of the following: English I or English II; Touch System Data Entry; Business Information Management I; Principles of Information Technology, student interest and/or submission of a portfolio. What's Next? Level II honors courses	Grade level: 10 – 12 Credit(s): 0.5 - 1 College Hour(s): NA **Tier II**
ADVANCED JOURNALISM: YEARBOOK II AB	**3560 AB**
Students will plan, draft, and complete written and/or visual communications on a regular basis, carefully examining their copy for clarity, engaging language, and the correct use of the conventions and mechanics of written English while learning ethics and standards. Writing, technology, and visual and electronic media are used as tools for learning as students create, clarify, critique, write, and produce effective communications. Students refine and enhance journalistic skills, research self-selected topics, and plan, organize, and prepare a project(s).	03230120 Grade level: 10 - 12 Credit(s): 0.5 - 1
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Taken in sequence What's Next? Advanced Journalism: Yearbook III or Advanced Journalism: Literary Magazine; Any offered elective.	College Hour(s): NA **Tier III**
HONORS ADVANCED JOURNALISM: YEARBOOK II ABH	**3564 ABH**
In-depth study and practice in the process of producing a specific publication being yearbook. Students will better define their skills in page layout, photography and graphics layout, article and caption writing, time management, teamwork, sales, and marketing. Students will also implement the technology necessary to accomplish these skills. Honors students will also assume leadership positions such as section editors, chief photographers, and sales managers to direct the work of the publications' staff. Students will undertake additional assignments and projects to earn honors credit.	03230120 Grade level: 9 – 12 Credit(s): 0.5 - 1 College Hour(s): NA **Tier II**
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Advanced Journalism: Yearbook or Literary Magazine I and four of the following: English I or English II; Touch System Data Entry; Business Information Management I; Principles of Information Technology. What's Next? Honors Advanced Journalism; Yearbook or Literary Magazine III; any offered elective	

ADVANCED JOURNALISM: YEARBOOK IIIT	**3562 T**
Provides instruction in all phases of magazine-type journalistic production, including the literary magazine.	03230130 Grade level: 9 - 12
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Creative and Imaginative Writing IT What's Next? Any offered elective	Credit(s): 0.5 College Hour(s): NA **Tier III**
HONORS ADVANCED JOURNALISM: YEARBOOK III ABH	**3568 ABH**
Honors Yearbook will go beyond the Yearbook II requirements to focus primarily on developing students' leadership abilities in guiding incoming staff in producing the school yearbook or literary magazine publication. Students will: 1) assume overall leadership responsibilities including the editor-in-chief, co-editor-in-chief, or business ads/sales manager; 2) train all incoming staff members in areas such as copy editing, technology, design themes, writing, and overall style for the yearbook; 3) have overall responsibility for maintaining/increasing sales and ad sales; 4) come up with creative ideas to reach new advertisers; and 5) develop an overall theme for the yearbook and create sections and pages that represent this theme throughout the yearbook.	03230130
Instructional Material: *1155 – Journalism Today! McGraw-Hill School Division, ISBN: 0658004042* Prerequisites: Advanced Journalism: Yearbook or Literary Magazine II, student must have held a leadership position for the publication for at least a year prior, and submit a portfolio for evaluation. What's Next? Any offered elective	Grade level: 9 – 12 Credit(s): 0.5 - 1 College Hour(s): NA **Tier II**
ADVANCED BROADCAST JOURNALISM I AB	**0714 AB**
Course emphasizes radio and television broadcasting. Students are provided opportunities to understand radio waves, the radio spectrum, and the history and significance of radio and television broadcasting. Students explore issues in legal and ethical responsibilities of non-print media, analyze non-print media coverage of news, and work within regulatory constraints. Students are also provided opportunities to distinguish between capabilities of print and non-print media news coverage, to select coverage, and to gather news.	03231900 Grade level: 9 - 12
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: Taken in sequence What's Next? Any offered elective	Credit(s): 0.5 - 1 College Hour(s): NA **Tier III**
ADVANCED BROADCAST JOURNALISM II AB	**0716 AB**
Provides opportunities for students to learn about the history and functions of broadcast media; laws and ethical considerations affecting broadcast media; impact of radio/television on society; production techniques including script writing, voice performance techniques, advertising strategies, career opportunities; and establishment of evaluation criteria. Students will produce, individually and in small groups, video productions emphasizing informational, documentary, and dramatic themes. All steps of production from script writing to tape editing will be included.	03231901 Grade level: 9 - 12
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: Advanced Broadcast Journalism I What's Next? Any offered elective	Credit(s): 0.5 - 1 College Hour(s): NA **Tier III**
PHOTOJOURNALISM AB	**0715 AB**
Provides opportunities to plan photographs and to illustrate news events with appropriate photos and captions. In addition, students learn to operate various types of cameras, light meters, and electronic strobes; to use the darkroom; to use film processing supplies; and to identify available supplementary services. Students also learn to crop and scale photographs and are provided opportunities to apply principles of balance and contrast.	03230800 Grade level: 9 - 12
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: Taken in sequence What's Next? Any offered elective	Credit(s): 0.5 - 1 College Hour(s): NA **Tier III**
INDEPENDENT STUDY/JOURNALISM T	**3566 T**
Includes activities individually designed for high-achieving students who are interested in conducting research, producing original work in print or in some other medium, extensively developing an advanced skill, or studying a specific area of interest. Independent Study in Journalism may be repeated with different content each time it is repeated for up to three state elective credits.	032310##
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: None What's Next? Any offered elective *032310## - 1st Time ##=00, 2nd time ##=11, 3rd Time ##=22*	Grade level: 11 - 12 Credit(s): 0.5 College Hour(s): NA **Tier III**

INDEPENDENT STUDY IN JOURNALISM AB	**0717 AB**
Includes activities individually designed for high-achieving students who are interested in conducting research, producing original work in print or in some other medium, extensively developing an advanced skill, or studying a specific area of interest. Independent Study in Journalism may be repeated with different content each time it is repeated for up to three state elective credits.	032310##
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: Taken in sequence What's Next? Any offered elective *032310## - 1st Time ##=00, 2nd time ##=11, 3rd Time ##=22*	Grade level: 11 - 12 Credit(s): 0.5-1 College Hour(s): NA **Tier III**
AP CAPSTONE PROGRAM – COURSE 1: AP SEMINAR	**3065 AB**
In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. Students engage in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as a part of a team.	N1130026 Grade level: 9 - 12
Instructional Material: *St. Martin's Guide to Writing, Bedford, Freeman, & Worth, ISBN: 1319245072* Prerequisites: None What's Next? NA Teachers with an English Learner enrolled in the course must be English and ESL certified.	Credit(s): 0.5 - 1 College Hour(s): NA **Tier I**
AP CAPSTONE PROGRAM – COURSE 2: AP RESEARCH	**3067 AB**
In AP Research, students cultivate the skills and discipline necessary to conduct independent research in order to produce and defend a scholarly academic thesis. Students explore an academic topic, problem, or area of individual interest deeply. Through this exploration, they design, plan, and conduct a yearlong mentored, research-based investigation to address a research question. In this course, students further skills acquired in the AP Seminar course by understanding research methods, employing ethical research practices, and accessing, analyzing, and synthesizing information as they address a research question. The course culminates in an academic thesis paper of approximately 5000 words and a presentation, performance, or exhibition with an oral defense.	N1100014
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: AP Capstone Program – Course 1: AP Seminar What's Next? NA *Offered only at Paschal High School*	Grade level: 10 - 12 Credit(s): 0.5 - 1 College Hour(s): NA **Tier I**

Reading

READING I AB / T **SHELTERED READING I AB – NP** **SHELTERED READING I AB**	**3941 AB / 3941 T** **3942 AB** **3962 AB**
Reading I offers students instruction to successfully navigate academic demands and attain life-long literacy skills. Specific instruction in word recognition, vocabulary, comprehension strategies, and fluency provide students an opportunity to read with competence, confidence, and understanding. Students will learn how traditional and electronic texts are organized and how authors choose language for effect. These strategies will be applied in instructional-level and independent-level texts that cross the content areas. Note: LPAC will determine placement for Transition EL students are placed in this course or in Intensive Reading I. Maximum enrollment: 25 students.	03270700
Instructional Material: *McGraw Hill Study Sync, Grade 9 TX Std, ISBN 9781265535973; ThinkCERCA Supplemental Resource* Prerequisites: Students who did not meet minimum standards on previous state reading assessment; students who score one to two levels below grade level on standardized reading screening assessment. What's Next? Reading II AB Teachers with an English Learner enrolled in the course must be ELAR and ESL certified.	Grade level: Credit(s): 0.5-1 College Hour(s): NA **Tier III**
READING II AB / T **SHELTERED READING II AB – NP** **SHELTERED READING II AB**	**3943 AB / 3943 T** **3944 AB** **3964 AB**
Reading II offers students instruction to successfully navigate academic demands and attain life-long literacy skills. Specific instruction in word recognition, vocabulary, comprehension strategies, and fluency provide students an opportunity to read with competence, confidence, and understanding. Students will learn how traditional and electronic texts are organized and how authors choose language for effect. These strategies will be applied in instructional-level and independent-level texts that cross the content areas. Note: LPAC will determine placement for Transition EL students are placed in this course or in Intensive Reading II. Maximum enrollment: 25 students. This course may be stacked with Reading I.	03270800
Instructional Material: *McGraw Hill Study Sync, Grade 9 TX Std, ISBN 9781265535973; ThinkCERCA Supplemental Resource* Prerequisites: Required for students who did not meet minimum standards on previous state reading assessment or for students who score one to two levels below grade on standardized reading screening assessment. What's Next? English III Teachers with an English Learner enrolled in the course must be ELAR and ESL certified.	Grade level: Credit(s): 0.5-1 College Hour(s): NA **Tier III**
COLLEGE READINESS AND STUDY SKILLS T	**3955 T**
High school students that require or request additional honing of the study skills, especially as the students prepare for the demands of college, may enroll in the one semester course College Readiness and Study Skills. In this course, students acquire techniques for learning from texts, including studying word meanings, identifying and relating key ideas, drawing and supporting inferences, and reviewing study strategies. In all cases, interpretations and understandings will be presented through varying forms, including through use of available technology. Students accomplish many of the objectives through wide reading as well as use of content texts in preparation for post-secondary schooling.	03270100 Grade level: 9 – 12 Credit(s): 0.5 College Hour(s): NA **Tier III**
Instructional Material: *No state-adopted instructional material/ contact content director* Prerequisites: Students having a passing reading grade of 80%or better on the Grade 8 STAAR Reading subtest What's Next? English II AB; English III AB: English IV AB Teachers with an English Learner enrolled in the course must be ELAR and ESL certified.	
READING I FOR IDENTIFIED DYSLEXIC STUDENTS AB	**3967 AB**
This course provides an intense phonetic analysis of written language for students identified with dyslexia. Students will participate in a research-based Literacy Program including explicitly structured, multisensory, sequential and cumulative lessons. These are aligned with components of instruction for students identified with dyslexia as well as the TEKS. The recommended class size is no more than 6 students.	NA
Instructional Material: *No state adopted instructional material(s); locally determined instructional material(s) provided for identified dyslexic students by FWISD Dyslexia Services office*	Grade level: 9 Credit(s): 0

Prerequisites: Students must be identified with dyslexia through the FWISD Dyslexia Services office, and must be cleared to participate in this class by FWISD Dyslexia Services staff. Due to House Bill 5, careful consideration must be made to prevent pulling students from Career and Technical education courses leading to an endorsement program. What's Next? Any offered elective *(Teachers teaching this class must complete a Dyslexia training provided by FWISD Dyslexia Services staff.)"* *Recommended for students to meet daily. 032310## - 1st Time ##=00, 2nd time ##=11, 3rd Time ##=22* Teachers with an English Learner enrolled in the course must be ELAR and ESL certified.	College Hour(s): NA **Tier III**
READING II FOR IDENTIFIED DYSLEXIC STUDENTS AB	**3968 AB**
This course provides an intense phonetic analysis of written language for students identified with dyslexia. Students will participate in a research-based Literacy Program including explicitly structured, multisensory, sequential and cumulative lessons. These are aligned with components of instruction for students identified with dyslexia as well as the TEKS. The recommended class size is no more than 6 students.	NA
Instructional Material: *No state adopted instructional material(s); locally determined instructional material(s) provided for identified dyslexic students by FWISD Dyslexia Services office*	
Prerequisites: Students must be identified with dyslexia through the FWISD Dyslexia Services office, and must be cleared to participate in this class by FWISD Dyslexia Services staff. Due to House Bill 5, careful consideration must be made to prevent pulling students from Career and Technical Education courses leading to an endorsement program. What's Next? Any offered elective *Teachers teaching this class must complete a Dyslexia training provided by FWISD Dyslexia Services staff.* *Recommended for students to meet daily. 032310## - 1st Time ##=00, 2nd time ##=11, 3rd Time ##=22* Teachers with an English Learner enrolled in the course must be ELAR and ESL certified.	Grade level: 10 Credit(s): 0 College Hour(s): NA **Tier III**

Speech Graduation Requirements

ALL STUDENTS ARE REQUIRED to take 1 semester of Speech

All Plans (22 & 26 credits) Require 0.5 Credit in Speech

Speech (1/2 Credit) may be selected from the following

- Professional Communications (CTE course in each cluster)
- Communication Applications
- Public Speaking
- Debate I
- Honors Debate I
- Independent Study in Speech
- DC Communication Applications

PROFESSIONAL COMMUNICATIONS T	**AV09901 T**
Professional Communications (CTE Course) 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 software applications, manipulate computer graphics, and conduct Internet research.	13009900 Grade level: 9 – 12
Instructional Material: *Fundamentals of Business Communication, Goodheart-Willcox Publisher; ISBN: 9781605254722* Prerequisites: None What's Next? NA *Professional Communications can be taught by any teacher certified in speech or any teacher with a Career and Technical Education certification who holds a baccalaureate degree and has completed six semester credit hours in speech.* Teachers with an English Learner enrolled in the course must be CTE or Speech and ESL certified.	Credit(s): 0.5 College Hour(s): NA **Tier III**
DUAL CREDIT PROFESSIONAL COMMUNICATION T **TCC Course: Business and Professional Communication (SPCH 1321)** **TWU Course: Fundamentals of Speech (SPC 1301)**	**AVD09901 T** 13009900
Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams and technologically mediated formats.	Grade level: NA ECHS: 9 - 12
Instructional Material: NA FWISD & TCC Prerequisites: None TWU Prerequisites: Only offered at Dunbar What's Next? NA *Course taught by an approved adjunct instructor.*	Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
COMMUNICATION APPLICATIONS T	**3126 T**
Understanding and developing skills in communication are fundamental to all other learning and to all levels of human interaction. For successful participation in professional and social life, students must develop effective communication skills. Rapidly expanding technologies and changing social and corporate systems demand that students send clear verbal messages, choose effective nonverbal behaviors, listen for desired results, and apply valid critical-thinking and problem-solving processes. Students enrolled in Communication Applications will be expected to identify, analyze, develop, and evaluate communication skills needed for professional and social success in interpersonal situations, group interactions, and personal and professional presentations. When possible, students should consider taking Professional Communications (CTE) in lieu of this course.	03241400 Grade level: 9 – 12
Instructional Material: *1103 – Communication Applications, McGraw-Hill School Division, ISBN: 0538429186* Prerequisites: None What's Next? Oral Interpretation I AB; Public Speaking I AB; Debate I AB; Any offered elective. Teachers with an English Learner enrolled in the course must be Speech and ESL certified.	Credit(s): 0.5 College Hour(s): NA **Tier III**

DUAL CREDIT COMMUNICATION APPLICATIONS T **TCC Course: Introduction to Speech Communication (SPCH 1311)**	**3129 T**
Introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking.	03241400 Grade level: 11 - 12
Instructional Material: NA FWISD & TCC Prerequisites: None What's Next? NA *Course taught by an approved adjunct instructor*	ECHS: 9 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
ORAL INTERPRETATION I, II, III AB	**3713 AB**
Literature and its presentation are integral to understanding the cultural aspects of a society. Students in Oral Interpretation I, II, III will select, research, analyze, adapt, interpret, and perform literary texts as a communication art. Students focus on intellectual, emotional, sensory, and aesthetic levels of texts to attempt to capture the entirety of the author's work. Individual or group performances of literature will be presented and evaluated.	03240200 Grade level: 9 - 12
Instructional Material: *No state-adopted textbook/Contact ELA Director* Prerequisites: None What's Next? Public Speaking I AB; Debate I AB; Any offered elective Teachers with an English Learner enrolled in the course must be Speech and ESL certified.	Credit(s): 1-3 College Hour(s): NA **Tier III**
PUBLIC SPEAKING I AB	**3715 AB**
In order to have full participation in the civic process, students must have a good understanding of public dialogue. Students must learn the concepts and skills related to preparing and presenting public messages and to analyzing and evaluating the messages of others. Within this process, students will gain skills in reading, writing, speaking, listening, and thinking and will examine areas such as invention, organization, style, memory, and delivery.	03240900 Grade level: 9 – 12
Instructional Material: *1136 – Public Speaking Today! McGraw-Hill School Division, ISBN: 0844203696* Prerequisites: None What's Next? Oral Interpretation I AB; Debate I AB; Any offered elective Teachers with an English Learner enrolled in the course must be Speech and ESL certified.	Credit(s): 0.5 - 1 College Hour(s): NA **Tier III**
DEBATE I AB	**3717 AB**
Controversial issues arise in aspects of personal, social public, and professional life in modern society. Debate and argumentation are widely used to make decisions and reduce conflict. Students who develop skills in argumentation and debate become interested in current issues, develop sound critical thinking, and sharpen communication skills. They acquire life-long skills for intelligently approaching controversial issues.	03240600
Instructional Material: *1129 – Lincoln Douglas Debate: Values in Conflict, Perfection Learning Corporation, ISBN: 0931054613* Prerequisites: None What's Next? Oral Interpretation I AB; Public Speaking I AB; Debate II AB Teachers with an English Learner enrolled in the course must be Speech and ESL certified.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS DEBATE I ABH	**3718 ABH**
This program begins with the study of forensic debate. Students will develop skills in research including in-depth reading and formulation of ideas both written and oral. Students will construct arguments that demonstrate an understanding of multiple and varied topics. A key element to this course is the organization of research materials. The course will provide practice and theory emphasizing use of refutation, debate strategy, and evaluation as applied to forensic debate. Students will understand how to use refutation, debate strategies and evaluation methods as applied in forensic debate with focus on UIL practice competition.	03240600
Instructional Material: *1129 – Lincoln Douglas Debate: Values in Conflict, Perfection Learning Corporation, ISBN: 0931054613* Prerequisites: None What's Next? Oral Interpretation I AB; Public Speaking I AB; Debate II AB Teachers with an English Learner enrolled in the course must be Speech and ESL certified.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
DEBATE II AB	**3719 AB**
Controversial issues arise in aspects of personal, social public, and professional life in modern society. Debate and argumentation are widely used to make decisions and reduce conflict. Students who develop skills in argumentation and debate become interested in current issues, develop sound critical thinking, and sharpen communication skills. They acquire life-long skills for intelligently approaching controversial issues.	03240700

Instructional Material: *1129 – Lincoln Douglas Debate: Values in Conflict, Perfection Learning Corporation, ISBN: 0931054613* Prerequisites: Debate I What's Next? Debate III AB; Any offered elective Teachers with an English Learner enrolled in the course must be Speech and ESL certified.	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS DEBATE II ABH	**3720 ABH**
This program provides students with opportunities to further the study done in Debate I. Students will develop skills in argumentation and debate with the associated skills of research, writing, and developing presentations. The course will allow for student involvement in Lincoln-Douglas Debate, Cross-Examination Debate, and Extemporaneous Speaking. Elective credit only.	03240700
Instructional Material: *1129 – Lincoln Douglas Debate: Values in Conflict, Perfection Learning Corporation, ISBN: 0931054613* Prerequisites: Debate I What's Next? Debate III AB; Any offered elective Teachers with an English Learner enrolled in the course must be Speech and ESL certified.	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
DEBATE III AB	**3721 AB**
Controversial issues arise in aspects of personal, social public, and professional life in modern society. Debate and argumentation are widely used to make decisions and reduce conflict. Students who develop skills in argumentation and debate become interested in current issues, develop sound critical thinking, and sharpen communication skills. They acquire life-long skills for intelligently approaching controversial issues.	03240800
Instructional Material: *1129 – Lincoln Douglas Debate: Values in Conflict, Perfection Learning Corporation, ISBN: 0931054613* Prerequisites: Debate II What's Next? Any offered elective Teachers with an English Learner enrolled in the course must be Speech and ESL certified.	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS DEBATE III ABH	**3722 ABH**
This program provides students with opportunities to further the study done in Debate II. Students will develop skills in argumentation and debate with the associated skills of research, writing, and developing presentations. The course will allow for student involvement in Lincoln-Douglas Debate, Cross-Examination Debate, and Extemporaneous Speaking. Elective credit only.	03240800
Instructional Material: *1129 – Lincoln Douglas Debate: Values in Conflict, Perfection Learning Corporation, ISBN: 0931054613* Prerequisites: Debate II What's Next? Any offered elective Teachers with an English Learner enrolled in the course must be Speech and ESL certified.	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT INDEPENDENT STUDY IN SPEECH T **TCC Course: Public Speaking (SPCH 1315)**	**3130 T**
Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students speaking abilities, as well as ability to effectively evaluate oral presentations.	03241200 Grade level: NA ECHS: 9 - 12
Instructional Material: NA FWISD & TCC Prerequisites: None What's Next? NA *Course taught by an approved adjunct instructor*	Credit(s): 0.5 College Hour(s): 3 Hours **Tier I**

MATHEMATICS GRADUATION REQUIREMENTS

ALL STUDENTS ARE REQUIRED to take Algebra I (EOC) & Geometry

FOUNDATION PLANS

Foundation Plan:

- 22 credits
- Requires only **3 math credits**

Foundation Plan w/ Endorsements:

- 26 credits
- Requires **4 math credits**

Distinguished Level of Achievement:

- 26 credits
- Requires **4 math credits**
- Requires **Algebra II**

The 3rd Math credit is subject to prerequisite requirements.

The 3rd Math credit options:

- Algebra II
- Math Models w/ Applications
- Robotics Programming & Design
- Digital Electronics
- Math Apps in Ag, Food, & Natural Resources
- Accounting II
- Robotics II
- Financial Mathematics
- Applied Mathematics for Technical Professionals
- Manufacturing Engineering Technology II

Math Models and Algebra II can be taken concurrently.

- **Math Models** counts as the **3rd math credit**
- **Algebra II** counts as the **4th math credit**

The 4th Math credit may be selected from one full credit or a combination of two half credits from two different courses, subject to prerequisite requirements.

The 4th Math credit options:

- Algebra II
- DC College Algebra
- OnRamps College Algebra
- Precalculus
- DC Pre-Calculus Math
- OnRamps Pre-Calculus
- Statistics
- AP Statistics
- DC Statistics
- OnRamps Statistics
- Algebraic Reasoning
- Independent Study in Mathematics
- Adv Quantitative Reasoning
- Engineering Mathematics
- Statistics & Business Decision Making
- Mathematics for Medical Professionals
- Discrete Math for Computer Science
- Discrete Math for Problem Solving
- DC Multivariable Calculus
- AP Calculus AB or BC
- DC Calculus AB or BC
- AP Computer Science A
- College Preparatory Math
- DC Linear Algebra
- DC Differential Equations
- DC Differential Equations and Linear Algebra

Mathematics Recommended Course Sequence and Testing Guide

	Traditional		Advanced		Accelerated	
6th	Gr 6 Math: 0200	STAAR Gr 6	Advanced Gr 6 Math: 0204	STAAR Gr 6	Accelerated Gr 6 Math: 0205	STAAR Gr 8
7th	Gr 7 Math: 0202	STAAR Gr 7	Advanced Gr 7 Math: 0207	STAAR Gr 8	Honors Algebra I: 7055	Alg I EOC
8th	Gr 8 Math: 0203	STAAR Gr 8	Honors Algebra I: 7055	Alg I EOC	Honors Geometry: 7073	STAAR Gr 8
9th	Algebra I: 7051	Alg I EOC	Honors Geometry: 7073	PSAT	Honors Algebra II: 7057 or OnRamps College Alg: 7050	PSAT
10th	Geometry: 7071	PSAT	Honors Algebra II: 7057 or OnRamps College Alg: 7050	PSAT	Honors Precalculus: 7123 or OnRamps Precalculus: 7119	PSAT SAT, ACT TSI
11th	Algebra II: 7053	ACT SAT TSI	Honors Precalculus: 7123 or OnRamps Precalculus: 7119	ACT SAT TSI	AP/DC/OnRamps Math Electives or Ind Study	SAT ACT TSI
12th	4th Math or CTE Equivalent	ACT SAT TSI	AP/DC/OnRamps Math Electives or Ind Study	Exams vary by course	AP/DC/OnRamps Math Electives or Ind Study	Exams vary by course

ALGEBRA I AB **SHELTERED ALGEBRA I AB – NP** **SHELTERED ALGEBRA I AB** **ALGEBRA I AB**	**7051 AB** **7043 AB** **7048 AB** **70515 AB**
Students will study linear, quadratic, and exponential functions and their transformations, equations, and associated solutions in both mathematical and real-world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences and laws of exponents. **Algebra I is required for graduation.**	03100500
Instructional Material: *1521 – Algebra 1 Texas Hybrid Consumable Student Resource, Houghton Mifflin Harcourt; ISBN: 9780544555730* Prerequisites: Mathematics, Grade 8 or its equivalent What's Next? Geometry or Honors Geometry *Students will take the STAAR Algebra I EOC.* All Newcomer Program teachers must be content and ESL certified.	Grade level: 9 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ALGEBRA I AB **SHELTERED HONORS ALGEBRA I AB**	**7055 AB** **7047 AB**
Extends and builds on the foundation for the Advanced Placement program. Includes all of the regular Algebra I course with extensions, both independent and guided, in the application of algebraic concepts, the analysis of historical development of algebra, and the relationships of the major ideas of algebra and geometry. **Algebra I is required for graduation.**	03100500
Instructional Material: *XXXX-SpringBoard Algebra 1, CollegeBoard; ISBN: 9781457300394* Prerequisites: Mathematics, Grade 8 or its equivalent and student interest What's Next? Geometry or Honors Geometry *Course taught by a locally certified gifted teacher or AP trained teacher.* *Students will take the STAAR Algebra I EOC.*	Grade level: 9 Credit(s): 1 College Hour(s): NA **Tier II**

PROBLEM SOLVING IN MATHEMATICS AB	7056 AB
Provides instruction for students who need additional problem-solving strategies. Basic operations with real numbers, number concepts, algebraic relations, geometric properties, measurement, estimation, solution strategies, mathematical representations and reasonableness of problem situations will be included in this course. Students must complete the three state-required credits in mathematics for graduation. Local credit only, does not count toward graduation requirements.	N/A Grade level: 9 – 12 Credit(s): N/A
Instructional Material: *No state-adopted instructional material(s)/Local credit only/Contact Mathematics Director* Prerequisites: None *Local credit only, does not count toward graduation requirements.*	College Hour(s): NA **Tier III**
GEOMETRY I AB **SHELTERED GEOMETRY I AB – NP** **SHELTERED GEOMETRY I AB** **GEOMETRY I AB**	**7071 AB** **7069 AB** **7070 AB** **70715 AB**
Students will begin to focus on more precise terminology, symbolic representation, and the development of proofs. Students will explore concepts covering coordinate and transformational geometry; logical arguments and constructions; proof and congruence; similarity, proof and trigonometry; two- and three-dimensional figures; circles; and probability. Students will connect previous knowledge from Algebra I to Geometry through the coordinate and transformational geometry strand. **Geometry is required for graduation.**	03100700 Grade level: 9 - 10
Instructional Material: *1534 - Geometry Texas Hybrid Consumable Student Resource, Houghton Mifflin Harcourt; ISBN: 9780544555990* Prerequisites: Algebra I or Honors Algebra I What's Next? Algebra II or Honors Algebra II All Newcomer Program teachers must be content and ESL certified.	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS GEOMETRY AB **SHELTERED HONORS GEOMETRY AB**	**7073 AB** **7074 AB**
Extends and builds on the foundation for the Advanced Placement program. Includes all of regular geometry course with extensions, both independent and guided, from advanced topics. Instruction focuses on the use of higher levels of understanding, such as relationships of ideas, analysis of investigations, and prediction of results. **Geometry is required for graduation.**	03100700 Grade level: 9 – 10 Credit(s): 1
Instructional Material: *SpringBoard Geometry, CollegeBoard; ISBN: 9781457300400* Prerequisites: Algebra I or Honors Algebra I and student interest What's Next? Algebra II or Honors Algebra II *Course taught by a locally certified gifted teacher or AP trained teacher.*	College Hour(s): NA **Tier II**
MATHEMATICAL MODELS WITH APPLICATIONS I AB	**7052 AB**
This mathematics course provides a path for students to succeed in Algebra II and prepares them for post-secondary choices. Students learn to apply mathematics through experiences in personal finance, science, engineering, fine arts, and social sciences. Students use algebraic, graphical, and geometric reasoning to apply their mathematical knowledge. This course can be taken concurrently with Geometry or with Algebra II. This course can count as the third math credit.	03102400 Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *1523 - Math Models with Applications, Pearson; ISBN: 9781269888738* Prerequisites: Algebra I What's Next? Algebra II	
COLLEGE PREPARATORY MATH I (DEVELOPMENTAL MATH) - BEGINNING ALGEBRA (MATH 0361) **COLLEGE PREPARATORY MATH II (DEVELOPMENTAL MATH) - INTERMEDIATE ALGEBRA (MATH 0362)**	**7040 A CP** **7040 B CP**
This is a College Preparatory course intended to help students hone their skills prior to taking the TSIA college placement exam.	CP111200
Instructional Material: *Contact the Mathematics Department for Required instructional resources and materials.* Prerequisites: Students who have not yet met college readiness standards What's Next? N/A *Credits may or may not be available to count toward graduation. Students on the Foundation HS Plan may earn advanced mathematics credit for a Math College Preparatory course (both semesters are required) only if the student has already completed the three previous mathematics credit requirements for the Foundation Program prior to taking these courses.* • This course is a preparation course for success on TSIA and will no longer provide exemption at TCCD. • Mathematics College preparatory courses only provide high school credit if the student completes both semesters with a 70 average. These College Preparatory courses are developmental courses and will not provide any dual credit. See the decision-point situations listed below that a student should consider in determining if this course will provide the benefits he/she needs. 1. If the student has not passed Algebra I EOC, then complete all coursework in HS needed to pass the EOC exam. **(Students who have not passed the Algebra I EOC can be scheduled into the course for their senior year.)**	Grade level: 12 only Credit(s): 1 College Hour(s): N/A **Tier III**

2. Students on the Foundation HS Program may earn advanced mathematics credit for a Math College Preparatory course (both semesters required=1 credit) only if the student has already completed the three previous mathematics credit requirements for the Foundation Program prior to taking this class.

3. This course is to be taught on a high school campus, but may not be available at all high school campuses. Availability of the high school classes will be based on student's requests.

Texas College Bridge Math (Online)	**9006 AB**
This is a College Preparatory course intended to help students hone their skills prior to taking collegiate level mathematics.	CP111200
Instructional Material: *Texas College Bridge stipulates the resources and requires teacher training* Prerequisites: Students who have not yet met college readiness standards What's Next? N/A *Credits for this program alone are not available to count toward graduation.* • This course is a preparation course for success in collegiate level mathematics and will provide exemption at Higher Ed Institutions that partner with Texas College Bridge. • Students will receive a certificate of completion up finishing both Stage 1 and Stage 2 to share with colleges or universities that partner with Texas College Bridge and the student intends to enroll. These College Preparatory courses are developmental courses and will not provide any dual credit. See the decision-point situations listed below that a student should consider in determining if this course will provide the benefits he/she needs. 1. If the student is not enrolled in a program that offers a certification/licensure. 2. If the student is not within 3 college credit hours in Math/English or 9 college credit hours in other. 3. If student is not enrolled in a Dual Credit, IB, AP, nor OnRamps Course or if student grades and/or test scores are not aligned with success for the student enrolled in the course. 4. If student intends to enlist in the military and no other CCMR pathway is assigned. 5. If student is not enrolled in any CCMR course or programs. 6. If student wants to participate in the program for TSIA prep or other reasons.	Grade level: 12 Credit(s): 0 College Hour(s): N/A **Tier III**

Texas College Bridge Math (Distance Learning)	**9008 AB**
This is a College Preparatory course intended to help students hone their skills prior to taking collegiate level mathematics.	CP111200
Instructional Material: *Texas College Bridge stipulates the resources and requires teacher training* Prerequisites: Students who have not yet met college readiness standards What's Next? N/A *Credits for this program alone are not available to count toward graduation.* • This course is a preparation course for success in collegiate level mathematics and will provide exemption at Higher Ed Institutions that partner with Texas College Bridge. • Students will receive a certificate of completion up finishing both Stage 1 and Stage 2 to share with colleges or universities that partner with Texas College Bridge and the student intends to enroll. These College Preparatory courses are developmental courses and will not provide any dual credit. See the decision-point situations listed below that a student should consider in determining if this course will provide the benefits he/she needs. 1. If the student is not enrolled in a program that offers a certification/licensure. 2. If the student is not within 3 college credit hours in Math/English or 9 college credit hours in other. 3. If student is not enrolled in a Dual Credit, IB, AP, nor OnRamps Course or if student grades and/or test scores are not aligned with success for the student enrolled in the course. 4. If student intends to enlist in the military and no other CCMR pathway is assigned. 5. If student is not enrolled in any CCMR course or programs. 6. If student wants to participate in the program for TSIA prep or other reasons.	Grade level: 12 Credit(s): 0 College Hour(s): N/A **Tier III**

ALGEBRA II AB **SHELTERED ALGEBRA II AB – NP** **SHELTERED ALGEBRA II AB** **ALGEBRA II AB**	**7053 AB** **7068 AB** **7060 AB** **70535 AB**
Students build on their previous algebraic skills. Students will broaden their knowledge of quadratic functions and exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations, inverses in both mathematical and real-world situations.	03100600 Grade level: 9 - 12 Credit(s): 1
Instructional Material: *1526 -Algebra 2 Texas Hybrid Consumable Student Resource, Houghton Mifflin Harcourt; ISBN: 9780544556201* Prerequisites: Algebra I or Honors Algebra I Recommended Prerequisites: Geometry, or Honors Geometry What's Next? Precalculus or Honors Precalculus All Newcomer Program teachers must be content and ESL certified.	College Hour(s): NA **Tier III**

HONORS ALGEBRA II AB **SHELTERED HONORS ALGEBRA II AB**	**7057 AB** **7075 AB**
Extends and builds on the foundation for the Advanced Placement program. Includes the entire regular Algebra II course with extensions, both independent and guided, in the areas of probability, trigonometry functions, triangle problems, and arithmetic sequences and series with emphasis on real-world situations.	03100600 Grade level: 9 - 12
Instructional Material: *XXXX-SpringBoard Algebra 2, CollegeBoard; ISBN: 9781457300417* Prerequisites: Algebra I, Honors Algebra I, and student interest Recommended Prerequisites: Geometry, or Honors Geometry What's Next? Precalculus or Honors Precalculus	Credit(s): 1 College Hour(s): NA **Tier II**
OnRamps College Algebra AB	**7050 AB**
In this course, students deepen their critical thinking skills and develop their ability to persist through challenges as they explore function families: Linear, Absolute Value, Quadratic, Polynomial, Radical, Rational, Exponential, and Logarithmic. Students analyze data algebraically and with technology while developing their knowledge of properties of functions, matrices and systems of equations, and complex numbers. OnRamps works through a dual enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher. **NOTE: This course provides the same credit as Algebra II or Honors Algebra II.**	03100600 Grade level: 9 – 12 Credit(s): 1 College Hour(s): 3 hours **Tier I**
Instructional Material: Selected and provided by the University of Texas at Austin Prerequisites: Algebra I or Honors Algebra 1, and Geometry or Honors Geometry What's Next? N/A	
PRECALCULUS I AB	**7121 AB**
Precalculus deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at high levels in both mathematical and real-world situations. This course provides the necessary foundation for advanced placement or college calculus.	03101100 Grade level: 10 - 12
Instructional Material: *1549 SpringBoard Precalculus, CollegeBoard; ISBN: 9781457300424* Prerequisites: Algebra I or Honors Algebra I, Geometry or Honors Geometry and Algebra II or Honors Algebra II What's Next? AP Calculus AB or AP Statistics	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS PRECALCULUS I AB **SHELTERED HONORS PRECALCULUS I AB**	**7123 AB** **7118 AB**
Extends and builds on the foundation for the Advanced Placement program. Includes the entire regular Precalculus course with extensions, both guided and independent, in the areas of symbolic logic, linear programming, and applications of polar coordinates, and topics from discrete mathematics. This course provides the necessary foundation for advanced placement or college calculus	03101100 Grade level: 10 – 12 Credit(s): 1
Instructional Material: *1549 SpringBoard Precalculus, CollegeBoard; ISBN: 9781457300424* Prerequisites: Algebra I or Honors Algebra I, Geometry or Honors Geometry and Algebra II or Honors Algebra II What's Next? AP Calculus AB or AP Statistics	College Hour(s): NA **Tier II**
DUAL CREDIT PRECALCULUS I A **TCC Course: College Algebra (MATH 1314)** **TWU Course: Precalculus (MAT 1302)**	**7122 A**
In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Computer software materials fee charged for some sections.	03101100
Instructional Material: *N/A* FWISD Prerequisites: Algebra II and Geometry or Honors Algebra II and Honors Geometry TCC Prerequisites: TSI compliant in mathematics TWU Prerequisites: Only offered at Dunbar Early College High School Grade Placement: 9 -12 What's Next? MATH 2412 *Course taught by an approved adjunct instructor*	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT PRECALCULUS I B **TCC Course: PreCalculus Math (MATH 2412)** **TWU Course: Precalculus (MAT 1303)**	**7120 B**
In-depth combined study of algebra, trigonometry, and other topics for calculus readiness. Includes the study of elementary functions, both algebraic and trigonometric, their graphs and applications. These functions include polynomial, rational, exponential, logarithmic and trigonometric. This is a regular college-level Precalculus course in which dual credit will be awarded for college Precalculus and high school Precalculus B.	03101100 Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): 4 hours
Instructional Material: *N/A* FWISD & TCC Prerequisites: MATH-1314 or MATH-1316 with a minimum grade of C TWU Prerequisites: MAT 1302; Only offered at Dunbar Early College High School Grade Placement: 9 - 12 What's Next? MATH 2413 *Course taught by an approved adjunct instructor.*	**Tier I**

OnRamps PRECALCULUS I AB	**7119 AB**
Students will deepen and extend their knowledge of functions, graphs and equations from their high school Algebra and Geometry courses so they can successfully work on concepts in a rigorous university-level calculus course. An emphasis on unpacking mathematical definitions and making logical arguments will empower students to develop their problem-solving skills and create connections to prior concepts. OnRamps works through a dual enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher.	03101100 Grade level: 11-12 Credit(s): 1 College Hour(s): 3 hours **Tier I**
Instructional Material: Selected and provided by University of Texas at Austin Prerequisites: Algebra II or Honors Algebra II What's Next? AP Calculus AB or Dual Credit AP Calculus AB (TSI compliant in mathematics)	
AP CALCULUS AB AB	**7124 AB**
Prepares eligible students for the Calculus AB Advanced Placement Examination given by the College Entrance Examination Board	A3100101 Grade level: 11 - 12
Instructional Material: *1550 - AP Calculus 1st Edition, Pearson Briggs; ISBN: 9780133498356* Prerequisites: Precalculus, or Honors Precalculus and student interest What's Next? AP Calculus BC or AP Statistics	Credit(s): 1 College Hour(s): NA **Tier I**
DUAL CREDIT AP CALCULUS AB AB **TCC Course: Calculus I (MATH 2413)**	**7125 AB**
Limits and continuity; the fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas.	A3100101 Grade level: 11 – 12 Credit(s): 1
Instructional Material: *N/A* FWISD & TCC Prerequisites: MATH-2412 with a minimum grade of C Early College High School Grade Placement: 10-12 What's Next? MATH 2414 *Course taught by an approved adjunct instructor*	College Hour(s): 4 hours **Tier I**
AP CALCULUS BC AB	**7126 AB**
Prepares eligible students for the Calculus BC Advanced Placement Examination given by the College Entrance Examination Board.	A3100102 Grade level: 11 - 12
Instructional Material: *1550 - AP Calculus 1st Edition, Pearson Briggs; ISBN: 9780133498356* Prerequisites: Precalculus, or Honors Precalculus and student interest (AP Calculus AB Recommended) What's Next? Ordinary Differential Equations or Multivariable Calculus or AP Statistics	Credit(s): 1 College Hour(s): NA **Tier I**
DUAL CREDIT AP CALCULUS BC AB **TCC Course: Calculus II (Math 2414)**	**7127 AB**
Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals.	A3100102
Instructional Material: *TCC Course: Calculus II (Math 2414)* FWISD & TCC Prerequisites: MATH-2413 with a minimum grade of C Early College High School Grade Placement: 10-12 What's Next? N/A *Course taught by an approved adjunct instructor*	Grade level: 11-12 Credit(s): 1 College Hour(s): 4 hours **Tier I**
ADVANCED QUANTITATIVE REASONING AB	**7132 AB**
Students will develop and apply reasoning, planning, and communication to make decisions and solve problems in applied situations involving numerical reasoning, probability, statistical analysis, finance, mathematical selection, and modeling with algebra, geometry, trigonometry and discrete mathematics. Both semesters must be taken for this course to qualify as a fourth-year mathematics graduation credit.	03102510 Grade level: 12 Credit(s): 1
Instructional Material: *XXXX - Advanced Quantitative Reasoning, AQR Press; ISBN: 9781631300004* Prerequisites: Geometry or Honors Geometry and Algebra II or Honors Algebra II What's Next? N/A	College Hour(s): NA **Tier III**
ALGEBRAIC REASONING AB	**7134 AB**
Students taking this course will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I, continue with the development of mathematical reasoning related to algebraic understandings and processes, and deepen a foundation for studies in subsequent mathematics courses. Students will broaden their knowledge of functions and relationships, including linear, quadratic, square root, rational, cubic, cube root, exponential, absolute value, and logarithmic functions. Students will study these functions through analysis and application that includes explorations of patterns and structure, number and algebraic methods, and modeling from data using tools that build to workforce and college readiness such as probes, measurement tools, and software tools, including spreadsheets.	03102540 Grade level: 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Consenza & Associates ISBN: 9780988679696* Prerequisites: Algebra I and student interest What's Next? N/A	

STATISTICS AB	7144 AB
Students taking this course will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. Students will broaden their knowledge of variability and statistical processes. Students will study sampling and experimentation, categorical and quantitative data, probability and random variables, inference, and bivariate data. Students will connect data and statistical processes to real-world situations. In addition, students will extend their knowledge of data analysis.	03102530 Grade level: 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Bedford, Freeman, & Worth ISBN: 1464122164 and e-text: ISBN 1319124518* Prerequisites: Algebra I and student interest What's Next? N/A	**Tier III**

AP STATISTICS AB	7145 AB
Introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, planning a study, anticipating patterns in advance, and statistical inference. This course is equivalent to an introductory, non-calculus based, college course in statistics.	A3100200 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *1552 - Practice of Statistics, Bedford, Freeman and Worth Publishing Group; ISBN: 9781464170770* Prerequisites: Geometry or Honors Geometry, and Algebra II or Honors Algebra II; and student interest What's Next? AP Calculus AB	College Hour(s): NA **Tier I**

OnRamps STATISTICS AB	7146 AB
This course develops the quantitative reasoning skills and habits of mind. It will target conceptual understandings and hone highly relevant mathematical skills through scaffolded introduction to statistical methodologies, informal game play, and strategic lab exercise that engage students in hands-on analysis of real data. Valuable programming and coding skills will be acquired as a means for conducting these analyses. OnRamps works through a dual enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher.	A3100200 Grade level: 11-12 Credit(s): 1 College Hour(s): 3 hours **Tier I**
Instructional Material: Selected and provided by the University of Texas at Austin Prerequisites: Algebra I or Honors Algebra 1; Geometry and Algebra II are preferred What's Next? N/A	

INTRODUCTORY MATHEMATICS AB	7415 AB
This course provides instruction for students who need additional study in computational skills before entering Algebra. This course includes operations with whole numbers, decimals, percent, and consumer applications. Units on measurement, statistical graphs, and geometry will be taught. No credit is earned toward graduation for this course.	N/A Grade level: 9 – 12 Credit(s): N/A
Instructional Material: Prerequisites: Must be International Newcomer Academy student What's Next? N/A	College Hour(s): NA **Tier III**

TEXAS PREFRESHMAN ENGINEERING PROGRAM I AB	7421 AB
Available at Texas Wesleyan University and/or Tarrant County Community College, as summer enrichment for high ability students, these courses emphasize study and research in mathematics, engineering, and computer science. Preference is given to female students and minority students who have been underrepresented in the field of engineering. Note: This course is for state elective credit only, and some students may have earned one or two credits in middle school. For this course to count as an elective credit and to be calculated into the student's GPA; each student is responsible to provide his/her grade and course information to his/her counselor.	N1303752 Grade level: 9 - 11 Credit(s): 1 College Hour(s): 4 hours **Tier III**
Instructional Material: *Textbook(s) and materials provided by the participating university* Prerequisites: Average of 80 or higher in college preparatory mathematics course; teacher recommendation	

TEXAS PREFRESHMAN ENGINEERING PROGRAM II AB	7423 AB
Available at Texas Wesleyan University and/or Tarrant County Community College, as summer enrichment for high ability students, these courses emphasize study and research in mathematics, engineering, and computer science. Preference is given to female students and minority students who have been underrepresented in the field of engineering. Note: This course is for state elective credit only, and some students may have earned one or two credits in middle school. For this course to count as an elective credit and to be calculated into the student's GPA; each student is responsible to provide his/her grade and course information to his/her counselor.	N1303753 Grade level: 9 – 11 Credit(s): 1 College Hour(s): 4 hours
Instructional Material: *Textbook(s) and materials provided by the participating university* Prerequisites: Average of 80 or higher in college preparatory mathematics course; teacher recommendation What's Next? N/A	**Tier III**

TEXAS PREFRESHMAN ENGINEERING PROGRAM III AB	7425 AB
Available at Texas Wesleyan University and/or Tarrant County Community College, as summer enrichment for high ability students, these courses emphasize study and research in mathematics, engineering, and computer science. Preference is given to female students and minority students who have been underrepresented in the field of engineering. Note: This course is for state elective credit only, and some students may have earned one or two credits in middle school. For this course to count as an elective credit and to be calculated into the student's GPA; each student is responsible to provide his/her grade and course information to his/her counselor.	N1303754 Grade level: 9 - 11 Credit(s): 1 College Hour(s): 4 hours **Tier III**
Instructional Material: *Textbook(s) and materials provided by the participating university*	

Prerequisites: Average of 80 or higher in college preparatory mathematics course; teacher recommendation

TEXAS PREFRESHMAN ENGINEERING PROGRAM IV AB	**7427 AB**
Available at Texas Wesleyan University and/or Tarrant County Community College, as summer enrichment for high ability students, these courses emphasize study and research in mathematics, engineering, and computer science. Preference is given to female students and minority students who have been underrepresented in the field of engineering. Note: This course is for state elective credit only, and some students may have earned one or two credits in middle school. For this course to count as an elective credit and to be calculated into the student's GPA; each student is responsible to provide his/her grade and course information to his/her counselor.	N1303755 Grade level: 9 – 11 Credit(s): 1 College Hour(s): 4 hours **Tier III**
Instructional Material: *Textbook(s) and materials provided by the participating university* Prerequisites: Average of 80 or higher in college preparatory mathematics course; teacher recommendation What's Next? N/A	
INDEPENDENT STUDY IN MATH DAP: HONORS MULTIVARIABLE CALCULUS AND ITS APPLICATIONS AB	**7128 AB**
This third course of calculus will use all of the skills and concepts learned in the previous two courses to analyze and explore problems requiring multi-variables. Essential for students planning to study advanced physical sciences and/or mathematics in college.	031025##
Instructional Material: *XXXX - Multivariable Calculus 1st Edition, Pearson Briggs; ISBN: 9780321965158* Prerequisites: Concurrent enrollment or completion of AP Calculus BC What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=02. Course taught by locally certified gifted teacher.*	Grade level: 12 Credit(s): 1 College Hour(s): NA **Tier I**
DUAL CREDIT MULTIVARIABLE CALCULUS AND ITS APPLICATIONS AB **TCC Course: Calculus III (Math 2415)**	**7133 AB**
Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem.	031025## Grade level: HS: 11-12
Instructional Material: *N/A* FWISD & TCC Prerequisites: MATH-2414 with a minimum grade of C What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=02.* *Course taught by an approved adjunct instructor.*	ECHS: 11 – 12 Credit(s): 1 College Hour(s): 4 hours **Tier I**
INDEPENDENT STUDY IN MATH DAP: HONORS ORDINARY DIFFERENTIAL EQUATIONS AND THEIR APPLICATIONS AB	**7129 AB** 031025##
Provides instruction in the concepts and skills associated with differential equations including solving first-order differential equations, linear differential equations, higher- order linear differential equations, first-order systems, homogeneous and non-homogeneous systems, and real-world problems as found in the physical science.	Grade level: 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *No state-adopted instructional material(s)/Contact Mathematics Director* Prerequisites: AP Calculus BC or concurrent enrollment and student interest What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=03 Course taught by a locally certified gifted teacher.*	**Tier I**
DUAL CREDIT ORDINARY DIFFERENTIAL EQUATIONS AND THEIR APPLICATIONS A **TCC Course: Differential Equations (MATH 2320)**	**7135 A**
Ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, and boundary value problems; application of differential equations to real-world problems. This is a regular college-level Differential Equations course in which dual credit will be awarded for Differential Equations and high school Ordinary Differential Equations A.	031025##
Instructional Material: *N/A* FWISD & TCC Prerequisites: MATH-2414 with minimum grade of C Early College High School Grade Placement: 11-12 What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=04 Course taught by an approved adjunct instructor.*	Grade level: 11-12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT ORDINARY DIFFERENTIAL EQUATIONS AND THEIR APPLICATIONS B **TCC Course: Differential Equations and Linear Algebra (MATH 2421)**	**7135 B**
This course emphasizes solution techniques. Ordinary differential equations, vector spaces, linear transformations, matrix/vector algebra, eigenvectors, Laplace Transforms and systems of equations. This is a regular college-level Differential Equations and Linear Algebra course in which dual credit will be awarded for Differential Equations and Linear Algebra and high school Ordinary Differential Equations B.	031025##
Instructional Material: *N/A* FWISD & TCC Prerequisites: MATH-2414 with minimum grade of C Early College High School Grade Placement: 11-12 What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=04.* *Course taught by an approved adjunct instructor.*	Grade level: 11-12 Credit(s): 0.5 College Hour(s): 4 hours **Tier I**

INDEPENDENT STUDY IN MATH DAP: HONORS MATHEMATICAL MODELING USING COMPUTER SIMULATION AB	**7130 AB**
This one- or two-semester course is designed for students to use an interdisciplinary approach to modeling physical events in the real world. For example, pilots are trained on computer simulators, new medicinal drugs are designed with the aid of computer models, economic projections and weather forecasting are based upon mathematical formats that are solved through intensive computer programming. This course will use skills and concepts learned in various mathematics courses (algebra-calculus, economics, physics, biology, anatomy, and physiology, and computer science).	031025##
Instructional Material: *No state-adopted instructional material(s)/Contact Mathematics Director* Prerequisites: AP Calculus AB and student interest What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=05* *Course taught by a locally certified gifted teacher. State elective credit*	Grade level: 11 - 12 Credit(s): 0.5-1 College Hour(s): NA **Tier I**
INDEPENDENT STUDY IN MATH DAP: HONORS NUMBER THEORY AB	**7215 AB**
Provides the opportunity for students to learn concepts and skills involving the use of integers.	031025##
Instructional Material: *No state-adopted instructional material(s)/Contact Mathematics Director* Prerequisites: Algebra II What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=05* *Course taught by a locally certified gifted teacher. State elective credit.*	Grade level: 11 - 12 Credit(s): 1 College Hour(s): NA **Tier I**
INDEPENDENT STUDY IN MATH DAP: CALCULUS BASED STATISTICS AB	**7235 AB**
Provides a study of permutations, combinations, binomial theorems, equally likely outcomes, random variables, joint and continuous distributions, the binomial distribution, and inferential statistics.	031025##
Instructional Material: *No state-adopted instructional material(s)/Contact Mathematics Director* Prerequisites: AP Calculus BC or concurrent enrollment What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=05* *Course taught by a locally certified gifted teacher. State elective credit.*	Grade level: 11 - 12 Credit(s): 1 College Hour(s): NA **Tier I**
DUAL CREDIT CALCULUS BASED STATISTICS AB **TCC Course: Elementary Statistical Methods (MATH 1342)**	**7237 AB**
Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Topics may include population sampling; collection, tabulation, and graphing of data; frequency distributions; mean and standard deviation; normal distribution; correlation and regression, and tests for significance. This is a regular college-level Statistics course in which dual credit will be awarded for college Elementary Statistical Methods and high school Calculus Based Statistics.	031025## Grade level: 11-12 Credit(s): 1 College Hour(s): 3 hours
Instructional Material: *N/A* FWISD Prerequisites: AP Calculus AB TCC Prerequisites: TSI compliant in mathematics Early College High School Grade Placement: 10-12 What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=05* *Course taught by an approved adjunct instructor. State elective credit*	**Tier I**
INDEPENDENT STUDY IN MATHEMATICS DAP: HONORS LOGIC DESIGN USING BOOLEAN ALGEBRA	**7275 AB**
The Honors Logic Design using Boolean Algebra course provides opportunities to study the Boolean mathematics behind and the design methods for combinational and sequential digital logic systems from standard integrated circuits. The students will also design, implement and evaluate their logic circuit designs using basic digital lab techniques. Both combinational and sequential logic circuits will be implemented and tested in the labs.	031025##
Instructional Material: *Laboratory materials provided by high school* Prerequisites: Co-requisite of an AP level mathematics course What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=05* *Course taught by an approved adjunct instructor. State elective credit.* *Offered at: Paschal*	Grade level: 11 - 12 Credit(s): 1 College Hour(s): NA **Tier I**
INDEPENDENT STUDY IN MATH DAP: HONORS LINEAR ALGEBRA ABH	**7277 ABH**
Presents matrices and vectors, transformations and matrices, representatives of linear transformations, and some elementary analytic geometry from a vector standpoint.	031025##
Instructional Material: *Introductory Linear Algebra with Applications, MacMillian* Prerequisites: AP Calculus A, AP Calculus AB, AP Statistics or concurrent enrollment What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=05* *Course taught by a locally certified gifted teacher. State elective credit.* *Offered only at: Paschal*	Grade level: 12 Credit(s): 1 College Hour(s): NA **Tier I**

DUAL CREDIT LINEAR ALGEBRA IT **TCC Course: Linear Algebra (MATH 2318)**	**7279 T**
Introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvector; and applications in science and engineering.	031025## Grade level: 11-12 Credit(s): 0.5
Instructional Material: *N/A* FWISD & TCC Prerequisites: MATH-2414 with minimum grade of C Early College High School Grade Placement: 11-12 What's Next? N/A *Course taught by an approved adjunct instructor.*	College Hour(s): 3 hours **Tier I**
INDEPENDENT STUDY IN MATH DAP: ELECTRICAL CIRCUIT THEORY AB	**7278 AB**
The Electrical Circuit Theory course will supplement the basic knowledge of the function of electrical circuits provided by an introductory physics course. This course is modeled after the initial analog circuits course in a university electrical engineering program. Students will engage in theoretical analysis of circuit response via mathematical methods and computer simulation as well as hands-on design, construction, and testing of electrical circuits in a laboratory environment.	031025## Grade level: 11-12 Credit(s): 1 College Hour(s): NA
Instructional Material: N/A Prerequisites: Successful completion of AP Calculus AB and concurrent enrollment in AP Calculus BC. Successful completion of AP Physics 1 or an equivalent course. What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=05* *Course taught by a locally certified gifted teacher. State elective credit.*	**Tier I**
INDEPENDENT STUDY IN MATHEMATICS: OPTICS	**7256 AB**
In Optics, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: the principles of reflection and refraction, reflective optics, lenses and ray tracing, physical optics, and lasers. Students who successfully complete the Optics course will acquire factual knowledge within a conceptual framework, practice experimental design and interpretation, work collaboratively with colleagues, and develop critical-thinking skills.	031025## Grade level: 11-12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Optics, 5th edition,* by Eugene Hecht, Pearson, ISBN 9780133977226 Prerequisites: AP Calculus AB, AP Physics 1 or an equivalent course. What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=05* *Course taught by a locally certified gifted teacher. State elective credit.*	**Tier I**
INDEPENDENT STUDY IN MATHEMATICS: ASTROPHYSICS	**7257 AB**
The Astrophysics course will cover the same curricular topics found in the Honors Astronomy course. However, the topics will be explored in greater depth using the advanced mathematics and physics skills including calculus, differential equations, spectrum analysis, and quantum physics. The course will emphasize application and critical thinking for problem solving.	031025## Grade level: 11-12 Credit(s): 1
Instructional Material: *Astronomy Today,* by Chaisson and McMillan, Pearson, ISBN 978-0-321-90167-5 Prerequisites: AP Calculus AB, AP Physics 1 or an equivalent course. What's Next? N/A *031025##- 1st Time ##=00, 2nd Time ##=01, 3rd Time ##=05* *Course taught by a locally certified gifted teacher.* *State elective credit.*	College Hour(s): NA **Tier I**

SCIENCE GRADUATION REQUIREMENTS

ALL STUDENTS ARE REQUIRED to pass Biology EOC exam

FOUNDATION PLANS

One credit: in Biology or AP/IB Biology.

One credit: must be selected from the following laboratory-based courses:

- Integrated Physics & Chemistry
- Chemistry
- AP/DC Chemistry
- OnRamps Chemistry
- Physics
- Principles of Technology
- AP Physics 1 (Algebra-based)
- DC Physics
- OnRamps Physics

The 3rd & 4th Science credit may be selected from one full credit or a combination of two half credits from the following:

- Chemistry
- Physics
- Principles of Technology
- Aquatic Science / DC
- Astronomy / DC
- Earth & Space Science / DC
- Environmental Systems / DC
- Engineering Science
- CTE: Food Science
- CTE: Scientific Research & Design
- CTE: Anatomy & Physiology
- DC Anatomy & Physiology
- CTE: Eng Design & Prob Solving
- CTE: Forensic Science
- CTE: Adv Animal Science
- CTE: Pathophysiology
- CTE: Adv Plant & Soil Science
- CTE: Medical Microbiology
- DC SRD: Biology for Non-Science Majors
- DC SRD: General Chemistry
- DC SRD: College Physics
- AP/DC Biology
- AP/DC Chemistry
- OnRamps Biology
- OnRamps Chemistry
- OnRamps Chemistry II
- AP Physics 1 or 2 (Algebra-based)
- AP Physics C - Mechanics
- AP Physics C - Electricity & Magnetism
- DC Physics
- OnRamps Physics
- OnRamps Physics II
- OnRamps Earth & Space Science
- AP Environmental Science
- Biotechnology I
- Biotechnology II

Possible Endorsement Opportunities:

- Multidisciplinary
- Business & Industry
- STEM (Sci, Tech, Eng & Math)

Science

Science Recommended Course Sequence and Testing Guide

	Traditional		Advanced		Advanced Placement (AP) /OnRamps/ Dual Credit (DC)	
6th	Gr 6 Science: 0300	None	Gr 6 Advanced Science: 0313	None	Gr 6 Advanced Science: 0313	None
7th	Gr 7 Science: 0304	None	Gr 7 Advanced Science: 0303	STAAR Gr 8	Gr 7 Advanced Science: 0303	STAAR Gr 8
8th	Gr 8 Science: 0305	STAAR Gr 8	Grade 8 Science: 0305 or Honors Biology: 7574 or Honors IPC: 7524	STAAR Gr 8 or Bio EOC or None	Honors Biology: 7574 or Honors Integrated Physics/Chemistry: 7524	Bio EOC or None
9th	Biology: 7572 or Integrated Physics/Chemistry: 7532	Bio EOC or None	Honors Chemistry: 7594 or Honors Physics: 7616 or Honors Biology: 7574	None or Bio EOC	Honors Biology: 7574 or Honors Chemistry: 7594 or AP Physics: 7625	Bio EOC or None
10th	Biology: 7572 or Chemistry: 7592 or Physics: 7614	Bio EOC or PSAT Exams vary by course	Honors Chemistry: 7594 or Honors Physics: 7616 or Honors Biology: 7574	Bio EOC or PSAT Exams vary by course	Honors Chemistry: 7594 or AP Physics: 7625 or Honors Biology: 7574	Bio EOC or PSAT Exams vary by course
11th	Chemistry: 7592 or Physics: 7614	PSAT SAT ACT	AP/DC Science Elective or Advanced Science	Exams vary by course	AP/DC/OnRamps Science Elective or Advanced Science	Exams vary by course
12th	Advanced Science or CTE Equivalent	PSAT SAT ACT	AP/DC/OnRamps Science Elective or Advanced Science	Exams vary by course	AP/DC/OnRamps Science Elective or Advanced Science	Exams vary by course

INTEGRATED PHYSICS/CHEMISTRY AB	**7532 AB**
SHELTERED INTEGRATED PHYSICS AND CHEMISTRY AB – NP	**7526 AB**
SHELTERED INTEGRATED PHYSICS AND CHEMISTRY AB	**7528 AB**
In Integrated Physics and Chemistry, students conduct laboratory and field investigations, use scientific inquiry during investigation, and make informed decisions using critical thinking and scientific problem solving. This course integrates the disciplines of physics and chemistry in the following topics: force, motion, energy, and matter.	03060201
Instructional Material: *1746 - Integrated Physics and Chemistry, McGraw-Hill Education (Glencoe/ McGraw-Hill), ISBN 9780021437276* Prerequisites: None What's Next? Biology, Chemistry, or Physics if IPC was taken as the first high school science or any advanced science course if Biology has been successfully completed. All Newcomer Program teachers must be content and ESL certified.	Grade level: 9 – 10 Credit(s): 1 College Hour(s): NA **Tier III**

HONORS INTEGRATED PHYSICS/CHEMISTRY AB **SHELTERED HONORS INTEGRATED PHYSICS AND CHEMISTRY AB - NP** **SHELTERED HONORS INTEGRATED PHYSICS AND CHEMISTRY AB**	**7524 AB** **7525 AB** **7523 AB**
This Integrated Physics and Chemistry course develops students in the fundamentals of chemistry (1st semester) and physics (2nd semester). Students will conduct laboratory and field investigations, use scientific inquiry during investigation, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include characteristics of matter, use of the Periodic Table, chemical bonding, thermochemistry, nuclear chemistry, laws of motion, conservation of energy and momentum; force; thermodynamics; characteristics and behavior of waves.	03060201 Grade level: 9 - 10 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *1746 - Integrated Physics and Chemistry, McGraw-Hill Education (Glencoe/ McGraw-Hill), ISBN 9780021437276* Prerequisites: Successful completion of 8th grade STAAR, and completion/concurrent enrollment in Algebra I. What's Next? Honors Chemistry, OnRamps Chemistry, Honors Physics or Honors Biology All Newcomer Program teachers must be content and ESL certified.	
DUAL CREDIT INTEGRATED PHYSICS AND CHEMISTRY AB **TCC Course: Physical Science I (PHYS 1415 and PHYS 1415 Lab)** **TWU Course: Nature of Physical Science (CHE 1403)**	**7535 AB**
Course, designed for non-science majors, that surveys topics from physics, chemistry, geology, astronomy, and meteorology.	03060201
Instructional Material: N/A FWISD & TCC Prerequisites: None TCC Co-Requisite: PHYS-1415 Lab TWU Prerequisites: Only offered at Dunbar What's Next? N/A Early College High School Grade Placement: 9-12. Course taught by an approved adjunct instructor.	Grade level: N/A Credit(s): 1 College Hour(s): 4 hours **Tier I**
BIOLOGY I AB **SHELTERED BIOLOGY I AB – NP** **SHELTERED BIOLOGY I AB** **BIOLOGY I AB**	**7572 AB** **7573 AB** **7575 AB** **75725 AB**
In Biology, students conduct laboratory and field investigations, use scientific inquiry during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Biology study a variety of topics that include: structures and functions of cells and viruses; growth and development of organisms; cells, tissues, and organs; nucleic acids and genetics; biological evolution; taxonomy; metabolism and energy transfers in living organisms; living systems; ecosystems and the environment; and homeostasis. One credit of Biology is required for graduation. Students entering Grade 9 in 2011-2012 and thereafter are required to take the STAAR End of Course (EOC) exam in this course.	03010200
Instructional Material: *1712 – Biology, McGraw-Hill, ISBN: 9780021360031* Prerequisites: None What's Next? Chemistry, Physics or any advanced science course *All students will take the Biology EOC.* All Newcomer Program teachers must be content and ESL certified.	Grade level: 9 - 11 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS BIOLOGY AB **SHELTERED HONORS BIOLOGY AB**	**7574 AB** **7576 AB**
In addition to the Biology course requirements; this course prepares students for success in AP Biology by exposing them to deeper biological concepts and skills. More in-depth study is made of cell structure and processes, including transport, energy transformations, protein production, and reproduction. Comprehensive learning concerning hierarchy and interdependence of living systems, development of organisms, inheritance, evolution, and ecology is required. Independent research is a mandatory component of this honors course. One credit of Biology is required for graduation.	03010200
Instructional Material: *1712 – Biology, McGraw-Hill, ISBN: 9780021360031* Recommended Prerequisites: Advanced rating on the 8th grade STAAR What's Next? AP Biology, Honors Chemistry, or any advanced science course *Students will take the Biology EOC.*	Grade level: 8 - 10 Credit(s): 1 College Hour(s): NA **Tier II**
AP BIOLOGY AB	**7590 AB**
This course involves extensive laboratory investigations and advanced topics in Biology including molecules and cells, heredity and evolution, and organisms and populations. The course prepares students to take the College Board AP Biology Examination. One credit of Biology is required for graduation.	A3010200

Instructional Material: *1715 – AP Edition Biology, 11th Edition, Media-Onboard Connect electronic resources and digital Scoreboard for each student. McGraw-Hill School Education, LLC, ISBN: 9780076649761* Recommended Prerequisites: Successful completion of Biology and Chemistry What's Next? AP Environmental Science, AP Chemistry, AP Physics, and/or any advanced science course *If students are using this course as a substitution for the on-level or Honors Biology, they will take the Biology EOC.*	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
OnRamps BIOLOGY AB	**7591 AB**
This course focuses on molecular and cellular biology. It revolved around three big ideas of biology starting with the student of the structure and function of biomolecules. The flow of energy through living systems via photosynthesis and cellular respiration is the second big idea of the class. The course finishes with investigation of how genetic information is expressed and transmitted both within and between cells. OnRamps works through a dual-enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher.	A3010200 Grade level: 10 – 12 Credit(s): 1 College Hour(s): 3 **Tier I**
Instructional Material: Selected and provided by the University of Texas at Austin Prerequisites: Biology and Chemistry What's Next? OnRamps Chemistry, Physics, and/or any advanced science course	
CHEMISTRY AB **SHELTERED CHEMISTRY AB – NP** **SHELTERED CHEMISTRY AB** **CHEMISTRY AB**	**7592 AB** **7596 AB** **7598 AB** **75925 AB**
In Chemistry, students conduct laboratory and field investigations, use scientific inquiry during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include characteristics of matter, use of the Periodic Table, development of atomic theory and chemical bonding, chemical stoichiometry, gas laws, solution chemistry, thermochemistry, and nuclear chemistry. Students will investigate how Chemistry is an integral part of our daily lives.	03040000
Instructional Material: *1731 – Texas Chemistry: Matter and Change, McGraw-Hill, ISBN 9780021435104* Required Prerequisites: One unit of high school science and Algebra I Suggested prerequisite: Completion of, or concurrent enrollment in, a second year of mathematics What's Next? Biology, Physics or any advanced science course All Newcomer Program teachers must be content and ESL certified.	Grade level: 10 - 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS CHEMISTRY AB **SHELTERED HONORS CHEMISTRY AB**	**7594 AB** **7595 AB**
The course prepares students for success in AP Chemistry by exposing them to deeper concept and skills, utilizing laboratory experiences. It includes extensive coverage of chemical principles and concepts beyond on-level chemistry. Requires an independent research project.	03040000
Instructional Material: *1731 – Texas Chemistry: Matter and Change, McGraw-Hill, ISBN 9780021435104* Required Prerequisites: One unit of High School Science and Algebra I Suggested prerequisite: Completion of, or concurrent enrollment in, a second year of mathematics What's Next? AP Chemistry, Honors Physics or any advanced science course	Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
AP CHEMISTRY AB	**7610 AB**
This course involves extensive laboratory investigations and advanced topics in Chemistry, such as quantitative analysis, thermodynamics, bonding, ideal gas laws, and stoichiometry. This class prepares students to take the AP Chemistry Examination.	A3040000
Instructional Material:*1733 – Chemistry, 9th Edition ©2014 with OWL, ISBN: 9781133611103, OWL AP Chemistry Resource Website w eBook; AP Lab Manual ISBN: 9781133611493 National Geographic Learning/Cengage Learning, Inc.* Recommended Prerequisites: Successful completion of a Chemistry course and Algebra II. What's Next? AP Biology, AP Physics or any advanced science course	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
OnRamps CHEMISTRY I AB	**7597 AB**
This course addresses the nature of matter, energy, chemical reactions, and chemical thermodynamics. Throughout the course, students will learn how to think like a scientist by exploring the underlying theoretical foundations of chemistry, making intuitive arguments for how the world works. May be paired with advanced science lab 7626T (Minimum 40% lab). OnRamps works through a dual-enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher.	3040000 Grade level: 9 – 12 Credit(s): 1
Instructional Material: Selected and provided by the University of Texas at Austin Prerequisites: Biology or IPC, and successful completion of Algebra I What's Next? AP Biology, AP Physics or any advanced science course	College Hour(s): 4 **Tier I**

OnRamps CHEMISTRY II AB	**7593 AB**
This course continues the development and application of concepts, theories and laws underlying chemistry that were introduces in OnRamps Chemistry I. The course extends the study of thermodynamics to the development of chemical equilibria and kinetics with applications to water chemistry and electrochemistry. In addition, students will gain insight into the workings of the material world through introduction to nuclear chemistry, battery technology, polymer chemistry and applications in organic chemistry and biochemistry. OnRamps works through a dual-enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher.	A3040000 Grade level: 9 – 12 Credit(s): 1 College Hour(s): 4 **Tier I**
Instructional Material: Selected and provided by the University of Texas at Austin Prerequisites: OnRamps Chemistry I, AP Chemistry or equivalent What's Next? AP Biology, AP Physics or any advanced science course	
DUAL CREDIT CHEMISTRY A **TCC Course: General Chemistry I (CHEM 1411 and CHEM 1411 Lab)**	**7599 A**
Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry. Laboratory required.	03040000
Instructional Material: N/A FWISD & TCC Prerequisites: MATH-1314 or equivalent academic preparation TCC Co-Requisite: CHEM-1411 Lab What's Next? N/A Early College High School Grade Placement: 9-12. Course taught by an approved adjunct instructor.	Grade level: 10 – 12 Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
DUAL CREDIT CHEMISTRY B **TCC Course: General Chemistry II (CHEM 1412 and CHEM 1412 Lab)**	**7599 B**
This course is a continuation of Chem 1411 & 1411L. Topics covered in this course include: Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry. Laboratory required.	03040000
Instructional Material: N/A FWISD & TCC Prerequisites: CHEM-1411 and MATH-1314 TCC Co-Requisite: CHEM-1412 Lab What's Next? N/A Early College High School Grade Placement: 9-12. Course taught by an approved adjunct instructor.	Grade level: 10 – 12 Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
PHYSICS AB	**7614 AB**
In Physics, students conduct field and laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: laws of motion; changes within physical systems and conservation of energy and momentum; force; thermodynamics; characteristics and behavior of waves; and quantum physics. This course provides students with a conceptual framework, factual knowledge, and analytical and scientific skills	03050000 Grade level: 9 - 12
Instructional Material: *1747 – Holt McDougal Texas Physics, ©2015; Holt McDougal; ISBN: 9780544136113* Suggested Prerequisites: Successful completion of, or concurrent enrollment in, Algebra I What's Next? Any advanced science course	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS PHYSICS AB **SHELTERED HONORS PHYSICS AB**	**7616 AB** **7615 AB**
The course prepares students for success in AP Physics by exposing them to deeper concepts and skills used in that course. It includes extensive coverage of Newton's Laws of Motion, energy, thermodynamics, waves, and quantum physics. Mathematical formulation of concepts and solutions to problems are stressed. Independent research is a required component of Honors Physics.	03050000 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *1749- AP Edition College Physics: A Strategic Approach, 3rd Edition, ©2015, Media-e-book version and other online resources, Pearson Education, Inc., ISBN: 9780133539677* Suggested Prerequisites: Successful completion of, or concurrent enrollment in, Algebra I What's Next? AP Physics I	College Hour(s): NA **Tier II**
HONORS MODERN PHYSICS ABH	**0689 ABH**
This course is designed for students to use an interdisciplinary approach to explore the physical processes in nature that can only be described by quantum mechanics. This analysis and description are highly mathematical in content. For example, the position of an electron is found in terms of a probability density function. This course will use skills and concepts learned in various mathematics courses (Algebra II – Calculus), physics, and computer science. This stimulating environment will foster creativity and academic growth well beyond an honors curriculum and will open	N1120041

the imagination of students to the science of the 21st century.	
Instructional Material: *Suggested Instructional Material(s): Modern Physics for Scientists and Engineers Contact the content director (Science and/or Mathematics Director, based on content credit to be awarded)* Suggested Prerequisites: Successful completion of AP Physics C, AP Calculus BC. Concurrent enrollment in AP Multi-Variable Calculus. Completion of, or concurrent enrollment in, AP Chemistry is beneficial. What's Next? N/A	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
AP PHYSICS I AB (Algebra Based)	**7625 AB**
This algebra-based course is equivalent to a first-semester college algebra-based physics course. The algebra-based course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. Prepares students to take the AP Physics 1 examination.	A3050003
Instructional Material:*1749 – AP Edition College Physics: A Strategic Approach, 3rd Edition, ©2015, Media-e-book version and other online resources, Pearson Education, Inc., ISBN: 9780133539677* Recommended Prerequisites: Successful completion of Algebra I, Geometry and Algebra II What's Next? AP Physics 2 or AP Physics C or any advanced science course	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
AP PHYSICS II AB (Algebra Based)	**7627 AB**
The algebra-based course is equivalent to a second-semester college algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. Prepares students to take the AP Physics II examination.	A3050004
Instructional Material: *1749 – AP Edition College Physics: A Strategic Approach, 3rd Edition, ©2015, Media-e-book version and other online resources, Pearson Education, Inc., ISBN: 9780133539677* Recommended Prerequisites: Successful completion of AP Physics 1 or a comparable physics course. Recommended Co-requisite: Pre-calculus or an equivalent course. *Science Director's approval is required to offer this course new to a campus.* What's Next? Any advanced science course	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
AP PHYSICS C - MECHANICS AB	**7628 AB**
This calculus-based course provides instruction in each of the following six content areas: kinematics; Newton's laws of motion; work and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Prepares students to take the AP Physics C: Mechanics exam.	A3050006 Grade level: 11 – 12
Instructional Material: *1750 – Physics for Scientists and Engineers, ©2015 9th Edition Media-e-book version and other online instructional material, National Geographic Learning / Cengage Learning, Inc., ISBN: 9781305335615* Recommended Prerequisites: Successful completion or concurrent enrollment in a calculus course. What's Next? AP Physics C- Electricity and Magnetism	Credit(s): 1 College Hour(s): NA **Tier I**
AP PHYSICS C - ELECTRICITY AND MAGNETISM AB	**7618 AB**
This calculus-based course provides instruction in each of the following five content areas: electrostatics; conductors; capacitors; and dielectrics; circuits; magnetic fields; and electromagnetism. Prepares students to take the AP Physics C: Electricity and Magnetism exam.	A3050005 Grade level: 11 – 12
Instructional Material: *1750 – Physics for Scientists and Engineers, ©2015 9th Edition Media-e-book version and other online instructional material, National Geographic Learning / Cengage Learning, Inc., ISBN: 9781305335615* Recommended Prerequisites: Successful completion or concurrent enrollment in a calculus course. AP Physics C-Mechanics. What's Next? N/A	Credit(s): 1 College Hour(s): NA **Tier I**
OnRamps PHYSICS I AB	**7613 AB**
Students study a variety of topics that include the laws of motion; changes within physical systems; conservation of momentum and energy; forces; thermodynamics; characteristics and behavior of waves; and atomic, nuclear and quantum physics. OnRamps works through a dual-enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher. May be paired with advanced science lab 7626T (Minimum 40% lab).	03050000 Grade level: 10-12 Credit(s): 1 College Hour(s): 4 **Tier I**
Instructional Material: Selected and provided by the University of Texas at Austin Suggested Prerequisites: IPC or Biology; Algebra I; and concurrent enrollment in a second math course What's Next? Any advanced science course available	
OnRamps PHYSICS II AB	**STH03724 AB**
Students study topics that include electromagnetism, optics, and Nuclear. Students will explore how electric, magnetic, and electromagnetic effects arise from static, uniformly moving and accelerating charges. OnRamps works through a dual-enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher. May be paired with advanced science lab 7626T (Minimum 40% lab).	A3050004 Grade level: 10-12 Credit(s): 1 College Hour(s): 3

Instructional Material: Selected and provided by the University of Texas at Austin Recommended Prerequisites: OnRamps Physics, AP Physics I, Honors Physics, or DC College Physics I & II What's Next? Any advanced science course available	**Tier I**
HONORS THERMODYNAMICS	**7136 AB**
The Thermodynamics course is designed as a relatively comprehensive overview of the field of classical thermodynamics with some statistical mechanics injected toward the end of the semester to tie in with more modern approaches. The class begins with a discussion of what thermodynamics includes, the meaning of certain important terms and approaches. The idea of temperature and temperature scales, methods of heat transfer, and the various types of thermodynamic processes are discussed. The various laws of thermodynamics are covered, (zeroth, first, second, third) building on knowledge and practical applications of each law as it's introduced to the student. During the units, simple laboratory experiments will be utilized to solidify conceptual knowledge.	03102502 Grade level: 10-12 Credit(s): 0.5 College Hour(s): NA **Tier I**
Instructional Material: *Thermodynamics – Enrico Fermi, Understanding Thermodynamics – Van Ness* Prerequisites: Successful completion of Calculus AB plus one of the following: AP Physics 1, On-Ramps Physics 1, or AP Physics C Mechanics What's Next? N/A	
DUAL CREDIT PHYSICS A **TCC Course: College Physics I (PHYS 1401 and PHYS 1401 Lab)**	**7624 A**
Fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving.	03050000
Instructional Material: N/A FWISD & TCC Prerequisites: MATH-1314 and MATH-1316 or MATH-2412 TCC Co-Prerequisite: PHYS-1401 Early College High School Grade Placement: 10-12 What's Next? N/A Course taught by an approved adjunct instructor.	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
DUAL CREDIT PHYSICS B **TCC Course: College Physics II (PHYS 1402 and PHYS 1402 Lab)**	**7624 B**
Fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving.	03050000
Instructional Material: N/A FWISD & TCC Prerequisites: PHYS-1401 TCC Co-Prerequisite: PHYS-1402 Lab Early College High School Placement: 10-12 What's Next? N/A Course taught by an approved adjunct instructor.	Grade level: 10 – 12 Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
AP ENVIRONMENTAL SCIENCE AB	**7678 AB**
AP Environmental Science stresses scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.	A3020000
Instructional Material: *Living in the Environment, National Geographic Learning/Cengage Learning, Inc.* Recommended Prerequisites: Algebra, two years of high school laboratory science, including one year of life science and one year of physical science What's Next? Any advanced science course	Grade level: 11 - 12 Credit(s): 1 College Hour(s): NA **Tier I**
ADVANCED SCIENCE LAB T	**7626 T**
This course can be taken concurrently with AP science courses if campuses wish to schedule a year-long lab component to supplement the AP course. It can be paired with the following courses: ST37202, STH03724, 7590, 7597, 7610, 7625, 7627, 7628, 7613, 7618 and 7678.	84800XXX Grade level: 10 - 12
Instructional Material: *No state adopted instructional material(s)/Contact Director of Science* Prerequisites: None What's Next? Any advanced science course *Local credit course.*	Credit(s): 0.5 College Hour(s): NA **Tier III**
AQUATIC SCIENCE AB	**7536 AB**
In Aquatic Science, students work both independently and collaboratively with peers to develop critical-thinking and problem-solving skills while conducting investigations and observations of aquatic environments. Students will acquire knowledge about a variety of aquatic systems and study the interactions of biotic and abiotic components in aquatic environments, including their impact. Investigations and field work in this course emphasize fresh water and marine aspects of Aquatic Science.	03030000

Instructional Material: *Texas Aquatic Science*; *Texas A&M University Press; ISBN: 9781623491932* Required Prerequisites: One unit of high school Biology. Suggested prerequisite: Chemistry or concurrent enrollment in Chemistry What's Next? AP Environmental Science or any advanced science course *Offered only at: Paschal and Southwest*	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
DUAL CREDIT AQUATIC SCIENCE AB **TCC Course: Oceanography (GEOL 1445 and GEOL 1445 Lab)**	**7537 AB**
Survey of oceanography and related sciences.	03030000
Instructional Material: N/A FWISD Prerequisites: Three (3) units of science (Biology, Chemistry, Physics), one (1) of which may be taken concurrently. TCC Co-Prerequisite: GEOL-1455 Lab Early College High School Grade Placement: 11-12 What's Next? N/A Course taught by an approved adjunct instructor.	Grade level: N/A Credit(s): 1 College Hour(s): 4 hours **Tier I**
EARTH AND SPACE SCIENCE AB	**7538 AB**
This course explores the origins of the solar system and Earth. Changes in the earth are studied in terms of geology and biology. Students will learn physical geology data collection techniques. The interaction of the ocean and the atmosphere are examined. This course stresses global concepts and man's impact on earth.	03060200
Instructional Material: *Discovery Education Science: Earth and Space; Discovery Education; ISBN: 9781618286086* Required Prerequisites: Three (3) units of science, one (1) of which may be taken concurrently, and three (3) units mathematics, one (1) of which may be taken concurrently. What's Next? AP Environmental Science or any advanced science course *Offered only at: Arlington Heights, Benbrook, Dunbar, Eastern Hills, and Paschal*	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
OnRamps EARTH AND SPACE SCIENCE AB	**7534 AB**
This course introduces students to the major areas in geoscience and helps them develop critical, creative, and geological problem-solving skills, as applied to 21st century scientific problems. It covers the fundamentals of how the earth works, and how various systems (lithosphere, atmosphere, hydrosphere, and biosphere) interact to form the complex of which we live. OnRamps works through a dual-enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher.	03060200 Grade level: 11 – 12 Credit(s): 1
Instructional Material: Selected and provided by the University of Texas at Austin Required Prerequisites: Biology & Chemistry What's Next? Any advanced science course	College Hour(s): 3 **Tier I**
DUAL CREDIT EARTH AND SPACE SCIENCE AB **TCC Course: Earth Sciences, Non-Science Majors (GEOL 1401 and GEOL 1401 Lab)**	**7539 AB**
Survey of geology, meteorology, oceanography, and astronomy.	03060200
Instructional Material: N/A Prerequisites: Three (3) units of science (Biology, Chemistry, Physics), one (1) of which may be taken concurrently. TCC Co-Prerequisite: GEOL-1401 Lab What's Next? N/A Early College High School Grade Placement: 11-12 Course taught by an approved adjunct instructor.	Grade level: N/A Credit(s): 1 College Hour(s): 4 hours **Tier I**
HONORS ORGANIC CHEMISTRY AB	**7602 ABH**
This course is designed for those students seeking higher level learning in chemistry that are planning to pursue a college degree in chemistry, chemical engineering, pharmacy or pre-med associated majors. Organic chemistry will parallel the learning and education of a first semester, college organic chemistry course. By definition, organic chemistry is dedicated to the study of carbon compounds, which include hydrocarbons and fossil fuels. Students who successfully complete organic chemistry will be adequately prepared for the continuing advanced learning of chemistry in a college environment. Independent research is a required component of this honors course.	N1120027
Instructional Material: *No state adopted instructional material(s)/FWISD textbook – Organic Chemistry, McMurray* Prerequisites: Student should have received an 85 or above average in Honors Chemistry. Recommended that student has successfully completed, or is concurrently enrolled in, AP Chemistry. What's Next? N/A *This course counts for State Elective Credit only; therefore, it may not be counted as a required science course.* *Offered only at: Southwest*	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
DUAL CREDIT ORGANIC CHEMISTRY A **TCC Course: Organic Chemistry I (CHEM 2423 and CHEM 2423 Lab)**	**7604 A**
Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is	N1120027

placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or pre-professional programs.	
Instructional Material: N/A FWISD & TCC Prerequisites: CHEM-1412 TCC Co-requisite: CHEM-2423 Lab Early College High School Grade Placement: 11-12 What's Next? N/A Course taught by an approved adjunct instructor.	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
DUAL CREDIT ORGANIC CHEMISTRY B **TCC Course: Organic Chemistry II (CHEM 2425 and CHEM 2425 Lab)**	**7604 B**
Continuation of CHEM 2423. Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. This course is intended for students in pre-professional science programs.	N1120027
Instructional Material: N/A FWISD & TCC Prerequisites: CHEM-1412 TCC Co-Requisite: CHEM-2423 Lab Early College High School Grade Placement: 11-12 What's Next? N/A Course taught by an approved adjunct instructor.	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
ASTRONOMY AB	**7706 AB**
In Astronomy, students make informed decisions using critical thinking and scientific problem solving. Students study the following topics: astronomy in civilization, patterns and objects in the sky, our place in space, the moon, and reasons for the seasons, planets, the sun, stars, galaxies, cosmology, and space exploration. Students who successfully complete Astronomy will acquire knowledge within a conceptual framework, conduct observations of the sky, work collaboratively, and develop critical-thinking skills.	03060100
Instructional Material: Astronomy Today *ISBN: 9780133412796* Suggested Prerequisites: One unit of high school science What's Next? N/A *Offered only at: Arlington Heights, Western Hills, Paschal and South Hills*	Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ASTRONOMY I ABH	**7707 ABH**
Provides opportunities for students to expand the essential elements of Astronomy and perform laboratory investigations requiring more mathematical calculations and the completion of an independent research project is a required component of this honors course.	03060100
Instructional Material: *Astronomy Today ISBN: 9780133412796* Prerequisites: One unit of high school science What's Next? N/A *Offered only at: Arlington Heights, Western Hills, Paschal and South Hills*	Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT ASTRONOMY A **TCC Course: Stars and Galaxies (PHYS 1403 and PHYS 1403 Lab)**	**7708 A**
Study of stars, galaxies, and the universe outside our solar system. Laboratory requires night observations.	03060100
Instructional Material: N/A FWISD Prerequisites: Three (3) units of science (Biology, Chemistry, Physics), one of which may be taken concurrently. TCC Co-Requisite: PHYS-1403 Lab What's Next? N/A Early College High School Grade Placement: 11-12 Course taught by an approved adjunct instructor.	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
DUAL CREDIT ASTRONOMY B **TCC Course: Solar System (PHYS 1404 and PHYS 1404 Lab)**	**7708 B**
Study of the sun and its solar system, including its origin. Laboratory requires night observations.	03060100
Instructional Material: N/A FWISD Prerequisites: Three (3) units of science (Biology, Chemistry, Physics), one (1) of which may be taken concurrently. TCC Co-Requisite: PHYS-1404 Lab What's Next? N/A Early College High School Grade Placement: 11-12 Course taught by an approved adjunct instructor.	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**

ENVIRONMENTAL SYSTEMS AB	**7676 AB**
In Environmental Systems, students conduct field and laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: biotic and abiotic factors in habitats; ecosystems and biomes; interrelationships among resources and an environmental system; sources and flow of energy through an environmental system; relationship between carrying capacity and changes in populations and ecosystems; and changes in environments.	03020000 Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *1775 – Holt McDougal Environmental Science, Houghton Mifflin Harcourt,* Suggested Prerequisites: One unit of high school life science and one unit of high school physical science. What's Next? AP Environmental Science or any advanced science course *TCC-South FWISD Collegiate High School Grade Placement: 9-12*	
DUAL CREDIT ENVIRONMENTAL SYSTEMS AB **TCC Course: Environmental Biology (BIOL 2306 and BIOL 2306 Lab)** **TWU Course: Physical Science & Environment (CHE 1404)**	**7680 AB**
Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research.	03020000
Instructional Material: N/A FWISD Prerequisites: Three (3) units of science (Biology, Chemistry, Physics), one (1) of which may be taken concurrently. TCC Recommended Prerequisite: MATH-1314 TCC Required Prerequisite: TSI compliant in Writing, Reading and Mathematics TCC Co-Requisite: BIOL-2306 Lab TWU Prerequisites: Only Offered at Dunbar CHE 1403 Early College High School Grade Placement: 11-12. Course taught by an approved adjunct instructor.	Grade level: N/A Credit(s): 1 College Hour(s): 3 hours **Tier I**
TEXAS PREFRESHMAN ENGINEERING PROGRAM I AB	**7421 AB**
Available at Texas Wesleyan University and/or Tarrant County Community College, as summer enrichment for high ability students, these courses emphasize study and research in mathematics, engineering, and computer science. Preference is given to female students and minority students who have been underrepresented in the field of engineering. Note: This course is for state elective credit only, and some students may have earned one or two credits in middle school. For this course to count as an elective credit and to be calculated into the student's GPA; each student is responsible to provide his/her grade and course information to his/her counselor.	N1303752 Grade level: 9 - 11
Instructional Material: *Textbook(s) and materials provided by the participating university* Prerequisites: Average of 80 or higher in college preparatory mathematics course; teacher recommendation What's Next? N/A	Credit(s): 1 College Hour(s): 4 hours **Tier III**
TEXAS PREFRESHMAN ENGINEERING PROGRAM II AB	**7423 AB**
Available at Texas Wesleyan University and/or Tarrant County Community College, as summer enrichment for high ability students, these courses emphasize study and research in mathematics, engineering, and computer science. Preference is given to female students and minority students who have been underrepresented in the field of engineering. Note: This course is for state elective credit only, and some students may have earned one or two credits in middle school. For this course to count as an elective credit and to be calculated into the student's GPA; each student is responsible to provide his/her grade and course information to his/her counselor.	N1303753 Grade level: 9 - 11
Instructional Material: *Textbook(s) and materials provided by the participating university* Prerequisites: Average of 80 or higher in college preparatory mathematics course; teacher recommendation What's Next? N/A	Credit(s): 1 College Hour(s): 4 hours **Tier III**
TEXAS PREFRESHMAN ENGINEERING PROGRAM III AB	**7425 AB**
Available at Texas Wesleyan University and/or Tarrant County Community College, as summer enrichment for high ability students, these courses emphasize study and research in mathematics, engineering, and computer science. Preference is given to female students and minority students who have been underrepresented in the field of engineering. Note: This course is for state elective credit only, and some students may have earned one or two credits in middle school. For this course to count as an elective credit and to be calculated into the student's GPA; each student is responsible to provide his/her grade and course information to his/her counselor.	N1303754 Grade level: 9 - 11
Instructional Material: *Textbook(s) and materials provided by the participating university* Prerequisites: Average of 80 or higher in college preparatory mathematics course; teacher recommendation What's Next? N/A	Credit(s): 1 College Hour(s): 4 hours **Tier III**
TEXAS PREFRESHMAN ENGINEERING PROGRAM IV AB	**7427 AB**
Available at Texas Wesleyan University and/or Tarrant County Community College, as summer enrichment for high ability students, these courses emphasize study and research in mathematics, engineering, and computer science. Preference is given to female students and minority students who have been underrepresented in the field of	N1303755 Grade level: 9 - 11

engineering. Note: This course is for state elective credit only, and some students may have earned one or two credits in middle school. For this course to count as an elective credit and to be calculated into the student's GPA; each student is responsible to provide his/her grade and course information to his/her counselor.	Credit(s): 1 College Hour(s): 4 hours **Tier III**
Instructional Material: *Textbook(s) and materials provided by the participating university* Prerequisites: Average of 80 or higher in college preparatory mathematics course; teacher recommendation	

CTE COURSES

Students may repeat the Scientific Research and Design course TEKS with different course content for up to a maximum of three credits. If being taken as their fourth-year science course,

SCIENTIFIC RESEARCH AND DESIGN AB	**ST37202 AB**
Students may repeat the Scientific Research and Design course TEKS with different course content for up to a maximum of three credits. If being taken as their fourth-year science course, DAP students must successfully complete a biology, a chemistry, and a physics course prior to the Scientific Research and Design course or take it concurrently with the third one of these required courses.	130372## Grade level: 12 HS Credit(s): 1
Instructional Material: *Contact the content director (Science and/or CTE Director)* Prerequisites: To receive 4th year science credit students must have completed two (2) units of science (Biology, and Chemistry or Physics), one (1) of which may be taken concurrently. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	College Hour(s): NA **Tier III**
HONORS SCIENTIFIC RESEARCH AND DESIGN AB	**STH37202 AB**
In addition to meeting the 40% laboratory and fieldwork requirement, students in this course must complete an independent research project. It is a required component of the all Honors Scientific Research and Design courses. Students taking the course for science credit must register and participate in the Fort Worth Regional Science and Engineering Fair. May also be taught by any certified secondary science teacher, or CTE teacher with a baccalaureate degree and 18 semester credit hours in any combination of sciences. 19 TAC Chapter 231.	130372## Grade level: 12 HS Credit(s): 1 College Hour(s): NA
Instructional Material: *Contact the content director (Science and/or CTE Director)* Prerequisites: To receive 4th year science credit students must have completed two (2) units of science (Biology, and Chemistry or Physics), one (1) of which may be taken concurrently. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20* *Course taught by locally certified gifted CTE teacher*	**Tier II**
SCIENTIFIC RESEARCH AND DESIGN II AB	**ST37212 AB**
The student conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices. These investigations must involve actively obtaining and analyzing data with physical equipment, but may also involve experimentation in a simulated environment as well as field observations that extend beyond the science or CTE classrooms. Research in an area of bio-related technology; communication; construction; energy, power, and transportation; or engineering align with various CTE clusters. Students apply research to problem solving and development of prototypes and working models.	130372## Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact the content director (Science and/or CTE Director)* Prerequisites: To receive 4th year science credit students must have completed two (2) units of science (Biology, and Chemistry or Physics), one (1) of which may be taken concurrently. *Course taught by any certified secondary science teacher or CTE teacher with a baccalaureate degree and 18 semester credit hours in any combination of sciences. 19 TAC Chapter 231.* *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	
HONORS SCIENTIFIC RESEARCH AND DESIGN II AB	**STH37212 AB**
The student conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices. These investigations must involve actively obtaining and analyzing data with physical equipment, but may also involve experimentation in a simulated environment as well as field observations that extend beyond the science or CTE classrooms. Research in an area of bio-related technology; communication; construction; energy, power, and transportation; or engineering align with various CTE clusters. Students apply research to problem solving and development of prototypes and working models. Special projects are included in this honors level course. Independent research is a required component of the all Honors Scientific Research and Design courses.	130372## Grade level: 12 HS Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact the content director (Science and/or CTE Director)* Prerequisites: To receive 4th year science credit students must have completed two (2) units of science (Biology, and Chemistry or Physics), one (1) of which may be taken concurrently. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	

Course taught by locally certified gifted CTE teacher (May be taught by any certified secondary science teacher or CTE teacher with a baccalaureate degree and 18 semester credit hours

SCIENTIFIC RESEARCH AND DESIGN III AB	**ST37222 AB**
The student conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices. These investigations must involve actively obtaining and analyzing data with physical equipment, but may also involve experimentation in a simulated environment as well as field observations that extend beyond the science or CTE classrooms. Research in an area of bio-related technology; communication; construction; energy, power, and transportation; or engineering align with various CTE clusters. Students apply research to problem solving and development of prototypes and working models.	130372## Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact the content director (Science and/or CTE Director)* Prerequisites: To receive 4th year science credit students must have completed two (2) units of science (Biology, and Chemistry or Physics), one (1) of which may be taken concurrently. *Course taught by any certified secondary science teacher or CTE teacher with a baccalaureate degree and 18 semester credit hours in any combination of sciences. 19 TAC Chapter 231.* *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	

HONORS SCIENTIFIC RESEARCH AND DESIGN III AB	**STH37222 AB**
The student conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices. These investigations must involve actively obtaining and analyzing data with physical equipment, but may also involve experimentation in a simulated environment as well as field observations that extend beyond the science or CTE classrooms. Research in an area of bio-related technology; communication; construction; energy, power, and transportation; or engineering align with various CTE clusters. Students apply research to problem solving and development of prototypes and working models. Special projects are included in this honors level course. Independent research is a required component of the all Honors Scientific Research and Design courses.	130372## Grade level: 12 HS Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact the content director (Science and/or CTE Director)* Prerequisites: To receive 4th year science credit students must have completed two (2) units of science (Biology, and Chemistry or Physics), one (1) of which may be taken concurrently. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20* *Course taught by locally certified gifted CTE teacher (May be taught by any certified secondary science teacher or CTE teacher with a baccalaureate degree and 18 semester credit hours*	

SCIENTIFIC RESEARCH AND DESIGN: INTRODUCTION TO CELL BIOLOGY AB	**7578 AB**
This course provides an intricate introduction to cells and cellular processes. The course is meant to provide advanced science students the opportunity to engage in advanced experimentation. This course will introduce scientific research journal articles and give students the opportunity to assess and write about summary articles. This course is based upon TEKS developed by the teachers.	130372##
Instructional Material: *No state-adopted textbook* Prerequisites: Students should have completed or be concurrently enrolled in AP Biology, Medical Microbiology/Pathobiology, or AP Chemistry. What's Next? University level course in Biology or enrollment in Medical Microbiology/Pathobiology or AP Biology *Teachers teaching this course must be Composite Science or Biology certified, with some college work in Cell Biology.* *Offered only at: Paschal* *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier I**

DUAL CREDIT SCIENTIFIC RESEARCH AND DESIGN A **TCC Course: Biology for Science Majors I (BIOL 1406 and BIOL 1406 Lab)**	**STD37202 A**
Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of reproduction, genetics, and scientific reasoning are included.	130372##
Instructional Material: *TBD* FWISD Prerequisites: Three (3) units of science (Biology, Chemistry, Physics), one (1) of which may be taken concurrently. TCC Recommended Prerequisites: MATH 1314 TCC Required Prerequisites: TSI compliant in Writing, Reading and Mathematics TCC Co-requisite: BIOL 1406 Lab High School Early College Placement: 10-11 What's Next? N/A Course taught by an approved adjunct instructor. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**

DUAL CREDIT SCIENTIFIC RESEARCH AND DESIGN B **TCC Course: Biology for Science Majors I (BIOL 1407 and BIOL 1407 Lab)**	**STD37202 B**
Continuation of BIOL-1406. The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals.	130372##
Instructional Material: *TBD* FWISD Prerequisites: Three (3) units of science (Biology, Chemistry, Physics), one (1) of which may be taken concurrently. TCC Prerequisites: TSI compliant in Writing, Reading and Mathematics TCC Co-requisite: BIOL 1406 Lab. Early College High School Grade Placement: 10-11 What's Next? N/A Course taught by an approved adjunct instructor. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
DUAL CREDIT SCIENTIFIC RESEARCH AND DESIGN A: BIOLOGY FOR NON-SCIENCE MAJORS A **TCC Course: Biology for Non-Science Majors I (BIOL 1408 and BIOL 1408 Lab)**	**STD1408A** **STD1408**
Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction.	130372##
Instructional Material: *TBD* FWISD Prerequisites: Biology and Chemistry and/or Physics TCC Recommended Prerequisites: None TCC Required Prerequisites: TSI compliant in Writing, Reading and Mathematics TCC Co-requisite: None Early College High School Grade Placement: 11-12 What's Next? N/A Course taught by an approved adjunct instructor. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
DUAL CREDIT SCIENTIFIC RESEARCH AND DESIGN B: BIOLOGY FOR NON-SCIENCE MAJORS B **TCC Course: Biology for Non-Science Majors II (BIOL 1409 and BIOL 1409 Lab)**	**STD1409B** **STD1409**
This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology.	130372##
Instructional Material: *TBD* FWISD Prerequisites: Biology and Chemistry and/or Physics TCC Recommended Prerequisites: None TCC Required Prerequisites: TSI compliant in Writing, Reading and Mathematics TCC Co-requisite: None Early College High School Grade Placement: 11-12 What's Next? N/A Course taught by an approved adjunct instructor. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
DUAL CREDIT SCIENTIFIC RESEARCH AND DESIGN A: GENERAL CHEMISTRY A **TCC Course: General Chemistry I (CHEM 1411 and CHEM 1411 Lab)**	**STD1411A** **STD1411LA**
Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry. Basic laboratory experiments supporting theoretical principles in lecture; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports.	130372##
Instructional Material: *TBD* FWISD Prerequisites: Biology and Chemistry and/or Physics TCC Recommended Prerequisites: High School Chemistry TCC Required Prerequisites: MATH 1314 or equivalent academic preparation; TSI compliant in Writing, Reading and Mathematics TCC Co-requisite: None Early College High School Placement: 11-12 What's Next? N/A	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**

Course taught by an approved adjunct instructor. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	
DUAL CREDIT SCIENTIFIC RESEARCH AND DESIGN B: GENERAL CHEMISTRY B **TCC Course: General Chemistry II (CHEM 1412 and CHEM 1412 Lab)**	**STD1412B** **STD1412**
Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry. Basic laboratory experiments supporting theoretical principles presented in lecture; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports.	130372##
Instructional Material: *TBD* FWISD Prerequisites: Biology and Chemistry and/or Physics TCC Recommended Prerequisites: None TCC Required Prerequisites: CHEM 1411; TSI compliant in Writing, Reading and Mathematics TCC Co-requisite: None Early College High School Placement: 11-12 What's Next? N/A Course taught by an approved adjunct instructor. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
DUAL CREDIT SCIENTIFIC RESEARCH AND DESIGN A: COLLEGE PHYSICS I **TCC Course: College Physics I (PHYS 1401 and PHYS 1401 Lab)**	**STD1401A** **STD1401**
Fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving. Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; emphasis will be on problem solving.	130372##
Instructional Material: *TBD* FWISD Prerequisites: Biology and Chemistry and/or Physics TCC Recommended Prerequisites: None TCC Required Prerequisites: MATH 1314 and MATH 1316 or MATH 2412; TSI compliant in Writing, Reading and Mathematics TCC Co-requisite: None Early College High School Placement: 11-12 What's Next? N/A Course taught by an approved adjunct instructor. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
DUAL CREDIT SCIENTIFIC RESEARCH AND DESIGN B: COLLEGE PHYSICS II **TCC Course: College Physics II (PHYS 1402 and PHYS 1402 Lab)**	**STD1402B** **STD1402**
Fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving.	130372##
Instructional Material: *TBD* FWISD Prerequisites: Biology and Chemistry and/or Physics TCC Recommended Prerequisites: None TCC Required Prerequisites: PHYS 1401; TSI compliant in Writing, Reading and Mathematics TCC Co-requisite: None Early College High School Placement: 11-12 What's Next? N/A Course taught by an approved adjunct instructor. *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: N/A Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
HONORS SCIENTIFIC RESEARCH AND DESIGN PROJECT BASED RESEARCH IN BOTANY AND SUSTAINABLE HORTICULTURE AB/H	**STH30372 AB**
Student project-based research to be conducted working with local outside nonprofit research institutes such as BRIT (Botanical Research Institute of Texas), Seed to Table, Gardening Guerillas, Urban Planning, and TRA (Trinity River Authority)	130372##

Instructional Material: *Contact the content director (Science and/or CTE Director)* Prerequisites: Successful completion of Biology, Chemistry, and Physics. Successful completion of Algebra II and Pre-Calculus, or concurrent enrollment in Pre-Calculus. What's Next? N/A *Students taking the course for science credit should register and participate in the Fort Worth Regional Science and Engineering Fair. This course has science content and skill equal to AP and Dual Credit courses. Contact the content director (Science and/or CTE Director) based on content credit to be awarded.* *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: 11-12 Credit(s): 1.0 College Hour(s): NA **Tier I**
HONORS SCIENTIFIC RESEARCH AND DESIGN SCIENCE TALENT SEARCH - YEAR 1 AB	**STH03722 AB**
Regeneron STS is a prestigious science research completion where young scientists present original research to nationally recognized professional scientists. In year one, students select their original research project and begin their research for entry.	130372##
Instructional Material: *Contact the content executive director (Science)* Prerequisites: Teacher's approval What's Next? N/A *This course has science content and skill equal to AP and Dual Credit courses. Contact Science and the CTE Director.* *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: 10-12 Credit(s): 1.0 College Hour(s): NA **Tier I**
HONORS SCIENTIFIC RESEARCH AND DESIGN SCIENCE TALENT SEARCH - YEAR 2 AB	**STH03712 AB**
Regeneron STS is a prestigious science research completion where young scientists present original research to nationally recognized professional scientists. In year one, students select their original research project and begin their research for entry.	130372##
Instructional Material: *Contact the content executive director (Science)* Prerequisites: Teacher's approval What's Next? N/A *Students taking the course for science credit must register and participate in the Fort Worth Regional Science and Engineering Fair. This course has science content and skill equal to AP and Dual Credit courses. Contact the content director (Science and/or CTE Director) based on content credit to be awarded.* *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: 10-12 Credit(s): 1.0 College Hour(s): NA **Tier I**
HONORS SCIENTIFIC RESEARCH AND DESIGN: INTERACTION OF RADIATION WITH MATTER I AB	**7709 AB**
Designed to allow students who have displayed higher levels of science and mathematics mastery to extend their skills across several academic disciplines. This course will use skills and concepts learned in biology (e.g. cell theory, molecular interaction), physics (e.g. atomic structure, types of radiation) and various mathematics courses (algebra, calculus). Independent research is a required component of this honors course.	13037200
Instructional Material: *Contact the content director (Science and/or CTE Director)* Prerequisites: Successful completion of Biology, Chemistry and Geometry. Successful completion, or concurrently taking, Algebra II or an equivalent course. Concurrent enrollment in AP Physics I or II. What's Next? N/A *Teacher must be certified in science for the student to receive the science credit.* *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20*	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
ANATOMY AND PHYSIOLOGY AB	**HS02062 AB**
In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.	13020600 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *TBD* Prerequisites: Two (2) units of science (Biology, and Chemistry or Physics), one of which may be taken concurrently. *Anatomy and Physiology may be taught by any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of sciences.*	College Hour(s): NA **Tier III**
HONORS ANATOMY AND PHYSIOLOGY AB	**HSH02062 ABH**
Students in this honors course will complete a project using the five phases of project management used in the business and industry environment. Anatomy and Physiology may be taught by any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of sciences. It may also be taught by a certified secondary science teacher. 19 TAC Chapter 231	13020600 Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): NA
Instructional Material: *TBD* Prerequisites: Two (2) units of science (Biology, and Chemistry or Physics), one (1) of which may be taken concurrently. *Course taught by locally certified gifted CTE teacher.*	**Tier II**

DUAL CREDIT ANATOMY AND PHYSIOLOGY A **TCC Course: Anatomy and Physiology I (BIOL 2401 and BIOL 2401 Lab)**	**HSD02062 A**
Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis in on the interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Content may be either integrated or specialized. Laboratory experiments in vertebrate physiology and the dissection of a mammal.	13020600 Grade level: 10 - 12 HS Credit(s): 0.5 College Hour(s): 4 hours
Instructional Material: *NA* FWISD Prerequisites: Two (2) units of science (biology, chemistry, physics) one of which may be taken concurrently. TCC Prerequisites: TSI compliant in Writing, Reading, and Mathematics. TCC Co-requisites: BIOL 2401 Lab Early College High School Placement: 10-12 Course taught by an approved adjunct instructor.	**Tier I**
DUAL CREDIT ANATOMY AND PHYSIOLOGY B **TCC Course: Anatomy and Physiology II (BIOL 2402 and BIOL 2402 Lab)**	**HSD02062 B**
Continuation of BIOL-2401. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.	13020600 Grade level: 10 - 12 HS Credit(s): 0.5
Instructional Material*: NA* FWISD Prerequisites: Two (2) units of science (biology, chemistry, physics) one of which may be taken concurrently. TCC Prerequisites: TSI compliant in Writing, Reading, and Mathematics. TCC Co-requisites: BIOL 2401 Lab Early College High School Placement: 10-12 Course taught by an approved adjunct instructor.	College Hour(s): 4 hours **Tier I**
ENGINEERING DESIGN AND PROBLEM SOLVING AB	**ST37302 AB**
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. Engineering Design and Problem Solving reinforces and integrates skills learned in previous mathematics and science courses. This course emphasizes solving problems, moving from well-defined toward more open ended, with real-world application. Students apply critical-thinking skills to justify a solution from multiple design options. Additionally, the course promotes interest in and understanding of career opportunities in engineering. This course is intended to stimulate students' ingenuity, intellectual talents, and practical skills in devising solutions to engineering design problems. Students use the engineering design process cycle to investigate, design, plan, create, and evaluate solutions. At the same time, this course fosters awareness of the social and ethical implications of technological development.	13037300 Grade level: 12 HS Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *TBD* Prerequisites: Two (2) units of science (Biology, and Chemistry or Physics), one (1) of which may be taken concurrently; Geometry and Algebra II. *Course taught by a certified secondary science teacher, or any CTE teacher with a baccalaureate degree and 18 semester credit hours in any combination of sciences. 19 TAC Chapter 231.* *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	
HONORS ENGINEERING DESIGN AND PROBLEM SOLVING AB	**STH37302 ABH**
In this course, students conduct laboratory and field investigations, use scientific investigations, and make informed decisions using critical thinking and scientific problem solving. In addition to the course requirements of Engineering Design and Problem Solving, the student will produce projects in defined areas of engineering including buoyancy, stress construction and aerodynamics. In this course, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving.	13037300 Grade level: 12 HS Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Engineering Fundamentals: An Introduction to Engineering, 4th Edition; Cengage Delmar Learning; ISBN: 9781439062081* Prerequisites: Two (2) units of science (Biology, and Chemistry or Physics), one (1) of which may be taken concurrently; Geometry and Algebra II *Course taught by locally certified gifted CTE teacher, certified secondary science teacher, or any CTE teacher with a baccalaureate degree and 18 semester credit hours in any combination of sciences. 19 TAC Chapter 231.* *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal HS, Polytechnic, South Hills, Southwest, Trimble Technical, Western Hills, YMLA, YWLA*	

MEDICAL MICROBIOLOGY AB	**HS02071 AB**
Students in Medical Microbiology explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. Pathogenic and nonpathogenic organisms will be identified to assist in the understanding of specific diseases, causative agents, and treatment options. Activities will include a variety of lab experiences designed to build microbiology lab skills and techniques. In this course, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving.	13020700 Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): NA **Tier III**

Instructional Material: *TBD*
Prerequisites: Biology and Chemistry
This course may be taught by a certified secondary science teacher or any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of sciences. 19 TAC Chapter 231.

HONORS MEDICAL MICROBIOLOGY AB	**HSH02071 ABH**
In addition to the regular course curriculum, students in this honors course will complete a project using the five phases of project management used in the business and industry environment or following scientific investigation procedures.	13020700 Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): NA **Tier II**

Instructional Material: *Microbiology, an Introduction, 6th Edition, Prentice/Hall*
Prerequisites: Biology and Chemistry
Course taught by locally certified gifted CTE teacher This course may be taught by a certified secondary science teacher or any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of sciences. 19 TAC Chapter 231.

DUAL CREDIT MEDICAL MICROBIOLOGY T **TCC Course: Microbiology for Non-Science Majors (BIOL 2420 and BIOL 2420 Lab)**	**HSD02071 T**
This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and cellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health.	13020700 HS Credit(s): 0.5 College Hour(s): 4 hours

Instructional Material: *NA*
FWISD Prerequisites: Three (3) units of science (biology, Chemistry, Physics) one of which may be taken concurrently.
TCC Prerequisites: TSI compliant in Writing, Reading, and Mathematics.
TCC Co-requisites: BIOL 2420 Lab
Early College High School Grade Placement: 11-12
Course taught by an approved adjunct instructor.

Tier I

PATHOPHYSIOLOGY AB	**HS20801 AB**
In Pathophysiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Pathophysiology study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease. Students will differentiate between normal and abnormal physiology.	13020800 Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): NA

Instructional Material: *Human Disease 4th edition; Cengage Learning; ISBN: 9781285065922*
Prerequisites: Biology and Chemistry; Principles of Health Science
4th year science credit.

Tier III

HONORS PATHOPHYSIOLOGY AB	**HSH20801 AB**
In addition to the regular course curriculum, students in this honors course will complete a project using the five phases of project management used in the business and industry environment.	13020800 Grade level: 11 - 12

Instructional Material: *Human Disease 4th edition; Cengage Learning; ISBN: 9781285065922*
Prerequisites: Biology and Chemistry; Principles of Health Science
4th year science credit. *Course taught by locally certified gifted CTE teacher.*

HS Credit(s): 1
College Hour(s): NA
Tier II

ADVANCED ANIMAL SCIENCE AB	**AG00702 AB**
In this course, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. This course examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences. Teacher must be certified in Agriculture and highly qualified or meet HOUSE in science.	13000700 Grade level: 12 HS Credit(s): 1 College Hour(s): NA

Instructional Material: *Contact CTE director*
Prerequisites: two (2) units of science (Biology, and Chemistry or Physics) one of which may be taken concurrently.
Livestock Production; Equine Science, or Small Animal Management
Offered only at: Arlington Heights and Diamond Hill-Jarvis

Tier III

HONORS ADVANCED ANIMAL SCIENCE AB	AGH00702 AB
In addition to the regular course curriculum, students in this honors course will complete a project using the five phases of project management used in the business and industry environment. Teacher must be certified in Agriculture and highly qualified or meet HOUSE in science.	13000700 Grade level: 12
Instructional Material: *Contact CTE director* Prerequisites: two (2) units of science (Biology, and Chemistry or Physics), one of which may be taken concurrently. Livestock Production or Equine Science *Course taught by locally certified gifted CTE teacher.* *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ADVANCED PLANT AND SOIL SCIENCE AB	**AG02102 AB**
In this course, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Plant and Soil Science provides a way of learning about the natural world. Students should know how plant and soil science has influenced a vast body of knowledge, that there are still applications to be discovered, and that plant and soil science is the basis for many other fields of science. Investigations, laboratory practices, and field exercises will be used to develop an understanding of current plant and soil science. This course is designed to prepare students for careers in the food and fiber industry. Students will learn, reinforce, apply, and transfer their knowledge in a scientific setting.	13002100 Grade level: 12 HS Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact CTE director* Prerequisites: two (2) units of science (Biology, and Chemistry or Physics) one of which may be taken concurrently. Horticulture Science I and/or Landscape Design and Turf Management *Course taught by certified Agriculture and highly qualified (or meet HOUSE in science) teacher*	
HONORS ADVANCED PLANT AND SOIL SCIENCE AB	**AGH02102 AB**
In addition to the regular course curriculum, curriculum enhancements for the honors course include web research, integration of applications to increase productivity in crop production and soil management, and problem solving with soil, drainage conditions and pest management. Students in this honors course will complete a project using the five phases of project management used in the business and industry environment. Teacher must be certified in agriculture and highly qualified or meet HOUSE in science.	13002100 Grade level: 12 HS Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact CTE director* Prerequisites: Two (2) units of science (Biology, and Chemistry or Physics) one (1) of which may be taken concurrently, and Horticulture Science *Course taught by locally certified gifted CTE teacher.* *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	
DUAL CREDIT ADVANCED PLANT AND SOIL SCIENCE A **TCC Course: Soil Science (AGCR 2418)**	**AGD02102 A**
Introduction to physical, chemical, and biological properties of soils. Topics include the relationship between crops and soils, conservation of soil and water resources, and the economic use of fertilizer.	13002100
FWISD Prerequisites: Three (3) units of science, one (1) of which may be taken concurrently. Horticulture Science I and/or Landscape Design and Turf Management Instructional Material: *NA* *Course taught by an approved adjunct instructor.* *Offered only at: Arlington Heights and Marine Creek Collegiate HS*	Grade level: 12 HS Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
DUAL CREDIT ADVANCED PLANT AND SOIL SCIENCE B **TCC Course: Soil Fertility and Fertilizers (HALT 2318)**	**AGD02102 B**
An in-depth study of the chemistry, soil interaction, plant uptake and utilization of essential plant nutrients. Topics include deficiency and toxicity symptoms, and the selection application, and characteristics of fertilizer materials.	13002100
FWISD Prerequisites: Three (3) units of science, one (1) of which may be taken concurrently. Horticulture Science I and/or Landscape Design and Turf Management TCC Recommended Prerequisites: HALT 1301 *Course taught by an approved adjunct instructor.* *Offered only at: Arlington Heights and Marine Creek Collegiate HS*	Grade level: 12 HS Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
FOOD SCIENCE AB (FOODSC1 AB)	**HT23002 AB**
In Food Science students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Food Science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public. Upon completion of this course, students will be prepared to take the ServSafe Food Safety Certification Exam. The course should be taught in a kitchen laboratory with some industrial equipment to provide the students with real-world experience in commercial foods. CTE teacher should meet HOUSE NCLB qualifications or can be science certified.	13023000 Grade level: 12 HS Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *TBD* Prerequisites: Three units of science, including chemistry and biology, and Culinary Arts I or Hospitality Services *Offered only at: North Side, Paschal, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	

HONORS FOOD SCIENCE AB (FOODSC1 AB/H)	HTH23002 AB
In addition to the regular course curriculum, students in this honors course will complete a project using the five phases of project management used in the business and industry environment. CTE teacher should meet HOUSE NCLB qualifications or can be science certified.	13023000 Grade level: 12 HS Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Principles of Food Science, Goodheart-Willcox, ISBN: 9781605256092* Prerequisites: Three units of science, including chemistry and biology, and Culinary Arts I or Hospitality Services *Course taught by locally certified gifted CTE teacher* *Offered only at: North Side, Paschal, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	

FORENSIC SCIENCE AB (FORENSCI AB)	LA29502 AB
Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science.	13029500 Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *TBD* Prerequisites: Two (2) units of science (Biology, and Chemistry or Physics) one of which may be taken concurrently. *Teacher should be certified in any of the following: Health Science Technology, T & I/Law Enforcement, or secondary science.*	

HONORS FORENSIC SCIENCE AB (FORENSCI AB/H)	LAH29502 AB
In addition to the regular course curriculum, students in this honors course will complete a project using the five phases of project management used in the business and industry environment.	13029500
Instructional Material: TBD Prerequisites: Two (2) units of science (Biology, and Chemistry or Physics) one of which may be taken concurrently. *Course taught by locally certified gifted CTE teacher. Teacher should be certified in any of the following: Health Science Technology, T & I/Law Enforcement, or secondary science.*	Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): NA **Tier II**

PRINCIPLES OF TECHNOLOGY AB (PRINTECH AB)	ST37201 AB
In Principles of Technology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Various systems will be described in terms of space, time, energy, and matter. Students will study a variety of topics that include laws of motion, conservation of energy, momentum, electricity, magnetism, thermodynamics, and characteristics and behavior of waves. Students will apply physics concepts and perform laboratory experimentations for at least 40% of instructional time using safe practices.	13037100 Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Physics in Context, CORD Communications, CCI Publishing, ISBN: 1578372755* Prerequisites: Chemistry or Biology, and Algebra I *All teachers assigned to Principles of Technology shall participate in Texas Education Agency approved training and have eight semester credit hours in physics prior to teaching the course. 19 TAC Chapter 231.* *Offered only at: Polytechnic*	

HONORS PRINCIPLES OF TECHNOLOGY AB (PRINTECH AB)	STH37201 AB
In Principles of Technology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Various systems will be described in terms of space, time, energy, and matter. Students will study a variety of topics that include laws of motion, conservation of energy, momentum, electricity, magnetism, thermodynamics, and characteristics and behavior of waves. Students will apply physics concepts and perform laboratory experimentations for at least 40% of instructional time using safe practices.	13037100 Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Physics in Context, CORD Communications, CCI Publishing, ISBN: 1578372755* Prerequisites: Chemistry or Biology, and Algebra I *All teachers assigned to Principles of Technology shall participate in Texas Education Agency approved training and have eight semester credit hours in physics prior to teaching the course. 19 TAC Chapter 231.* *Offered only at: Polytechnic*	

SOCIAL STUDIES GRADUATION REQUIREMENTS

ALL STUDENTS ARE REQUIRED to pass US History EOC

FOUNDATION PLANS

All Foundation Plans (22 & 26 credits) Require 4 Social Studies credits

Four credits must consist of:

3 credits of the following:

- World Geography
  OR AP Human Geography
  OR Dual Credit World Geography

- U.S. History Since 1877
  OR AP U.S. History
  OR Dual Credit U.S. History
  OR OnRamps U.S. History

- U.S. Government (.5 credit)
  OR AP U.S. Government (.5 credit)
  OR Dual Credit U.S. Government (.5 credit)

- Economics (.5 credit)
  OR AP Macroeconomics (.5 credit)
  OR AP Microeconomics (.5 credit)
  OR Dual Credit Economics (.5 credit)

1 credit <u>selected</u> from the following:

- World History
  OR AP Modern World History
  OR Dual Credit World History

- Ethnic Studies course pairing
  STSS: African and African-American Perspectives and Historical Contributions (.5 credit)
  AND
  STSS: Latino/a Studies (.5 credit)

Possible Endorsement Opportunities:

- Multidisciplinary
- Arts & Humanities

Social Studies & Economics Recommended Course Sequence and Testing Guide

	Traditional		Honors/Enhanced			Advanced Placement (AP) / Dual Credit (DC)		
6th	Gr 6 Social Studies: 0331	None	Honors Gr 6 Social Studies: 0325	Enhanced Gr 6 Social Studies: 00331	None	Honors Gr 6 Social Studies: 0325	Enhanced Gr 6 Social Studies: 00331	None
7th	Gr 7 Social Studies: 0336	None	Honors Gr 7 Social Studies: 0327	Enhanced Gr 7 Social Studies: 00336	None	Honors Gr 7 Social Studies: 0327	Enhanced Gr 7 Social Studies: 00336	None
8th	Gr 8 Social Studies: 0337	STAAR Gr 8	Honors Gr 8 Social Studies: 0329	Enhanced Gr 8 Social Studies: 00337	STAAR Gr 8	Honors Gr 8 Social Studies: 0329	Enhanced Gr 8 Social Studies: 00337	STAAR Gr 8
9th	World Geography: 8011	None	Honors World Geography: 8009		None	AP Human Geog: 8003 or DC World Geog: 8006		PSAT AP Exam
10th	World History: 8033 or Ethnic Studies: 8041T & 8045T	PSAT	Honors World History: 8035 or Ethnic Studies: 8041T & 8045T		PSAT	AP Modern World Hist: 8037 or DC World Hist: 8034		PSAT SAT AP Exam
11th	US History Since 1877: 8056 SS Electives	PSAT SAT US Hist EOC	Honors US History Since 1877: 8066 AP/DC SS Electives		SAT US Hist EOC	AP US Hist: 8215 or DC US Hist: 8042 or OnRamps US History: 8049 AP/DC SS Electives		SAT US Hist EOC AP Exam
12th	US Gov & Econ: 8076T & 8096T SS Electives	PSAT SAT	US Gov & Econ: 8076T & 8096T AP/DC SS Electives		SAT	AP US Gov & AP Econ: 8135T & 8098T or DC US Gov & DC Econ: 8079T & 8094T AP/DC SS Electives		Exams vary by course

WORLD GEOGRAPHY STUDIES AB **SHELTERED WORLD GEOGRAPHY STUDIES AB – NP** **SHELTERED WORLD GEOGRAPHY STUDIES AB** **WORLD GEOGRAPHY STUDIES AB**	**8011 AB** **8008 AB** **8010 AB** **80115 AB**
This course is a comprehensive examination of people, places, and environments at local, regional, national, and international scales from the spatial and ecological perspectives of geography. A significant portion of this course centers around the physical processes that shape, patterns in the physical environment; the characteristics of major land forms, climates and ecosystems and their interrelationships; the political, economic, and social processes that shape cultural patterns of regions; and the distribution and movement of world population. This course meets the state recommended graduation requirement.	03320100 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *1402 – Texas World Geography, McGraw-Hill, 2014, ISBN: 0021380996* Prerequisites: None What's Next? AP or Honors or World History Studies or Dual Credit World History Studies All Newcomer Program teachers must be content and ESL certified.	
HONORS WORLD GEOGRAPHY STUDIES AB **SHELTERED HONORS WORLD GEOGRAPHY STUDIES AB**	**8009 AB** **8024 AB**
Description of course: Honors World Geography will present the student with a general understanding of cultural geography, physical geography, and human geography while preparing the student for AP modern world history by incorporating AP skills and habits of mind as well as some geography-driven content. This course meets the state recommended graduation requirement.	03320100 Grade level: 9 Credit(s): 1
Instructional Material: *1402 – Texas World Geography, McGraw-Hill, 2014, ISBN: 0021380996* Prerequisites: Student interest What's Next? AP or Honors or World History Studies or Dual Credit World History Studies	College Hour(s): NA **Tier II**

DUAL CREDIT WORLD GEOGRAPHY STUDIES A **TCC Course: Physical Geography (GEOG 1301)**	**8006 A**
This course introduces students to the processes that drive Earth's physical systems. Students will explore the relationships among these physical systems, with emphasis on weather and climate, water, ecosystems, geologic processes and landform development, and human interactions with the physical environment.	03320100 Grade level: N/A
Instructional Material: *TCC Course: Physical Geography (GEOG 1301)* Prerequisites: None Early College High School Grade Placement 9-12. Course taught by an approved adjunct instructor. *Combined with GEOG 1302, this course meets the one-year world geography social studies graduation requirement.*	Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT WORLD GEOGRAPHY STUDIES B **TCC Course: Geography (GEOG 1302)**	**8006 B**
This course introduces students to fundamentals concepts, skills, and practices of human geography. Place, space, and scale serve as a framework for understanding patterns of human experience. Topics for discussion may include globalization, population and migration, culture, diffusion, political and economic systems, language, religion, gender, and ethnicity.	03320100 Grade level: N/A Credit(s): 0.5
Instructional Material: *TCC Course: Human Geography (GEOG 1302)* Prerequisites: Dual Credit World Geography Studies A Early College High School Grade Placement 9-12. Course taught by an approved adjunct instructor. *Combined with GEOG 1301, this course meets the one-year world geography social studies graduation requirement.*	College Hour(s): 3 hours **Tier I**
AP HUMAN GEOGRAPHY AB	**8003 AB**
AP Human Geography introduces students to the rigorous and systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students employ special concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about methods and tools geographers use in their science and practice. Prepares students to perform successfully on the AP Human Geography examination.	A3360100
Instructional Material: *Human Geography: People, Place, and Culture 10th edition, John Wiley and Sons Peoples Publishing Group, ISBN: 9781118018699* Prerequisites: Met standard on Grade 8 Social Studies STAAR; and student interest What's Next? AP or Honors or World History Studies or Dual Credit World History Studies *Successful completion of this course substitutes for World Geography as a graduation requirement. Elective credit cannot be awarded for 8003 AB. Students seeking elective credit for APHG should enroll in 8005T.*	Grade level: 9 – 10 Credit(s): 1 College Hour(s): NA **Tier I**
AP HUMAN GEOGRAPHY T	**8005 T**
AP Human Geography introduces students to the rigorous and systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students employ special concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about methods and tools geographers use in their science and practice.	A3360100
Instructional Material: *Human Geography: People, Place, and Culture, 8th edition, John Wiley and Sons Peoples Publishing Group, ISBN: 9780471679518* Prerequisites: World Geography Studies or Honors World Geography Studies; World History Studies or Honors World History or AP Modern World History; completion of (or taken concurrently) US History Studies or Honors or AP US History Studies; student interest What's Next? Any elective social studies course that can be applied toward a humanities endorsement *8005T is a .5 credit elective course. Students who successfully completed AP Human Geography AB are not eligible to enroll in this course.*	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): NA **Tier I**
WORLD HISTORY STUDIES AB **SHELTERED WORLD HISTORY STUDIES AB – NP** **SHELTERED WORLD HISTORY STUDIES AB** **WORLD HISTORY STUDIES AB**	**8033 AB** **8027 AB** **8029 AB** **80335 AB**
Examines human history with emphasis on early civilizations (non-western), Western, and other regions. Focuses on cultural experiences as related to history, literature, art, music, and philosophy. Students compare and analyze ways of life and cultural patterns that reflect the diversity and commonality of human experiences and develop an understanding of how these patterns occur.	03340400 03340405 (SPEC ED) Grade level: 9 – 12
Instructional Material: *1411 – Texas World History, McGraw-Hill, 2014, ISBN: 007660604X* Prerequisites: District Recommendation: World Geography Studies or Honors World Geography Studies; and student interest. What's Next? AP or Honors or United States History Studies or Dual Credit United States History All Newcomer Program teachers must be content and ESL certified.	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS WORLD HISTORY STUDIES AB **SHELTERED HONORS WORLD HISTORY STUDIES AB**	**8035 AB** **8032 AB**
Examines human history with emphasis on early civilizations (non-western), Western, and other regions. Focuses on cultural experiences as related to history, literature, art, music, and philosophy. Students compare and analyze ways of life and cultural patterns that reflect the diversity and commonality of human experiences and develop an	03340400

understanding of how these patterns occur. Problem-solving skills are also emphasized. This course builds the foundation for successful participation in AP coursework.	
Instructional Material: *1411 – Texas World History, McGraw-Hill, 2014, ISBN: 007660604X* Prerequisites: District Recommendation: Honors World Geography Studies or World Geography Studies; and student interest What's Next? AP or Honors or United States History Studies or Dual Credit United States History *This course meets the one-year world history social studies graduation requirement.*	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT WORLD HISTORY STUDIES A **TCC Course: World Civilization I (HIST 2321)** **TWU Course: World History to 1648 (HIS 2301)**	**8034 A**
A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the emergence of human cultures through the 15th century. Examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include the emergence of early societies, the rise of civilizations, the development of political and legal systems, religion and philosophy, economic systems and trans-regional networks of exchange. The course emphasizes the development, interaction and impact of global exchange.	03340400
Instructional Material: *TCC Course: World Civilization I (HIST 2321)* FWISD Prerequisites: None TCC Prerequisites: Early College High School Grade Placement 9-12 TWU Prerequisites: Only offered at Dunbar Course taught by an approved adjunct instructor. *Combined with HIST 2322, this course meets the one-year world history social studies graduation requirement.*	Grade level: N/A Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT WORLD HISTORY STUDIES B **TCC Course: World Civilization II (HIST 2322)** **TWU Course: World History since 1648 (HIS 2303)**	**8034 B**
A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the 15th century to the present. Examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include maritime exploration and transoceanic empires, nation/state formation and industrialization, imperialism, global conflicts and resolutions, and global economic integration. The course emphasizes the development, interaction and impact of global exchange.	03340400
Instructional Material: *TCC Course: World Civilization II (HIST 2322)* FWISD Prerequisites: Dual Credit World History Studies A TCC Prerequisites: Early College High School Grade Placement 9-12 TWU Prerequisites: HIS 2301; Only offered at Dunbar Course taught by an approved adjunct instructor. *Combined with HIST 2321, this course meets the one-year world history social studies graduation requirement.*	Grade level: N/A Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
AP MODERN WORLD HISTORY AB	**8037 AB**
Formerly titled "AP World History," this course presents a comprehensive history of the world required to meet the state's World History Studies graduation requirement, while giving particular emphasis to College Board's AP Modern World History timespan (1200 CE to present). This comprehensive experience allows students to view history in a global and integrated way and affords them the opportunity to gain a Distinguished Achievement measure as well as college credit by successful completion of the associated AP exam in May. Major facets of the course include the impact of interaction among major societies, relationship of change and continuity, impact of technology and demography on people and the environment, systems of social structure and gender structure, cultural and intellectual developments and interactions, and changes in functions and structures of states, and in attitudes toward states and political identities, including the rise of the nation-state.	A3370100
Instructional Material: *411- Stearns World Civilizations: The Global Experience 7th AP Ed with My History Lab, Pearson, 2015, ISBN: 9780133447705* Prerequisites: District Recommendations: AP Human Geography AB or Honors World Geography Studies or World Geography Studies; and student interest What's Next? AP or Honors or United States History Studies or Dual Credit United States History *This course meets the one-year world history social studies graduation requirement.*	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
UNITED STATES HISTORY STUDIES SINCE 1877 AB **SHELTERED UNITED STATES HISTORY STUDIES SINCE 1877 AB – NP** **SHELTERED UNITED STATES HISTORY STUDIES SINCE 1877 AB** **UNITED STATES HISTORY STUDIES SINCE 1877 AB**	**8056 AB** **8050 AB** **8052 AB** **80565 AB**
Students study the history of the United States since Reconstruction to the present. Content focuses on the political, economic, and social events and issues related to 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; analyze causes and effects of the Great Depression and examine the dynamic relationship of the three branches of the federal government. Students will be required to take the U.S. History End of Course (EOC) exam in this course.	03340100 03340105 (SPEC ED)
Instructional Material: *1422 – Texas U.S. History, McGraw-Hill, 2015, ISBN: 0076608581* Prerequisites: District Recommendation: World Geography and World History	Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA

What's Next? AP or Government, Economics, or Dual Credit Government, Economics, and any elective social studies course that can be applied toward a humanities endorsement. *Students will take the US History EOC.* All Newcomer Program teachers must be content and ESL certified.	**Tier III**
HONORS UNITED STATES HISTORY STUDIES SINCE 1877 AB **SHELTERED HONORS UNITED STATES HISTORY STUDIES SINCE 1877 AB**	**8066 AB** **8068 AB**
Honors United States History extends the study of United States History to involve a chronological history from 1877 to present. To support the teaching a variety of rich primary and secondary source material is used so that students are studying and learning history as historians.	03340100
Instructional Material: *1422 – Texas U.S. History, McGraw-Hill, 2015, ISBN: 0076608581* Prerequisites: District Recommendation: Honors World Geography Studies or World Geography Studies; AP or Honors or Dual Credit World History; and student interest What's Next? AP or Government, Economics, or Dual Credit Government, Economics; and any elective social studies course that can be applied toward a humanities endorsement *Students will take the US History EOC.*	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
AP UNITED STATES HISTORY AB	**8215 AB**
Extends the study of United States history to involve the full sweep of chronological history from discovery to present. Uses college-level material and parallel historic readings to provide the student's information and skills that will enable them to perform successfully on the advanced placement test and/or in their college history classes. This course may be used to meet either the course requirement for U.S. History or state graduation or elective course requirements.	A3340100
Instructional Material: *9488 – Give Me Liberty! An American History, 3e AP edition, W.W. Norton & Company, 2014, ISBN: 9780393282788* Prerequisites: District Recommendation: AP Human Geography AB or Honors World Geography Studies or World Geography Studies; AP or Honors or Dual Credit World History; and student interest What's Next? AP or Government, Economics, or Dual Credit Government, Economics; and any elective social studies course that can be applied toward a humanities endorsement *If students are using this course as a substitution for regular or Honors US History, they will take the US History EOC.*	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
DUAL CREDIT UNITED STATES HISTORY SINCE 1877 A **TCC Course: United States History I to 1876 (HIST 1301)** **TWU Course: Early American History HIS 2321**	**8042 A**
A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government.	03340100
Instructional Material: *TCC Course: United States History I to 1876 (HIST 1301)* FWISD Prerequisites: None TCC Prerequisites: ENGL-1301 with a grade of C or TSI compliant in reading Early College High School Grade Placement 10-12 TWU Prerequisites: Only offered at Dunbar Course taught by an approved adjunct instructor. *If students are using this dual credit course combination (8042A & 8042B) as a substitution for the regular or Honors US History, they will take the US History EOC.*	Grade level: 11 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT UNITED STATES HISTORY SINCE 1877 B **TCC Course: United States History II Since 1876 (HIST 1302)** **TWU Course: Modern American History HIS 2324**	**8042 B**
A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History examines industrialization, immigration, world wars, the Great Depression, and the Cold War and post-Cold War eras. Themes that may be addressed include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy.	03340100
Instructional Material: *TCC Course: United States History II Since 1876 (HIST 1302)* FWISD Prerequisites: Dual Credit United States History Since 1877 A TCC Prerequisites: ENGL-1301 with a grade of C or TSI compliant in reading Early College High School Grade Placement 10-12 TWU Prerequisites: HIS 2321; Only offered at Dunbar Course taught by an approved adjunct instructor. *If students are using this dual credit course combination (8042A & 8042B) as a substitution for the regular or Honors US History, they will take the US History EOC.*	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
OnRamps UNITED STATES HISTORY 1492-1865 A	**8049 A**
In this first of two sequential college American history courses, students study significant themes in US history to uncover the range and depth of the American story. Using lectures, primary and secondary readings, videos, maps, and other graphics, students work both independently and collaboratively to develop the critical thinking skills to	A3340100

evaluate the historical record. This course surveys from the colonial beginnings through the Civil War, and Course B considers the post-Civil War era to the end of the 20th century. Exams include essay questions that require students to craft well-written narratives and arguments that set events in historical context, engage the complexity of cause and consequence, and make connections that reveal the dynamic of change over time. OnRamps works through a dual-enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher.	
Instructional Material: Selected and provided by the University of Texas at Austin Prerequisites: FWISD: World Geography, World History preferred UT Austin OnRamps: Concurrent or completed English II What's Next? OnRamps US History Since 1865 *If students are using this course combination (8049A & 8049B) as a substitution for the regular or Honors US History, they will take the US History EOC.*	Grade level: 11 – 12 Credit(s): .5 College Hour(s): 3 hours **Tier I**
OnRamps UNITED STATES HISTORY SINCE 1865 B	**8049 B**
In this second of two sequential college American history courses, students study significant themes in US history to uncover the range and depth of the American story. Using lectures, primary and secondary readings, videos, maps, and other graphics, students work both independently and collaboratively to develop the critical thinking skills to evaluate the historical record. Course A surveys from the colonial beginnings through the Civil War, and this course considers the post-Civil War era to the end of the 20th century. Exams include essay questions that require students to craft well-written narratives and arguments that set events in historical context, engage the complexity of cause and consequence, and make connections that reveal the dynamic of change over time. OnRamps works through a dual-enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher.	A3340100
Instructional Material: Selected and provided by the University of Texas at Austin Prerequisites: FWISD: World Geography, World History preferred UT Austin OnRamps: Concurrent or completed English II What's Next? AP or Government, Economics, or Dual Credit Government, Economics; and any elective social studies course that can be applied toward a humanities endorsement *If students are using this course combination (8049A & 8049B) as a substitution for the regular or Honors US History, they will take the US History EOC.*	Grade level: 11 - 12 Credit(s): .5 College Hour(s): 3 hours **Tier I**
UNITED STATES GOVERNMENT T	**8076 T**
The focus of this course is on the principles and beliefs upon which the United States was founded, and on the structure, functions, and powers of government at the national, state, and local levels. Major emphasis is given to the U.S. Constitution, its underlying principles, beliefs, and the form of government it created.	03330100 Grade level: 11 - 12
Instructional Material: *1445 – Texas United States Government, McGraw-Hill, 2015, ISBN: 0021357994* Prerequisites: District Recommendation: World Geography Studies; World History Studies; and US History Studies What's Next? Economics if Government taken first; and any elective social studies course that can be applied toward a humanities endorsement	Credit(s): 0.5 College Hour(s): NA **Tier III**
DUAL CREDIT UNITED STATES GOVERNMENT T **TCC Course: Federal Government (GOVT 2305)** **TWU Course: American Government (GOV 2311)**	**8079 T**
Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights.	03330100
Instructional Material: *TCC Course: Federal Government (GOVT 2305)* FWISD Prerequisites: None TCC Prerequisites: ENGL-1301 with a grade of C or TSI compliant in reading TWU Prerequisites: Only offered at Dunbar Early College High School Grade Placement 10-12 Course taught by an approved adjunct instructor. *This course may be used to meet the Government social studies graduation requirement.*	Grade level: 11 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
AP UNITED STATES GOVERNMENT AND POLITICS T	**8135 T**
Gives attention to national and state governmental structures. Individual rights are stressed throughout as necessary foundations for a successful, functioning democratic republic. Prepares students to perform successfully on the AP Examination.	A3330100
Instructional Material: *9364 – Edward's Government in America 16th edition with My PoliSciLab, Pearson, 2014, ISBN: 9780133991758* Prerequisites: District Recommendation: AP Human Geography AB or Honors World Geography Studies or World Geography Studies; AP or Honors or Dual Credit World History Studies; completion of (or taken concurrently) AP or Honors or Dual Credit US History; and student interest What's Next? AP Microeconomics or Macroeconomics or Economics with an Emphasis on the Free Enterprise System T if AP United States Government taken first; and any elective social studies course that can be applied toward a humanities endorsement *This course may be used to meet the course requirement in U.S. Government for state graduation.*	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): NA **Tier I**

AP COMPARATIVE GOVERNMENT AND POLITICS T	8078 T
Provides qualified students an opportunity to engage in an in-depth examination of various political systems. Prepares students to take the AP examination, thus providing an additional AP testing opportunity for students seeking the Distinguished Achievement Diploma.	A3330200
Instructional Material: *9541 – Comparative Politics Domestic Responses to Global Challenges 7E AP Edition, Cengage Learning, ISBN: 9781305335899* Prerequisites: District Recommendation: AP Human Geography AB or Honors World Geography Studies or World Geography Studies; AP or Honors or Dual Credit World History Studies; completion of (or taken concurrently) AP or Honors or Dual Credit US History; AP Government or Government T; and student interest What's Next? Any elective social studies course that can be applied toward a humanities endorsement *This course may be used to meet only elective course requirements for state graduation. Will not substitute for U. S. Government requirement.*	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): NA **Tier I**
AP EUROPEAN HISTORY AB	**8219 AB**
The course examines the history of Europe from 1450 to the present and focuses on these interrelated historical themes: political/diplomatic, social/economic, and intellectual/cultural. This course provides students the opportunity to complete the equivalent of the introductory college course.	A3340200
Instructional Material: *9217 – Kagan The Western Heritage: Since 1300 11th AP Ed. Revised with My History Lab, Pearson, ISBN: 9780134050225* Prerequisites: District Recommendation: AP Human Geography AB or Honors World Geography Studies or World Geography Studies; AP or Honors or Dual Credit World History; completion of (or taken concurrently) AP or Honors or Dual Credit US History; and student interest What's Next? Any elective social studies course that can be applied toward a humanities endorsement *State elective credit; will not substitute for World History.*	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
ECONOMICS WITH EMPHASIS ON THE FREE ENTERPRISE SYSTEM AND ITS BENEFITS T	**8096 T**
The focus and content of this course is on the basic principles concerning production, consumption, and distribution of goods and services in the United States and a comparison with those principles and practices in other world economies. Students analyze the interaction of supply, demand, and price and study the role of financial institutions in a free enterprise system. Students examine various types of business ownership and market structures, the rights and responsibilities of consumers and businesses and basic concepts of consumer economics.	03310300 Grade level: 11 – 12 Credit(s): 0.5
Instructional Material: *1452 – Texas Economics, McGraw-Hill, 2015, ISBN: 0021381119* Prerequisites: District Recommendation: World Geography Studies, World History Studies, and US History What's Next? Government if Economics taken first; and any elective social studies course that can be applied toward a humanities endorsement.	College Hour(s): NA **Tier III**
DUAL CREDIT ECONOMICS WITH EMPHASIS ON THE FREE ENTERPRISE SYSTEM AND ITS BENEFITS T **TCC Course: Principles of Macroeconomics (ECON 2301)**	**8094 T**
An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy. Emphasis on the U.S. economy. Required for business and economics majors.	03310300 Grade level: 11 - 12
Instructional Material: *TCC Course: Principles of Macroeconomics (ECON 2301)* FWISD Prerequisites: United States History I AB Early College High School Grade Placement 10-12 Course taught by an approved adjunct instructor.	Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
AP MACROECONOMICS T	**8098 T**
Presents a one-semester analysis of economic theory. This course deals with major economic goals and the policy tools used to implement them. Prepares students to perform successfully on the AP Examination.	A3310200
Instructional Material: *9363 – Krugman's Economics for AP(HS), 2nd Edition Ed, Bedford, Freeman, and Worth, 2011, ISBN: 1429218276* Prerequisites: District Recommendations: AP Human Geography AB or Honors World Geography Studies or World Geography Studies; AP or Honors or Dual Credit World History; completion of (or taken concurrently) AP or Honors or Dual Credit US History; and student interest What's Next? AP Microeconomics or any elective social studies course that can be applied toward a humanities endorsement *This course may be used to meet either the course requirement for Economics for state graduation or elective course requirements.*	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): NA **Tier I**
AP MICROECONOMICS T	**8099 T**
Presents a one-semester analysis of the elements of economic theory. This course deals with product and factor price determination in a market economy. Prepares students to perform successfully on the AP Examination.	A3310100
Instructional Material: *9363 – Krugman's Economics for AP(HS), 2nd Edition Ed, Bedford, Freeman, and Worth, 2011, ISBN: 1429218276* Prerequisites: District Recommendations: AP Human Geography AB or Honors World Geography Studies or World Geography Studies; AP or Honors or Dual Credit World History; completion of (or taken concurrently) AP or Honors or Dual Credit US History; and student interest	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): NA

What's Next? Any elective social studies course that can be applied toward a humanities endorsement. *This course may be used to meet either the course requirement for Economics for state graduation or elective course requirements.*	**Tier I**
SOCIOLOGY T	**8117 T**
Offers students opportunities to study individual and group social patterns as a means for gaining insight into the interrelations among people and societal institutions.	03370100
Instructional Material: *1480 – Sociology: The Study of Human Relationships, Holt McDougal, ISBN: 9780544344037* Prerequisites: District Recommendation: World Geography Studies; World History Studies; US History (or concurrent enrollment); and student interest What's Next? Any elective social studies course that can be applied toward a humanities endorsement. *This course may be used to meet only elective course requirements for state graduation.*	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): NA **Tier III**
DUAL CREDIT SOCIOLOGY T **TCC Course: Introduction to Sociology (SOCI 1301)** **TWU Course: Introduction to Sociology (SOC 2301)**	**8115 T**
The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance.	03370100
Instructional Material: *TCC Course: Introduction to Sociology (SOCI 1301)* FWISD Prerequisites: None TCC Prerequisites: ENGL-1301 with a grade of C or TSI compliant in reading Early College High School Grade Placement 9-12 TWU Prerequisites: Only offered at Dunbar Course taught by an approved adjunct instructor. *This course may be used to meet only elective course requirements for state graduation.*	Grade level: 11-12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
PSYCHOLOGY T	**8125 T**
Involves an exploration into human behavior with the understanding that individual adjustment in a compact and complex world is essential.	03350100
Instructional Material: *1470 – Texas Psychology, McGraw-Hill, 2015 ISBN: 0021394946* *ISBN: 0078285712* Prerequisites: District Recommendation: World Geography Studies; World History Studies, US History (or concurrent enrollment); and student interest What's Next? Any elective social studies course that can be applied toward a humanities endorsement. *This course may be used to meet only elective course requirements for state graduation.*	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): NA **Tier III**
AP PSYCHOLOGY T	**8127 T**
Extends the study of psychology to include an in-depth approach to both human and animal behavior through experimental, correlation, and clinical research. Students have opportunities to apply statistical methods for the interpretation of data. Prepares students to perform successfully on the AP Examination. *The course pairing 8146 and 8127 prepares students for the AP Psychology exam by teaching the curriculum over two semesters. When campuses pair 8146 and 8127, students must be enrolled in both courses.*	A3350100
Instructional Material: *9425 – Myer's Psychology for AP 2nd Edition, Bedford, Freeman and Worth Publishing, 2014, ISBN: 1464113076* Prerequisites: District Recommendation: AP Human Geography AB or Honors World Geography Studies or World Geography Studies; or, concurrent enrollment in AP or Honors or Dual Credit World History Studies; and student interest What's Next? Honors Social Studies Research Methods in Psychology (8146 TH) or Core course per recommended sequence for graduation and/or any elective social studies course that can be applied toward a humanities endorsement. *This course may be used to meet only elective course requirements for state graduation.*	Grade level: 10 – 12 Credit(s): 0.5 College Hour(s): NA **Tier I**
DUAL CREDIT PSYCHOLOGY IT **TCC Course: General Psychology (PSYC 2301)** **TWU Course: Introduction to Psychology (PSY 1301)**	**8123 T**
A survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes.	03350100
Instructional Material: *TCC Course: General Psychology (PSYC 2301)* FWISD Prerequisites: TCC Prerequisites: ENGL-1301 with a grade of C or TSI compliant in reading Early College High School Grade Placement 10-12 TWU Prerequisites: Only offered at Dunbar Course taught by an approved adjunct instructor.	Grade level: 11-12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT AP PSYCHOLOGY IT **TCC Course: General Psychology (PSYC 2301)**	**8126 T**
A survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes.	03350100

Instructional Material: *TCC Course: General Psychology (PSYC 2301)* FWISD Prerequisites: TCC Prerequisites: ENGL-1301 with a grade of C or TSI compliant in reading Early College High School Grade Placement 10-12 Course taught by an approved adjunct instructor.	Grade level: 11-12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
ADVANCED SOCIAL STUDIES RESEARCH METHODS IN PSYCHOLOGY T	**8146 T**
An elective course designed for use in pairing with AP Psychology. Students learn collegiate level skills in research analysis and design. Each student will conduct in-depth research, prepare a product of professional quality, and make presentations to appropriate audiences. In collaboration with the teacher or a mentor, students independently investigate a problem, issue or concern. *The course pairing 8146 and 8127 prepares students for the AP Psychology exam by teaching the curriculum over two semesters. When campuses pair 8146 and 8127, students must be enrolled in both courses.*	033800##
Instructional Material: *No state-adopted instructional material(s)/ Contact Social Studies Director.* Prerequisites: AP Psychology and student interest. What's Next? Core course per recommended sequence for graduation and/or any elective social studies course that can be applied toward a humanities endorsement. *033800##- 1st Time ##=03, 2nd Time ##=23, 3rd Time ##=33, 4th Time ##=43* *This course may be used to meet only elective course requirements for state graduation.*	Grade level: 10 - 12 Credit(s): 0.5 College Hour(s): NA **Tier I**
SOCIAL STUDIES ADVANCED STUDIES T	**8138 T**
This is an elective course where students conduct in-depth research, prepare a product of professional quality, and make presentations to appropriate audiences. In collaboration with a mentor, or working independently, students investigate a problem, issue, or concern. Social Studies Advanced Studies may be repeated with different advanced content for up to four state elective credits.	033800##
Instructional Material: *No state-adopted instructional material(s)/Contact Social Studies* Prerequisites: District Recommendation: AP Human Geography AB or Honors World Geography Studies or World Geography Studies; AP or Honors or Dual Credit World History Studies; completion of (or taken concurrently) AP or Honors or Dual Credit US History; and student interest What's Next? Core course per recommended sequence for graduation and/or any elective social studies course that can be applied toward a humanities endorsement. *033800##- 1st Time ##=01, 2nd Time ##=21, 3rd Time ##=31, 4th Time ##=41* *This course may be used to meet only elective course requirements for state graduation.*	Grade level: 11 - 12 Credit(s): 0.5 College Hour(s): NA **Tier III**
HONORS SOCIAL STUDIES ADVANCED STUDIES TH	**8142 T/H**
This is an elective course where students conduct in-depth research, prepare a product of professional quality, and make presentations to appropriate audiences. In collaboration with a mentor, or working independently, students investigate a problem, issue, or concern.	033800##
Instructional Material: *No state-adopted instructional material(s)/Contact Social Studies* Prerequisites: District Recommendation: AP Human Geography AB or Honors World Geography Studies or World Geography Studies; AP or Honors or Dual Credit World History Studies; completion of (or taken concurrently) AP or Honors or Dual Credit US History; and student interest What's Next? Any elective course that can be applied toward a humanities endorsement. *033800##- 1st Time ##=01, 2nd Time ##=21, 3rd Time ##=31, 4th Time ##=41*	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): NA **Tier II**
STUDENT LEADERSHIP AB	**8141 AB**
Provides students the opportunity to study and develop individual leadership and organizational skills (e.g. decision making, problem solving, communications, human relations, and civic responsibility). Teachers are to use the course curriculum provided by the Texas Association of Secondary School Principals (TAASP). Training in the use of this curriculum is also required. State elective graduation credit. (Innovative Course).	N1290010
Instructional Material: *Course curriculum provided by the Texas Association of Secondary School Principals (TAASP)/Contact Social Studies* Prerequisites: None What's Next? Core course per recommended sequence for graduation and/or any elective social studies course that can be applied toward a humanities endorsement social studies elective. *Course taught by TASSP curriculum trained teachers. This course is not eligible for application toward the social studies humanities endorsement. Contact Social Studies with questions.*	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS STUDENT LEADERSHIP ABH	**8140 ABH**
Provides students the opportunity for advanced study and development of individual leadership and organizational skills (e.g. decision making, problem solving, communications, human relations, and civic responsibility). Teachers are to use the course curriculum provided by the Texas Association of Secondary School Principals (TAASP) and differentiate it to meet Honors-level expectations. Training in the use of this curriculum is also required. State elective graduation credit. (Innovative Course).	N1290010
Instructional Material: *Course curriculum provided by the Texas Association of Secondary School Principals (TAASP)/Contact Social Studies* Prerequisites: District Recommendation: Successful completion and/or concurrent enrollment in Honors or AP or Dual Credit coursework. What's Next? Core course per recommended sequence for graduation and/or any elective social studies course that can be applied toward a humanities endorsement social studies elective.	Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier II**

Course taught by TASSP curriculum trained teachers. This course is not eligible for application toward the social studies humanities endorsement. Contact Social Studies with questions.	
SPECIAL TOPICS IN SOCIAL STUDIES: AMERICAN CULTURE STUDIES T	**8038 T**
Provides an opportunity for an in-depth examination of various cultural or ethnic groups in the United States. The course is designed to develop appreciation and respect for cultural diversity and the contributions made by various groups to the American landscape while incorporating the skills and content understanding needed by students to be successful on the United States History End-of-Course Exam.	033800##
Instructional Material: *No state-adopted instructional material(s)/Contact Social Studies* Prerequisites: District Recommendation: World Geography Studies; World History Studies; completion of (or taken concurrently) US History; teacher, recommendation; parental approval. What's Next? Core course per recommended sequence for graduation and/or any elective social studies course that can be applied toward a humanities endorsement social studies elective. *033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42 Special Topics may be repeated with different topics for up to two state credits.*	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): NA **Tier III**
DUAL CREDIT SPECIAL TOPICS IN SOCIAL STUDIES: PHILOSOPHY T **TCC Course: Introduction to Philosophy (PHIL 1301)** **TWU Course: Intro to Ethics (REL 1313)**	**8039 T**
A study of major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics in philosophy may include theories of reality, theories of knowledge, theories of value, and their practical applications.	033800##
Instructional Material: *TCC Course: Introduction to Philosophy (PHIL 1301)* FWISD Prerequisites: None TCC Prerequisites: ENGL-1301 with a grade of C or TSI compliant in reading Early College High School Grade Placement 10-12 TWU Prerequisites: Only offered at Dunbar Course taught by an approved adjunct instructor. *Special Topics may be repeated with different topics for up to two state credits. 033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42*	Grade level: 11 – 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT SPECIAL TOPICS IN SOCIAL STUDIES: GEOGRAPHY THEMES AND PERSPECTIVES A **TCC Course: Introduction to World Religions (PHIL 1304)**	**8004 A**
This course engages students in a comparative study of world religions including, but not limited to Hinduism, Buddhism, Judaism, Christianity and Islam. In addition to understanding their historical development, cultural expressions and spatial distribution students will consider what it means to live in a world where people have diverse religious beliefs.	033800##
Instructional Material: TCC Course: Introduction to World Religions (PHIL 1304) FWISD Prerequisites: None TCC Prerequisites: None Course taught by an approved adjunct instructor. *Special Topics may be repeated with different topics for up to two state credits. 033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42*	Grade level: 9 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT SPECIAL TOPICS IN SOCIAL STUDIES: GEOGRAPHY THEMES AND PERSPECTIVES B **TCC Course: Social Problems (SOCI 1306)**	**8004 B**
In this course, students will apply social science principles and perspectives to explore major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems. Included in the study is a building an understanding of the linkage between social problems and the global, political, economic, and cultural dimensions.	033800##
Instructional Material: TCC Course: Social Problems (SOCI 1306) FWISD Prerequisites: None TCC Prerequisites: None Course taught by an approved adjunct instructor. *Special Topics may be repeated with different topics for up to two state credits. 033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42*	Grade level: 10 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
SPECIAL TOPICS IN SOCIAL STUDIES: LATINO/A STUDIES T	**8041 T/H**
Students explore LatinX and Chicano/Chicana experiences from the pre-Columbian era to the present day. Topics of study include an examination of the historical, economic, social, and cultural contributions of people and descendants of Mexico, Central and South America, and the Caribbean. Through their exploration of these topics, students will investigate the diversity of Latino(a)/Chicano(a) culture, ponder the various factors that have come to form their identities, and analyze how their experiences have shaped American society today. This course provides authentic academic experiences and is designed to prepare students for success in college and in their chosen careers. Students are expected to conduct in-depth research, prepare a product of professional quality, and make presentations to appropriate audiences as part of this course.	033800##
Instructional Material: *No state-adopted instructional material(s)/Contact Social Studies* Prerequisites: World Geography Studies if taken for core social studies graduation credit. * Enrolled concurrently in United States History Studies, Government, or Economics if taken as an elective; student interest What's Next? Students planning to take ethnic studies as a graduation eligible credit should take 8045 T in the Spring semester. Students taking the course as an elective may take a Core course per recommended sequence for graduation and/or any elective social studies course that can be applied toward a humanities endorsement.	Grade level: 10 – 12 Credit(s): 0.5 College Hour(s): NA **Tier II**

**When paired with 8045T this Ethnic Studies course may be used in place of World History Studies to satisfy core social studies graduation credit.* *033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42* *Special Topics may be repeated with different topics for up to two state credits.*	
DUAL CREDIT SPECIAL TOPICS IN SOCIAL STUDIES: LATINO/A STUDIES T **UTA Course: Introduction to Mexican-American Studies (MAS 2300)**	**8043 T**
This online course is an introduction to the multi-disciplinary field of Mexican-American Studies. By the end of the course, students will gain an understanding of important moments in Mexican-American history, key cultural concepts in Mexican American cultural studies, and the issues confronting Latinos/as today.	033800##
Instructional Material: UTA Course: Intro. to Mexican-American Studies (MAS 2300) FWISD Prerequisites: World Geography Studies; World History Studies; completion of US History or taken concurrently; student interest UTA Prerequisites: Admission into UTA's Honors Academy Dual Credit Program *033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42* *Special Topics may be repeated with different topics for up to two state credits.*	Grade level: 11-12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
DUAL CREDIT SPECIAL TOPICS IN SOCIAL STUDIES: LATINO/A STUDIES T **TCC Course: Mexican-American History I to 1876 (HIST 2327)**	**8043 T**
Historical, economic, social, and cultural development of Mexican-Americans/Chicanos/Chicanas. (May be applied to US History requirement.)	033800##
Instructional Material: *TCC Course: Mexican-American History I to 1876 (HIST 2327)* FWISD Prerequisites: World Geography and World History TCC Prerequisites: ENGL-1301 with a grade of C or TSI compliant in reading Early College High School Grade Placement 10-12 Course taught by an approved adjunct instructor. *Special Topics may be repeated with different topics for up to two state credits.* *033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42*	Grade level: 11-12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
SPECIAL TOPICS IN SOCIAL STUDIES: A HISTORY OF HEALTH AND MEDICINE TH	**8044 T/H**
Provides students enrolled at the Texas Academy of Biomedical Sciences an opportunity for an in-depth examination of health and medical topics related to the school's mission; including historical influences on public health, the evolution of scientific and medical advances on health throughout history, as well as changing perceptions and approaches to professional practice in the biomedical fields. The course is designed in a seminar format and will provide opportunities to develop college and career readiness skills through the robust class discussions as well as conducting research for and the writing of a historical paper.	033800##
Instructional Material: *No state-adopted instructional material(s)/Contact Social Studies* Prerequisites: World Geography Studies; World History Studies; US History; student interest What's Next? N/A *033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42* *Special Topics may be repeated with different topics for up to two state credits.* *Offered only at: TABS*	Grade level: 12 Credit(s): 0.5 College Hour(s): NA **Tier II**
ETHNIC STUDIES: AFRICAN AMERICAN STUDIES T	**8045 T/H**
Students explore African and African-American history from ancient times to the present. During this study, students develop a rich understanding of the causes, character, and consequences of the African American experience as well as the way individual contributions shape the political, economic, and cultural landscape in the local community, the United States, and the World. Students are expected to conduct in-depth research, prepare a product of professional quality, and make presentations to appropriate audiences as part of this course.	03380085
Instructional Material: *No state-adopted instructional material(s)/Contact Social Studies/Locally adopted text is Freedom on My Mind (2nd Edition) from Bedford Freeman & Worth* Prerequisites: World Geography Studies if taken for core social studies graduation credit. * Enrolled concurrently in United States History Studies, Government, or Economics if taken as an elective; student interest What's Next? Students planning to take ethnic studies as a graduation eligible credit should take 8041 T in the Fall. Core course per recommended sequence for graduation and/or any elective social studies course that can be applied toward a humanities endorsement. **When paired with 8041T this Ethnic Studies course may be used in place of World History Studies to satisfy core social studies graduation credit.*	Grade level: 10 – 12 Credit(s): 0.5 College Hour(s): NA **Tier II**
DUAL CREDIT SPECIAL TOPICS IN SOCIAL STUDIES: TEXAS GOVERNMENT T **TCC Course: Texas Government (GOVT 2306)**	**8073 T**
Origin and development of the Texas Constitution, structure and powers of state and local government, federalism and inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas.	033800##
Instructional Material: *TCC Course: Texas Government (GOVT 2306)* FWISD Prerequisites: None TCC Prerequisites: ENGL-1301 with a grade of C or TSI compliant in reading What's Next? N/A Early College High School Grade Placement 10-12 Course taught by an approved adjunct instructor.	Grade level: N/A Credit(s): 0.5 College Hour(s): 3 hours **Tier I**

DUAL CREDIT SPECIAL TOPICS IN SOCIAL STUDIES: PRINCIPLES OF MICROECONOMICS T **TCC Course: Principles of Microeconomics (ECON 2302)**	**8095 T**
Analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade.	033800##
Instructional Material: *TCC Course: Principles of Microeconomics (ECON 2302)* FWISD Prerequisites: United States History I What's Next? N/A Course taught by an approved adjunct instructor. *Special Topics may be repeated with different topics for up to two state credits. 033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42*	Grade level: 11 - 12 Credit(s): 0.5 College Hour(s): 3 hours ECHS Grade: 10-12 **Tier I**
SPECIAL TOPICS IN SOCIAL STUDIES: HISTORICAL CONTRIBUTIONS OF WOMEN IN UNITED STATES HISTORY T	**8047 T**
This course provides students with the opportunity to explore the diversity of women's lives, their roles, and contributions to American society overtime. The course will also serve as an elective offering to satisfy the Humanities endorsement.	033800##
Instructional Material: *No state-adopted instructional material(s)/Contact Social Studies* Prerequisites: World Geography Studies; World History Studies; completion of US History or taken concurrently; student interest. What's Next? N/A *033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42* *Special Topics may be repeated with different topics for up to two state credits.*	Grade level: 11-12 Credit(s): 0.5 College Hour(s): NA **Tier III**
PERSONAL FINANCIAL LITERACY T	**8145 T**
Personal financial literacy is designed to be an interactive research-based course where students learn to apply critical-thinking and problem-solving skills to analyze decisions involving earning and spending, saving and investing, credit and borrowing, insuring and protecting, and college and post-secondary education and training.	03380082
Instructional Material: *No state-adopted instructional material(s)/Contact Social Studies* Prerequisites: District Recommendations: AP Human Geography AB or Honors World Geography Studies or World Geography Studies; and student interest. What's Next? Core course per recommended sequence for graduation and/or any elective social studies course that can be applied toward a humanities endorsement.	Grade level: 10-12 Credit(s): 0.5 College Hour(s): NA **Tier III**
DUAL CREDIT PERSONAL FINANCIAL LITERACY T **TWU Course: Personal Finance (FIN 1325)**	**8147 T**
This course offers an introduction to the planning and management of the financial status of an individual. Topics will include personal budgeting, car and home loan financial analysis, a survey of investment opportunities and retirement planning.	03380082
Instructional Material: TWU Personal Finance (FIN 1325) FWISD Prerequisites: None TWU Prerequisites: None This course is offered as part of the Early College High School program at Dunbar High School. Course must be taught by an approved adjunct instructor	Grade level: 9 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
SPECIAL TOPICS IN SOCIAL STUDIES: HONORS UNITED STATES MILITARY HISTORY ABH	**5975 ABH** **5976 ABH** **5978 ABH**
This course presents a comprehensive U. S. Military History review, providing students an awareness of responsible leadership roles of men and women in past and present history. Students will gain an understanding of U.S. military history and strategy from an intellectual, social, economic and political perspective. Students will apply critical-thinking skills to understand the impact of geographic factors, current world events and the role of diplomacy from the perspective of both scholars and from the perspective of those who have fought our wars. Cadet leaders are provided the opportunity to participate in world affairs discussions and seminars, staff rides to military installations, museums, historic battlefields and monuments, panel discussions, community service projects, leadership labs, leadership camps, as well as participation in classroom discussion, and debate projects on local and world events. Students will gain a world-view perspective and a greater appreciation and understanding of culture, history and government.	033800## Grade level: 10 - 12 HS Credit(s): 1 College Hour(s): N/A **Tier II**
Instructional Materials: *Provided by ROTC Department/Locally adopted textbook* - Lookingbill's *The American Military: A Narrative History, John Wiley Press, 2014, ISBN: 9781444337365* Prerequisites: Student must have completed JROTC I or seeking Humanities Endorsement. *033800## - 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42*	
SPECIAL TOPICS IN SOCIAL STUDIES: ADVANCED WORLD HISTORY CA. 1500 AB	**8053 AB**
This course introduces students to the philosophy, themes, and perspectives that define the discipline of history as well as cultivating the habits of mind and skills historians use to practice their art through a study of primary and secondary texts that illuminate the history of world civilizations from prehistory to CA 1500. Students will be guided through a sophisticated curriculum that will (1) enhance their understanding of the patterns of human action that constitute civilization and culture building throughout time and (2) prepare them to consider the more contemporary world with an understanding of the history epochs that have preceded them.	Part A PEIMS: 03380002 Part B PEIMS: 03380022

Instructional Material(s): No State Adopted Instructional Materials/*World History and Geography* from McGraw-Hill/Materials integrated into the course curriculum/Contact the Social Studies Director Prerequisites: Concurrent enrollment in Honors English 1AB (VPA3090AB) or Honors English 2AB (VPA3092AB) What's Next? Honors World History 1AB (VPA8035AB) Offered ONLY at: IM Terrell VPA/STEM *Core course as part of the Humanities Academy at IM Terrell sequence for graduation. Taken in place of World Geography Studies, successful completion of this course satisfies 1 of the 4 social studies credits the district requires for graduation. Students earning credit for this course must take World History Studies, United States History Studies, Government and Economics as the remaining 3 social studies credits to satisfy state graduation requirements.* *033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42* *Special Topics may be repeated with different topics for up to two state credits.*	Grade level: 9 Credit(s): 1 College Hour(s): NA **Tier 1**
DUAL CREDIT SPECIAL TOPICS IN SOCIAL STUDIES: GEOGRAPHY THEMES AND PERSPECTIVES A TWU Course: Social Justice (SSC 2360)	**8002 A**
This course is a General Education Course within the Social Sciences designed as a collaboration between different disciplines. The intention is to provide you with a more holistic view looking at the world and your place within that world.	033800##
Instructional Material: TWU Personal Finance (FIN 1325) FWISD Prerequisites: None TWU Prerequisites: None This course is offered as part of the Early College High School program at Dunbar High School. Course must be taught by an approved adjunct instructor. *Special Topics may be repeated with different topics for up to two state credits. 033800##- 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42.*	Grade level: 9 - 12 Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
PEER ASSISTANCE & LEADERSHIP (PAL®) I AB	**0662 AB**
PAL courses serve as a peer-mentoring program in which students are trained as peer facilitators on their campus and at feeder campuses. The courses provide field experience for students who are potentially interested in careers in education and related helping professions. Positive peer influence will be utilized as a central strategy for addressing such issues as at-risk youth, dropout prevention, substance abuse prevention, teen pregnancy, suicide, absenteeism, low achievement, behavior problems, students with special needs and other areas of concern.	N1290005 Grade level: 10-12
Instructional Material: *No state-adopted instructional material(s)/Contact Social Studies Director* Prerequisites: None What's Next? PALS II *Course taught by PAL® Curriculum trained teachers. State elective graduation credit (Innovative Course). This course is not eligible for application toward the social studies humanities endorsement. Contact Social Studies with questions.*	Credit(s): 1 College Hour(s): NA **Tier III**
PEER ASSISTANCE & LEADERSHIP (PAL®) II AB	**0663 AB**
PAL courses serve as a peer-mentoring program in which students are trained as peer facilitators on their campus and at feeder campuses. The course is an extension of PALS I where students will engage in service learning projects in addition to mentoring students. Leadership skills and tools are studied.	N1290006 Grade level: 11-12
Instructional Material: *No state-adopted instructional material(s)/Contact Social Studies Director* Prerequisites: None What's Next? NA *Course taught by PAL® Curriculum trained teachers. State elective graduation credit (Innovative Course). This course is not eligible for application toward the social studies humanities endorsement. Contact Social Studies with questions.*	Credit(s): 1 College Hour(s): NA **Tier III**

FINE/VISUAL & PERFORMING ARTS GRADUATION REQUIREMENTS

ALL STUDENTS ARE REQUIRED to take ONE Fine Arts credit

FOUNDATION PLANS

All Foundation Plans (22 & 26 credits)

Fine Arts (1 credit) may be selected from the following categories (see chart on next page for all courses available within each category):

- Art Level I, II, III, IV
- Dance Level I, II, III, IV
- Music Level I, II, III, IV
- Music Studies
- Theatre Level I, II, III, IV
- Musical Theatre Level I, II, III, IV
- Technical Theatre Level I, II, III, IV
- Additional Courses

Courses identified as local credit only or state elective credit will not qualify as meeting the fine arts requirement.

College Board Advanced Placement and International Baccalaureate courses may be substituted for requirements in appropriate areas.

Note: In order to progress to a Level II studio art course, the student must successfully complete either Level I, 1010 Art I AB or 1051 Honors Art I ABH or Art and Media Communications I 1093 AB.

A student must take both semesters of the same course to satisfy the one credit required for graduation.

Under the state Endorsement category for Arts and Humanities: A Fine Arts Endorsement may be completed by a coherent sequence of four credits by selecting courses from one or two categories or disciplines in Fine Arts. The course taken to complete the Fine Arts one credit requirement may also count as a course within an endorsement.

Example of **Fine Arts Endorsement** with a coherent sequence from **one category:**

- Art Level I
- Art Level II
- Art Level III
- Art Level IV

Example of **Fine Arts Endorsement** with a coherent sequence from **two categories:**

- Music Level I
- Music Level II
- Art Level I
- Art Level II

CLASSES THAT FULFILL THE ONE FINE ARTS CREDIT

A student must take both semesters of the same course to satisfy the one credit required for graduation. To receive an Arts & Humanities endorsement, a student must select a coherent sequence of four courses, subject to prerequisites, from one or two of the categories listed below:

	Level I	Level II	Level III	Level IV
Art	• Art I • Art Appreciation	• Art II • Drawing I • Painting I • Ceramics I • Sculpture I • Jewelry I • Photography I	• Art III • Drawing II • Painting II • Ceramics II • Sculpture II • Jewelry II • Photography II • AP Studio Art: Drawing Portfolio • AP Studio Art: Two-Dimensional Design Portfolio • AP Studio Art: Three-Dimensional Design Portfolio • AP Art History	• Art IV • Drawing III • Painting III • Ceramics III • Sculpture III • Jewelry III • Photography III • AP Studio Art: Drawing Portfolio • AP Studio Art: Two-Dimensional Design Portfolio • AP Studio Art: Three-Dimensional Design Portfolio • AP Art History • OnRamps Arts and Entertainment Technologies • VPA Capstone
Dance	• Principles of Dance I • Dance and Media Communications I • Jazz I • Modern/Contemporary I • Tap I • Ballet I • World Dance Forms I • Dance Composition & Improvisation I • Dance Wellness I • Dance Production I • Dance History I	• Principles of Dance II • Dance and Media Communications II • Jazz II • Modern/Contemporary II • Tap II • Ballet II • World Dance Forms II • Dance Performance & Ensemble II • Dance Wellness II • Dance Production II • Dance History II	• Principles of Dance III • Jazz III • Modern/Contemporary III • Tap III • Ballet III • World Dance Forms III • Dance Performance & Ensemble III • Dance Wellness III • Dance Production III	• Principles of Dance IV • Jazz IV • Modern/Contemporary IV • Tap IV • Ballet IV • World Dance Forms IV • Dance Performance & Ensemble IV • Dance Wellness IV • Dance Production IV • VPA Capstone
Music	• Band I • Choir I • Orchestra I • Jazz Ensemble I • Instrumental Ensemble I • Vocal Ensemble I • Mariachi I • Piano I • Guitar I • Jazz Improvisation I • World Music Ensemble I	• Band II • Choir II • Orchestra II • Jazz Ensemble II • Instrumental Ensemble II • Vocal Ensemble II • Mariachi II • Piano II • Guitar II • Jazz Improvisation II • World Music Ensemble II	• Band III • Choir III • Orchestra III • Jazz Ensemble III • Instrumental Ensemble III • Vocal Ensemble III • Mariachi III • Piano III • Guitar III • Jazz Improvisation III • World Music Ensemble III	• Band IV • Choir IV • Orchestra IV • Jazz Ensemble IV • Instrumental Ensemble IV • Vocal Ensemble IV • Mariachi IV • Piano IV • Guitar IV • Jazz Improvisation IV • World Music Ensemble IV • VPA Capstone
Music Studies	• Music Appreciation I • Music Theory I • Music Production I • Music & Media Communications I • AP Music Theory	• Music Appreciation II • Music Theory II • Music Production II • Music & Media Communications II	• Ethnomusicology • Music & Movement	
Theatre	• Theatre Arts I • Theatre and Media Communications I • Theatre Production I	• Theatre Arts II • Theatre and Media Communications II • Theatre Production II	• Theatre III • Theatre Production III	• Theater Arts IV • Theatre Production IV • VPA Capstone

	Level I	Level II	Level III	Level IV
Musical Theatre	• Musical Theatre I	• Musical Theatre II	• Musical Theatre III	• Musical Theatre IV • VPA Capstone
Technical Theatre	• Technical Theatre I	• Technical Theatre II	• Technical Theatre III	• Technical Theater IV • VPA Capstone
Additional Courses	• Principles and Elements of Floral Design • Digital Art and Animation • 3-D Modeling and Animation			

Fine Arts

<u>ALL fine arts courses must be taken for the full year.</u>

VISUAL ARTS

Level I - IV		Level II- IV		Level III & IV	
General Art Courses		**Specialized Art Courses**		**Advanced Placement / IB Art Courses**	
Art I-IV	1010*, 1023, 1033, 1042	**Digital Art & Media**	1072	**AP Studio Art: Drawing Portfolio**	1041
Art Appreciation	1008*	**Ceramics**	1022, 1024, 1026	**AP Studio Art: Two-Dimensional Design Portfolio**	1043
Honors Art I	1051	**Drawing**	1012, 1037, 1076		
Note: *Some students will have completed their Art, Level I requirement in 8th grade.* ** Art I or Honors Art I must be taken prior to enrolling in a more specialized Art II studio course.*		**Jewelry**	1032, 1034, 1036	**AP Studio Art: Three-Dimensional Design Portfolio**	1020
		Painting	1016, 1029, 1080	**AP Art History**	1048
		Photography	1018, 1030, 1084		
		Sculpture	1028, 1092, 1099		
		Honors Art II	1025	*AP Art Courses may be taken as Art Level III and/or Art Level IV, and/or Portfolio review and Art Teacher recommendation.*	

Students must complete both A and B to receive state graduation credit for fine arts.

Honors Art courses are also available.

ART, LEVEL I, ART APPRECIATION AB	1008 AB
Art Appreciation introduces the visual arts to students with a focus on developing an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork using art media and tools in drawing, painting, printmaking, sculpture, ceramics, fiber art, design, and digital art and media. Students develop a portfolio of their artwork and acquire the skills to analyze the artworks of self and others. Art Appreciation is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03500110 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *NA* Prerequisites: None What's Next? Any Art Level II specialized art courses	

HONORS ART, LEVEL I, ART APPRECIATION ABH	1009 ABH
Honors Art Appreciation introduces the visual arts to students with a focus on developing an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork using art media and tools in drawing, painting, printmaking, sculpture, ceramics, fiber art, design, and digital art and media. Students develop a portfolio of their artwork and acquire the skills to analyze the artworks of self and others. Honors level students will expand their art appreciation ability and understanding to a higher degree with a final project related to the exploration of visual art forms and their relationship to culture, history, media, and society. Honors Art Appreciation is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03500110 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *NA* Prerequisites: Student interest What's Next? Any Art Level II specialized art courses *Course taught by a locally certified gifted teacher.*	

DUAL CREDIT ART, LEVEL I, ART APPRECIATION AB TCC COURSE: Art Appreciation (ARTS 1301) TWU COURSE: Basic Art (FAR 1311)	1108 AB 03500110
Dual Credit Art Appreciation introduces the visual arts to students with a focus on developing an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork using art media and tools in drawing, painting, printmaking, sculpture, ceramics, fiber art, design, and digital art and media. Students develop a portfolio of their artwork and acquire the skills to analyze the artworks of self and others. Honors level students will expand their art appreciation ability and understanding to a higher degree with a final project related to the exploration of visual art forms and their relationship to culture, history, media, and society. Dual Credit Art Appreciation is a one-semester course.	ECHS Grade level: 9-12 Grade level: NA Credit(s): 1 College Hour(s): 3 **Tier I**
Instructional Material: *NA* FWISD & TCC Prerequisites: None TWU Prerequisites: Only offered at Dunbar What's Next? NA *Course taught by an approved District or adjunct instructor.*	

ART, LEVEL I, ART I AB	1010 AB
Art I develops and expands visual literacy skills in students using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork using art media and tools in drawing, painting, printmaking, sculpture, ceramics, fiber art, design, and digital art and media while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Art I is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03500100 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *eBook: The Visual Experience, Davis Publications; ISBN: 978-1-61528-328-6* Prerequisites: None What's Next? Any Art Level II specialized Art courses	

HONORS ART, LEVEL I, ART I ABH	1051 ABH
Honors Art I develops and expands visual literacy skills in students using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork using art media and tools in drawing, painting, printmaking, sculpture, ceramics, fiber art, design, and digital art and media. Students create a portfolio with rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors level students will expand their art ability and understanding to a higher degree with a final project related to the exploration of visual arts. Honors Art I is a two-semester sequence course with the first semester being a prerequisite to the second	03500100 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**

semester.

Instructional Material: *eBook: The Visual Experience, Davis Publications; ISBN: 978-1-61528-328-6*
Prerequisites: Evaluation of student portfolio/teacher recommendation
What's Next? Any Art Level II specialized Art course
Course taught by a locally certified gifted or AP trained teacher. This course serves as an Honors course.

DUAL CREDIT ART, LEVEL I, ART I AB — **1011 AB**
TCC Course: Design I (2-Dimensional) (ARTS 1311)

Dual Credit Art I develops and expands visual literacy skills in students using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork using art media and tools in drawing, painting, printmaking, photography, design, and digital art and media. Students create a portfolio with rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Dual Credit Art I is a one-semester course.

03500100

ECHS Grade level: 9-12
Grade level: NA
Credit(s): 1
College Hour(s): 3
Tier I

Instructional Material: *NA*
FWISD & TCC Prerequisites: None
What's Next? Design II
Course taught by an approved District or adjunct instructor.

ART, LEVEL II, ART II AB — **1023 AB**

Art II develops and expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork using art media and tools in drawing, painting, printmaking, sculpture, ceramics, fiber art, jewelry, mixed media, photography, and digital art and media while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Art II is a two-semester sequence course with the first semester being a prerequisite to the second semester.

03500200

Grade level: 9 – 12

Instructional Material: *eBook: The Visual Experience, Davis Publications; ISBN: 978-1-61528-328-6*
Prerequisites: Art I
What's Next? Art III or any specialized Level II Art course

Credit(s): 1
College Hour(s): NA
Tier III

HONORS ART, LEVEL II, ART II ABH — **1025 ABH**

Honors Art II develops and expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork using art media and tools in drawing, painting, printmaking, sculpture, ceramics, fiber art, jewelry, mixed media, photography, and digital art and media while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Art II provides advanced art instruction to understand sustained investigation, selected works, and written evidence. Art II is a two-semester sequence course with the first semester being a prerequisite to the second semester.

03500200

Instructional Material: *eBook: The Visual Experience, Davis Publications; ISBN: 978-1-61528-328-6 Textbook: 1201 - The Visual Experience, Davis Publications; ISBN: 978-0-87192-627-2*
Prerequisites: Honors Art Level I, Art Portfolio and teacher recommendation
What's Next? Honors Art Level III, Advanced Placement Art, or any specialized Level II Art course
Course taught by a locally certified gifted or AP trained teacher. This course serves as an Honors course.

Grade level: 10 – 12
Credit(s): 1
College Hour(s): NA
Tier II

DUAL CREDIT ART, LEVEL II, ART II AB — **1147 AB**
TCC Course: Design II (3-Dimensional) (ARTS 1312)

Dual Credit Art II develops and expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork using art media and tools in sculpture, ceramics, fiber art, jewelry, mixed media, while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Dual Credit Art II is a one-semester course.

03501210

ECHS Grade level: 9-12
Grade level: NA
Credit(s): 1
College Hour(s): 3
Tier I

Instructional Material: *NA*
FWISD & TCC Prerequisites: ARTS 1311
What's Next? NA
Course taught by an approved District or adjunct instructor.

ART, LEVEL III, ART III AB — **1033 AB**

Art III expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers an advanced level opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork. It emphasizes the processes and techniques in using art media and tools in drawing, painting, printmaking, sculpture, ceramics, fiber art, jewelry, mixed media, photography, and digital art and media while

03500300

developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Art III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *eBook: The Visual Experience, Davis Publications; ISBN: 978-1-61528-328-6* Prerequisites: Art Level II What's Next? Art level IV, Advanced Placement Art or any specialized Level II Art course	
HONORS ART, LEVEL III, ART III ABH	**1035 AB/H**
Honors Art III expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers an advanced level opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork. It emphasizes the processes and techniques in using art media and tools in drawing, painting, printmaking, sculpture, ceramics, fiber art, jewelry, mixed media, photography, and digital art and media. Students create a portfolio with rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Art III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03500300 Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *eBook: The Visual Experience, Davis Publications; ISBN: 978-1-61528-328-6* Prerequisites: Art Level II What's Next? Art level IV, Advanced Placement Art or any specialized Level II Art course *Course taught by a locally certified gifted teacher.*	
ART, LEVEL IV, ART IV AB	**1042 AB**
Art IV further expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers an advanced level opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork. It emphasizes the advanced processes and techniques in using art media and tools in drawing, painting, printmaking, sculpture, ceramics, fiber art, jewelry, mixed media, photography, and digital art and media while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Art IV is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03500400 Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *eBook: The Visual Experience, Davis Publications; ISBN: 978-1-61528-328-6* Prerequisites: Art Level III What's Next? Advanced Placement Art or any Level III specialized Art course	
HONORS ART, LEVEL IV, ART IV ABH	**1045 ABH**
Honors Art IV further expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers an advanced level opportunity to communicate thoughts, feelings, ideas, or impressions through original artwork. It emphasizes the advanced processes and techniques in using art media and tools in drawing, painting, printmaking, sculpture, ceramics, fiber art, jewelry, mixed media, photography, and digital art and media. Students create a portfolio with rigorous assignments and demonstrate grown in skill level. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Art IV is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03500400 Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *eBook: The Visual Experience, Davis Publications; ISBN: 978-1-61528-328-6* Prerequisites: Art Level III What's Next? Advanced Placement Art or any Level III specialized Art course *Course taught by a locally certified gifted teacher.*	
OnRAMPS ART IV, ARTS AND ENTERTAINMENT TECHNOLOGIES AB OR	**1073 AB**
This course presents a broad overview of digital media technologies, software, and applications along with the fundamental concepts of digital representations of images and signals. Students study an assortment of entertainment concepts and experiences, discover the underlying technology involved, and learn how this technology is delivered to the participant. Students also consider the cultural, philosophical, ethical, and practical aspects of entertainment technology. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and a high school credit from their local teacher.	03503220 Grade level: 11-12 Credit(s): 1 College Hour(s): 3 **Tier I**
Instructional Material: Selected and provided by the University of Texas at Austin Prerequisites: Art 1 (1010AB); or Art & Media Communications (1093AB/1095ABH); and basic computer literacy What's Next? Any Level IV specialized course or Advanced Placement Art course	
ART, LEVEL II, CERAMICS I AB	**1022 AB**
Ceramics I is an in-depth exploration of clay construction to produce functional and sculptural artwork. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original ceramic artwork in pinch, coil, and slab processes while developing a digital portfolio of their artwork.	03500900 Grade level: 9 – 12 Credit(s): 1

Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Ceramics I is a two-semester sequence course with the first semester being a prerequisite to the second semester.

College Hour(s): NA
Tier III

Instructional Material: *eBook: Experience Clay, Davis Publications; ISBN: 978-1-61528-326-2*
Prerequisites: Art I
What's Next? Ceramics II; AP Three-Dimensional Design Art Portfolio, any specialized Level II art course

HONORS ART, LEVEL II, CERAMICS I ABH — **1081 ABH**

03500900

Honors Ceramics I is an in-depth exploration of clay construction to produce functional and sculptural artwork. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original ceramic artwork in pinch, coil, and slab processes. Students create a digital portfolio with rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Ceramics I is a two-semester sequence course with the first semester being a prerequisite to the second semester.

Instructional Material: *eBook: Experience Clay, Davis Publications; ISBN: 978-1-61528-326-2 Textbook: 1204 – Experience Clay, Davis Publications; ISBN: 978-1-61528-030-8*
Prerequisites: Art I
What's Next? Ceramics II; AP Three-Dimensional Design Art Portfolio, any specialized Level II art course
Course taught by a locally certified gifted teacher.

Grade level: 9 – 12
Credit(s): 1
College Hour(s): NA
Tier II

DUAL CREDIT ART, LEVEL II, CERAMICS I AB — **1122 AB**
TCC Course: Ceramics I (ARTS 2346) — 03500900

Dual Credit Ceramics I is an in-depth exploration of clay construction to produce functional and sculptural artwork. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original ceramic artwork in pinch, coil, and slab processes. Students create a digital portfolio with rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Dual Credit Ceramics I is a one-semester sequence course.

Grade level: 9 – 12
ECHS Grade level: 9-12
Credit(s): 1
College Hour(s): 3
Tier I

Instructional Material: *NA*
FWISD Prerequisites: Art I
TCC Prerequisites: None
What's Next? NA *Course taught by an approved District or adjunct instructor.*

ART, LEVEL III, CERAMICS II AB — **1024 AB**

03501800

Ceramics II is an in-depth exploration of clay construction to produce functional and sculptural artwork. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original ceramic artwork in pinch, coil, and slab processes. Student explore specialized glazing techniques and glass applications all while developing a digital portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Ceramics II is a two-semester sequence course with the first semester being a prerequisite to the second semester.

Grade level: 10 – 12
Credit(s): 1
College Hour(s): NA
Tier III

Instructional Material: *eBook: Experience Clay, Davis Publications; ISBN: 978-1-61528-326-2*
Prerequisites: Ceramics I
What's Next? Ceramics III, AP Three-Dimensional Design Art Portfolio, any specialized Level II Art course

HONORS ART, LEVEL III, CERAMICS II ABH — **1083 ABH**

03501800

Honors Ceramics II is an in-depth exploration of clay construction to produce functional and sculptural artwork. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original ceramic artwork in pinch, coil, and slab processes. Student explore specialized glazing techniques and glass applications all while developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Ceramics II is a two-semester sequence course with the first semester being a prerequisite to the second semester.

Grade level: 10 – 12
Credit(s): 1
College Hour(s): NA
Tier II

Instructional Material: *eBook: Experience Clay, Davis Publications; ISBN: 978-1-61528-326-2*
Prerequisites: Ceramics I; Evaluation of student portfolio and teacher recommendation
What's Next? Ceramics III, AP Three-Dimensional Design Art Portfolio, any specialized Level II Art course
Course taught by a locally certified gifted teacher.

DUAL CREDIT ART, LEVEL III, CERAMICS II AB **TCC Course: Ceramics II (ARTS 2347)**	**1124 AB**
Dual Credit Ceramics II is an in-depth exploration of clay construction to produce functional and sculptural artwork. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original ceramic artwork in pinch, coil, and slab processes. Student explore specialized glazing techniques and glass applications all while developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Dual Credit Ceramics II is a one-semester course that is a continuation of ARTS 2346.	03501800 ECHS Grade level: 10-12 Grade level: 10 – 12 Credit(s): 1 College Hour(s): 3 **Tier I**
Instructional Material: *NA* FWISD Prerequisites: Ceramics I TCC Prerequisites: None What's Next? NA *Course taught by an approved District or adjunct instructor.*	
ART, LEVEL IV, CERAMICS III AB	**1026 AB**
Ceramics III is an in-depth exploration of clay construction to produce functional and sculptural artwork which represent the personal style of the student. Students further expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original ceramic artwork in pinch, coil, and slab processes. Student explore specialized glazing techniques and glass applications all while developing a digital portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Ceramics IV is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502700 Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *eBook: Experience Clay, Davis Publications; ISBN: 978-1-61528-326-2* Prerequisites: Ceramics II; Evaluation of student portfolio/teacher recommendation What's Next? AP Three-Dimensional Design Art Portfolio or any specialized Level II Art course	
HONORS ART, LEVEL IV, CERAMICS III ABH	**1085 ABH**
Honors Ceramics III is an in-depth exploration of clay construction to produce functional and sculptural artwork which represent the personal style of the student. Students further expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original ceramic artwork in pinch, coil, and slab processes. Student explore specialized glazing techniques and glass applications all while developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Ceramics IV is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502700 Grade level: 11 – 12
Instructional Material: *eBook: Experience Clay, Davis Publications; ISBN: 978-1-61528-326-2* Prerequisites: Ceramics II; Evaluation of student portfolio and teacher recommendation What's Next? AP Three-Dimensional Design Art Portfolio or any specialized Level II Art course *Course taught by a locally certified gifted teacher*	Credit(s): 1 College Hour(s): NA **Tier II**
ART, LEVEL II, DRAWING I AB	**1012 AB**
Drawing I is an in-depth exploration of the fundamentals of drawing. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original drawn artwork in a variety of media while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Drawing I is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03500500 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *NA* Prerequisites: Art I What's Next? Drawing II or any specialized Level II course	
HONORS ART, LEVEL II, DRAWING I ABH	**1053 ABH**
Honors Drawing I is an in-depth exploration of the fundamentals of drawing. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original drawn artwork in a variety of media while developing a portfolio of their artwork comprising of rigorous assignments Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Drawing I is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03500500

Instructional Material: *NA* Prerequisites: Art I; Evaluation of student portfolio and teacher recommendation What's Next? Drawing II or any specialized Level II course *Course taught by a locally certified gifted teacher*	Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT ART, LEVEL II, DRAWING I AB **TCC Course: Drawing I (ARTS 1316)**	**1112 AB**
Dual Credit Drawing I is an in-depth exploration of the fundamentals of drawing with emphasis on descriptive, expressive and conceptual approaches. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original drawn artwork in a variety of media and techniques while developing a portfolio of their artwork comprising of rigorous assignments Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Dual Credit Drawing I is a one-semester course.	03500500 ECHS Grade Level: 10-12 Grade level: NA Credit(s): 1 College Hour(s): 3 **Tier I**
Instructional Material: *NA* FWISD Prerequisites: Art I TCC Prerequisites: None What's Next? NA *Course taught by an approved District or adjunct instructor.*	
ART, LEVEL III, DRAWING II AB	**1037 AB**
Drawing II provides advanced training in the specialized area of drawing. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original drawn artwork in a variety of media including ink, pencil, conté, charcoal, colored pencils, and other media while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Drawing II is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03501300 Grade level: 10- 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *NA* Prerequisites: Art I and Drawing II What's Next? Drawing III or any specialized Level II Art course, AP Drawing, or AP Design	**Tier III**
HONORS ART, LEVEL III, DRAWING II ABH	**1055 ABH**
Honors Drawing II provides advanced training in the specialized area of drawing. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original drawn artwork in a variety of media including ink, pencil, conté, charcoal, colored pencils, and other media while developing a portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Drawing II is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03501300
Instructional Material: *NA* Prerequisites: Art I, Drawing II; Evaluation of student portfolio/teacher recommendation What's Next? Drawing III or any specialized Level II Art course, AP Drawing, or AP Design *Course taught by a locally certified gifted teacher*	Grade level: 10 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT ART, LEVEL III, DRAWING II AB **TCC Course: Drawing II (ARTS 1317)**	**1137 AB** 03501300
Dual Credit Drawing II provides advanced training in the specialized area of drawing emphasis on descriptive, expressive and conceptual approaches. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original drawn artwork in a variety of media including ink, pencil, conté, charcoal, colored pencils, and other media while developing a portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Dual Credit Drawing II is a two-semester sequence course with the first semester being a prerequisite to the second semester.	ECHS Grade level: 10 – 12 Grade level: 10 – 12 Credit(s): 1 College Hour(s): 3 **Tier I**
Instructional Material: *NA* FWISD Prerequisites: Art I, Drawing II What's Next? NA *Course taught by an approved District or adjunct instructor.*	
ART, LEVEL IV, DRAWING III AB	**1076 AB**
Drawing III provides advanced training in the specialized area of drawing to introduce students to individual problems and styles in drawing. Students further expands their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original drawn artwork in a variety of media including ink, pencil, conté, charcoal, colored pencils, and other media while developing a portfolio of their artwork. Students develop an	03502300 Grade level: 11 – 12

understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Drawing III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *NA* Prerequisites: Art, Level III, Drawing II What's Next? Any specialized Level II Art course, AP Drawing, or AP Design	
HONORS ART, LEVEL IV, DRAWING III ABH	**1078 ABH**
Honors Drawing III provides advanced training in the specialized area of drawing to introduce students to individual problems and styles in drawing. Students further expands their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original drawn artwork in a variety of media including ink, pencil, conté, charcoal, colored pencils, and other media while developing a portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Drawing III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502300
Instructional Material: *NA* Prerequisites: Art, Level II. Drawing II; evaluation of student portfolio/ teacher recommendation. What's Next? Any specialized Level II Art course, AP Drawing, or AP Design *Course taught by a locally certified gifted teacher*	Grade level: 11 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
ART, LEVEL II, JEWELRY I AB	**1032 AB**
Jewelry I affords students the opportunity to create three-dimensional pieces of jewelry using specific techniques presented in the course. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original jewelry artwork developing a digital portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Jewelry I is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03501100 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *NA* Prerequisites: Art I What's Next? Jewelry II or any specialized Level II Art course	
HONORS ART, LEVEL II, JEWELRY I ABH	**1087 ABH**
Honors Jewelry I affords students the opportunity to create three-dimensional pieces of jewelry using specific techniques presented in the course. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original jewelry artwork developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Jewelry I is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03501100
Instructional Material: *NA* Prerequisites: Art I; evaluation of student portfolio/ teacher recommendation. What's Next? Jewelry II or any specialized Level II Art course *Course taught by a locally certified gifted teacher*	Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT ART, LEVEL II, JEWELRY I AB **TCC Course: Art Metals I (ARTS 2341)**	**1132 AB**
Dual Credit Jewelry I affords students the opportunity to create three-dimensional pieces of jewelry using metal construction. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original jewelry artwork developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Dual Credit Jewelry I is a one-semester sequence course.	03501100
Instructional Material: *NA* FWISD Prerequisites: Art I TCC Recommended Prerequisites: ARTS 1312 What's Next? NA *Course taught by an approved District or adjunct instructor.*	Grade level: NA Credit(s): 1 ECHS Grade level: 10-12 College Hour(s): 3 **Tier I**

ART, LEVEL III, JEWELRY II AB	**1034 AB**
Jewelry II includes casting, fabrication, finishing, stone setting, limited lapidary, or a combination of these to create jewelry. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original jewelry artwork developing a digital portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Jewelry II is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502000 Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *NA* Prerequisites: Jewelry I What's Next? Jewelry III or any specialized Level II Art course	
HONORS ART, LEVEL III, JEWELRY II ABH	**1089 ABH**
Honors Jewelry II includes casting, fabrication, finishing, stone setting, limited lapidary, or a combination of these to create jewelry. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original jewelry artwork developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Jewelry II is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502000 Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *NA* Prerequisites: Jewelry I; Evaluation of student portfolio/teacher recommendation What's Next? Jewelry III or any specialized Level II Art course *Course taught by a locally certified gifted teacher.*	
ART, LEVEL IV, JEWELRY III AB	**1036 AB**
Jewelry III includes casting, fabrication, finishing, stone setting, limited lapidary, or a combination of these to create jewelry in the individual style of the students. Students further expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original jewelry artwork developing a digital portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Jewelry III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502900 Grade level: 11 - 12
Instructional Material: *NA* Prerequisites: Jewelry II What's Next? AP Three-Dimensional Design Art Portfolio or any specialized Level II Art course	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ART, LEVEL IV, JEWELRY III ABH	**1091 ABH**
Honors Jewelry III includes casting, fabrication, finishing, stone setting, limited lapidary, or a combination of these to create jewelry in the individual style of the students. Students further expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original jewelry artwork developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Jewelry III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502900
Instructional Material: *NA* Prerequisites: Jewelry II; Evaluation of student portfolio/teacher recommendation What's Next? AP Three-Dimensional Design Art Portfolio or any specialized Level II Art course *Course taught by a locally certified gifted teacher*	Grade level: 11 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
ART, LEVEL II, PAINTING I AB	**1016 AB**
Painting I is an in-depth exploration of the fundamentals of painting. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original painted artwork in a variety of media while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Painting I is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03500600 Grade level: 9 - 12
Instructional Material: *eBook Experience Painting, Davis Publications; ISBN: 978-1-61528-330-9* Prerequisites: Art I What's Next? Painting II, Art II; any specialized Level II Art course, or AP Two-Dimensional Design Art Portfolio	Credit(s): 1 College Hour(s): NA **Tier III**

HONORS ART, LEVEL II, PAINTING I ABH	**1057 ABH**
Honors Painting I is an in-depth exploration of the fundamentals of painting. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original painted artwork in a variety of media while developing a portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honor Painting I is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03500600
Instructional Material: *eBook Experience Painting, Davis Publications; ISBN: 978-1-61528-330-9* Prerequisites: Art I; evaluation of student portfolio/ teacher recommendation. What's Next? Painting II, Art II; any specialized Level II Art course, or AP Two-Dimensional Design Art Portfolio *Course taught by a locally certified gifted teacher*	Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT ART, LEVEL II, PAINTING I AB **TCC Course: Painting I (ARTS 2316)**	**1116 AB** 03500600
Dual Credit Painting I is an in-depth exploration of the fundamentals of painting with an emphasis on color and composition. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original painted artwork in a variety of media while developing a portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Dual Credit Painting I is a one-semester sequence course.	Grade level: NA ECHS Grade level: 10-12 Credit(s): 1 College Hour(s): 3 **Tier I**
Instructional Material: *NA* FWISD Prerequisites: Art I TCC Recommended Prerequisites: ARTS 1311 or ARTS 1316 What's Next? NA *Course taught by an approved District or adjunct instructor.*	
ART, LEVEL III, PAINTING II AB	**1029 AB**
Painting II is an in-depth exploration of the fundamentals of painting. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original painted artwork in a variety of media including, acrylic, ink, and watercolor while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Painting II is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03501400 Grade level: 10 – 12
Instructional Material: *eBook Experience Painting, Davis Publications; ISBN: 978-1-61528-330-9* Prerequisites: Art I and Painting I What's Next? Painting III, any specialized Level II Art course, AP Two-Dimensional Design Art Portfolio, or AP Studio Drawing Portfolio	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ART, LEVEL III, PAINTING II AB	**1059 ABH**
Honors Painting II is an in-depth exploration of the fundamentals of painting. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original painted artwork in a variety of media including, acrylic, ink, and watercolor while developing a portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Painting II is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03501400 Grade level: 10 – 12 Credit(s): 1
Instructional Material: *eBook Experience Painting, Davis Publications; ISBN: 978-1-61528-330-9* Prerequisites: Art I and Painting I, Evaluation of student portfolio/teacher recommendation What's Next? Painting III, any specialized Level II Art course, AP Two-Dimensional Design Art Portfolio, or AP Studio Drawing Portfolio *Course taught by a locally certified gifted teacher*	College Hour(s): NA **Tier II**
DUAL CREDIT ART, LEVEL III, PAINTING II AB **TCC Course: Painting II (ARTS 2317)**	**1129 AB** 03501400
Dual Credit Painting II is an in-depth exploration of the fundamentals of painting with an emphasis on individual expression. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original painted artwork in a variety of media including, acrylic, ink, and watercolor while developing a portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Dual Credit Painting II is a one-semester course and a continuation of ARTS 2316.	ECHS Grade level: 10-12

Instructional Material: *NA* FWISD Prerequisites: Art II, Painting I, TCC Recommended Prerequisites: ARTS 2316 What's Next? NA *Course taught by an approved District or adjunct instructor.*	Grade level: 10 – 12 Credit(s): 1 College Hour(s): 3 **Tier I**
ART, LEVEL IV, PAINTING III AB	**1080 AB**
Painting III is an in-depth exploration of the fundamentals of painting focusing on individual problems and personal style. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original painted artwork in a variety of media including, acrylic, ink, and watercolor while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Painting III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502400 Grade level: 11 – 12
Instructional Material: *eBook Experience Painting, Davis Publications; ISBN: 978-1-61528-330-9* Prerequisites: Art III, Painting II, Evaluation of student's portfolio/teacher recommendation What's Next? Any specialized Level II Art course, AP Two-Dimensional Design Art Portfolio, or AP Studio Drawing Portfolio	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ART, LEVEL IV, PAINTING III ABH	**1082 ABH**
Honors Painting III is an in-depth exploration of the fundamentals of painting focusing on individual problems and personal style. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original painted artwork in a variety of media including, acrylic, ink, and watercolor while developing a portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Painting III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502400
Instructional Material: *eBook Experience Painting, Davis Publications; ISBN: 978-1-61528-330-9* Prerequisites: Art III, Painting II, Evaluation of student's portfolio/teacher recommendation What's Next? Any specialized Level II Art course, AP Two-Dimensional Design Art Portfolio, or AP Studio Drawing Portfolio *Course taught by a locally certified gifted teacher*	Grade level: 11 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
ART, LEVEL II, PHOTOGRAPHY I AB	**1018 AB**
Photography I is an in-depth exploration of the fundamentals of photography. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original photographs in a using a variety of techniques while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Students will explore related career areas such as advertising, layout and design, illustration, computer graphics and commercial photography. Photography I is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03501200 Grade level: 9 - 12
Instructional Material: *NA* Prerequisites: Art I What's Next? Photography II, any specialized Level II Art course, or any AP Art courses	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ART, LEVEL II, PHOTOGRAPHY I ABH	**1061 ABH**
Honors Photography I is an in-depth exploration of the fundamentals of photography. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original photographs in a using a variety of techniques while developing a portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Students will explore related career areas such as advertising, layout and design, illustration, computer graphics and commercial photography. Honors Photography I is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03501200
Instructional Material: *NA* Prerequisites: Art I What's Next? Photography II, any specialized Level II Art course, or any AP Art courses *Course taught by a locally certified gifted teacher*	Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT ART, LEVEL II, PHOTOGRAPHY I AB **TCC Course: Photography I (Fine Arts Emphasis) (ARTS 2356)**	**1118 AB**
Introduction to the basics of photography. Includes camera operation, techniques, knowledge of chemistry, and presentation skills. Emphasis on design, history, and contemporary trends as a means of developing an understanding of photographic aesthetics. Utilizes black and white film and traditional chemical darkrooms as well	03501200 ECHS Grade level: 10-12

as digital photographic laboratories. Dual Credit Photography II is a one semester course sequence course.	Grade level: NA
Instructional Material: *NA* FWISD Prerequisites: None What's Next? Dual Credit Photography II (Fine Arts Emphasis) (ARTS 2357) *Course taught by an approved District or adjunct instructor.*	Credit(s): 1 College Hour(s): 3 **Tier I**
ART, LEVEL III, PHOTOGRAPHY II AB	**1030 AB**
Photography II is an in-depth exploration of the advanced photography and photography application. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original photographs in a using a variety of camera techniques, creative photography techniques, using both color and black and white, while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Students will explore related career areas such as advertising, layout and design, illustration, computer graphics and commercial photography. Photography II is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502200
Instructional Material: *NA* Prerequisites: Art I and Photography I What's Next? Photography III, any specialized Level II Art course, or AP Two-Dimensional Design Art Portfolio *Course taught by a locally certified gifted teacher*	Grade level: 10 - 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ART, LEVEL III, PHOTOGRAPHY II ABH	**1063 ABH**
Honors Photography II is an in-depth exploration of the advanced photography and photography application. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original photographs in a using a variety of camera techniques, creative photography techniques, using both color and black and white, while developing a portfolio of their artwork comprising of rigorous assignment. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Students will explore related career areas such as advertising, layout and design, illustration, computer graphics and commercial photography. Honors Photography II is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502200
Instructional Material: *NA* Prerequisites: Art I and Photography I; Evaluation of student's portfolio/teacher's recommendation What's Next? Photography III, any specialized Level II Art course, or AP Two-Dimensional Design Art Portfolio *Course taught by a locally certified gifted teacher.*	Grade level: 10 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT ART, LEVEL III, PHOTOGRAPHY II AB **TCC Course: Photography II (Fine Arts Emphasis) (ARTS 2357)**	**1130 AB** 03502200
Dual Credit Photography II is an in-depth exploration of the advanced photography and photography application. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original photographs in a using a variety of camera techniques, creative photography techniques, using both color and black and white, while developing a portfolio of their artwork comprising of rigorous assignment. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Students will explore related career areas such as advertising, layout and design, illustration, computer graphics and commercial photography. Dual Credit Photography II is a one-semester sequence course and a continuation of ARTS-2356.	ECHS Grade level: 10-12 Grade level: 10 – 12
Instructional Material: *NA* FWISD Prerequisites: Art I and Photography I TCC Required Prerequisites: ARTS 2356 What's Next? NA *Course taught by an approved District or adjunct instructor.*	Credit(s): 1 College Hour(s): 3 **Tier I**
ART, LEVEL IV, PHOTOGRAPHY III AB	**1084 AB**
Photography III is an in-depth exploration of the advanced photography, photography application, and personal style in photography. Students further expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original photographs in a using a variety of camera techniques, creative photography techniques, using both color and black and white, while developing a portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Students will explore related career areas such as advertising, layout and design, illustration, computer graphics and commercial photography. Photography III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03503100 Grade level: 11 - 12

Instructional Material: *NA* Prerequisites: Photography II What's Next? Any specialized Level II Art course or AP Two-Dimensional Design Art Portfolio	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ART, LEVEL IV, PHOTOGRAPHY III ABH	**1086 ABH**
Honors Photography III is an in-depth exploration of the advanced photography, photography application, and personal style in photography. Students further expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original photographs in a using a variety of camera techniques, creative photography techniques, using both color and black and white, while developing a portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Students will explore related career areas such as advertising, layout and design, illustration, computer graphics and commercial photography. Honors Photography III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03503100
Instructional Material: *NA* Prerequisites: Photography II; portfolio review What's Next? Any specialized Level II Art course or AP Two-Dimensional Design Art Portfolio *Course taught by a locally certified gifted teacher*	Grade level: 11 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
ART, LEVEL II, SCULPTURE I AB	**1028 AB**
Sculpture I is an in-depth exploration of three-dimensional work. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original sculpted artwork in a variety of media including wood, paper, recycled materials, stone, and clay while developing a digital portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Sculpture I is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03501000 Grade level: 9 - 12
Instructional Material: *NA* Prerequisites: Art I What's Next? Sculpture II, any specialized Level II Art course, or AP Three-Dimensional Design (Sculpture)	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ART, LEVEL II, SCULPTURE I ABH	**1069 ABH**
Honors Sculpture I is an in-depth exploration of three-dimensional work. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original sculpted artwork in a variety of media including wood, paper, recycled materials, stone, and clay while developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Sculpture I is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03501000
Instructional Material: *NA* Prerequisites: Art I What's Next? Sculpture II, any specialized Level II Art course, or AP Three-Dimensional Design (Sculpture) *Course taught by a locally certified gifted teacher*	Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT ART, LEVEL II, SCULPTURE I AB **TCC Course: Sculpture I (ARTS 2326)**	**1128 AB** 03501000
Dual Credit Honors Sculpture I is an in-depth exploration of three-dimensional work. Students develop and expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original sculpted artwork in a variety of media including wood, paper, recycled materials, stone, and clay while developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Sculpture I is a one-semester sequence course.	ECHS Grade level: 10-12 Grade level: 9 - 12
Instructional Material: *NA* FWISD Prerequisites: Art I TCC Recommended Prerequisites: ARTS 1312 What's Next? NA *Course taught by an approved District or adjunct instructor.*	Credit(s): 1 College Hour(s): 3 **Tier I**
ART, LEVEL III, SCULPTURE II AB	**1092 AB**
Sculpture II is an in-depth exploration of three-dimensional work. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original sculpted artwork in a variety of media including wood, paper, recycled materials, stone, and clay while developing a digital portfolio of their artwork.	03501900

Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Sculpture II is a two-semester sequence course with the first semester being a prerequisite to the second semester.	Grade level: 10 - 12
Instructional Material: *NA* Prerequisites: Sculpture I What's Next? Sculpture III, any specialized Level II Art course, or AP Three-Dimensional Design (Sculpture)	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ART, LEVEL III, SCULPTURE II ABH	**1071 ABH**
Honors Sculpture II is an in-depth exploration of three-dimensional work. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original sculpted artwork in a variety of media including wood, paper, recycled materials, stone, and clay while developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Sculpture II is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03501900
Instructional Material: *NA* Prerequisites: Sculpture I; evaluation of student portfolio/teacher recommendation What's Next? Sculpture III, any specialized Level II Art course, or AP Three-Dimensional Design (Sculpture) *Course taught by a locally certified gifted teacher*	Grade level: 10 - 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT ART, LEVEL III, SCULPTURE II AB **TCC Course: Sculpture II (ARTS 2327)**	**1192 AB**
Dual Credit Sculpture II is an in-depth exploration of three-dimensional work with an emphasis on individual. Students expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original sculpted artwork in a variety of media including wood, paper, recycled materials, stone, and clay while developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Dual Credit Sculpture II is a one-semester course and a continuation of ARTS 2326.	03501900 ECHS Grade level: 10-12 Grade level: 10 – 12
Instructional Material: *NA* FWISD Prerequisites: Sculpture I TCC Recommended Prerequisites: ARTS 2326 What's Next? NA *Course taught by an approved District or adjunct instructor.*	Credit(s): 1 College Hour(s): 3 **Tier I**
ART, LEVEL IV, SCULPTURE III AB	**1099 AB**
Sculpture III is an in-depth exploration of three-dimensional work. Students further expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original sculpted artwork in a variety of media including wood, paper, recycled materials, stone, and clay while developing a digital portfolio of their artwork. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Sculpture III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502800 Grade level: 11 - 12
Instructional Material: *NA* Prerequisites: Sculpture II; What's Next? Any specialized Level II Art course or AP Three-Dimensional Design (Sculpture)	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS ART, LEVEL IV, SCULPTURE III ABH	**1100 ABH**
Honors Sculpture III is an in-depth exploration of three-dimensional work. Students further expand their visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. It offers the opportunity to communicate thoughts, feelings, ideas, or impressions through original sculpted artwork in a variety of media including wood, paper, recycled materials, stone, and clay while developing a digital portfolio of their artwork comprising of rigorous assignments. Students develop an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures, as well as the ability to respond to and analyze the artworks of self and others. Honors Sculpture III is a two-semester sequence course with the first semester being a prerequisite to the second semester.	03502800
Instructional Material: *NA* Prerequisites: Sculpture II; evaluation of student portfolio/teacher recommendation What's Next? Any specialized Level II Art course or AP Three-Dimensional Design (Sculpture) *Course taught by a locally certified gifted teacher*	Grade level: 11 - 12 Credit(s): 1 College Hour(s): NA **Tier II**

AP STUDIO ART: DRAWING PORTFOLIO AB III or IV	1041 AB
AP Drawing is an introductory college-level two-dimensional design course. Students refine and apply skills and ideas they develop throughout the course to produce two-dimensional art and design. The AP Art and Design course framework is composed of course skills, big ideas, essential questions and enduring understandings, learning objectives, and essential knowledge. AP Art and Design skill categories delineate overarching understandings central to the study and practice of art and design. Each of the three skill categories consists of skills that encompass foundational to advanced learning over the span of the course. Students need to develop, practice, and apply these skills in a variety of contexts. The AP 2-D Art and Design course framework is made up of three big ideas; investigate materials, processes, and ideas, Make art and design, and present art and design. Students should practice the skills that will help them learn to think and act like artists. Students will develop a portfolio that will be submitted for critical analysis in drawing for the Advanced Placement exam in Studio Art.	A3500300
Instructional Material: NA Prerequisites: Art I; any specialized area of Art II; and teacher recommendation What's Next? N/A *Course taught by a locally certified gifted or AP trained teacher.*	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
AP STUDIO ART: TWO-DIMENSIONAL DESIGN PORTFOLIO AB III or IV	**1043 AB**
AP 2-D Art and Design is an introductory college-level two-dimensional design course. Students refine and apply skills and ideas they develop throughout the course to produce two-dimensional art and design. The AP Art and Design course framework is composed of course skills, big ideas, essential questions and enduring understandings, learning objectives, and essential knowledge. AP Art and Design skill categories delineate overarching understandings central to the study and practice of art and design. Each of the three skill categories consists of skills that encompass foundational to advanced learning over the span of the course. Students need to develop, practice, and apply these skills in a variety of contexts. The AP 2-D Art and Design course framework is made up of three big ideas; investigate materials, processes, and ideas, Make art and design, and present art and design. Students should practice the skills that will help them learn to think and act like artists. Students will develop a portfolio that will be submitted for critical analysis in 2-D Design for the Advanced Placement exam in Studio Art.	A3500400 Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
Instructional Material: NA Prerequisites: Art I; any specialized area of Art II; teacher recommendation What's Next? N/A *Course taught by a locally certified gifted or AP trained teacher.*	
AP STUDIO ART: THREE-DIMENSIONAL DESIGN PORTFOLIO AB	**1020 AB**
AP 3-D Art and Design is an introductory college-level three-dimensional design course. Students refine and apply skills and ideas they develop throughout the course to produce three-dimensional art and design. The AP Art and Design course framework is composed of course skills, big ideas, essential questions and enduring understandings, learning objectives, and essential knowledge. AP Art and Design skill categories delineate overarching understandings central to the study and practice of art and design. Each of the three skill categories consists of skills that encompass foundational to advanced learning over the span of the course. Students need to develop, practice, and apply these skills in a variety of contexts. The AP 3-D Art and Design course framework is made up of three big ideas; investigate materials, processes, and ideas, Make art and design, and present art and design. Students will develop a portfolio that will be submitted for critical analysis in 3-D Design for the Advanced Placement exam in Studio Art.	A3500500 Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
Instructional Material: NA Prerequisites: Art I; any specialized area of Art II and/or Art III; teacher recommendation What's Next? N/A *Course taught by a locally certified gifted or AP trained teacher.*	
TWO AND THREE-DIMENSIONAL ART LEVEL II, DESIGN I AB	**1050 AB**
This Art course provides opportunities to develop skills, techniques, and processes related to both two-dimensional and three-dimensional processes and projects while using three or more of the following Art forms, i.e., Drawing, Painting, Jewelry, Photography, Glasswork, Sculpture, and more. This will be offered as a level two, Art II class and will allow second year Art students to experience a rotation of media and Art forms. The class will combine in-depth foundation studies using the Elements of Art and Principles of Design with skills and techniques as these concepts are applied to the students' individual Art work. Students will develop a portfolio, as well as use correct oral and written communication as they relate to the visual arts.	03501210
Instructional Material: Textbook should be available in 2016-2017, *Communicating Through Graphic Design*, Davis Publications; ISBN: 9780871929884 Prerequisites: Art I What's Next? Any level III Art course or Art Advanced Placement course *Course taught by a locally certified gifted or AP trained teacher. Offered only at Terrell VPA HS.*	Grade level: 9 – 10 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS TWO AND THREE-DIMENSIONAL ART LEVEL II, DESIGN I AB	**1052 AB**
This Art course provides opportunities to develop skills, techniques, and processes related to both two-dimensional and three-dimensional processes and projects while using three or more of the following Art forms, i.e., Drawing, Painting, Jewelry, Photography, Glasswork, Sculpture, and more. This will be offered as a level two, Art II class and will allow second year Art students to experience a rotation of media and Art forms. The class will combine in-depth foundation studies using the Elements of Art and Principles of Design with skills and techniques as these concepts are applied to the students' individual Art work. Students will develop a portfolio, as well as use correct oral and written communication as they relate to the visual arts.	03501210 Grade level: 9 – 10 Credit(s): 1

Instructional Material: *Communicating Through Graphic Design,* Davis Publications; ISBN: 9781615283255 Prerequisites: Art I What's Next? Any level III Art course or Art Advanced Placement course. *Course taught by a locally certified gifted or AP trained teacher. Offered only at Terrell VPA HS.*	College Hour(s): NA **Tier II**
AP ART HISTORY AB	**1048 AB**
AP Art History is an introductory college-level art history course. Students cultivate their understanding of art history through analyzing works of art and placing them in historical context as they explore concepts like culture and cultural interactions, theories and interpretations of art, the impact of materials, processes, and techniques on art and art making, and understanding purpose and audience in art historical analysis. Students must know, be able to do, and understand, with a focus on the big ideas that encompass core principles, theories, and processes of the discipline. The framework also encourages instruction that prepares students to understand representative works of art from diverse cultures, including placing these works in context and illuminating relationships among them. Students should practice the skills that will help them learn to think and act like art historians. Many colleges and universities offer advanced placement and/or credit to students who perform successfully on the AP Art History Exam.	A3500100 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
Instructional Material: *1209 – Gardners' Art Through the Ages: A Global History, Kleiner, 15th Edition, plus eBook access card; ISBN: 9781285754994* Prerequisites: Aptitude for art history and motivation is demonstrated with a teacher recommendation What's Next? N/A *Course taught by a locally certified gifted or AP trained teacher.*	
FINE ARTS, LEVEL IV, VPA CAPSTONE AB	**VPA1000 AB**
The aim of this course is to provide opportunity for students to explore college preparation and professional applications of their VPA craft. Advanced credit with college and career readiness focused assignments and special projects will be approved and monitored by the instructor. Students will document their four years of VPA work through the completion of their portfolio in the first semester. Students will receive opportunities to job shadow and/or participate in unpaid practicums, networking, preparation of interview and audition requirements, and be able to creatively advocate their art to peers and members of the arts community. Students will investigate careers in the arts, develop problem solving skills and apply their art to a service learning action project. Students will actively prepare their capstone project to be presented in the spring semester (recital, gallery exhibit, direction of play, or project).	84500XXX Grade level: 12 Credit(s): Local Credit College Hour(s): NA
Instructional Material: N/A Prerequisites: Level I-III of a Fine Arts Content What's Next? N/A *This is for local credit only and only available at I.M. Terrell Academy for STEM & VPA.*	

CHOIR

Concert Choir	1422, 1424, 1426, 1428
A Cappella Choir	1430, 1432, 1434, 1436
Show Choir	1442, 1444, 1446, 1448
Treble Choir	1451, 1453, 1455, 1457
Tenor/Bass Choir	1459, 1461, 1463, 1465

Students must complete both A and B to receive state graduation credit for fine arts.
Honors courses are also available.
ALL courses require a teacher recommendation and audition.

MUSIC I CHOIR AB (CONCERT) **1422 AB -** 03150900
MUSIC II CHOIR AB (CONCERT) **1424 AB -** 03151000
MUSIC III CHOIR AB (CONCERT) **1426 AB -** 03151100
MUSIC IV CHOIR AB (CONCERT) **1428 AB -** 03151200

Provides students with basic musical instruction in various musical styles and genres, as well as vocal pedagogy and music theory. In addition, students are encouraged to participate in TMEA All State auditions and Solo and Ensemble contests. Participation at all choir performances are required. Students are encouraged to attend outside concerts/performances to develop critical listening skills.

Grade level: 9 – 12
Credit(s): 1
College Hour(s): NA

Instructional Material: *Contact Content Director*
Prerequisites: Placement based by audition only; taken in sequence

Tier III

MUSIC I CHOIR AB (CONCERT), HONORS **1423 ABH -** 03150900
MUSIC II CHOIR AB (CONCERT), HONORS **1425 ABH -** 03151000
MUSIC III CHOIR AB (CONCERT), HONORS **1427 ABH -** 03151100
MUSIC IV CHOIR AB (CONCERT), HONORS **1429 ABH -** 03151200

Provides students with basic music instruction in various musical styles and genres, as well as vocal pedagogy and music theory. In addition, students are required to participate in TMEA All State auditions and Solo and Ensemble contests. Participation at all choir performances and the UIL Concert & Sight-Reading contests are required. Honors students will attend outside concerts/performances and write critiques using TMAA rubrics.

Grade level: 9 – 12
Credit(s): 1
College Hour(s): NA

Instructional Material: *Contact Content Director*
Prerequisites: Placement based by audition only; taken in sequence
What's Next? N/A

Tier II

MUSIC I CHOIR AB (A CAPPELLA) **1430 AB -** 03150900
MUSIC II CHOIR AB (A CAPPELLA) **1432 AB -** 03151000
MUSIC III CHOIR AB (A CAPPELLA) **1434 AB -** 03151100
MUSIC IV CHOIR AB (A CAPPELLA) **1436 AB -** 03151200

Provides choristers with advanced training in the mastery of vocal pedagogy, rigorous sight-reading and ear training, and immersion in all genres of choral music. In addition, students must participate in TMEA All State auditions, UIL Concert & Sight Reading, and UIL Solo and Ensemble auditions. Attendance at all performances is required.

Grade level: 9 – 12
Credit(s): 1
College Hour(s): NA

Instructional Material: *Contact Content Director*
Prerequisites: Placement based by audition only; taken in sequence
What's Next? N/A

Tier III

MUSIC I CHOIR AB (A CAPPELLA), HONORS **1438 AB -** 03150900
MUSIC II CHOIR AB (A CAPPELLA), HONORS **1440 AB -** 03151000
MUSIC III CHOIR AB (A CAPPELLA), HONORS **1439 AB -** 03151100
MUSIC IV CHOIR AB (A CAPPELLA), HONORS **1441 AB -** 03151200

Provides choristers with advanced training in the mastery of vocal pedagogy, rigorous sight-reading and ear training, and immersion in all genres of choral music. In addition, students must participate in TMEA All State auditions, UIL Concert & Sight Reading, UIL Solo and Ensemble auditions, attend concerts and write Concert/ performance critiques, and write papers on assigned composers, musical styles and periods. Attendance at all performances is required.

Grade level: 9 – 12
Credit(s): 1
College Hour(s): NA

Tier II

Instructional Material: *Contact Content Director*
Prerequisites: Placement based by audition only; successful performance on sight-reading skills tests; concurrent membership in the most advanced chorus in the school music department taken in sequence.
What's Next? N/A

MUSIC I VOCAL ENSEMBLE AB (SHOW CHOIR) **MUSIC II VOCAL ENSEMBLE AB (SHOW CHOIR)** **MUSIC III VOCAL ENSEMBLE AB (SHOW CHOIR)** **MUSIC IV VOCAL ENSEMBLE AB (SHOW CHOIR)**	**1442 AB -** 03152100 **1444 AB -** 03152200 **1446 AB -** 03152300 **1448 AB -** 03152400
Introduces students to different musical genres and performance styles that are not typically taught in a classical choral setting. This musical style can include choreography and introduces vocal techniques necessary for understanding and appreciating fine musical performances through various styles of literature, such as pop, rock, contemporary a cappella and jazz. Attendance at all performances and rehearsals is required. *The student can earn PE credit for Music II, Show Choir IIAB as a TEKS-based course that meets the requirement of 100 minutes of moderate to vigorous physical activity per week if it is not being used to satisfy another graduation requirement. The teacher does not have to be certified in PE. See Health & Physical Education section for course #.*	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Auditioned by instructor; taken in sequence What's Next? N/A	
MUSIC I VOCAL ENSEMBLE AB (SHOW CHOIR), HONORS **MUSIC II VOCAL ENSEMBLE AB (SHOW CHOIR), HONORS** **MUSIC III VOCAL ENSEMBLE AB (SHOW CHOIR), HONORS** **MUSIC IV VOCAL ENSEMBLE AB (SHOW CHOIR), HONORS**	**1415 AB -** 03152100 **1417 AB -** 03152200 **1419 AB -** 03152300 **1421 AB -** 03152400
Continues the rigorous immersion for students to experience different musical genres and performance styles that are not typically taught in a classical choral setting. This musical style can include choreography and introduces vocal techniques necessary for understanding and appreciating fine musical performances through various styles of literature, such as pop, rock, contemporary a cappella and jazz. Attendance at all performances and rehearsals is required. Students will create audition recordings and prepare audition materials for university and/or professional auditions.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact Content Director* Prerequisites: Auditioned by instructor; taken in sequence What's Next? N/A	
MUSIC I VOCAL ENSEMBLE AB (TREBLE CHOIR) **MUSIC II VOCAL ENSEMBLE AB (TREBLE CHOIR)** **MUSIC III VOCAL ENSEMBLE AB (TREBLE CHOIR)** **MUSIC IV VOCAL ENSEMBLE AB (TREBLE CHOIR)**	**1451 AB -** 03152100 **1453 AB -** 03152200 **1455 AB -** 03152300 **1457 AB -** 03152400
Offers instruction for those students who wish to improve their vocal skills and techniques necessary for the performance of music for treble voices (same as other ensembles). In addition, students are encouraged to participate in TMEA All State auditions, UIL Concert & Sight Reading, and UIL Solo and Ensemble auditions. Attendance at all performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Contact Content Director* Prerequisites: Placement based by audition only; taken in sequence What's Next? N/A	**Tier III**
MUSIC I VOCAL ENSEMBLE AB (TREBLE CHOIR), HONORS **MUSIC II VOCAL ENSEMBLE AB (TREBLE CHOIR), HONORS** **MUSIC III VOCAL ENSEMBLE AB (TREBLE CHOIR), HONORS** **MUSIC IV VOCAL ENSEMBLE AB (TREBLE CHOIR), HONORS**	**1450 AB -** 03152100 **1452 AB -** 03152200 **1454 AB -** 03152300 **1456 AB -** 03152400
Provides students advanced musical instruction in various musical styles and genres of treble choral music. Incorporates various choral music techniques in order to better understand and appreciate culturally diverse styles of treble music literature. In addition, students are strongly encouraged to participate in TMEA All State auditions, UIL Concert & Sight Reading, UIL Solo and Ensemble auditions, attend outside concerts and write concert/performance critiques; write papers on assigned composers, musical styles and periods. Attendance at all performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact Content Director* Prerequisites: Placement based by audition only; taken in sequence What's Next? N/A	
MUSIC I VOCAL ENSEMBLE AB (TENOR/BASS CHOIR) **MUSIC II VOCAL ENSEMBLE AB (TENOR/BASS CHOIR)** **MUSIC III VOCAL ENSEMBLE AB (TENOR/BASS CHOIR)** **MUSIC IV VOCAL ENSEMBLE AB (TENOR/BASS CHOIR)**	**1459 AB -** 03152100 **1461 AB -** 03152200 **1463 AB -** 03152300 **1465 AB -** 03152400
Offers instruction for those students who wish to improve their vocal skills and techniques necessary for the performance of music for tenor/bass voices (same as other ensembles). In addition, students are encouraged to participate in TMEA All State auditions, UIL Concert & Sight Reading, and UIL Solo and Ensemble auditions. Attendance at all performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Contact Content Director* Prerequisites: Placement based by audition only; taken in sequence What's Next? N/A	**Tier III**

MUSIC I VOCAL ENSEMBLE AB (TENOR/BASS CHOIR), HONORS	**1460 AB -** 03152100
MUSIC II VOCAL ENSEMBLE AB (TENOR/BASS CHOIR), HONORS	**1462 AB -** 03152200
MUSIC III VOCAL ENSEMBLE AB (TENOR/BASS CHOIR), HONORS	**1464 AB -** 03152300
MUSIC IV VOCAL ENSEMBLE AB (TENOR/BASS CHOIR), HONORS	**1466 AB -** 03152400
Provides students advanced musical instruction in various musical styles and genres. Incorporates various choral music techniques in order to better understand and appreciate culturally diverse styles of tenor/bass music literature. In addition, students are strongly encouraged to participate in TMEA All State auditions, UIL Concert & Sight Reading, UIL Solo and Ensemble auditions, attend outside concerts and write concert/performance critiques, and write papers on assigned composers, musical styles and periods. Attendance at all performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Contact Content Director* Prerequisites: Placement based by audition only; taken in sequence What's Next? N/A	**Tier II**

Music Studies

MUSIC STUDIES, MUSIC THEORY I AB	**1481 AB**
Provides a study of the basic fundamentals of music. Develops an understanding of rhythmic and melodic notation, scale structure, intervals, and chords. Provides an opportunity for arranging and composing.	03155400 Grade level: 9 - 12
Instructional Material: *Contact Content Director* Prerequisites: Taken in sequence What's Next? Music Theory II AB	Credit(s): 1 College Hour(s): NA **Tier III**
MUSIC STUDIES, HONORS MUSIC THEORY I AB	**VPA1481 ABH**
This course will develop students' understanding of the foundational elements of music. Students will discover the building blocks of tonal analysis—pitch and rhythm, through analysis, performance, and composition. Students will learn to listen critically, identify and notate intervals, and sight-read. A majority of the time will be spent on pentatonic and modal music, as well as learning all major and minor scales.	03155400 Grade level: 9 Credit(s): 1
Instructional Material: *Contact Content Director* Prerequisites: None What's Next? Honors Music Theory II VPA1483 ABH *Only available at I.M. Terrell Academy for STEM & VPA.*	College Hour(s): NA **Tier II**
MUSIC STUDIES, MUSIC THEORY II AB	**1483 AB**
Provides continued and advanced study of the basic fundamentals of music. Maintains an understanding of rhythmic and melodic notation, scale structure, intervals, and chords. Provides an opportunity for arranging and composing.	03155500 Grade level: 9 – 12
Instructional Material: *Contact Content Director* Prerequisites: Music Theory IAB; taken in sequence What's Next? AP Music Theory	Credit(s): 1 College Hour(s): NA **Tier III**
MUSIC STUDIES, HONORS MUSIC THEORY II AB	**VPA1483 ABH**
Students will begin to analyze and compose Western tonal music employing the rubrics of rhythm and meter, pitch, key signatures, intervals, scales, chords, inversions, harmonic progression, and SATB voice leading. Students will also perform melodies and rhythms at sight, and notate dictations of rhythms, melodies and harmonic progressions.	03155500 Grade level: 10 Credit(s): 1
Instructional Material: *Contact Content Director* Prerequisites: Honors Music Theory I VPA1481 ABH; taken in sequence What's Next? AP Music Theory *Only available at I.M. Terrell Academy for STEM & VPA.*	College Hour(s): NA **Tier II**
AP MUSIC THEORY AB	**1473 AB**
Provides students with a serious introduction to a broad repertoire of musical pieces and develops the listening skills needed to appreciate these pieces as works of art. Compares and contrasts the relationship of musical works, composers, forms, and styles to the political and social events of their musical and historical periods. Students listen to major works, study elements of music, write a research paper, and attend concerts. Satisfies state fine arts credit.	A3150200 Grade level: 11 - 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Contact Content Director* Prerequisites: Music Theory II AB; taken in sequence *Course taught by a locally AP trained teacher.*	**Tier I**

MUSIC STUDIES, MUSIC PRODUCTION I **MUSIC STUDIES, MUSIC PRODUCTION II**	**1334 AB** **1332 AB**
Music Production is designed to supplement the traditional performance-based school music curriculum with knowledge and skills increasingly more relevant to 21st century musical practices. Students will learn principles of live sound reinforcement with emphasis placed on creative rather than re-creative aspects of the musical experience. This course will integrate musical understanding and contemporary technology. After completing this class, students will be able to assemble, dissemble, and operate basic reinforcement equipment in a live sound environment as well as digitally record and produce audio onto CD/DVD. Additionally, students may find entry-level employment with live music venues, sound companies, and churches as a stage hand, engineer, or an assistant engineer.	03156200 03156300 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Previous instrumental or vocal performance ensemble experience, experience working with computers, common peripherals, and permission of instructor. What's Next? Music and Media Communication II AB	
HONORS MUSIC STUDIES, MUSIC AND MEDIA COMMUNICATION I AB	**1497 ABH**
Honors Music and Media Communication I students will complete special projects (i.e. research projects, written critiques of professional and amateur performances) to earn honors credit. Additional hours are required to produce a portfolio of audio and visual work on CD/DVD, as well as to perform these works at concerts throughout the year. Honors MMC students will demonstrate introductory skills with Pro Tools recording software on the path to earn industry certification. Placement based on audition. This course is offered only at Southwest High School through the Music & Sound Design program.	03156400 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *No state adopted textbook(s)/Contact Coordinator of Choral and General Music* Prerequisites: None What's Next? Music and Media Communication II AB *Offered only at: Southwest Music & Sound Design Program*	
DUAL CREDIT MUSIC STUDIES, MUSIC APPRECIATION I AB **TCC Course: Music Appreciation (MUSI 1306)**	**1504 AB** 03155600
Understanding music through the study of cultural periods, major composers, and musical elements, illustrated with audio recordings and live performances.	ECHS Grade level: 10-12 Grade level: NA
Instructional Material: *NA* FWISD & TCC Prerequisites: None What's Next? N/A *Course taught by an approved District or adjunct instructor.*	Credit(s): 1 College Hour(s): 3 **Tier I**
DUAL CREDIT MUSIC STUDIES, MUSIC AND MEDIA COMMUNICATION I AB **TCC Course: American Music (MUSI 1310)**	**1495 AB** 03156400
General survey of various styles of music in America. Topics may include jazz, ragtime, folk, rock, and contemporary art music.	ECHS Grade level: 10-12 Grade level: NA
Instructional Material: *NA* FWISD & TCC Prerequisites: None What's Next? N/A *Course taught by an approved District or adjunct instructor.*	Credit(s): 1 College Hour(s): 3 **Tier I**
MUSIC STUDIES, MUSIC AND MEDIA COMMUNICATION IIAB	**1498 AB**
Music and Media Communications II builds upon the foundational music and technology skills taught in the Music and Media Communications I survey course and provides opportunities for students to apply and synthesize knowledge and skills through relevant, real-world projects. Students will explore in depth music-related technical professions and components of media production, including commercial career pathways in advertising, marketing, entertainment, and game design. The course provides hands-on, experiential learning in music, including composition, recording, production, and performance, integrated with instruction focused on technology applications, media literacy, and 21st century skills. A key focus of the course is on collaborative design and production of musical products and the function of participatory media in contemporary musical contexts. As they learn the role of technology and media in creating and enhancing the impact of a musical work, students will document their work in the course in a professional-level digital portfolio. Students may follow MMC II with Music Production or Instrumental Ensemble (contemporary) based upon audition. This course is offered only at Southwest High School through the Music & Sound Design program.	03156500 Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *No state adopted textbook(s)/Contact Coordinator of Choral and General Music* Prerequisites: Music and Media Communication I AB; taken in sequence *Offered only at: Southwest Music & Sound Design Program*	
HONORS MUSIC STUDIES, MUSIC AND MEDIA COMMUNICATION IIAB	**1499 ABH**
Honors Music and Media Communication II students will complete special projects (i.e. products aimed at sharing with a wide audience either through the web or a site-specific interactive performance) to earn honors credit. Additional hours are required to produce a portfolio of audio and visual work on CD/DVD, as well as to perform these works at concerts and special events throughout the year. Honors MMC II students will demonstrate intermediate to advanced skills with Pro Tools recording software on the path to earn industry certification. Placement based on audition. This course is offered only at Southwest High School through the Music & Sound Design program.	03156500 Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier II**

Instructional Material: *No state adopted textbook(s)/Contact Coordinator of Choral and General Music*
Prerequisites: Music and Media Communication IAB; taken in sequence
Offered only at: Southwest Music & Sound Design Program

FINE ARTS, LEVEL IV, VPA CAPSTONE AB	**VPA1000 AB**
The aim of this course is to provide opportunity for students to explore college preparation and professional applications of their VPA craft. Advanced credit with college and career readiness focused assignments and special projects will be approved and monitored by the instructor. Students will document their four years of VPA work through the completion of their portfolio in the first semester. Students will receive opportunities to job shadow and/or participate in unpaid practicums, networking, preparation of interview and audition requirements, and be able to creatively advocate their art to peers and members of the arts community. Students will investigate careers in the arts, develop problem solving skills and apply their art to a service learning action project. Students will actively prepare their capstone project to be presented in the spring semester (recital, gallery exhibit, direction of play, or project).	84500XXX Grade level: 12 Credit(s): Local Credit College Hour(s): NA

Instructional Material: N/A
Prerequisites: Level I-III of a Fine Arts Content
What's Next? N/A
This is for local credit only and only available at I.M. Terrell Academy for STEM & VPA.

HONORS MUSIC STUDIES, ETHNOMUSICOLOGY: WORLD MUSIC PERSPECTIVES AB	**1587 ABH**
This course explores the ways that music is both shaped by and gives shape to the cultural settings in which it is performed. This study will consider music as a functional activity in people's lives, as a symbol of historical or national identity, and as a form of artistic expression. Students will listen to, analyze, perform, and compose music in a variety of styles from around the world. Course work includes an overview of Western music, cultivating active listening skills and music journaling/aural analysis, daily hands-on music making, composition, live demonstrations by guest artists, and ethnographic research projects. Students will gain a deeper understanding of other cultures, as well as their own.	03155400 Grade level: 12 Credit(s): 1 College Hour(s): NA **Tier II**

Instructional Material: *Contact Content Director*
Prerequisites: AP Music Theory
Course is only available at I.M. Terrell Academy for STEM & VPA.

HONORS MUSIC STUDIES, MUSIC AND MOVEMENT: MUSIC THEORY FOR THE DANCER ABH	**1586 ABH**
The course introduces dancers to the fundamentals of music (rhythm, harmony, and melody) to equip them with a working musical vocabulary, surveys the history of Western music, and critically engages with contemporary, folk, popular, and Non-western music performance and compositional practice in relation to collaboration with modern dance choreography. Students will cultivate active listening skills, engage in thought-provoking student-led discussions and guest lectures, critically analyze and reflect through journaling, participate in daily hands-on music making, compose, dance, and present research projects.	84500XXX Grade level: 11-12 Credit(s): Local Credit College Hour(s): NA

Instructional Material: *Contact Content Director*
Prerequisites: Teacher approval required; placement by audition only
This is for local credit only and only available at I.M. Terrell Academy for STEM & VPA.

INSTRUMENTAL MUSIC

MARIACHI	GUITAR	PIANO	JAZZ ENSEMBLE
1202, 1204, 1206, 1208	1218, 1220, 1222, 1224	1234, 1236, 1238, 1240	1396, 1397, 1398, 1399

BRASS, WOODWIND, & PERCUSSION

1250, 1252, 1254, 1256

	BAND	INST ENSEMBLE	ORCHESTRA
Sub Non-Varsity	1313, 1314, 1315, 1316	1341, 1342, 1343, 1344	1349, 1350, 1351, 1352
Non-Varsity	1317, 1318, 1319, 1320	1345, 1346, 1347, 1348	1353, 1354, 1355, 1356
Varsity	1382, 1384, 1386, 1388	1402, 1404, 1406, 1408	1410, 1412, 1414, 1416

Students must complete both A and B to receive state graduation credit for fine arts.
Honors courses are also available.
ALL courses require a teacher recommendation and audition.
ATTENDANCE AT ALL REHEARSALS AND PERFORMANCES IS REQUIRED.

MUSIC I BAND (SUB NON-VARSITY) IAB **MUSIC II BAND (SUB NON-VARSITY) IIAB** **MUSIC III BAND (SUB NON-VARSITY) IIIAB** **MUSIC IV BAND (SUB NON-VARSITY) IVAB**	**1313 AB -** 03150100 **1314 AB -** 03150200 **1315 AB -** 03150300 **1316 AB -** 03150400
Provides instruction for sub non-varsity band students to continue their development of characteristic tone quality, instrumental skills/techniques, music literacy, ear training, and marching fundamentals at the appropriate level. This select ensemble will require mandatory attendance at all rehearsals, performances, football games, parades, pep rallies, marching festivals and competitions. In addition to the Fine Arts credit, Band students also receive a .5 PE substitution credit in the first semester for participation in the marching band component of the course. A physical examination is required for participation.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: Contact Content Director Prerequisites: Placement based on audition; taken in sequence	
MUSIC I BAND (NON-VARSITY) IAB **MUSIC II BAND (NON-VARSITY) IIAB** **MUSIC III BAND (NON-VARSITY) IIIAB** **MUSIC IV BAND (NON-VARSITY) IV AB**	**1317 AB -** 03150100 **1318 AB -** 03150200 **1319 AB -** 03150300 **1320 AB -** 03150400
Provides instruction for non-varsity band students to continue their development of characteristic tone quality, instrumental skills/techniques, music literacy, ear training, and marching fundamentals at the appropriate level. This select ensemble will require mandatory attendance at all rehearsals, performances, football games, parades, pep rallies, marching festivals and competitions. In addition to the Fine Arts credit, Band students also receive a .5 PE substitution credit in the first semester for participation in the marching band component of the course. A physical examination is required for participation.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I BAND (NON-VARSITY) HONORS IABH **MUSIC II BAND (NON-VARSITY) HONORS IIABH** **MUSIC III BAND (NON-VARSITY) HONORS IIIABH** **MUSIC IV BAND (NON-VARSITY) HONORS IVABH**	**1321 AB -** 03150100 **1322 AB -** 03150200 **1323 AB -** 03150300 **1324 AB -** 03150400
Provides opportunities for non-varsity band students to earn honors credit for study and performance of above-level music and etudes. Independent musicianship, juried recitals (refers to UIL Solo and Ensemble or equivalent), and special projects (e.g., research projects, written critiques of professional and amateur performances) to earn honors credit. The students are required to prepare and audition for TMEA All-Region and All-District Honors Band. This select ensemble will require mandatory attendance at all rehearsals, performances, football games, parades, pep rallies, marching festivals and competitions. In addition to the Fine Arts credit, Band students also receive a .5 PE substitution credit in the first semester for participation in the marching band component of the course. A physical examination is required for participation.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	

MUSIC I BAND (VARSITY) IAB **MUSIC II BAND (VARSITY) IIAB** **MUSIC III BAND (VARSITY) IIIAB** **MUSIC IV BAND (VARSITY) IVAB**	**1382 AB -** 03150100 **1384 AB -** 03150200 **1386 AB -** 03150300 **1388 AB -** 03150400
Provides instruction for varsity band students to continue their development of characteristic tone quality, instrumental skills/techniques, music literacy, ear training, and marching fundamentals at the appropriate level. This select ensemble will require mandatory attendance at all rehearsals, performances, football games, parades, pep rallies, marching festivals and competitions. In addition to the Fine Arts credit, Band students also receive a .5 PE substitution credit in the first semester for participation in the marching band component of the course. A physical examination is required for participation.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I BAND (VARSITY) HONORS IABH **MUSIC II BAND (VARSITY) HONORS IIABH** **MUSIC III BAND (VARSITY) HONORS IIIABH** **MUSIC IV BAND (VARSITY) HONORS IVABH**	**1379 ABH -** 03150100 **1380 ABH -** 03150200 **1389 ABH -** 03150300 **1390 ABH -** 03150400
Provides opportunities for varsity-level band students to earn honors credit for study and performance of above-level music and etudes. Independent musicianship, juried recitals (refers to UIL Soto and Ensemble or equivalent), and special projects (e.g., research projects, written critiques of professional and amateur performances) to earn honors credit. The students are required to prepare and audition for TMEA All-Region and All-District Honors Band. This select ensemble will require mandatory attendance at all rehearsals, performances, football games, parades, pep rallies, marching festivals and competitions. In addition to the Fine Arts credit, Band students also receive a .5 PE substitution credit in the first semester for participation in the marching band component of the course. A physical examination is required for participation.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I INSTRUMENTAL ENSEMBLE (SUB NON-VARSITY) IAB **MUSIC II INSTRUMENTAL ENSEMBLE (SUB NON-VARSITY) IIAB** **MUSIC III INSTRUMENTAL ENSEMBLE (SUB NON-VARSITY) IIIAB** **MUSIC IV INSTRUMENTAL ENSEMBLE (SUB NON-VARSITY) IVAB**	**1341 AB -** 03151700 **1342 AB -** 03151800 **1343 AB -** 03151900 **1344 AB -** 03152000
Offers sub non-varsity instrumental ensemble students the opportunity to continue to develop and refine technical skills and increase their music knowledge with literature selected for performance and listening. Instrumental Ensemble Classes may include but are not limited to Mariachi Ensembles, Medium Ensembles, Woodwind Ensembles, Brass Ensembles, Percussion Ensembles, String Ensembles, Chamber Ensembles, or individual solo studies. Attendance at all rehearsals and performances is required. Placement based on audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I INSTRUMENTAL ENSEMBLE (NON-VARSITY) IAB **MUSIC II INSTRUMENTAL ENSEMBLE (NON-VARSITY) IIAB** **MUSIC III INSTRUMENTAL ENSEMBLE (NON-VARSITY) IIIAB** **MUSIC IV INSTRUMENTAL ENSEMBLE (NON-VARSITY) IVAB**	**1345 AB -** 03151700 **1346 AB -** 03151800 **1347 AB -** 03151900 **1348 AB -** 03152000
Offers non-varsity instrumental ensemble students the opportunity to continue to develop and refine technical skills and increase their music knowledge with literature selected for performance and listening. Instrumental Ensemble Classes may include but are not limited to Mariachi Ensembles, Medium Ensembles, Woodwind Ensembles, Brass Ensembles, Percussion Ensembles, String Ensembles, Chamber Ensembles, or individual solo studies. Attendance at all rehearsals and performances is required. Placement based on audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I INSTRUMENTAL ENSEMBLE (NON-VARSITY) HONORS IABH **MUSIC II INSTRUMENTAL ENSEMBLE (NON-VARSITY) HONORS IIABH** **MUSIC III INSTRUMENTAL ENSEMBLE (NON-VARSITY) HONORS IIIABH** **MUSIC IV INSTRUMENTAL ENSEMBLE (NON-VARSITY) HONORS IVAB**	**1361 ABH -** 03151700 **1362 ABH -** 03151800 **1363 ABH -** 03151900 **1364 ABH -** 03152000
Offers non-varsity instrumental ensemble students the opportunity to continue to develop and refine technical skills and increase their music knowledge with literature selected for performance and listening. Instrumental Ensemble Classes may include but are not limited to Mariachi Ensembles, Medium Ensembles, Woodwind Ensembles, Brass Ensembles, Percussion Ensembles, String Ensembles, Chamber Ensembles, or individual solo studies. Attendance at all rehearsals and performances is required. Placement based on audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	

MUSIC I INSTRUMENTAL ENSEMBLE (VARSITY) IAB **MUSIC II INSTRUMENTAL ENSEMBLE (VARSITY) IIAB** **MUSIC III INSTRUMENTAL ENSEMBLE (VARSITY) IIIAB** **MUSIC IV INSTRUMENTAL ENSEMBLE (VARSITY) IVAB**	**1402 AB -** 03151700 **1404 AB -** 03151800 **1406 AB -** 03151900 **1408 AB -** 03152000
Offers varsity instrumental ensemble students the opportunity to continue to develop and refine technical skills and increase their music knowledge with literature selected for performance and listening. Instrumental Ensemble Classes may include but are not limited to Mariachi Ensembles, Medium Ensembles, Woodwind Ensembles, Brass Ensembles, Percussion Ensembles, String Ensembles, Chamber Ensembles, or individual solo studies. Attendance at all rehearsals and performances is required. Placement based on audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I INSTRUMENTAL ENSEMBLE (VARSITY) HONORS IABH **MUSIC II INSTRUMENTAL ENSEMBLE (VARSITY) HONORS IIABH** **MUSIC III INSTRUMENTAL ENSEMBLE (VARSITY) HONORS IIIABH** **MUSIC IV INSTRUMENTAL ENSEMBLE (VARSITY) HONORS IVABH**	**1365 ABH -** 03151700 **1366 ABH -** 03151800 **1367 ABH -** 03151900 **1368 ABH -** 03152000
Varsity Instrumental Ensemble students, through Mariachi Ensembles, Medium Ensembles, Woodwind Ensembles, Brass Ensembles, Percussion Ensembles, String Ensembles, Chamber Ensembles, or individual solo studies, will demonstrate independent musicianship, perform juried recitals (refers to UIL Solo and Ensemble or equivalent) and complete special projects (i.e. research projects, written critiques of professional and amateur performances) to earn honors credit. The students are required to prepare and audition for TMEA All-Region. This select ensemble will require mandatory attendance at all rehearsals, concerts, festivals and competitions. Placement based on audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I, MARIACHI IA/B **MUSIC II, MARIACHI IIA/B** **MUSIC III, MARIACHI IIIA/B** **MUSIC IV, MARIACHI IVA/B**	**1202 AB -** 03153800 **1204 AB -** 03153900 **1206 AB -** 03154000 **1208 AB -** 03154100
Provides students in the proper historical techniques and styles of the mariachi ensemble. Emphasis is placed on individual and ensemble tone production, mastery of fundamentals, and music reading. The students are reinforced with skills needed for the intricate rhythm, techniques, styles of the Latino cultural heritage for the voice, trumpet, violin, vihuela, guitar, and /or guitarron. Students in this class must demonstrate a high level of commitment and superior citizenship to be successful. This is a select ensemble and performances will be given during the semester at concerts, festivals, and contests. Placement based upon audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I, MARIACHI I HONORS A/B/H **MUSIC II, MARIACHI II HONORS A/B/H** **MUSIC III, MARIACHI III HONORS A/B/H** **MUSIC IV, MARIACHI IV HONORS A/B/H**	**1210 ABH -** 03153800 **1212 ABH -** 03153900 **1214 ABH -** 03154000 **1216 ABH -** 03154100
Provides students in the proper historical techniques and styles of the mariachi ensemble. Emphasis is placed on individual and ensemble tone production, mastery of fundamentals, and music reading. The students are reinforced with skills needed for the intricate rhythm, techniques, styles of the Latino cultural heritage for the voice, trumpet, violin, vihuela, guitar, and /or guitarron. Students in this class must demonstrate a high level of commitment and superior citizenship to be successful. This is a select ensemble and performances will be given during the semester at concerts, festivals, and contests. Placement based upon audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I, GUITAR IA/B **MUSIC II, GUITAR IIA/B** **MUSIC III, GUITAR IIIA/B** **MUSIC IV, GUITAR IVA/B**	**1218 AB -** 03154600 **1220 AB -** 03154700 **1222 AB -** 03154800 **1224 AB -** 03154900
Provides students in the proper historical techniques and styles of the mariachi ensemble. Emphasis is placed on individual and ensemble tone production, mastery of fundamentals, and music reading. The students are reinforced with skills needed for the intricate rhythm, techniques, styles of the Latino cultural heritage for the voice, trumpet, violin, vihuela, guitar, and/or guitarron. Students in this class must demonstrate a high level of commitment and superior citizenship to be successful. Performances will be given during the semester at concerts, festivals, and contests. This is a select ensemble and performances will be given during the semester at concerts, festivals, and contests. Placement based upon audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	

MUSIC I, GUITAR I HONORS A/B/H **MUSIC II, GUITAR II HONORS A/B/H** **MUSIC III, GUITAR III HONORS A/B/H** **MUSIC IV, GUITAR IV HONORS A/B/H**	**1226 ABH -** 03154600 **1228 ABH -** 03154700 **1230 ABH -** 03154800 **1232 ABH -** 03154900
Provides advanced guitar students in the proper historical techniques and styles of the guitar. Emphasis is placed on individual and ensemble tone production, mastery of fundamentals, and music reading. The students are reinforced with skills needed for advanced techniques and styles for guitar. Students in this class must demonstrate a high level of commitment and superior citizenship to be successful. Performances will be given during the semester at concerts, festivals, and contests. Placement based upon audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I, PIANO IA/B **MUSIC II, PIANO IIA/B** **MUSIC III, PIANO IIIA/B** **MUSIC IV, PIANO IVA/B**	**1234 AB -** 03154200 **1236 AB -** 03154300 **1238 AB -** 03154400 **1240 AB -** 03154500
Provides students in the proper fundamentals and technique for piano. Emphasis is placed on individual tone production, fundamentals, technique and music reading. The students are reinforced with the proper repertoire, sequencing, fundamentals and technique for piano. Students in this class must demonstrate a high level of commitment and superior citizenship to be successful. Placement based upon audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I, PIANO I HONORS A/B/H **MUSIC II, PIANO II HONORS A/B/H** **MUSIC III, PIANO III HONORS A/B/H** **MUSIC IV, PIANO IV HONORS A/B/H**	**1242 AB -** 03154200 **1244 AB -** 03154300 **1246 AB -** 03154400 **1248 AB -** 03154500
Provides students in the proper advanced fundamentals and technique for piano. Emphasis is placed on individual more sophisticated tone production, fundamentals, technique and music reading. The students are reinforced with the proper repertoire, the sequencing of fundamentals and improvement on the technique for piano. Students in this advanced class must demonstrate a high level of commitment and superior citizenship to be successful. Placement based upon audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I, INSTRUMENTAL ENSEMBLE IA/B (BRASS, WOODWIND & PERCUSSION I) **MUSIC II, INSTRUMENTAL ENSEMBLE IIA/B (BRASS, WOODWIND, & PERCUSSION II)** **MUSIC III, INSTRUMENTAL ENSEMBLE IIIA/B (BRASS, WOODWIND, & PERCUSSION III)** **MUSIC IV, INSTRUMENTAL ENSEMBLE IVA/B (BRASS, WOODWIND, & PERCUSSION IV)**	**1250 AB -** 03151700 **1252 AB -** 03151800 **1254 AB -** 03151900 **1256 AB -** 03152000
Provides students in the proper techniques and styles of the brass, woodwind and percussion instruments. Emphasis is placed on individual and ensemble tone production, mastery of fundamentals, and music reading. The students are reinforced with general skills needed for proper tone, technique, vibrato, and idiomatic style for each instrument and ensemble. Students in this class must demonstrate a high level of commitment and superior citizenship to be successful. Performances will be given during the semester at concerts, festivals, and contests. Placement based on audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I, INSTRUMENTAL ENSEMBLE (BRASS, WOODWIND, & PERCUSSION I) HONORS IA/B/H **MUSIC II, INSTRUMENTAL ENSEMBLE (BRASS, WOODWIND, & PERCUSSION II) HONORS IIA/B/H** **MUSIC III, INSTRUMENTAL ENSEMBLE (BRASS, WOODWIND, & PERCUSSION III) HONORS IIIA/B/H** **MUSIC IV, INSTRUMENTAL ENSEMBLE (BRASS, WOODWIND, & PERCUSSION IV) HONORS IVA/B/H**	**1258 ABH -** 03151700 **1260 ABH -** 03151800 **1262 ABH -** 03151900 **1264 ABH -** 03152000
Provides students in the proper advanced techniques and styles of the brass, woodwind and percussion instruments. Emphasis is placed on an artistic level for individual and ensemble tone production, mastery of advanced fundamentals and music reading. The students are reinforced with advanced and honor level skills needed for proper tone, technique, vibrato, and idiomatic style for each instrument and ensemble. Students in this class must demonstrate an advanced honor's level of commitment and superior citizenship to be successful. Performances will be given during the semester at concerts, festivals, and solo and ensemble contests. Placement based on audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	
MUSIC I, JAZZ ENSEMBLE I **MUSIC II, JAZZ ENSEMBLE II** **MUSIC III, JAZZ ENSEMBLE III** **MUSIC IV, JAZZ ENSEMBLE IV**	**1396 AB -** 03151300 **1397 AB -** 03151400 **1398 AB -** 03151500 **1399 AB -** 03151600
Offers instruction and practice for a group of selected musicians interested in the study and performance of modern jazz, rock, and popular music. Includes the study of improvisation and performance at various concerts and special events throughout the year. Attendance at all rehearsals and performances is required. Placement based on audition	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA

Instructional Material: *Contact Content Director* Prerequisites: Member of band, orchestra, or chorus; auditioned by instructor; must be enrolled in parent group; taken in sequence	**Tier III**
MUSIC I, JAZZ ENSEMBLE I, HONORS **MUSIC II, JAZZ ENSEMBLE II, HONORS** **MUSIC III, JAZZ ENSEMBLE III, HONORS** **MUSIC IV, JAZZ ENSEMBLE IV, HONORS**	**1371 ABH -** 03151300 **1373 ABH -** 03151400 **1375 ABH -** 03151500 **1377 ABH -** 03151600
Provides opportunities for a selected group of advanced jazz instrumentalist/vocalist to earn honors credit for study and performance of modern jazz, rock, and popular music. The student will need to attend two major jazz performances (one per semester), creating a writing critique of each. The student will need to demonstrate knowledge of different styles (swing, funk, Latin, etc.) and jazz scales. The student will be required to prepare and audition for TMEA All-Region Jazz Band. Includes the study of improvisation and performance at concerts and special events throughout the year. Attendance at all rehearsals and performances is required. Placement based on audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Contact Content Director* Prerequisites: Member of band, orchestra, or chorus; auditioned by instructor; must be enrolled in parent group; taken in sequence	
MUSIC I, ORCHESTRA AB (SUB NON-VARSITY) **MUSIC II, ORCHESTRA AB (SUB NON-VARSITY)** **MUSIC III, ORCHESTRA AB (SUB NON-VARSITY)** **MUSIC IV, ORCHESTRA AB (SUB NON-VARSITY)**	**1349 AB -** 03150500 **1350 AB -** 03150600 **1351 AB -** 03150700 **1352 AB -** 03150800
Provides instruction for sub non-varsity orchestra students to continue their development of characteristic tone quality, instrumental skills/techniques, music literacy, ear training, and fundamentals at the appropriate level. Attendance at all rehearsals and performances is required. Placement based on audition.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Contact Content Director* Prerequisites: Placement based on audition; taken in sequence	**Tier III**
MUSIC I, ORCHESTRA (NON-VARSITY) I AB **MUSIC II, ORCHESTRA (NON-VARSITY) II AB** **MUSIC III, ORCHESTRA (NON-VARSITY) III AB** **MUSIC IV, ORCHESTRA (NON-VARSITY) IV AB**	**1353 AB -** 03150500 **1354 AB -** 03150600 **1355 AB -** 03150700 **1356 AB -** 03150800
Provides instruction for non-varsity orchestra students to continue their development of characteristic tone quality, instrumental skills/techniques, music literacy, ear training, and fundamentals at the appropriate level.	Grade level: 9 – 12 Credit(s): 1
Prerequisites: Placement based on audition; taken in sequence	College Hour(s): NA **Tier III**
HONORS MUSIC I, ORCHESTRA (NON-VARSITY), I AB/H **HONORS MUSIC II, ORCHESTRA (NON-VARSITY), II AB/H** **HONORS MUSIC III, ORCHESTRA (NON-VARSITY), III AB/H** **HONORS MUSIC IV, ORCHESTRA (NON-VARSITY), IV AB/H**	**1357 ABH -** 03150500 **1358 ABH -** 03150600 **1359 ABH -** 03150700 **1360 ABH -** 03150800
Non-varsity orchestra students will demonstrate independent musicianship, perform juried recitals and complete special projects (i.e. research projects, written critiques of professional and amateur performances) to earn honors credit. Students are required to prepare and audition for TMEA All-Region.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Prerequisites: Placement based on audition; taken in sequence	**Tier II**
MUSIC I, ORCHESTRA (VARSITY) I AB **MUSIC II, ORCHESTRA (VARSITY) II AB** **MUSIC III, ORCHESTRA (VARSITY) III AB** **MUSIC IV, ORCHESTRA (VARSITY) IV AB**	**1410 AB -** 03150500 **1412 AB -** 03150600 **1414 AB -** 03150700 **1416 AB -** 03150800
Provides instruction for varsity orchestra students to continue their development of characteristic tone quality, instrumental skills/techniques, music literacy, ear training, and fundamentals at the appropriate level.	Grade level: 9 – 12 Credit(s): 1
Prerequisites: Placement based on audition; taken in sequence	College Hour(s): NA **Tier III**
HONORS MUSIC I, ORCHESTRA (VARSITY), I AB/H **HONORS MUSIC II, ORCHESTRA (VARSITY), II AB/H** **HONORS MUSIC III, ORCHESTRA (VARSITY), III AB/H** **HONORS MUSIC IV, ORCHESTRA (VARSITY), IV AB/H**	**1336 ABH -** 03150500 **1337 ABH -** 03150600 **1338 ABH -** 03150700 **1339 ABH -** 03150800
Varsity orchestra students will demonstrate independent musicianship, performs juried recitals and complete special projects (i.e. research projects, written critiques of professional and amateur performances) to earn honors credit. Students are required to prepare and audition (at director's discretion) for TMEA All-Region.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Prerequisites: Placement based on audition; taken in sequence	**Tier II**

PERFORMING ARTS - DANCE AND THEATRE ARTS

Principles of Dance	Dance & Media Communications
1500, 1503, 1505, 1507	1517, 1519

Theatre Arts	Technical Theatre	Theatre Production
3731, 3733, 3735, 3773	3751, 3754, 3757, 3759	3755, 3761, 3763, 3765

Musical Theatre	Theatre & Media Communications
1484, 1474, 1475, 1476	3736, 3738

Honors courses are also available. Some courses require a teacher recommendation and audition.
ATTENDANCE AT ALL PERFORMANCES IS REQUIRED.
Students must successfully complete both semesters (AB) to meet the state requirement for fine arts credit.

Students can earn PE credit for Principles of Dance IIAB, Show Choir IIAB, Technical Theatre IIAB or Musical Theatre IIAB as a TEKS-based course that meets the requirement of 100 minutes of moderate to vigorous physical activity per week if it is not being used to satisfy another graduation requirement. The teacher does not have to be certified in PE. See Health & Physical Education section for correct course numbers.

DANCE, LEVEL I, PRINCIPLES OF DANCE I AB **DANCE, LEVEL II, PRINCIPLES OF DANCE II AB** **DANCE, LEVEL III, PRINCIPLES OF DANCE III AB** **DANCE, LEVEL IV, PRINCIPLES OF DANCE IV AB**	**1500 AB -** 03830100 **1503 AB -** 03830200 **1505 AB -** 03830300 **1507 AB -** 03830400
A primary and basic entry-level dance course for any high school student. Attendance at all rehearsals and performances is required. *The student can earn PE credit for Dance II, Principles of Dance IIAB as a TEKS-based course that meets the requirement of 100 minutes of moderate to vigorous physical activity per week if it is not being used to satisfy another graduation requirement. The teacher does not have to be certified in PE. See Health & Physical Education section for course #.*	Grade level: 9 – 12 Credit(s): 1
Instructional Material: *Discovering Dance Teacher Web Resources; Human Kinetics, 9781492504740, Discovering Dance with Web Resource, Human Kinetics, 9781450468862* Prerequisites: Teacher recommendation; taken in sequence What's Next? Dance II-IV	College Hour(s): NA **Tier III**
HONORS DANCE, LEVEL I PRINCIPLES OF DANCE I ABH **HONORS DANCE, LEVEL II, PRINCIPLES OF DANCE II ABH** **HONORS DANCE, LEVEL III, PRINCIPLES OF DANCE III ABH** **HONORS DANCE, LEVEL IV, PRINCIPLES OF DANCE IV ABH**	**1511 ABH -** 03830100 **1513 ABH -** 03830200 **1515 ABH -** 03830300 **1509 ABH -** 03830400
Extends and builds on Dance I-IV as established by the TEKS. Focus may include choreography, musical theatre dance, auditions, and college preparation. Class activities and assessment projects are unique to this section, and will include one critique (paper) each semester. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1
Instructional Material: *No state-adopted textbook/Contact Content Director* Prerequisites: Teacher recommendation; taken in sequence What's Next? Dance II-IV	College Hour(s): NA **Tier II**
DANCE, LEVEL I, DANCE WELLNESS I AB **DANCE, LEVEL II, DANCE WELLNESS II AB** **DANCE, LEVEL III, DANCE WELLNESS III AB** **DANCE, LEVEL IV, DANCE WELLNESS IV AB**	**1512 AB -** 03834100 **1514 AB -** 03834200 **1516 AB -** 03834300 **1510 AB -** 03834400
Provides an opportunity for students to develop a comprehensive understanding of dancer wellness. Topics will include, but are not limited to, the mental components (imagery, rest, fatigue, and burnout) as well as the physical aspects (dancer nutrition, body composition, injury prevention, and first aid) of dancer wellness. Ultimately, students will design their own personal wellness plan that will help them get the most out of their dance practice. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**

Instructional Material: *Dancer Wellness with Web Resource by Mary Virginia Wilmerding and Donna Krasnow*
Prerequisites: Teacher recommendation; taken in sequence
What's Next? Dance II-IV
Course is only available at Arlington Heights and I.M. Terrell Academy.

HONORS DANCE, LEVEL I, DANCE WELLNESS I ABH **HONORS DANCE, LEVEL II, DANCE WELLNESS II ABH** **HONORS DANCE, LEVEL III, DANCE WELLNESS III ABH** **HONORS DANCE, LEVEL IV, DANCE WELLNESS IV ABH**	**1552 ABH -** 03834100 **1554 ABH -** 03834200 **1556 ABH -** 03834300 **1558 ABH -** 03834400
Provides an opportunity for students to develop a comprehensive understanding of dancer wellness. Topics will include, but are not limited to, the mental components (imagery, rest, fatigue, and burnout) as well as the physical aspects (dancer nutrition, body composition, injury prevention, and first aid) of dancer wellness. Students will design their own personal wellness plan that will help them get the most out of their dance practice, as well as present it to a panel of dance educators/professionals for adjudication at the end of the year. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Dancer Wellness with Web Resource by Mary Virginia Wilmerding and Donna Krasnow* Prerequisites: Teacher recommendation; taken in sequence What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*	
DANCE, LEVEL I, DANCE PRODUCTION I AB **DANCE, LEVEL II, DANCE PRODUCTION II AB** **DANCE, LEVEL III, DANCE PRODUCTION III AB** **DANCE, LEVEL IV, DANCE PRODUCTION IV AB**	**1522 AB -** 03833700 **1524 AB -** 03833800 **1526 AB -** 03833900 **1528 AB -** 03834000
Students will participate in a production class each day, focusing on stage management, lighting, sound, and various other production elements. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1
Instructional Material: *Dance Production: Design and Technology by Jeremy Hopgood* Prerequisites: Teacher recommendation; taken in sequence What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*	College Hour(s): NA **Tier III**
HONORS DANCE, LEVEL I, DANCE PRODUCTION I ABH **HONORS DANCE, LEVEL II, DANCE PRODUCTION II ABH** **HONORS DANCE, LEVEL III, DANCE PRODUCTION III ABH** **HONORS DANCE, LEVEL IV, DANCE PRODUCTION IV ABH**	**1553 ABH -** 03833700 **1555 ABH -** 03833800 **1557 ABH -** 03833900 **1559 ABH -** 03834000
Students will participate in a production class each day, focusing on stage management, lighting, sound, and various other production elements. Students must serve as tech crew/stage management for at least one production a semester (this can be for one act of a performance if they are also performing in the show). Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Dance Production: Design and Technology by Jeremy Hopgood* Prerequisites: Teacher recommendation; taken in sequence What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*	**Tier II**
DANCE, LEVEL I, DANCE HISTORY I AB **DANCE, LEVEL II, DANCE HISTORY II AB**	**1530 AB -** 03834700 **1531 AB -** 03834800
This course provides students with an interest in dance to expand their understanding of dance as both an art form and as a social and cultural artifact. It focuses on the dancers and choreographers, dances, and significant dance works from each time period. Students will analyze dance works from a variety of time periods. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *History of Dance by Gayle Kassing* Prerequisites: Teacher recommendation; taken in sequence; upper level class for juniors and seniors What's Next? Taken in sequence *Course is only available at Arlington Heights and I.M. Terrell Academy.*	**Tier III**
HONORS DANCE, LEVEL I, DANCE HISTORY I ABH **HONORS DANCE, LEVEL II, DANCE HISTORY II ABH**	**1560 ABH -** 03834700 **1561 ABH -** 03834800
This course provides students with an interest in dance to expand their understanding of dance as both an art form and as a social and cultural artifact. It focuses on the dancers and choreographers, dances, and significant dance works from each time period. Students will analyze dance works from a variety of time periods. Students will produce a project given by their instructor to a panel of dance educators/professionals for adjudication at the end of the year. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *History of Dance by Gayle Kassing* Prerequisites: Teacher recommendation; taken in sequence; upper level class for juniors and seniors What's Next? Taken in sequence *Course is only available at Arlington Heights and I.M. Terrell Academy.*	
DANCE, LEVEL I, DANCE COMPOSITION/IMPROVISATION I AB **DANCE, LEVEL II, DANCE PERFORMANCE AND ENSEMBLE II AB** **DANCE, LEVEL III, DANCE PERFORMANCE AND ENSEMBLE III AB** **DANCE, LEVEL IV, DANCE PERFORMANCE AND ENSEMBLE IV AB**	**1521 AB -** 03833300 **1523 AB -** 03833400 **1525 AB -** 03833500 **1527 AB -** 03833600
This dance course provides an opportunity for students with an interest in choreography and performance to experience what it is like to work and perform at a professional level. Students will participate in technique class each day; focusing on technique, artistry, alignment, and movement quality. Students in Performance/Ensemble will focus on learning repertory, performance, and rehearsal skills. Course recommended for dance officers, leaders, and potential dance majors for the purpose of providing instruction and opportunities for student choreography, student directing, and enhanced complexity in dance education. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**

Instructional Material: Dance Composition/Improvisation - *Choreography: A Basic Approach Using Improvisation by Sandra Cerny Minton;* Dance Performance & Ensemble - *No state-adopted textbook/Contact Content Director*
Prerequisites: Teacher recommendation; taken in sequence
What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*

HONORS DANCE, LEVEL I, DANCE COMPOSITION/IMPROVISATION I ABH — **1562 ABH -** 03833300
HONORS DANCE, LEVEL II, DANCE PERFORMANCE AND ENSEMBLE II ABH — **1564 ABH -** 03833400
HONORS DANCE, LEVEL III, DANCE PERFORMANCE AND ENSEMBLE III ABH — **1566 ABH -** 03833500
HONORS DANCE, LEVEL IV, DANCE PERFORMANCE AND ENSEMBLE IV ABH — **1568 ABH -** 03833600

This dance course provides an opportunity for students with an interest in choreography and performance to experience what it is like to work and perform at a professional level. Students will focus on learning repertory, performance, and rehearsal skills. Students will be required to participate in at least one additional performance/production a year, a dance critique/critical analysis paper in the Fall as well as an end of the year presentation at the end of the Spring semester. Course recommended for dance officers, leaders, and potential dance majors for the purpose of providing instruction and opportunities for student choreography, student directing, and enhanced complexity in dance education. Attendance at all rehearsals and performances is required.

Grade level: 9 – 12
Credit(s): 1
College Hour(s): NA
Tier II

Instructional Material: Dance Composition/Improvisation - *Choreography: A Basic Approach Using Improvisation by Sandra Cerny Minton;* Dance Performance & Ensemble
Prerequisites: Teacher recommendation; taken in sequence
What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*

DANCE, LEVEL I, BALLET I AB — **1532 AB -** 03830500
DANCE, LEVEL II, BALLET II AB — **1534 AB -** 03830600
DANCE, LEVEL III, BALLET III AB — **1536 AB -** 03830700
DANCE, LEVEL IV, BALLET IV AB — **1538 AB -** 03830800

This course provides an opportunity for students with an interest in ballet to be immersed in this codified dance technique. Students will participate in a traditional ballet class each day, focusing on technique, artistry, alignment, and movement quality. Attendance at all rehearsals and performances is required.

Grade level: 9 – 12
Credit(s): 1
College Hour(s): NA
Tier III

Instructional Material: *Technical Manual and Dictionary of Classical Ballet by Gail Grant*
Prerequisites: Teacher recommendation; taken in sequence
What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*

HONORS DANCE, LEVEL I, BALLET I ABH — **1563 ABH -** 03830500
HONORS DANCE, LEVEL II, BALLET II ABH — **1565 ABH -** 03830600
HONORS DANCE, LEVEL III, BALLET III ABH — **1567 ABH -** 03830700
HONORS DANCE, LEVEL IV, BALLET IV ABH — **1569 ABH -** 03830800

This course provides an opportunity for students with an interest in ballet to be immersed in this codified dance technique. Students will participate in a traditional ballet class each day, focusing on technique, artistry, alignment, and movement quality. Students will be required to perform in one production per semester. Attendance at all rehearsals and performances is required.

Grade level: 9 – 12
Credit(s): 1
College Hour(s): NA
Tier II

Instructional Material: *Technical Manual and Dictionary of Classical Ballet by Gail Grant*
Prerequisites: Teacher recommendation; taken in sequence
What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*

DANCE, LEVEL I, WORLD DANCE FORMS I AB — **1533 AB -** 03832100
DANCE, LEVEL II, WORLD DANCE FORMS II AB — **1535 AB -** 03832200
DANCE, LEVEL III, WORLD DANCE FORMS III AB — **1537 AB -** 03832300
DANCE, LEVEL IV, WORLD DANCE FORMS IV AB — **1539 AB -** 03832400

This dance course provides an opportunity for students with an interest in world dance to be exposed to dances that are part of cultures, traditions, customs, and rituals from around the world. Students will participate in a movement-based class each day, focusing on technique, artistry, alignment, and movement quality. Recommended for campuses offering Ballet Folklorico. Attendance at all rehearsals and performances is required.

Grade level: 9 – 12
Credit(s): 1
College Hour(s): NA
Tier III

Instructional Material: *No state-adopted textbook/Contact Content Director*
Prerequisites: Teacher recommendation; taken in sequence
What's Next? Dance II-IV *Course is only available at Arlington Heights, I.M. Terrell Academy and Diamond Hill-Jarvis.*

HONORS DANCE, LEVEL I, WORLD DANCE FORMS I ABH — **1570 ABH -** 03832100
HONORS DANCE, LEVEL II, WORLD DANCE FORMS II ABH — **1572 ABH -** 03832200
HONORS DANCE, LEVEL III, WORLD DANCE FORMS III ABH — **1574 ABH -** 03832300
HONORS DANCE, LEVEL IV, WORLD DANCE FORMS IV ABH — **1576 ABH -** 03832400

This dance course provides an opportunity for students with an interest in world dance to be exposed to dances that are part of cultures, traditions, customs, and rituals from around the world. Students will participate in a movement-based class each day, focusing on technique, artistry, alignment, and movement quality. Recommended for campuses offering Ballet Folklorico. Attendance at all rehearsals and performances is required.

Grade level: 9 – 12
Credit(s): 1
College Hour(s): NA
Tier II

Instructional Material: *No state-adopted textbook/Contact Content Director*
Prerequisites: Teacher recommendation; taken in sequence
What's Next? Dance II-IV
Course is only available at Arlington Heights, I.M. Terrell Academy and Diamond Hill-Jarvis.

DANCE, LEVEL I, TAP I AB **DANCE, LEVEL II, TAP II AB** **DANCE, LEVEL III, TAP III AB** **DANCE, LEVEL IV, TAP IV AB**	**1540 AB -** 03831700 **1542 AB -** 03831800 **1544 AB -** 03831900 **1546 AB -** 03832000
This dance course provides an opportunity for students with an interest in Tap Dance to be immersed in this codified dance technique. Students will participate in a Tap technique class each day, focusing on technique, artistry, alignment, and movement quality. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1
Instructional Material: *No state-adopted textbook/Contact Content Director* Prerequisites: Teacher recommendation; taken in sequence What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*	College Hour(s): NA **Tier III**
HONORS DANCE, LEVEL I, TAP I ABH **HONORS DANCE, LEVEL II, TAP II ABH** **HONORS DANCE, LEVEL III, TAP III ABH** **HONORS DANCE, LEVEL IV, TAP IV ABH**	**1571 ABH -** 03831700 **1573 ABH -** 03831800 **1575 ABH -** 03831900 **1577 ABH -** 03832000
This dance course provides an opportunity for students with an interest in Tap Dance to be immersed in this codified dance technique. Students will participate in a Tap technique class each day, focusing on technique, artistry, alignment, and movement quality. Students will be required to perform in one production per semester. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *No state-adopted textbook/Contact Content Director* Prerequisites: Teacher recommendation; taken in sequence What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*	**Tier II**
DANCE, LEVEL I, MODERN/CONTEMPORARY I AB **DANCE, LEVEL II, MODERN/CONTEMPORARY II AB** **DANCE, LEVEL III, MODERN/CONTEMPORARY III AB** **DANCE, LEVEL IV, MODERN/CONTEMPORARY IV AB**	**1541 AB -** 03830900 **1543 AB -** 03831000 **1545 AB -** 03831100 **1547 AB -** 03831200
This dance course provides an opportunity for students with an interest in modern dance to be immersed in this codified dance technique. Students will participate in a modern technique class each day, focusing on technique, artistry, alignment, and movement quality. Along with focusing on technique, students will work on choreographic skills and phrase work. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *No state-adopted textbook/Contact Content Director* Prerequisites: Teacher recommendation; taken in sequence What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*	**Tier III**
HONORS DANCE, LEVEL I, MODERN/CONTEMPORARY I ABH **HONORS DANCE, LEVEL II, MODERN/CONTEMPORARY II ABH** **HONORS DANCE, LEVEL III, MODERN/CONTEMPORARY III ABH** **HONORS DANCE, LEVEL IV, MODERN/CONTEMPORARY IV ABH**	**1578 ABH -** 03830900 **1580 ABH -** 03831000 **1582 ABH -** 03831100 **1584 ABH -** 03831200
This dance course provides an opportunity for students with an interest in modern dance to be immersed in this codified dance technique. Students will participate in a modern technique class each day, focusing on technique, artistry, alignment, and movement quality. Along with focusing on technique, students will work on choreographic skills and phrase work. Students will be required to perform in one production per semester. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *No state-adopted textbook/Contact Content Director* Prerequisites: Teacher recommendation; taken in sequence What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*	
ADVANCED STUDIES IN MODERN DANCE, LEVEL IV, MODERN/CONTEMPORARY IV AB	**1588 AB**
In this collegiate level dance course, students will be immersed in a rigorous version of Modern Dance. Daily, students will be engaged in a codified Modern technique, artistry, alignment, and movement at the highest level. In addition, students will focus on choreographic skills, phrase work, and the anatomy of a dancer. Students will be required to perform in one production per semester, as well as required to have written, oral, and physical summative and formative assessments: demonstrating and showcasing mastery of the various codified Modern technique studies (Floor Work, Fortifications, Preludes, etc. are a few examples from various codified modern techniques). Attendance at all rehearsal, performance, and formative assessments are required.	03831200 Grade level: 12 Credit(s): 1 College Hour(s): NA **Tier I**
Instructional Material: *No state-adopted textbook/Contact Content Director* Prerequisites: Teacher recommendation; taken in sequence What's Next? NA *Course is only available at I.M. Terrell Academy.*	
DANCE, LEVEL I, JAZZ I AB **DANCE, LEVEL II, JAZZ II AB** **DANCE, LEVEL III, JAZZ III AB** **DANCE, LEVEL IV, JAZZ IV AB**	**1548 AB -** 03831300 **1549 AB -** 03831400 **1550 AB -** 03831500 **1551 AB -** 03831600
This dance course provides an opportunity for students with an interest in Jazz Dance to be immersed in this codified dance technique. Students will participate in a Jazz technique class each day, focusing on technique, artistry, alignment, and movement quality. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1

Instructional Material: *No state-adopted textbook/Contact Content Director* Prerequisites: Teacher recommendation; taken in sequence What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*	College Hour(s): NA **Tier III**
HONORS DANCE, LEVEL I, JAZZ I ABH **HONORS DANCE, LEVEL II, JAZZ II ABH** **HONORS DANCE, LEVEL III, JAZZ III ABH** **HONORS DANCE, LEVEL IV, JAZZ IV ABH**	**1579 ABH -** 03831300 **1581 ABH -** 03831400 **1583 ABH -** 03831500 **1585 ABH -** 03831600
This dance course provides an opportunity for students with an interest in Jazz Dance to be immersed in this codified dance technique. Students will participate in a Jazz technique class each day, focusing on technique, artistry, alignment, and movement quality. Students will be required to perform in one production per semester. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *No state-adopted textbook/Contact Content Director* Prerequisites: Teacher recommendation; taken in sequence What's Next? Dance II-IV *Course is only available at Arlington Heights and I.M. Terrell Academy.*	**Tier II**
DUAL CREDIT DANCE, LEVEL I PRINCIPLES OF DANCE I A **TCC Course: Dance Appreciation (DANC 2303)**	**1501 A** 03830100
Survey of primitive, classical, and contemporary dance and its interrelationship with cultural developments and other art forms.	ECHS Grade level: 9-12 Grade level: 9 - 12
Instructional Material: *NA* FWISD Prerequisites: Parental permission; taken in sequence What's Next? N/A *Course taught by an approved District or adjunct instructor.*	Credit(s): 1 College Hour(s): 3 **Tier I**
DUAL CREDIT DANCE, LEVEL I PRINCIPLES OF DANCE I B **TCC Course: Ballet I (DANC 1341)**	**1501 B** 03830100
Instruction and participation in ballet technique.	ECHS Grade level: 9-12 Grade level: 9 - 12
Instructional Material: *NA* FWISD Prerequisites: Parental permission; taken in sequence What's Next? N/A *Course taught by an approved District or adjunct instructor.*	Credit(s): 1 College Hour(s): 3 **Tier I**
DANCE I, DANCE AND MEDIA COMMUNICATIONS I AB **DANCE II, DANCE AND MEDIA COMMUNICATIONS II AB**	**1517 AB -** 03834500 **1519 AB -** 03834600
Builds on Dance I- IV AB TEKS and incorporates multi-media and production curriculum. Designed for the student who plans to study dance and or media productions/communications at the college and or career level. Emphasizes classical ballet and modern dance, while continuing the study of jazz, tap, and world dance with multi-media elements. Expands the students' experiences with choreography, musical theatre, dance, and media communications/productions. Focuses on auditioning, rehearsal, performance techniques and media communications/productions. Prepares students for auditions into college dance and or media production programs. Class activities and assessment projects are unique to this section including a dance program combined with instruction on media productions. Activities will include professional, world-of-work contexts including evaluating live performances, and producing and recording multimedia dance productions. Involves students in appropriate lass/public performance activities and media productions. Students are expected to participate and produce at least one quality event/project at least every 6 weeks. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Experiencing Dance Teacher Web Resource 2nd Edition, Human Kinetics, 9781492504733: Experiencing Dance-2nd Edition-From Student to Dance Artist, Human Kinetics, 9781450421904* Prerequisites: Any Dance Course What's Next? Taken in sequence *Course is only available at Arlington Heights an I.M. Terrell Academy.*	
HONORS DANCE I, DANCE AND MEDIA COMMUNICATIONS I ABH **HONORS DANCE II, DANCE AND MEDIA COMMUNICATIONS II ABH**	**1518 ABH -** 03834500 **1520 ABH -** 03834600
Extends and builds on Dance IV AB TEKS and incorporates multi-media and production curriculum. Designed for the student who plans to study dance and or media productions at the college and career level. Emphasizes classical ballet and modern dance, while continuing the study of jazz, tap, and world dance. Expands the students' experiences with choreography, musical theatre, dance, and media communications/productions. Focuses on auditioning, rehearsal, performance techniques and multi-media curriculum. Prepares students for auditions and entry into college and or career dance and media production/communication programs. Class activities and assessment projects are unique to this section including a mentoring program with professional dance company and media production experts. Activities will include professional and world-of-work contexts including evaluating live performances, and producing quality media arts productions. Involves students in appropriate class/public performance activities. Students will be involved with choreographing, directing dance concerts, as well as, producing quality media communications of Dance events. Requires successful completion of at least one special project per six weeks approved and monitored by the teacher. Students will also work with at least one off-campus dance and or media production per semester. Students will also create and produce a portfolio appropriate for college and career standards. Attendance at all rehearsals and performances is required.	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**

Instructional Material: *Experiencing Dance Teacher Web Resource 2nd Edition, Human Kinetics, 9781492504733: Experiencing Dance-2nd Edition-From Student to Dance Artist, Human Kinetics, 9781450421904*
Prerequisites: Any Dance Course
What's Next? Taken in sequence
Course is only available at Arlington Heights and I.M. Terrell Academy.

FINE ARTS, LEVEL IV, VPA CAPSTONE AB	**VPA1000 AB**
The aim of this course is to provide opportunity for students to explore college preparation and professional applications of their VPA craft. Advanced credit with college and career readiness focused assignments and special projects will be approved and monitored by the instructor. Students will document their four years of VPA work through the completion of their portfolio in the first semester. Students will receive opportunities to job shadow and/or participate in unpaid practicums, networking, preparation of interview and audition requirements, and be able to creatively advocate their art to peers and members of the arts community. Students will investigate careers in the arts, develop problem solving skills and apply their art to a service learning action project. Students will actively prepare their capstone project to be presented in the spring semester (recital, gallery exhibit, direction of play, or project).	84500XXX Grade level: 12 Credit(s): Local Credit College Hour(s): NA

Instructional Material: N/A
Prerequisites: Level I-III of a Fine Arts Content
What's Next? N/A
This is for local credit only and only available at I.M. Terrell Academy for STEM & VPA.

THEATRE I, THEATRE ARTS I AB	**3731 AB**
Introduces students to the basic concepts of acting technique, history of theatre, introduction to Technical Theatre, voice, diction, and articulation for the stage. Also covers basic costuming, make-up, careers in Theatre, and audience etiquette.	03250100 Grade level: 9 - 12
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: None What's Next? Theatre Arts II AB	Credit(s): 1 College Hour(s): NA **Tier III**

HONORS THEATRE I, THEATRE ARTS I ABH	**3729 ABH**
Extends the Theatre I requirements into a rigorous in-depth focus. Students will develop a portfolio that will include an original short play for submission in a local contest, such as Circle Theatre Playwriting Contest, Stage West Playwriting Contest, etc.	03250100 Grade level: 9 - 12
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: None What's Next? Theatre Arts II AB	Credit(s): 1 College Hour(s): NA **Tier II**

DUAL CREDIT THEATRE I, THEATRE ARTS I A **TCC Course: Introduction to Theatre (DRAM 1310)**	**3730 A** 03250100
Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in production may be required.	ECHS Grade level: 9-12 Grade level: 9 - 12
Instructional Material: *NA* FWISD & TCC Prerequisites: None What's Next? N/A *Course taught by an approved District or adjunct instructor.*	Credit(s): 1 College Hour(s): 3 **Tier I**

DUAL CREDIT THEATRE I, THEATRE ARTS I B **TCC Course: Acting I (DRAM 1351)**	**3730 B** 03250100
An introduction to the fundamental principles and tools of acting as used in auditions, rehearsals, and performances. This may include ensemble performing, character and script analysis, and basic theater terminology. This exploration will emphasize the development of the actor's instrument: voice, body and imagination.	ECHS Grade level: 9-12 Grade level: 9 - 12
Instructional Material: *NA* FWISD & TCC Prerequisites: None What's Next? N/A *Course taught by an approved District or adjunct instructor.*	Credit(s): 0.5 College Hour(s): 3 **Tier I**

THEATRE II, THEATRE ARTS II AB	**3733 AB**
Continues theatrical studies including molding individual creativity into cooperative group efforts. Provides for the development of playwriting, acting, and technical production skills such as auditioning, rehearsal, and performance techniques. Explores theatrical genres throughout history.	03250200
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Arts I AB What's Next? Theatre Arts III AB	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier III**

HONORS THEATRE II, THEATRE ARTS II ABH	3745 ABH
Extends the Theatre I requirements into a rigorous in-depth focus. Examines and evaluates theatrical genres for character/script analysis, technical design, directing, and historical and cultural influences on theatrical styles. Focuses on career opportunities in theatre, film, television, and other electronic media. Includes activities and assessment projects that involve conflict-based playwriting, effective voice training, construction and operation of technical elements, and creating appropriate in-class/public performances. Students will develop a portfolio that will include an original short play for submission in a local contest, such as Circle Theatre Playwriting Contest, Stage West Playwriting Contest, etc.	03250200 Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Arts I AB What's Next? Theatre Arts III AB	**Tier II**
THEATRE III, THEATRE ARTS III AB	**3735 AB**
Advanced theatrical studies including the advanced development of playwriting, acting, and production skills such as auditioning, rehearsal, make-up, costuming and performance techniques.	03250300
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Arts II AB What's Next? Theatre Arts IV AB	Grade level: 11 - 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS THEATRE III, THEATRE ARTS III ABH	**3747 ABH**
Examines and evaluates theatrical genres for character/script analysis, technical design, directing, and historical and cultural influences on theatrical styles. Focuses on career opportunities in theatre, film, television, and other electronic media. Includes activities and assessment projects that involve conflict-based playwriting, effective voice training, construction and operation of technical elements, and creating appropriate in-class/public performances. Students will develop a portfolio that will include an original short play for submission in a local contest, such as Circle Theatre Playwriting Contest, Stage West Playwriting Contest, etc. Participation in one extra-curricular competition, performance, and/or production is required.	03250300 Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Arts II AB What's Next? Theatre Arts IV AB	
THEATRE IV, THEATRE ARTS IV AB	**3773 AB**
Focuses on a variety of advanced theatrical production skills such as playwriting, script and character analysis for acting and technical purposes, evaluation of directors, actors, designers, and technician's production responsibilities and their effective execution. Examines career and vocational opportunities in theatre, film, television, and other electronic media.	03250400 Grade level: 11 – 12 Credit(s): 1
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Arts III AB	College Hour(s): NA **Tier III**
HONORS THEATRE IV, THEATRE ARTS IV AB	**3749 ABH**
Students will provide an advanced demonstration of all Theatre aspects, such as character/script analysis, technical design, directing, and historical and cultural influences on theatrical styles. Students will focus on career opportunities in theatre, film, television, and other electronic media. Activities will include assessment projects that involve conflict-based playwriting, effective voice training, construction and operation of technical elements, and creating appropriate in-class/public performances. Participation in two extra-curricular competitions, performances, and/or productions is required.	03250400 Grade level: 11 – 12 Credit(s): 1
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Arts III AB	College Hour(s): NA **Tier II**
THEATRE I, THEATRE AND MEDIA COMMUNICATIONS I AB	**3736 AB**
Precedes all other high school Theatre Arts courses. Students will learn how to bridge traditional stagecraft with current technology applications to create new media such as animation, digital images, multimedia presentation, digital video, websites, and interactive performances. Student work will culminate in a capstone project that investigates an issue relevant to the student and uses a digital stage to address a problem within the community or to effect a change. These projects (minimum of two) will afford students an opportunity to learn and practice creative research skills, develop a narrative, engage an audience, and connect an online community to their projects.	03251300
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: None	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**

What's Next? N/A
Not available at all campuses

HONORS THEATRE I, THEATRE AND MEDIA COMMUNICATIONS I ABH	3737 ABH
Precedes all other high school Theatre Arts courses. Students will learn how to bridge traditional stagecraft with current technology applications to create new media such as animation, digital images, multimedia presentation, digital video, websites, and interactive performances. Student work will culminate in a capstone project that investigates an issue relevant to the student and uses a digital stage to address a problem within the community or to effect a change. These projects (minimum of two) will afford students an opportunity to learn and practice creative research skills, develop a narrative, engage an audience, and connect an online community to their projects. Students will also attend at least one off-campus theatre and or media production per semester. Students will also create and produce a portfolio appropriate for college and career standards.	03251300 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: None What's Next? N/A *Not available at all campuses*	

THEATRE II, THEATRE AND MEDIA COMMUNICATIONS II AB	3738 AB
Students will practice stage movement techniques, develop skills to express thoughts and feelings, and learn how to analyze characters in scripts. Students will define roles in collaborative relationships (between playwright, director, actor, technician, audience); develop an understanding of the value and purpose of listening, observation, concentration, and emotional and sensory recall; demonstrate safe use of the body; and employ effective techniques, as well as be able to define creativity related to personal expression (voice thoughts and feelings). Students will create original scripts; operate technical elements; and perform roles such as actor, director, editor, designer, technician, etc. Historical and cultural influences will be used and portray different times, places, and cultures. Students will identify US contributions to the performing arts and the impact of theatre, film, television, and electronic media on contemporary society, as well as analyze and apply appropriate behavior during live performances. Their work will culminate in a capstone project that investigates an issue relevant to the student and uses a digital stage to address a problem within the community or to effect a change. These projects (minimum of two) will afford students an opportunity to learn and practice creative research skills, develop a narrative, engage an audience, and connect an online community to their projects.	03251400 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Arts and Media Communications I AB What's Next? N/A	

HONORS THEATRE II, THEATRE AND MEDIA COMMUNICATIONS II ABH	3739 ABH
Students will bridge traditional stagecraft with current technology applications to create new media such as animation, digital images, multimedia presentation, digital video, websites, and interactive performances. Student work will culminate in a capstone project that investigates an issue relevant to the student and uses a digital stage to address a problem within the community or to effect a change. These projects (minimum of two) will afford students an opportunity to learn and practice creative research skills, develop a narrative, engage an audience, and connect an online community to their projects. Students will also attend at least one off-campus theatre and or media production per semester. Students will also create and produce a portfolio appropriate for college and career standards.	03251400 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Honors Theatre Art and Media Communications I AB What's Next? N/A	

TECHNICAL THEATRE I AB	3751 AB
Studies the technical side of theatre by providing instruction in a laboratory setting in makeup, costuming, stage lighting, sound production, set design/construction, house management, and other technical areas needed for play production.	03250500 Grade level: 9 - 12
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: N/A What's Next? Technical Theatre II AB	Credit(s): 1 College Hour(s): NA **Tier III**

HONORS TECHNICAL THEATER I ABH	3752 ABH
Offers a more intensive instruction in a laboratory and practical setting in makeup, costuming design, set design and construction, lighting and sound design, house management, and other technical areas needed for theatrical and performing arts productions. This course examines careers in theatre and other performing arts, as well as emphasizes studies and practical application of the technical side of theatre. This course requires successful completion of at least one classroom/public performance, writing activity, or technical project per semester approved and monitored by the teacher.	03250500

Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: N/A What's Next? Technical Theatre II AB	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT TECHNICAL THEATER I AB **TCC Course: Stagecraft I (DRAM 1330)**	**3750 AB** 03250500
Study and application of the methods and components of theatrical production, which may include one or more of the following: theater facilities, scenery construction and painting, properties, lighting, costume, makeup, sound, and theatrical management.	Grade level: 9 – 12 ECHS Grade level: 9-12 Credit(s): 0.5
Instructional Material: *NA* Prerequisites: N/A What's Next? N/A *Course taught by an approved District or adjunct instructor.*	College Hour(s): 3 **Tier I**
TECHNICAL THEATRE II AB	**3754 AB**
Provides advanced instruction in a laboratory and practical setting in makeup, costuming design, set design and construction, lighting and sound design, house management, and other technical areas needed for theatrical and performing arts productions. *The student can earn PE credit for Technical Theatre IIAB as a TEKS-based course that meets the requirement of 100 minutes of moderate to vigorous physical activity per week if it is not being used to satisfy another graduation requirement. The teacher does not have to be certified in PE. See Health & Physical Education section for course #.*	03250600
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Technical Theatre I AB; taken in sequence What's Next? Technical Theatre III AB	Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS TECHNICAL THEATER II ABH	**3753 ABH**
Offers a more intensive instruction in a laboratory and practical setting in makeup, costuming design, set design and construction, lighting and sound design, house management, and other technical areas needed for theatrical and performing arts productions. Students will be expected to participate in all behind-the-scenes action of productions and their performances.	03250600 Grade level: 10 – 12
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Technical Theatre I AB; taken in sequence What's Next? Technical Theatre III AB	Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT TECHNICAL THEATER II AB **TCC Course: Stagecraft II (DRAM 2331)**	**3767 AB** 03250600
Continued study and application of the methods and components of theatrical production which may include one or more of the following: theater facilities, scenery construction and painting, properties, lighting, costume, makeup, sound and theatrical management. Topics will alternate with DRAM 1330.	Grade level: 9 – 12 ECHS Grade level: 9-12
Instructional Material: *NA* Prerequisites: Technical Theatre I AB; taken in sequence What's Next? N/A *Course taught by an approved District or adjunct instructor.*	Credit(s): 0.5 College Hour(s): 3 **Tier II**
TECHNICAL THEATRE III AB	**3757 AB**
Provides advanced instruction in a laboratory and practical setting in makeup, costuming design, set design and construction, lighting and sound design, house management, and other technical areas needed for theatrical and performing arts productions. Students will be expected to participate in all behind-the-scenes action of productions.	03251100
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Technical Theatre Level II AB What's Next? Technical Theatre IV AB	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS TECHNICAL THEATRE III ABH	**3758 ABH**
Advanced instruction in a laboratory and practical setting in makeup, costuming design, set design and construction, lighting and sound design, house management, and other technical areas needed for theatrical and performing arts productions. Students will be expected to participate in all behind-the-scenes action of productions and their performances.	03251100 Grade level: 11 - 12
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Technical Theatre II AB What's Next? Technical Theatre IV AB	Credit(s): 1 College Hour(s): NA **Tier II**

TECHNICAL THEATRE IV AB	3759 AB
Provides advanced instruction in a laboratory and practical setting in makeup, costuming design, set design and construction, lighting and sound design, house management, and other technical areas needed for theatrical and performing arts productions. Students will be expected to participate in all behind-the-scenes action of productions.	03251200
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Technical Theatre III AB What's Next? N/A	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS TECHNICAL THEATRE IV ABH	**3760 ABH**
Advanced instruction in makeup, costuming design, set design and construction, lighting and sound design, house management, and other technical areas needed for theatrical and performing arts productions. Students will be expected to participate in all behind-the-scenes action of productions and their performances.	03251200
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Technical Theatre III AB What's Next? N/A	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
FINE ARTS, LEVEL IV, VPA CAPSTONE AB	**VPA1000 AB**
The aim of this course is to provide opportunity for students to explore college preparation and professional applications of their VPA craft. Advanced credit with college and career readiness focused assignments and special projects will be approved and monitored by the instructor. Students will document their four years of VPA work through the completion of their portfolio in the first semester. Students will receive opportunities to job shadow and/or participate in unpaid practicums, networking, preparation of interview and audition requirements, and be able to creatively advocate their art to peers and members of the arts community. Students will investigate careers in the arts, develop problem solving skills and apply their art to a service learning action project. Students will actively prepare their capstone project to be presented in the spring semester (recital, gallery exhibit, direction of play, or project).	84500XXX Grade level: 12 Credit(s): Local Credit College Hour(s): NA
Instructional Material: N/A Prerequisites: Level I-III of a Fine Arts Content What's Next? N/A *This is for local credit only and only available at I.M. Terrell Academy for STEM & VPA.*	
THEATRE PRODUCTION I AB	**3755 AB**
Practical hands-on experience in acting and stagecraft through the preparation and public performance of plays. Participation in public performance is required (one per semester).	03250700
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Arts I AB or Teacher Recommendation What's Next? Theatre Production II AB	Grade level: 9 – 12 Credit(s): 0.5 College Hour(s): NA **Tier III**
HONORS THEATRE PRODUCTION I ABH	**3756 ABH**
Practical hands-on experience in acting and stagecraft through the preparation and public performance of plays. Students are required to participate in all productions on their campus as either a performer or technician. Students will be required to read plays and/or see a determined number of local productions.	03250700
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Arts I AB or Teacher Recommendation What's Next? Theatre Production II AB	Grade level: 9 – 12 Credit(s): 0.5 College Hour(s): NA **Tier II**
THEATRE PRODUCTION II AB	**3761 AB**
Advanced hands-on experience in acting and stagecraft through the preparation and public performance of plays. Participation in public performance is required (one per semester).	03250800
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Production I AB What's Next? Theatre Production III AB	Grade level: 10 – 12 Credit(s): 0.5-1.0 College Hour(s): NA **Tier III**
HONORS THEATRE PRODUCTION II ABH	**3762 ABH**
Practical hands-on experience in acting and stagecraft through the preparation and public performance of plays. Students are required to participate in all productions on their campus either as a performer or technician. Students will also attend at least one off-campus theatre and/or media production per semester. Students will also create and produce a portfolio appropriate for college and career standards.	03250800
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002*	Grade level: 10 – 12 Credit(s): 0.5-1.0 College Hour(s): NA

Prerequisites: Theatre Production I AB What's Next? Theatre Production III AB	**Tier II**
THEATRE PRODUCTION III AB	**3763 AB**
Advanced hands-on experience in acting and stagecraft through the preparation and public performance of plays. Participation in public performance is required (one per semester).	03250900
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Production II AB What's Next? Theatre Production IV AB	Grade level: 11 – 12 Credit(s): 0.5-1.0 College Hour(s): NA **Tier III**
HONORS THEATRE PRODUCTION III ABH	**3764 ABH**
Hands-on experience in acting and stagecraft through the preparation and public performance of plays. Students are required to participate in all productions on their campus either as a performer or technician. Students will also attend at least one off-campus theatre and/or media production per semester. Students will also create and produce a portfolio appropriate for college and career standards.	03250900
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Productions II AB What's Next? Theatre Production IV AB	Grade level: 11 – 12 Credit(s): 0.5-1.0 College Hour(s): NA **Tier II**
THEATRE PRODUCTION IV AB	**3765 AB**
Advanced hands-on experience in acting and stagecraft through the preparation and public performance of plays. Participation in public performance is required (one per semester).	03251000
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Production III AB What's Next? N/A	Grade level: 11 – 12 Credit(s): 0.5-1.0 College Hour(s): NA **Tier III**
HONORS THEATRE PRODUCTION IV ABH	**3766 ABH**
Hands-on experience in acting and stagecraft through the preparation and public performance of plays. Students are required to participate in all productions on their campus either as a performer or technician. Students will also attend at least one off-campus theatre and/or media production per semester. Students will also create and produce a portfolio appropriate for college and career standards.	03251000
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Theatre Production III AB What's Next? N/A	Grade level: 11 – 12 Credit(s): 0.5-1.0 College Hour(s): NA **Tier II**
MUSICAL THEATER I AB	**1484 AB**
Musical Theatre will expose students to a wide range of on-stage performance disciplines, including acting, performance, vocal performance, and dance performance. The course will also provide an atmosphere in which students benefit from a teaching and learning experience in these performance disciplines of musical theatre. Participation in public performance is required (one per semester).	03251900 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Any level Theatre, Dance, or Music course What's Next? Musical Theatre II AB	College Hour(s): NA **Tier III**
HONORS MUSICAL THEATER I ABH	**1485 ABH**
Musical Theatre will expose students to a wide range of on-stage performance disciplines, including acting, performance, vocal performance, and dance performance. The course will also provide an atmosphere in which students benefit from a teaching and learning experience in these performance disciplines of musical theatre. Students are required to participate in all productions on their campus either as a performer or technician.	03251900 Grade level: 9 - 12 Credit(s): 1
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Any level Theatre, Dance or Music course What's Next? Musical Theatre II AB	College Hour(s): NA **Tier II**
MUSICAL THEATRE II AB	**1474 AB**
Musical Theatre will expose students to a wide range of on-stage performance disciplines, including acting, performance, vocal performance, and dance performance. Participation in public performance is required (one per semester). *The student can earn PE credit for Musical Theatre IIAB as a TEKS-based course that meets the requirement of 100 minutes of moderate to vigorous physical activity per week if it is not being used to satisfy another graduation requirement. The teacher does not have to be certified in PE. See Health & Physical Education section for course #.*	03252000 Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier III**

Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Musical Theatre I AB What's Next? Musical Theatre III AB	
HONORS MUSICAL THEATER II ABH	**1486 ABH**
Continued development of on-stage performance disciplines, including acting, performance, vocal performance, and dance performance. Students are required to participate in all productions on their campus either as a performer or technician. Students will also attend at least one off-campus theatre and/or media production per semester. Students will also create and produce a portfolio appropriate for college and career standards.	03252000 Grade level: 10 – 12 Credit(s): 1
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Musical Theatre I What's Next? Musical Theatre III AB	College Hour(s): NA **Tier II**
MUSICAL THEATRE III AB	**1475 AB**
Continued development to a wide range of on-stage performance disciplines, including acting, performance, vocal performance, and dance performance. Participation in public performance is required (one per semester).	03252100
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Musical Theatre II AB What's Next? Musical Theatre IV AB	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS MUSICAL THEATER III ABH	**1487 ABH**
Continued development of on-stage performance disciplines, including acting, performance, vocal performance, and dance performance. Students are required to participate in all productions on their campus either as a performer or technician. Students will also attend at least one off-campus theatre and/or media production per semester. Students will also create and produce a portfolio appropriate for college and career standards.	03252100 Grade level: 11 – 12 Credit(s): 1
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Musical Theatre II What's Next? Musical Theatre IV AB	College Hour(s): NA **Tier II**
MUSICAL THEATRE IV AB	**1476 AB**
Continued development to a wide range of on-stage performance disciplines, including acting, performance, vocal performance, and dance performance. Participation in public performance is required (one per semester).	03252200
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Musical Theatre III AB	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS MUSICAL THEATER IV ABH	**1488 ABH**
Continued development of on-stage performance disciplines, including acting, performance, vocal performance, and dance performance. Students are required to participate in all productions on their campus as either a performer or technician. Students will also attend at least one off-campus theatre and/or media production per semester. Students will also create and produce a portfolio appropriate for college and career standards.	03252200 Grade level: 11 – 12 Credit(s): 1
Instructional Material: *Drama for Reading and Performance Perfection Learning ISBN: 9781680644050; Stages of History Perfection Learning ISBN: 9780789163325; Creative Communication Perfection Learning ISBN: 97809310544002* Prerequisites: Musical Theatre III AB	College Hour(s): NA **Tier II**

WORLD LANGUAGES GRADUATION REQUIREMENTS

ALL STUDENTS ARE REQUIRED to take 2 Credits of the SAME Language

FOUNDATION PLANS

All Plans require students to earn two credits in any two levels of the same lanquage: Students may select to take any two levels in the same langauge or two credits in computer programming languages selected from Computer Science I, II, III, AP Computer Principles, and AP Computer Science A.

If a student, in completing the first credit of LOTE, demonstrates that the student is unlikely to be able to complete the second credit, the student may substitute another appropriate course as follows:

- Special Topics in Language and Culture
- Another credit from a different language
- Computer programming languages

The determination regarding a student's ability to complete the second credit of LOTE must be agreed on by:

- The teacher of the first LOTE course, the principal or designee, and the student's parent
- The ARD or 504 committee, if applicable

A student, who due to a disability, is unable to complete 2 credits in the same LOTE, may substitute a combination of 2 credits from ELA, math, science or soical studies or 2 credits in CTE or Technology Applications for the LOTE requirement. (Cannot combine a credit from the ELA, math, science, and social studies areas with a credit from the CTE / technology applications area.) The determination regarding the student's ability to complete the LOTE requirement will be made by the ARD or 504 committee, as applicable.

Students now have the oppportunity to:

- Earn a **performance acknowledgement** in bilingualism and biliteracy. Students must demonstrate proficiency in **two or more languages** through completion of a **minimum of 3 credits** in the same language other than English with a minimum GPA of the equivalent of 80 on a scale of 100;
- Meet the admissions requirements of many state, national, public, and private universities which include a **minimum of 3 years** of study of a language other than English.

All students, therefore, are strongly encouraged to study **a minimum of 3 years** of a LOTE.

Possible Endorsement Opportunities:

- Arts & Humanities

For specific Endorsement Requirements, see the FOUNDATION PROGRAM section of Bulletin 100.

A student who successfully completes a dual language immersion/two-way or dual language immersion/one-way program at an elementary school may satisfy one credit of the two credits required in a language other than English.

To successfully complete a dual language immersion program, a student must:

1. *Have participated in a dual language immersion program for at least five consecutive school years;*
2. *Achieve high levels of academic competence, as demonstrated by performance of meets or masters grade level on the STAAR in English or Spanish, as applicable; and*
3. *Achieve proficiency in both English and a language other than English as demonstrated by scores of proficient or higher in reading and speaking domains on language proficiency achievement tests in both languages.*

The second credit of a language other than English must be in the same language as the successfully completed dual language immersion program. TEC §28.0051 and TAC §74.12(b)(5)(F)

World Languages Frequently Asked Questions (FAQs)

LOTE (Languages Other Than English)

1. **Can a student combine different levels from different languages to meet the LOTE requirement to graduate on the foundation high school program? ***

   Two levels of the same language are required for graduation on the Foundation High School Program (unless an appropriate course substitution has been approved). Students may also meet the LOTE requirement by earning two credits in computer programming languages selected from Computer Science I, II, and III, AP Computer Science A, AP Computer Science Principles, IB Computer Science Standard Level, and IB Computer Science Higher Level.

2. **What options do we have for a junior/senior who has recently enrolled in our district and does not have any credits for LOTE or has taken a language that our district does not offer?***

   There is no exemption from the LOTE requirement of the Foundation High School Program. FWISD offers a variety of options including enrollment in a district-approved web-based program, taking a credit-by-exam, or summer school.

3. **Can a student be enrolled in two different levels of the same language at the same time?**

   LOTE courses are sequential and prerequisites are mandatory. Any LOTE course that requires a prerequisite course as listed in Bulletin 100 must be taken in sequence. For example, a student may not be enrolled in a Level I and Level II LOTE course at the same time.

4. **What options does a student have if they fail a LOTE course?**

   A student who fails a LOTE course can recover the credit by re-taking the course, enrolling in a district-approved web-based program, taking a credit-by-exam, or through summer school.

5. **A student failed Level 1A of a language, but passed Level 1B. Do they have to re-take 1A before they can be enrolled in 2A?**

   LOTE courses are sequential and prerequisites are mandatory. Student success in the higher-level LOTE course is based on content knowledge gained in the prerequisite course.

6. **What is the process for the Spanish placement test?**

   A counselor may refer a student to the World Languages department chair for placement testing. The department chair or other assigned facilitator is responsible for providing the counselor with a copy of the placement test results as well as documentation for the recommended course.

**These LOTE FAQs and more can be found on TEA's site at:*
https://tea.texas.gov/academics/subject-areas/languages-other-than-english

SPECIAL TOPICS IN LANGUAGE AND CULTURE AB	4065 AB
Students gain an understanding of two basic aspects of human existence: the nature of communication and the complexity of culture. Students become aware of multiple perspectives and means of expression, which lead to an appreciation of difference and diversity. This course cannot be considered a part of the coherent sequence of languages other than English (LOTE) courses required for any endorsement. This course will not count as a level II LOTE course. Students who desire to continue with LOTE study will need to take level II or higher LOTE courses. This course may be substituted for a level II LOTE course upon approval by the student's level I LOTE classroom teacher, the principal or designee, and the student's parent who determine that the student is not likely to be successful in a level II LOTE course.	11410000 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Contact Content Director* Prerequisites: Any Level I LOTE Course	
AMERICAN SIGN LANGUAGE I AB	**4402 AB**
Introduces communication skills in American Sign Language, including both receptive and expressive signing, as well as interactive communication. Explores History of the language and the culture of deaf people.	03980100 Grade level: 9 - 12
Instructional Material: *Signing Naturally Level I - Dawn Sign Press Media, Units 1-6 ISBN: 9781581212105 & Units 7-12 ISBN: 9781581212211* Prerequisites: Taken in sequence What's Next? American Sign Language II AB	Credit(s): 1 College Hour(s): NA **Tier III**
DUAL CREDIT AMERICAN SIGN LANGUAGE I AB **TCC Course: American Sign Language (SGNL 1401)**	**4414 AB**
An introduction to the basic skills in production and comprehension of American Sign Language (ASL). Includes the manual Alphabet and numbers. Develops conversational abilities, culturally appropriate behaviors, and exposes students to ASL grammar.	03980100 Grade level: HS: 11-12 ECHS: 9-12
Instructional Material: *NA* Prerequisites: Taken in sequence What's Next? SGNL 1402 *Course taught by an approved adjunct instructor.*	Credit(s): 1 College Hour(s): 4 hours **Tier I**
AMERICAN SIGN LANGUAGE II AB	**4404 AB**
The communication skills acquired in Level I are extended to include distinguishing between variations in signs and non-manual communication. More in-depth study of deaf culture will be explored. Students will be provided opportunities to express and receive signed information in a variety of situations.	03980200 Grade level: 9 – 12
Instructional Material: *Signing Naturally Level II. Dawn Sign Press Media, ISBN: 9781581211313* Prerequisites: American Sign Language I; taken in sequence What's Next? American Sign Language III AB or Honors American Sign Language III AB	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS AMERICAN SIGN LANGUAGE II AB	**4405 AB**
The honors course is designed for ninth grade students who have completed two years of languages in middle school or highly motivated language learners. These students will expand and strengthen the linguistic skills learned during their first language course. Students will be expected to participate in daily aural and written activities and conduct classroom conversations to create an immersion-type experience. *Students in this course are required to complete an approved Global Citizen project at the end of the year.*	03980200 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Signing Naturally Level II. Dawn Sign Press Media, ISBN: 9781581211313* Prerequisites: American Sign Language I; taken in sequence What's Next? American Sign Language III AB or Honors American Sign Language III AB	**Tier II**
DUAL CREDIT AMERICAN SIGN LANGUAGE II AB **TCC Course: American Sign Language (SGNL 1402)**	**4416 AB**
Develops receptive and expressive ability and allows recognition and demonstration of more sophisticated grammatical features of American Sign Language (ASL). Increases fluency and accuracy in finger spelling and numbers. Encourages opportunities for interaction with the deaf community. Taken with SLNG 1215.	03980200 Grade level: HS: 11-12 ECHS: 9-12
Instructional Material: *NA* FWISD Prerequisites: SGNL1401 What's Next? SGNL 2301 *Course taught by an approved adjunct instructor.*	Credit(s): 1 College Hour(s): 4 hours **Tier I**
DUAL CREDIT CONVERSATIONAL SIGN LANGUAGE IN THE WORKPLACE AB **TCC Course: Conversational Sign Language in the Workplace (SLNG 1202)**	**4422 AB**
Development of basic conversational skills through practice designed to improve communication with clients/co-workers who are deaf.	84600XXX Grade level: HS: 11-12
Instructional Material: *Per TCC* FWISD Prerequisites: SGNL 1401 & SGNL 1402 What's Next? NA Offered only at WLI	ECHS: 9-12 Credit(s): 0.5 College Hour(s): 2 hours Tier I

HONORS AMERICAN SIGN LANGUAGE III AB	4408 AB
Focus on increasing manual and non-manual communication, while extending the study of both receptive and expressive signing. Emphasizes the acquisition of skills of creative self-expression in both sign and non-manual communication, and understanding of deaf culture. Includes direction of regional variations in signs and idioms used in given conversation. Additional independent research and service projects are required of Honors class students.	03980300 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Signing Naturally Level III. Dawn Sign Press Media, ISBN: 9781581211351* Prerequisites: American Sign Language II; taken in sequence, student interest What's Next? Honors American Sign Language IV AB	**Tier II**
DUAL CREDIT VISUAL & GESTURAL COMMUNICATION T **TCC Course: American Sign Language (SLGN 1215)**	**9003 T**
Development of skills in non-verbal communication. Emphasizes the use and understanding of facial expression, gestures, pantomime, and body language.	84600XXX Grade level: HS: 11-12
Instructional Material: *NA* FWISD Prerequisites: SGNL 1402 What's Next? SGNL 2301 *Course taught by an approved adjunct instructor.* Offered only at WLI	ECHS: 9-12 Credit(s): 1 College Hour(s): 4 hours **Tier I**
DUAL CREDIT DEAF CULTURE AB **TCC Course: Deaf Culture (SLNG 1347)**	**4424 AB**
Historical and contemporary perspective of American Deaf culture using a sociocultural model. Includes cultural identity and awareness, values, group norms, communication, language, and significant contributions made by deaf people to the world.	84600XXX Grade level: HS: 11-12 ECHS: 9-12
Instructional Material: *Per TCC* FWISD Prerequisites: SGNL 2301 & SLNG 1215 What's Next? NA Offered only at WLI	Credit(s): 0.5 College Hour(s): 3 hours Tier I
DUAL CREDIT AMERICAN SIGN LANGUAGE III AB **TCC Course: American Sign Language (SGNL 2301)**	**4418 AB**
The first semester covers Visual and Gestural Communication. Integrates and refines expressive and receptive skills in American Sign Language (ASL), including recognition of sociolinguistic variation. A practiced oriented approach to language acquisition.	03980300 Grade level: HS: 11-12 ECHS: 9-12
Instructional Material: *NA* FWISD Prerequisites: SGNL 1402 & SLNG 1215 What's Next? NA *Course taught by an approved adjunct instructor.*	WLI: 10-12 Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
HONORS AMERICAN SIGN LANGUAGE IV AB	**4412 AB**
The focus is on manual and non-manual communication, while extending the study of both receptive and expressive signing. Other skills emphasized include creative self-expression in both signs and non-manual communication, and understanding of deaf culture. Encourages participation in connected discourse in straightforward situations, as well as fostering cultural and linguistic accuracy in communication. Additional independent research and service projects are required of Honors class students.	03980400 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Signing Naturally Level III. Dawn Sign Press Media, ISBN: 9781581211351* Prerequisites: Honors American Sign Language III, student interest What's Next? NA *Course taught by locally certified gifted teacher.*	**Tier II**
DUAL CREDIT AMERICAN SIGN LANGUAGE IV AB **TCC Course: American Sign Language (SGNL 2302)**	**4420 AB**
Integration of expressive and receptive skills in American Sign Language (ASL) with emphasis on grammar, linguistics, literature, and discourse styles at an intermediate level. Provides students with information linguistic and cultural variations.	03980400 Grade level: HS: 11-12 ECHS: 9-12
Instructional Material: *NA* FWISD Prerequisites: SGNL 2301 *Course taught by an approved adjunct instructor.*	Credit(s): 0.5 College Hour(s): 4 hours **Tier I**
DUAL CREDIT OTHER FOREIGN LANGUAGES LEVEL 1 AB **TCC Course: Beginning American Sign Language (SGNL 1401)**	**4351 AB**
Students become aware of multiple perspectives and means of expression, which lead to an appreciation of difference and diversity. Further benefits of foreign language study include stronger cognitive development, increased creativity, and divergent thinking. Students who effectively communicate in more than one language, with an appropriate understanding of cultural context, are globally literate and possess the attributes of successful participants in the world community. At the high school level, students shall be awarded one credit for successful completion of this course.	03993200 Grade level: 9 - 12 Credit(s): 1 College Hour(s): 4 hours **Tier I**
Instructional Material: *TBD* TCC Prerequisites: None What's Next? SGNL 1402 *Course taught by an approved adjunct instructor.*	

DUAL CREDIT OTHER FOREIGN LANGUAGES LEVEL 2 AB **TCC Course: Beginning American Sign Language (SGNL 1402)**	**4353 AB**
Students become aware of multiple perspectives and means of expression, which lead to an appreciation of difference and diversity. Further benefits of foreign language study include stronger cognitive development, increased creativity, and divergent thinking. Students who effectively communicate in more than one language, with an appropriate understanding of cultural context, are globally literate and possess the attributes of successful participants in the world community. At the high school level, students shall be awarded one credit for successful completion of this course.	03993300 Grade level: 9 - 12 Credit(s): 1 College Hour(s): 4 hours **Tier I**
Instructional Material: *TBD* TCC Prerequisites: SGNL1401 What's Next? SGNL 2301 *Course taught by an approved adjunct instructor.*	
DUAL CREDIT OTHER FOREIGN LANGUAGES LEVEL 3 AB **TCC Course: Intermediate American Sign Language I (SGNL 2301)**	**4355 AB**
Students become aware of multiple perspectives and means of expression, which lead to an appreciation of difference and diversity. Further benefits of foreign language study include stronger cognitive development, increased creativity, and divergent thinking. Students who effectively communicate in more than one language, with an appropriate understanding of cultural context, are globally literate and possess the attributes of successful participants in the world community. At the high school level, students shall be awarded one credit for successful completion of this course.	03993400 Grade level: 9 - 12 Credit(s): 1 College Hours(s): 3 hours **Tier I**
Instructional Material: *TBD* TCC Prerequisites: SGNL 1401 and SGNL 1402 What's Next? NA *Course taught by an approved adjunct instructor.*	
CHINESE I AB	**4356 AB**
Offers everyday conversational patterns in culturally authentic situations and introduces reading and writing. Offers practice in using learned material to carry on very simple conversations and to read and write familiar material. Fosters awareness in Mandarin Chinese culture and of the importance of accuracy expression. This course may also be broadcasted by the FWISD; students in all high schools have the opportunity to participate.	03490100 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *1614- Zhēn Bàng! Level I, EMC Publishing ISBN: 9781533815200* Prerequisites: Taken in sequence What's Next? Chinese II AB	College Hour(s): NA **Tier III**
CHINESE II AB	**4358 AB**
Expands oral and written skills into more challenging constructions, increased proficiency with the Chinese character system, increased reading comprehension and a variety of cultural experiences in the Chinese speaking world. Offers practice in Pinyan (Chinese pronunciation code), understanding and producing sentence-length utterances, and brief, connected texts using recombination's of learned material. Promotes recognition of the role of culture and language components in communication.	03490200 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *1615- Zhēn Bàng! Level II, EMC Publishing ISBN: 9781533815217* Prerequisites: Chinese I; taken in sequence What's Next? Honors Chinese III AB	College Hour(s): NA **Tier III**
HONORS CHINESE II AB	**4359 AB**
The honors course is designed for ninth grade students who have completed two years of languages in middle school or highly motivated language learners. These students will expand and strengthen the linguistic skills learned during their first language course. Students will be expected to participate in daily aural and written activities and conduct classroom conversations to create an immersion-type experience. *Students in this course are required to complete an approved Global Citizen project at the end of the year.*	03490200 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *1615- Zhēn Bàng! Level II, EMC Publishing ISBN: 9781533815217* Prerequisites: Chinese I; taken in sequence What's Next? Honors Chinese III AB *Course taught by locally certified gifted teacher or AP trained teacher*	**Tier II**
HONORS CHINESE III AB	**4362 AB**
Emphasizes creative self-expression in spoken language. Expands aural comprehension to improve guessing from context. Includes short passages from both adapted and authentic literature, in the reading practice and some creative writing. Promotes increased knowledge of the Chinese culture and components of the language.	03490300 Grade level: 9 - 12
Instructional Material: *1616- Zhēn Bàng! Level III, EMC Publishing, ISBN 9781533815224* Prerequisites: Chinese II, taken in sequence What's Next? AP Chinese Language and culture AB or Honors Chinese IV AB *Course taught by locally certified gifted teacher or AP trained teacher*	Credit(s): 1 College Hour(s): NA **Tier II**
HONORS CHINESE IV AB	**4367 AB**
Affords an opportunity for students to carry on connected discourse in straightforward situations, to produce oral presentations and written reports on a variety of topics, and interpret text from various genres and subject areas. Fosters cultural and linguistic accuracy in communication.	03490400 Grade level: 10 - 12

Instructional Material: *No state adopted materials/ Contact Content Director* Prerequisites: Honors Chinese III, taken in sequence What's Next? Chinese V AB *Course taught by locally certified gifted teacher.*	Credit(s): 1 College Hour(s): NA **Tier II**
AP CHINESE LANGUAGE AND CULTURE IV AB	**4364 AB**
Emphasizes creative self-expression in spoken language. Offers practice in understanding and producing oral and written passages on a variety of topics. Prepares students to increase level of proficiency in the Chinese languages across the three communicative modes (Interpersonal, Interpretive, and Presentational) and the five goal areas of the national and state standards: (Communication, Cultures, Connections, Comparisons, and Communities). Authentic sources support acquisition of both linguistic and cultural skills. Course fosters accuracy of expression and cultural behavior and the use of Chinese for future careers and personal enrichment.	A3490400 Grade level: 9 - 12 Credit(s): 1 College Hour(s): NA **Tier I**
Instructional Material: *No state adopted materials/ Contact Content Director* Prerequisites: Honors Chinese III, taken in sequence What's Next? Honors Chinese V *Course taught by an AP trained teacher.*	
HONORS CHINESE V ABH	**4369 AB**
Affords an opportunity for students to carry on connected discourse in straightforward situations, to produce oral presentations and written reports on a variety of topics, and interpret text from various genres and subject areas. Fosters cultural and linguistic accuracy in communication.	03490500 Grade level: 10 - 12 Credit(s): 1
Instructional Material: *No state adopted materials/ Contact Content Director* Prerequisites: AP Chinese Language and Cultural What's Next? NA *Course taught by locally certified gifted teacher.*	College Hour(s): NA **Tier I**
FRENCH I AB	**4131 AB**
Offers everyday conversational patterns in culturally authentic situations and introduces reading and writing. Offers practice in using learned material to carry on very simple conversations and to read and write familiar material. Fosters awareness of the variety of French-Speaking cultures and of the importance of accuracy of expression.	03410100 Grade level: 9 – 12
Instructional Material: *1603- Bien Dit! 1 Houghton, Mifflin, Harcourt, ISBN: 9781328682628* Prerequisites: Taken in sequence What's Next? French II AB	Credit(s): 1 College Hour(s): NA **Tier III**
DUAL CREDIT FRENCH I AB **TCC Course: Beginning French I (FREN 1411)**	**4127 AB**
Fundamental skills in listening comprehension, speaking, reading, and writing. Includes acquisition of language functions, basic vocabulary, grammatical structures, and culture through contextualized presentations, interactive activities, and extensive laboratory practice.	03410100 Grade level: HS: 11-12 ECHS: 9-12
Instructional Material: *NA* FWISD Prerequisites: Taken in sequence What's Next? FREN 1412 *Course taught by an approved adjunct instructor.*	Credit(s): 1 College Hour(s): 4 hours **Tier I**
FRENCH II AB	**4133 AB**
Expands oral and written skills into more challenging constructions, increased reading comprehension, and a variety of cultural experiences in the French-speaking world. Offers practice in understanding and producing sentence-length utterances and brief, connected texts using re-combinations of learned material. Promotes recognition of the role of culture and language components in communication.	03410200 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *1604 - Bien Dit! II Houghton, Mifflin, Harcourt, ISBN: 9781328682635* Prerequisites: French I, taken in sequence What's Next? Honors French III AB	College Hour(s): NA **Tier III**
HONORS FRENCH II AB	**4134 AB**
The honors course is designed for ninth grade students who have completed two years of languages in middle school or highly motivated language learners. These students will expand and strengthen the linguistic skills learned during their first language course. Students will be expected to participate in daily aural and written activities and conduct classroom conversations to create an immersion-type experience. *Students in this course are required to complete an approved Global Citizen project at the end of the year.*	03410200 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *1604 - Bien Dit! II Houghton, Mifflin, Harcourt, ISBN: 9781328682635* Prerequisites: French I, taken in sequence What's Next? Honors French III AB	**Tier II**
DUAL CREDIT FRENCH II AB **TCC Course: Beginning French II (FREN 1412)**	**4129 AB**
Continuation of FREN-1411 with emphasis on conversation. Laboratory practice. This is a regular college-level French course in which dual credit will be awarded for college French and high school French II.	03410200 Grade level: HS: 11-12 ECHS: 9-12
Instructional Material: *NA* FWISD & TCC Prerequisites: FREN 1411 *Course taught by an approved adjunct instructor.*	Credit(s): 1 College Hour(s): 4 hours **Tier I**
HONORS FRENCH III AB	**4137 AB**
Emphasizes creative self-expression in the spoken language. Expands aural comprehension to improve guessing from context. Includes short passages of literature in the reading practice and some creative writing. Promotes	03410300

increased knowledge of the French culture and components of the language	Grade level: 9 – 12
Instructional Material: *1605 - Bien Dit! III Houghton, Mifflin, Harcourt, ISBN: 9781942400349* Prerequisites: French II; novice-high proficiency in speaking; intermediate-low proficiency in listening, reading and writing, student interest; taken in sequence What's Next? AP French Language and Culture or Honors French IV AB *Course taught by locally certified gifted or AP trained teacher*	Credit(s): 1 College Hour(s): NA **Tier II**
HONORS FRENCH IV ABH	**4332 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of French for future careers and personal enrichment	03410400 Grade level: 9 – 12
Instructional Material: *1606 – APprenons, French IV Wayside Publishing, ISBN: 9781938026911* Prerequisites: Honors French III What's Next? 4141 – AP French Language and Culture; or 4143 Honors French V *Course taught by locally certified gifted teacher.*	Credit(s): 1 College Hour(s): NA **Tier II**
AP FRENCH LANGUAGE AND CULTURE AB	**4141 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of French for future careers and personal enrichment	A3410100 Grade level: 9 – 12
Instructional Material: *1606 – APprenons, French IV Wayside Publishing, ISBN: 9781938026911* Prerequisites: Honors French III What's Next? Honors French V AB	Credit(s): 1 College Hour(s): NA **Tier I**
HONORS FRENCH V AB	**4143 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of French for future careers and personal enrichment	03410500 Grade level: 9 - 12 Credit(s): 1
Instructional Material: *1606 –Contact Content Director* Prerequisites: AP French, Language & Culture What's Next? Honors French VI AB	College Hour(s): NA **Tier I**
HONORS FRENCH VI AB	**4145 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of French for future careers and personal enrichment	03410600 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *1606 – Contact Content Director* Prerequisites: Honors French V; taken in sequence What's Next? N/A	**Tier I**
GERMAN I AB	**4191 AB**
Offers everyday conversational patterns in culturally authentic situations and introduces reading and writing. Offers practice in using learned material to carry on very simple conversations and to read and write familiar material. Fosters awareness of German culture and of the importance of accuracy of expression	03420100 Grade level: HS: 9-12 Credit(s): 1
Instructional Material: *1670 - Portfolio Deutsch Level I, Klett-USA; ISBN: 9783126000024* Prerequisites: Taken in sequence What's Next? German II AB	College Hour(s): NA **Tier III**
DUAL CREDIT GERMAN I AB **TCC Course: Beginning German I (GERM 1411)**	**4187 AB**
Fundamental skills in listening comprehension, speaking, reading, and writing. Includes acquisition of language functions, basic vocabulary, grammatical structures, and culture through contextualized presentations, interactive activities, and extensive laboratory practice.	03420100 Grade level: HS: 11-12 ECHS: 9-12
Instructional Material: *NA* Prerequisites: Taken in sequence What's Next? GERM 1412 *Course taught by an approved adjunct instructor.*	Credit(s): 1 College Hour(s): 4 hours **Tier I**
GERMAN II AB	**4193 AB**
Expands oral and written skills into more challenging constructions, increased reading comprehension, and a variety of cultural experiences in the German-speaking world. Offers practice in understanding and producing sentence-length utterances and brief, connected texts using recombination's of learned material. Promotes recognition of the role of culture and language components in communication	03420200 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *1671 - Portfolio Deutsch Level II, Klett-USA; ISBN: 9783126000130* Prerequisites: German I; taken in sequence What's Next? Honors German III AB	College Hour(s): NA **Tier III**

HONORS GERMAN II AB	**4194 AB**
The honors course is designed for ninth grade students who have completed two years of languages in middle school or highly motivated language learners. These students will expand and strengthen the linguistic skills learned during their first language course. Students will be expected to participate in daily aural and written activities and conduct classroom conversations to create an immersion-type experience. *Students in this course are required to complete an approved Global Citizen project at the end of the year.*	03420200 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *1671 - Portfolio Deutsch Level II, Klett-USA; ISBN: 9783126000130* Prerequisites: German I; taken in sequence What's Next? Honors German III AB	**Tier II**
DUAL CREDIT GERMAN II AB **TCC Course: Beginning German II (GERM 1412)**	**4189 AB** 03420200
Continuation of GERM 1411 with emphasis on conversation.	Grade level: HS: 11-12 ECHS: 9-12
Instructional Material: *NA* FWISD & TCC Prerequisites: GERM-1411 *Course taught by an approved adjunct instructor.*	Credit(s): 1 College Hour(s): 4 hours **Tier I**
HONORS GERMAN III AB	**4197 AB**
Emphasizes creative self-expression in the spoken language. Expands aural comprehension to improve guessing from context. Includes short passages of literature for reading practice and some creative writing. Promotes increased knowledge of the German culture and components of the language	03420300 Grade level: 9 – 12
Instructional Material: *1672 - Portfolio Deutsch Level III, Klett-USA; ISBN: 97831260000208* Prerequisites: German II; novice-high proficiency in speaking; intermediate-low proficiency in listening, reading, and writing; student interest; taken in sequence What's Next? Honors German IV AB or AP German Language and Culture IV AB	Credit(s): 1 College Hour(s): NA **Tier II**
HONORS GERMAN IV AB	**4338 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of French for future careers and personal enrichment	03420400 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *Portfolio Deutsch Level IV, Klett-USA; ISBN: 9783126000260* Prerequisites: Honors German III What's Next? AP German Language and Culture V AB	College Hour(s): NA **Tier II**
AP GERMAN LANGUAGE AND CULTURE AB	**4201 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of German for future careers and personal enrichment	A3420100 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *Portfolio Deutsch Level IV, Klett-USA; ISBN: 9783126000260* Prerequisites: Honors German III What's Next? Honors German V AB	College Hour(s): NA **Tier I**
HONORS GERMAN V AB	**4203 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of French for future careers and personal enrichment	03420500 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *No state-adopted instructional material(s)/Deutschen Gramatick, 2nd Edition, Houghton Mifflin/Contact Content Director* Prerequisites: AP German Language & Culture What's Next? NA	College Hour(s): NA **Tier I**
HONORS GERMAN VI AB	**4205 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of German for future careers and personal enrichment	03420600 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *No state-adopted instructional material(s)/Deutschen Gramatick, 2nd Edition, Houghton Mifflin/Contact Content Director* Prerequisites: AP German Language and Culture; taken in sequence	College Hour(s): NA **Tier I**
ITALIAN I AB	**4244 AB**
Offers everyday conversational patterns in culturally authentic situations and introduces reading and writing. Offers practice in using learned material to carry on very simple conversations and to read and write familiar material. Fosters awareness of Italian culture and of the importance of accuracy of expression	03400100 Grade level: 9 – 12
Instructional Material: *Chiarissimo I - Wayside Publishing; ISBN: 9781942400370* Prerequisites: N/A What's Next? Italian II AB	Credit(s): 1 College Hour(s): NA **Tier III**

ITALIAN II AB	4250 AB
Expands oral and written skills into more challenging constructions, increased reading comprehension, and a variety of cultural experiences in the Italian-speaking world. Offers practice in understanding and producing sentence-length utterances and brief, connected texts using re-combinations of learned material. Promotes recognition of the role of culture and language components in communication	03400200 Grade level: 10 – 12 Credit(s): 1
Instructional Material: *Chiarissimo II - Wayside Publishing; ISBN: 9781942400394* Prerequisites: Italian I, taken in sequence What's Next? Honors Italian III AB	College Hour(s): NA **Tier III**
HONORS ITALIAN II AB	**4251 AB**
The honors course is designed for ninth grade students who have completed two years of languages in middle school or highly motivated language learners. These students will expand and strengthen the linguistic skills learned during their first language course. Students will be expected to participate in daily aural and written activities and conduct classroom conversations to create an immersion-type experience. *Students in this course are required to complete an approved Global Citizen project at the end of the year.*	03400200 Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Chiarissimo II - Wayside Publishing; ISBN: 9781942400394* Prerequisites: Italian I, taken in sequence What's Next? Honors Italian III AB	**Tier II**
HONORS ITALIAN III AB	**4252 AB**
Emphasizes creative self-expression in the spoken and written language. Reinforces previously learned materials. Develops spoken, written, and listening skills. Enhances cultural awareness through reading of major literary works and study of art, history, music, and geography	03400300
Instructional Material: *Sentieri - Vista Higher Learning. ISBN: 9781626808058* Prerequisites: Italian II; novice-high proficiency in speaking; intermediate-low proficiency in listening, reading, and writing; student interest; taken in sequence What's Next? Honors Italian IV AB or AP Italian Language and Culture AB	Grade level: 11 – 12 Credit(s): 1 College Hour(s): NA **Tier II**
HONORS ITALIAN IV ABH	**4255 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of French for future careers and personal enrichment	03400400 Grade level: 9 – 12
Instructional Material: *Immagina - Vista Higher Learning; ISBN: 978-1-62680-905-5* Prerequisites: Honors Italian III; student interest; taken in sequence What's Next? NA	Credit(s): 1 College Hour(s): NA **Tier II**
AP ITALIAN LANGUAGE AND CULTURE AB	**4256 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of Italian for future careers and personal enrichment	A3400400 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *Immagina - Vista Higher Learning; ISBN: 978-1-62680-905-5* Prerequisites: Honors Italian III; student interest; taken in sequence	**Tier I**
JAPANESE I AB	**4280 AB**
Offers everyday conversational patterns in culturally authentic situations and introduces reading and writing. Offers practice in using learned material to carry on very simple conversations and to read and write familiar material. Foster's awareness of Japanese culture and of the importance of accuracy of expression.	03120100 Grade level: 9 - 12
Instructional Material: *1622 — Genki, Level I, Cheng & Tsui, Co. Inc., ISBN: 9784789014403* Prerequisites: Taken in sequence What's Next? Japanese II AB	Credit(s): 1 College Hour(s): NA **Tier III**
JAPANESE II AB	**4282 AB**
Expands oral and written skills into more challenging constructions, increased reading comprehension, and a variety of cultural experiences. Offers practice in understanding and producing sentence-length utterances and brief, connected texts using recombination's of learned material. Promotes recognition of the role of culture and language components in communication. This course is also broadcast by the FWISD; students in all high schools have the opportunity to participate	03120200 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *1623 — Genki, Level II, Cheng & Tsui, Co. Inc., ISBN: 9784789014434* Prerequisites: Japanese I; taken in sequence What's Next? Honors Japanese III AB	**Tier III**
HONORS JAPANESE II AB	**4283 AB**
The honors course is designed for ninth grade students who have completed two years of languages in middle school or highly motivated language learners. These students will expand and strengthen the linguistic skills learned during their first language course. Students will be expected to participate in daily aural and written activities and conduct classroom conversations to create an immersion-type experience. *Students in this course are required to complete an approved Global Citizen project at the end of the year.*	03120200 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *1623 — Genki, Level II, Cheng & Tsui, Co. Inc., ISBN: 9784789014434* Prerequisites: Japanese I; taken in sequence	**Tier II**

What's Next? Honors Japanese III AB

HONORS JAPANESE III AB	4288 AB
Emphasizes creative self-expression in the spoken language. Expands aural comprehension to improve guessing from context Includes short passages of literature adapted from Kanji in the reading practice and some creative writing. Promotes increased knowledge of the Japanese culture and components of the language	03120300
Instructional Material: *1624 — Tobira, Level III Gateway to Advanced Japanese, Cheng & Tsui, Co. Inc., ISBN: 9784874244470* Prerequisites: Japanese II; demonstrated proficiency at the intermediate-low level in speaking and writing and the intermediate-mid level in listening and reading; student interest What's Next? AP Japanese Language & Culture	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier II**

HONORS JAPANESE IV A	4289 A
Emphasizes creative self-expression in the spoken language. Offers practice in understanding and producing oral and written passages on a variety of topics. Prepares students to increase level of proficiency in the Japanese language across the three communicative modes: (Interpersonal, Interpretive, and Presentational) and the via goal areas of the national and state standards: (Communication, Cultures, Connections, Comparisons, and Communities). Authentic sources support acquisition of both linguistic and cultural skills. Course fosters accuracy of expression and cultural behavior and the use of Japanese for future careers and personal enrichment.	A3120400 Grade level: 10 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
Instructional Material: *Tobira: Level IV Power Up Your Kanji, Cheng & Tsui, Co. Inc., ISBN: 9784874244876* Prerequisites: Honors Japanese III, taken in sequence What's Next? JAPNB/H 4289B	

AP JAPANESE LANGUAGE AND CULTURE AB	4286 AB
Emphasizes creative self-expression in the spoken language. Offers practice in understanding and producing oral and written passages on a variety of topics. Prepares students to increase level of proficiency in the Japanese language across the three communicative modes: (Interpersonal, Interpretive, and Presentational) and the via goal areas of the national and state standards: (Communication, Cultures, Connections, Comparisons, and Communities). Authentic sources support acquisition of both linguistic and cultural skills. Course fosters accuracy of expression and cultural behavior and the use of Japanese for future careers and personal enrichment	A3120400 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier I**
Instructional Material: *Tobira: Level IV Power Up Your Kanji, Cheng & Tsui, Co. Inc., ISBN: 9784874244876* Prerequisites: Honors Japanese III, taken in sequence What's Next? NA	

LATIN I AB	4211 AB
Introduces the reading of Latin, reinforced by listening, speaking, and writing. Fosters awareness of Roman culture and of components of the language	03430100 Grade level: 9 – 12
Instructional Material: *1625 - Elevate Level I, Unit I & Unit II Cambridge University Press, ISBN: 9781316646199* Prerequisites: Taken in sequence What's Next? Latin II AB	Credit(s): 1 College Hour(s): NA **Tier III**

LATIN II AB	4213 AB
Builds skills in reading comprehension, complemented by listening, speaking, and writing practice. Promotes recognition of the role of Roman culture and language components in communication	03430200 Grade level: 9 – 12
Instructional Material: *1625 - Elevate Level II, Unit III Cambridge University Press ISBN: 97813166462290* Prerequisites: Latin I; taken in sequence What's Next? Honors Latin III AB	Credit(s): 1 College Hour(s): NA **Tier III**

HONORS LATIN II AB	4214 AB
The honors course is designed for ninth grade students who have completed two years of languages in middle school or highly motivated language learners. These students will expand and strengthen the linguistic skills learned during their first language course. Students will be expected to participate in daily aural and written activities and conduct classroom conversations to create an immersion-type experience. *Students in this course are required to complete an approved Global Citizen project at the end of the year.*	03430200 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *1625 - Elevate Level II, Unit III Cambridge University Press ISBN: 97813166462290* Prerequisites: Latin I; taken in sequence What's Next? Honors Latin III AB	**Tier II**

HONORS LATIN III AB	4215 AB
Promotes the understanding of adapted and short unadapted literary passages. Uses listening, speaking, and writing skills to enhance reading. Applies knowledge of the culture and language components	03430300 Grade level: 9 – 12
Instructional Material: *1627 — Elevate Level III, Unit VI Cambridge University Press ISBN: 9781316646236* Prerequisites: Latin II; taken in sequence; student interest What's Next? AP Latin IV AB	Credit(s): 1 College Hour(s): NA **Tier II**

AP LATIN IV AB	4221 AB
Affords an opportunity for students to analyze and interpret selections of prose and poetry from a variety of sources and periods. Fosters the use of Latin for future careers and personal enrichment. Prepares students for the AP Latin examination.	A3430100 Grade level: 9 - 12
Instructional Material: *Vergil's Aeneid. Bolchazy-Carducci Publishers ISBN: 9780865167650 & Caesar ISBN: 9780865167780* Prerequisites: Honors Latin III; taken in sequence	Credit(s): 1 College Hour(s): NA **Tier I**

What's Next? NA

HONORS LATIN V AB	**4223 AB**
Affords an opportunity for students to analyze and interpret selections of prose and poetry from a variety of sources and periods. Fosters the use of Latin for future careers and personal enrichment	03430500 Grade level: 9 - 12
Instructional Material: *Latin of New Spain. Bolchazy-Carducci Publishers; ISBN: 9780865168053* Prerequisites: AP Latin Vergil AB; taken in sequence What's Next? NA	Credit(s): 1 College Hour(s): NA **Tier I**
HONORS LATIN VI AB	**4225 AB**
Affords an opportunity for students to analyze and interpret selections of prose and poetry from a variety of sources and periods. Fosters the use of Latin for future careers and personal enrichment. Prepares students for AP Latin examination	03430600 Grade level: 11 – 12
Instructional Material: *Not state adopted/ Contact Content Director* Prerequisites: Honors Latin V What's Next? NA	Credit(s): 1 College Hour(s): NA **Tier I**
SPANISH I AB	**4071 AB**
Offers everyday conversational patterns in culturally authentic situations and introduces reading and writing. Offers practice in using learned material to carry on very simple conversations and to read and write familiar material. Fosters awareness of Spanish culture and of the importance of accuracy of expression	03440100 Grade level: 9 - 12
Instructional Material: *1645 - Texas Auténtico I, Pearson Education, Inc.; ISBN: 9780328905461* Prerequisites: Taken in sequence What's Next? Spanish II AB	Credit(s): 1 College Hour(s): NA **Tier III**
DUAL CREDIT SPANISH I AB **TCC Course: Beginning Spanish I (SPAN 1411)** **TWU Course: Spanish 1 (SPN 1341)**	**4067 AB**
Basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level. Includes acquisition of language functions, basic vocabulary, and culture through contextualized presentations, interactive activities, and extensive laboratory practice.	03440100 Grade level: ECHS: 9 – 12 Credit(s): 1
Instructional Material: *NA* FWISD Prerequisites: Taken in sequence TWU Prerequisites: Only offered at Dunbar What's Next? TCC SPAN 1412 *Course taught by an approved adjunct instructor.*	College Hour(s): 4 hours **Tier I**
SPANISH II AB	**4073 AB**
Expands oral and written skills into more challenging constructions, increased reading comprehension, and a variety of cultural experiences in the Spanish-speaking world. Offers practice in understanding and producing sentence-length utterances and brief, connected texts using recombination's of learned material. Promotes recognition of the role of culture and language components in communication	03440200 Grade level: 9 - 12
Instructional Material: *1646 - Texas Auténtico II, Pearson Education, Inc.; ISBN: 032890547X* Prerequisites: Spanish I; taken in sequence What's Next? Honors Spanish III AB	Credit(s): 1 College Hour(s): NA **Tier III**
HONORS SPANISH II AB	**4072 AB**
The honors course is designed for ninth grade students who have completed two years of languages in middle school or highly motivated language learners. These students will expand and strengthen the linguistic skills learned during their first language course. Students will be expected to participate in daily aural and written activities and conduct classroom conversations to create an immersion-type experience. *Students in this course are required to complete an approved Global Citizen project at the end of the year.*	03440200 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *1646 - Texas Auténtico II, Pearson Education, Inc.; ISBN: 032890547X* Prerequisites: Spanish I; taken in sequence What's Next? Honors Spanish III AB	**Tier II**
DUAL CREDIT SPANISH II AB **TCC Course: Beginning Spanish II (SPAN 1412)** **TWU Course: Spanish 2 (SPN1342)**	**4069 AB**
Continued development of basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at a high beginner to low intermediate level. Emphasis on conversation.	03440200 Grade level: HS: 11-12 ECHS: 9-12
Instructional Material: *NA* FWISD & TCC Prerequisites: SPAN-1411 TWU Prerequisites: SPN 1341; Only offered at Dunbar What's Next? TCC SPAN 2311 *Course taught by an approved adjunct instructor.*	Credit(s): 1 College Hour(s): 4 hours **Tier I**
HONORS SPANISH III AB	**4077 AB**
Emphasizes creative self-expression in the spoken language. Expands aural comprehension to improve guessing from context. Includes short passages of literature in the reading practice and some creative writing. Promotes increased knowledge of the Spanish culture and components of the language	03440300
Instructional Material: *1647 - Texas Auténtico III, Pearson Education, Inc.; ISBN: 9780328905539*	Grade level: 9 – 12

Prerequisites: Spanish II; novice-high proficiency in speaking; intermediate-low proficiency in listening, reading, and writing; student interest; taken in sequence What's Next? Honors Spanish IV AB or AP Spanish Language AB	Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT SPANISH III A **TCC Course: Intermediate Spanish I (SPAN 2311)**	**4078 A**
The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Conversational practice based on selected readings and dialogues. Directed composition. Class conducted largely in Spanish.	03440300 Grade level: HS: 11-12 ECHS: 9-12 Credit(s): 0.5
Instructional Material: *NA* FWISD & TCC Prerequisites: SPAN-1412 What's Next? SPAN 2312 *Course taught by an approved adjunct instructor.*	College Hour(s): 3 hours **Tier I**
DUAL CREDIT SPANISH III B **TCC Course: Intermediate Spanish II (SPAN 2312)**	**4078 B** 03440300
Continuation of SPAN 2311	Grade level: HS: 11-12 ECHS: 9-12
Instructional Material: *NA* FWISD & TCC Prerequisites: SPAN-2311 *Course taught by an approved adjunct instructor.*	Credit(s): 0.5 College Hour(s): 3 hours **Tier I**
HONORS SPANISH IV ABH	**4326 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of French for future careers and personal enrichment	03440400 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *1650 – Triángulo Aprobado IV, Wayside Publishing, Inc.; ISBN: 9781938026621* Prerequisites: Honors Spanish III, taken in sequence What's Next? AP Spanish Language AB *Course taught by locally certified gifted teacher.*	College Hour(s): NA **Tier II**
AP SPANISH LANGUAGE AND CULTURE AB	**4081 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of Spanish for future careers and personal enrichment	A3440100 Grade level: 9 – 12
Instructional Material: *1650 – Triángulo Aprobado IV, Wayside Publishing, Inc.; ISBN: 9781938026621* Prerequisites: SSSPAN III & IV or Honors Spanish III; taken in sequence What's Next? AP Spanish Literature V AB *Course taught by an AP trained teacher*	Credit(s): 1 College Hour(s): NA **Tier I**
HONORS SPANISH V ABH	**4328 AB**
Affords an opportunity for students to carry on connected discourse in straightforward situations, to produce oral presentations and written reports on a variety of topics, and to interpret texts from various genres and subject areas. Fosters cultural and linguistic accuracy in communication	03440500 Grade level: 9 – 12
Instructional Material: *1651 – Azulejos V, Wayside Publishing, Inc.; ISBN: 9781942400301* Prerequisites: Spanish IV What's Next? NA *Course taught by locally certified gifted teacher.*	Credit(s): 1 College Hour(s): NA **Tier II**
AP SPANISH LITERATURE AND CULTURE AB	**4083 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of Spanish for future careers and personal enrichment	A3440200 Grade level: 9 – 12
Instructional Material: *1651 – Azulejos V, Wayside Publishing, Inc.; ISBN: 9781942400301* Prerequisites: Spanish IV or AP Spanish IV; taken in sequence What's Next? Honors Spanish VI *Course taught by an AP trained teacher*	Credit(s): 1 College Hour(s): NA **Tier I**
HONORS SPANISH VI AB	**4085 AB**
Affords an opportunity for students to participate fully in connected discourse; to communicate successfully in problematic situations; to explain, narrate, and describe in present, past, and future time; to analyze and interpret literary texts; and to write original compositions on a variety of topics. Fosters accuracy of expression and cultural behavior and the use of Spanish for future careers and personal enrichment	03440600 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: AP Spanish course What's Next? Honors Spanish VII *Course taught by locally certified gifted teacher.*	College Hour(s): NA **Tier I**

HONORS SPANISH VI: FOR BUSINESS, LEGAL AND MEDICAL PERSONNEL VI AB	4089 AB
This course provides instruction to develop essential vocabulary and language skills in Spanish needed to work in a business, law or medical career, and to familiarize students with basic processes and procedures involved in these fields. State elective credit	03440600 Grade level: 11 - 12
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: Successful completion of AP Spanish IV AB or Spanish for Native Speakers III – IV What's Next? AP Spanish Literature and Culture, if not previously taken or Honors Spanish VII *Teachers teaching this course must be Spanish certified, with some work experience in one or more of the fields preferred. Course taught by locally certified gifted teacher.*	Credit(s): 1 College Hour(s): NA **Tier I**
SPANISH LEVEL I & II (FOR SPANISH SPEAKERS)	**4079A (SPANISH I AB)** **4079B (SPANISH IIAB)**
Compacts the content of Level I and Level II Spanish, focusing on reading, writing, and higher-level thinking skills. Offers standard grammar and expanded vocabulary. Includes the cultures of various Hispanic countries.	03440110 & 03440220
Instructional Material: *1654 – 1st semester- Sendas Literarias, Pearson Education, Inc., ISBN: 9780131163553,* *2nd semester- Sendas Literarias, Pearson Education, Inc., ISBN: 9780131163560* Prerequisites: Good listening and speaking proficiency in Spanish and at least intermediate proficiency in English; taken in sequence What's Next? Honors Spanish III AB or Spanish for Spanish Speakers III AB & IV AB	Grade level: 9 – 12 Credit(s): 1 – 2 College Hour(s): NA **Tier III**
HONORS SPANISH LEVEL II (FOR SPANISH SPEAKERS)	**4076 (SPANISH II AB)**
The honors course is designed for ninth grade students who have completed two years of languages in middle school or highly motivated language learners. These students will expand and strengthen the linguistic skills learned during their first language course. Students will be expected to participate in daily aural and written activities and conduct classroom conversations to create an immersion-type experience. *Students in this course are required to complete an approved Global Citizen project at the end of the year.*	03440220 Grade level: 9 – 12 Credit(s): 1
Instructional Material: *1654 - Abriendo Paso, Pearson Education, Inc., ISBN: 9780133238006* Prerequisites: Good listening and speaking proficiency in Spanish and at least intermediate proficiency in English; taken in sequence What's Next? Spanish for Spanish Speakers III AB & IV AB	College Hour(s): NA **Tier II**
SPANISH LEVEL III & IV (FOR SPANISH SPEAKERS)	**4080A (SPANISH III AB)** **4080B (SPANISH IV AB)**
Emphasizes creative self-expression in the written language. This compacted and rigorous curriculum expands reading and interpretation of texts from various literary genres and various Content areas. Provides extensive practice in the presentation of oral and written narratives and reports. Promotes understanding of cultural practices and products, and fosters use of Spanish for future careers and personal enrichment	03440330 & 03440440 Grade level: 9 – 12 Credit(s): 1 - 2
Instructional Material: *1655- Primary – Encuentros Maravilloso Gramática, Pearson Education, Inc., ISBN 9780133693744 and Secondary- Abriendo Paso, Pearson Education, Inc., ISBN: 9780133238006* Prerequisites: Spanish for Spanish Speakers IIAB or Honors Spanish for Spanish Speakers IIAB; taken in sequence What's Next? AP Spanish Language IV AB, AP Spanish Literature V AB, or Honors Spanish VI for Business, Legal & Medical Personnel	College Hour(s): NA **Tier II**
SPANISH LEVEL I AB (FOR SPANISH SPEAKERS)	**4074 AB (SPANISH I AB)**
Compacts the content of Level I and Level II Spanish, focusing on reading, writing, and higher-level thinking skills. Offers standard grammar and expanded vocabulary. Includes the cultures of various Hispanic countries.	03440110
Instructional Material: *1654 – 1st semester- Sendas Literarias, Pearson Education, Inc., ISBN: 9780131163553,* *2nd semester- Sendas Literarias, Pearson Education, Inc., ISBN: 9780131163560* Prerequisites: Good listening and speaking proficiency in Spanish and at least intermediate proficiency in English taken in sequence What's Next? Honors Spanish for Spanish Speakers II Offered only at WLI	Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA **Tier III**
HONORS SPANISH LEVEL II AB (FOR SPANISH SPEAKERS)	**4076 AB (SPANISH II AB)**
The honors course is designed for ninth grade students who have completed two years of languages in middle school or highly motivated language learners. These students will expand and strengthen the linguistic skills learned during their first language course. Students will be expected to participate in daily aural and written activities and conduct classroom conversations to create an immersion-type experience. *Students in this course are required to complete an approved Global Citizen project at the end of the year.*	03440220 Grade level: 9 – 12 Credit(s): 1 College Hour(s): NA
Instructional Material: *1654 - Abriendo Paso, Pearson Education, Inc., ISBN: 9780133238006* Prerequisites: Spanish for Spanish Speakers I; taken in sequence What's Next? Spanish for Spanish Speakers III Offered only at WLI	**Tier II**
HONORS SPANISH LEVEL III AB (FOR SPANISH SPEAKERS)	**4075 AB (SPANISH III AB)**
Emphasizes creative self-expression in the written language. This compacted and rigorous curriculum expands reading and interpretation of texts from various literary genres and various Content areas. Provides extensive practice in the presentation of oral and written narratives and reports. Promotes understanding of cultural practices and products, and fosters use of Spanish for future careers and personal enrichment.	03440330 Grade level: 9 – 12 Credit(s): 1

Instructional Material: *1655- Primary – Encuentros Maravilloso Gramática, Pearson Education, Inc., ISBN: 9780133693744 and Secondary- Abriendo Paso, Pearson Education, Inc., ISBN: 9780133238006*
Prerequisites: Spanish for Spanish Speakers IIAB or Honors Spanish for Spanish Speakers IIAB; taken in sequence
What's Next? AP Spanish Language IV AB, AP Spanish Literature V AB, or Honors Spanish VI for Business, Legal & Medical Personnel
Offered only at WLI

College Hour(s): NA
Tier II

HEALTH / PHYSICAL EDUCATION GRADUATION REQUIREMENTS

ALL HS STUDENTS ARE REQUIRED to take ONE credit of Physical Education and 1/2 credit of Health Education

FOUNDATION PLANS

All Foundation Plans (22 & 26 credits) Require

Health Education (1/2 credit)

- Health (.5 credit)
- Principles of Health Science **OR**
- Honors Principles of Health Science (1 credit) *part of Health Science program of study* **OR**
- Dual Credit Health (Early College HS)

Physical Education (1 credit)

- Lifetime Fitness and Wellness Pursuits (1 credit)
- Lifetime Recreation and Outdoor Pursuits (1 credit)
- Skill-Based Lifetime Activities (1 credit)
- Dual Credit PE (Early College HS) (1 credit)

A Student who is **unable** to comply with all requirements of a physical education course because of a **physical limitation** (as certified by a licensed medical practitioner) is not prohibited from earning a diploma. Modifications will be provided as needed for students with special needs or disabilities.

PE Substitution Courses may be permitted in any of the following, earning up to one credit.

- Drill Team
- Marching Band
- Cheerleading
- JROTC

TEKS Based Courses that may be used to earn up to one PE credit.

- Show Choir II
- Principles of Dance II
- Technical Theatre II
- Musical Theatre II
- Colorguard

PE Substitution Courses may be permitted in any of the following, earning up to four credits.

- Athletics / UIL Athletics
- Approved private program *(must be pre-approved by the Director of PE)*

Health and Physical Education

The Texas Education Code, (TEC) 38.101, requires the District to test the physical fitness of students enrolled in grades 3-12 in any course that satisfies the curriculum requirements for physical education on an annual basis. This includes all courses that qualify as Physical Education substitutions. Additionally, TEC 38.103 requires the District to provide the results of individual student performance on the physical fitness assessment to the Texas Education Agency. The annual fitness assessment requirement is coordinated by the FWISD Department of Health and Physical Education.

HEALTH I	**5001 T**
Provides students with the knowledge and skills to develop and sustain health-promoting behaviors. Students will gather, interpret, and analyze health information to support health literacy within the topics of physical health and hygiene; mental health and wellness; healthy eating and physical activity; injury, violence prevention and safety; alcohol, tobacco, and other drugs; and reproductive and sexual health.	03810100 Grade level: 9 - 10 HS Credit(s): 0.5
Instructional Material: *HealthSmart, ETR* Prerequisites: None *Health I is required of all students.*	College Hour(s): N/A **Tier III**

HEALTH II	TBD T
This course will provide students opportunities for researching, discussing, and analyzing health issues. The emphasis will be to provide students with the skills to access their own health information and services and become health literate. The work will be student-directed and project-based.	03810300 Grade level: 10 – 12 HS Credit(s): 0.5
Instructional Material: *No state adopted instructional material(s)/Contact Content Director* Prerequisites: Health I Taught by Content-Director approved instructor.	College Hour(s): N/A **Tier III**
LIFETIME FITNESS AND WELLNESS PURSUITS A	**TBD A**
The Lifetime Fitness and Wellness Pursuits (LFWP) course offers current approaches for the foundation of personal fitness, physical literacy, lifetime wellness, and healthy living. Students in LFWP will apply the knowledge, skills, and value for demonstrating mastery of the concepts needed to achieve lifetime wellness. Course A during the **Fall** semester includes topics such as: physiological and biomechanical principles to improve health-related fitness; interval, HIIT, and functional fitness; various fitness-related activities to support lifelong participation and value for personal health-related fitness.	PES00051 Grade level: 9 - 12 HS Credit(s): 0.5 College Hour(s): N/A **Tier III**
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: None	
LIFETIME FITNESS AND WELLNESS PURSUITS B	**TBD B**
The Lifetime Fitness and Wellness Pursuits (LFWP) course offers current approaches for the foundation of personal fitness, physical literacy, lifetime wellness, and healthy living. Students in LFWP will apply the knowledge, skills, and value for demonstrating mastery of the concepts needed to achieve lifetime wellness. Course B during the **Spring** semester includes topics such as: various group fitness activities to support social and emotional health; personal fitness and health practice planning; and appropriate training and recovery practices to physical activity participation safety.	PES00051 Grade level: 9 - 12 HS Credit(s): 0.5 College Hour(s): N/A **Tier III**
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: None	
LIFETIME RECREATION AND OUTDOOR PURSUITS A	**TBD A**
The Lifetime Recreation and Outdoor Pursuits (LROP) course Part A, during the **Fall** semester, provides opportunities for students to develop competency in 3 or more lifetime recreational and outdoor pursuits to include: adventure activities, backpacking, camping, hiking, and navigation sporting activities. Additionally, students enrolled in LROP will participate in activities that promote physical literacy while developing appreciation and respect for nature and enjoyment in the outdoors.	PES00053 Grade level: 9 - 12 HS Credit(s): 0.5 College Hour(s): N/A **Tier III**
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: None	
LIFETIME RECREATION AND OUTDOOR PURSUITS B	**TBD B**
The Lifetime Recreation and Outdoor Pursuits (LROP) course Part B, during the **Spring** semester, provides opportunities for students to develop competency in 3 or more lifetime recreational and outdoor pursuits to include: water sports, angler education, archery, outdoor survival and safety, adventure activities, cycling, skating, and lawn games. Additionally, students enrolled in LROP will participate in activities that promote physical literacy while developing appreciation and respect for nature and enjoyment in the outdoors.	PES00053 Grade level: 9 - 12 HS Credit(s): 0.5 College Hour(s): N/A **Tier III**
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: None	
SKILL-BASED LIFETIME ACTIVITIES A	**TBD A**
The Skill-Based Lifetime Activities (SBLA) course Part A, during the **Fall** semester, offers students the opportunity to demonstrate mastery in basic sport skills, sport knowledge, and health and fitness principles through non-traditional team and individual sports. Students will experience activities that promote physical literacy and lifetime wellness while participating in in at least one activity from each of the following categories: target games; striking and fielding games; fitness activities; rhythmic fitness; and innovative/non-traditional games.	PES00056 Grade level: 9 - 12 HS Credit(s): 0.5 College Hour(s): NA **Tier III**
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: None	
SKILL-BASED LIFETIME ACTIVITIES B	**TBD B**
The Skill-Based Lifetime Activities (SBLA) course Part B, during the **Spring** semester, offers students the opportunity to demonstrate mastery in basic sport skills, sport knowledge, and health and fitness principles through non-traditional team and individual sports. Students will experience activities that promote physical literacy and lifetime wellness while participating in in at least one activity from each of the following categories: target games; striking and fielding games; fitness activities; rhythmic fitness; and innovative/non-traditional games.	PES00056 Grade level: 9 - 12 HS Credit(s): 0.5 College Hour(s): N/A **Tier III**
Instructional Material: *No state-adopted instructional material(s)/Contact Content Director* Prerequisites: None	
CARE AND PREVENTION OF SPORTS-RELATED INJURIES T	**5193 T**
Students in this course are expected to gain knowledge of sports training procedures.	N/A Grade level: 10 - 12
Instructional Material: *No state-adopted instructional material(s)/Local credit only/Contact Athletic Director* Prerequisites: None *Local Credit Only*	HS Credit(s): 0.5 College Hour(s): N/A **Tier III**

DUAL CREDIT HEALTH EDUCATION T **TCC Course: Personal and Community Health (KINE 1304)**	**5002 T**
This course provides an introduction to the fundamentals, concepts, strategies, applications, and contemporary trends related to understanding personal and/or community health issues. This course also focuses on empowering various populations with the ability to practice healthy living, promote healthy lifestyles, and enhance individual well-being.	03810100 Grade level: 9 - 12 HS Credit(s): 0.5 College Hour(s): 3 hours
Instructional Material: *NA* FWISD Prerequisites: Taken in sequence TCC Prerequisites: None *Course taught by an approved adjunct instructor.*	**Tier I**
DUAL CREDIT FOUNDATIONS OF PERSONAL FITNESS T **TCC Course: Introduction to Physical Fitness and Wellness (KINE 1164)**	**5058 T** PES00052
This course will provide an overview of the lifestyle necessary for fitness and health. Students will participate in physical activities and assess their fitness status. Students will be introduced to proper nutrition, weight management, cardiovascular health, flexibility, and strength training. Includes: 1. Scientific information concerning values and preventive medical benefits of exercise. 2. Individual (personal) evaluations and experiments to determine present health fitness status. 3. Development of a personal exercise program based on student's needs.	Grade level: 9 - 12 HS Credit(s): 0.5 College Hour(s): 1 hour **Tier I**
Instructional Material: *NA* FWISD & TCC Prerequisites: None *Course taught by and approved adjunct instructor.*	
DUAL CREDIT INDIVIDUAL SPORTS T **TCC Course: Aerobic Fitness – Beginning (KINE 1102)**	**5070 T** PES00055
Improves cardiovascular fitness, muscular endurance/strength, flexibility, and body composition. (Course is coeducational)	Grade level: 9 – 12 HS Credit(s): 0.5
Instructional Material: *NA* FWISD Prerequisites: None TCC Prerequisites: None *Course taught by and approved adjunct instructor.*	College Hour(s): 1 hour **Tier I**
DUAL CREDIT INDIVIDUAL SPORTS T **TCC Course: Swimming – Beginning (KINE 1122)**	**5041 T** PES00055
Develops good swimming technique, improves cardiovascular fitness level, and teaches water safety skills. (Course is coeducational)	Grade level: 9 – 12 HS Credit(s): 0.5
Instructional Material: *NA* FWISD & TCC Prerequisites: None *Course taught by an approved adjunct instructor.*	College Hour(s): 1 hour **Tier I**
DUAL CREDIT INDIVIDUAL SPORTS T **TCC Course: Recreational Sports – Beginning (KINE 1116)**	**5042 T** PES00055
Develops and improves basic skills, strategies and rules of various recreational sports. (Course is coeducational).	Grade level: 9 – 12
Instructional Material: *NA* FWISD & TCC Prerequisites: None *Course taught by an approved adjunct instructor.*	HS Credit(s): 0.5 College Hour(s): 1 hour **Tier I**
DUAL CREDIT INDIVIDUAL SPORTS T **TCC Course: Golf – Beginning (KINE 1111)**	**5043 T** PES00055
Develops and improves individual skills, and the understanding of the rules of golf. (Course is coeducational)	Grade level: 9 - 12
Instructional Material: *NA* FWISD & TCC Prerequisites: None *Course taught by an approved adjunct instructor.*	HS Credit(s): 0.5 College Hour(s): 1 hour **Tier I**
DUAL CREDIT INDIVIDUAL SPORTS T **TCC Course: Yoga – Beginning (KINE 1134)**	**5044 T** PES00055
Improves flexibility, muscular endurance/strength and mental well-being. (Course is coeducational)	Grade level: 9 - 12
Instructional Material: *NA* FWISD & TCC Prerequisites: None *Course taught by an approved adjunct instructor.*	HS Credit(s): 0.5 College Hour(s): 1 hour **Tier I**
DUAL CREDIT INDIVIDUAL SPORTS T **TCC Course: Bowling – Beginning (KINE 1104)**	**5072 T** PES00055
Develops the basic skills necessary to enjoy the lifetime sport of bowling. (Course is coeducational)	Grade level: 9 - 12
Instructional Material: *NA* FWISD & TCC Prerequisites: None *Course taught by an approved adjunct instructor.*	HS Credit(s): 0.5 College Hour(s): 1 hour **Tier I**

DUAL CREDIT INDIVIDUAL SPORTS T **TCC Course: Kickboxing – Beginning (KINE 1113)**	**5074 T** PES00055
Improves cardiovascular fitness, muscular endurance/strength, flexibility, and body composition. (Course is coeducational)	Grade level: 9 – 12 HS Credit(s): 0.5
Instructional Material: *NA* FWISD & TCC Prerequisites: None	College Hour(s): 1 hour **Tier I**

Course taught by an approved adjunct instructor.

.

Fort Worth ISD Athletics State Elective or Local Credit Option

The State of Texas requires one year of physical education (PE) for graduation and allows up to four years/four credits of Physical Education/Athletics to count as state graduation credits. When an Athletics course is selected by the student, the student needs to be aware of the various options he/she has in how the credit will be used.

When selecting courses, pay close attention to the course numbers selected. For the same named course, one set of course numbers is used to count the course as a state credit and another set of course numbers is used to have the course count as a local credit.

Understanding the Results of the Options Selected:

1) **The first year taking an athletic course** will automatically count as a PE substitution unless the student has already satisfied or is currently taking another course that will count as a full credit PE substitution; such as JROTC, Drill Team, Cheerleading, or a Marching Band course coded as a PE substitution or a District-approved off-campus activity substitution.

2) **When the one credit is already satisfied** or the student is also currently scheduled/taking a qualified PE substitution course, the student has the option of choosing how he/she wants the additional athletic course to count. The student is to select the desired option at the time of creating the course schedule.

   - **Option 1 - Athletic Course State Credit Option:** Athletics courses taken beyond the one course required for the PE substitution will count toward the number of course electives needed for graduation (up to 3 athletics elective credits may be used toward graduation and will be calculated into the student's GPA).

   - **Option 2 - Athletic Course Local Credit Option:** When students are either scheduled for/or have completed taking a PE course/PE substitution, any athletics course beyond the requirement may be taken for local credit. The local credit course will not count toward the number of elective credits needed for graduation, and the grades earned as a local credit will not be calculated into the student's GPA. Students/Parents must sign a ***FWISD Athletics State Elective – Local Credit Option form*** one time to have the student's athletic courses count as local credits. *See the school counselor for this form.*

As students develop their high school schedules, they need to be aware of the manner in which:

- **athletic courses,**
- **physical education courses, and**
- **physical education substitution courses will:**
  (1) be credited toward their graduation requirements and
  (2) impact Grade Point Average.

Physical Education Substitutions

The substitution activities for athletics and private or commercially-sponsored physical activity programs may be awarded up to four PE credits toward graduation, one for the required physical education credit and three additional PE credits as state elective credits.

ATHLETICS

NOTE: State law requires that any student who is taking a PE course, or class that substitutes for PE, participate in annual fitness testing.

Course Codes	*PEIMS #*	*NO.*	*COURSE TITLE*	*SHORT TITLE*
PE Substitution Athletics 1 (SUBATH1) (1/2 -1 Credit)	**PES00000**	**5401A**	**Competitive Athletics IA**	**ATHLETIC1A**
		5401B	**Competitive Athletics IB**	**ATHLETIC1B**
PE Substitution Athletics 2 (SUBATH2) (1/2 -1 Credit)	**PES00001**	**5403A**	**Competitive Athletics IIA**	**ATHLETIC2A**
		5403B	**Competitive Athletics IIB**	**ATHLETIC2B**
PE Substitution Athletics 3 (SUBATH3) (1/2 -1 Credit)	**PES00002**	**5405A**	**Competitive Athletics IIIA**	**ATHLETIC3A**
		5405B	**Competitive Athletics IIIB**	**ATHLETIC3B**
PE Substitution Athletics 4 (SUBATH4) (1/2 -1 Credit)	**PES00003**	**5407A**	**Competitive Athletics IVA**	**ATHLETIC4A**
		5407B	**Competitive Athletics IVB**	**ATHLETIC4B**

Prerequisite: Student is required approval from head coach for placement into a specific sport course. In addition, student is required to complete the UIL Pre-Participation Evaluation — Medical History form and the UIL Pre-Participation Evaluation-Physical Examination form before participation in any practice before, during, or after school. Fort Worth ISD requires the completion of seven (7) Fort Worth ISD/UIL Pre-Participation forms before participating in athletic class. Forms must be complete before the tenth day of the new school year.

Grade Placement: 9 - 12

Credit: .5 – 4

Provides instruction and practice for members of competitive athletics teams. **Athletics may be awarded up to four credits toward graduation, one for the required physical education credit and three additional credits as state electives.**

ATHLETIC SPORTS FOR STATE GRADUATION CREDIT

Student enrolling in the following athletic sports will receive state graduation credit which will be credited in the following way: one for PE substitution and three for elective credits, up to a total of four graduation credits. All of these courses will count in the calculation of the student's grade point average (GPA) as a Tier III course. These courses will also count as credit toward graduation requirements. Students may not change their schedules after the 10th day class period ends without a penalty.

FWISD NO.	**TEAM SPORT**		**FWISD NO.**	**TEAM SPORT**
BBK12	**Boys Basketball 1AB**		**GBK12**	**Girls Basketball 1AB**
BBK22	**Boys Basketball 2AB**		**GBK22**	**Girls Basketball 2AB**
BBK32	**Boys Basketball 3AB**		**GBK32**	**Girls Basketball 3AB**
BBK42	**Boys Basketball 4AB**		**GBK42**	**Girls Basketball 4AB**
FWISD NO.	**TEAM SPORT**		**FWISD NO.**	**TEAM SPORT**
BSC12	**Boys Soccer 1AB**		**GSC12**	**Girls Soccer 1AB**
BSC22	**Boys Soccer 2AB**		**GSC22**	**Girls Soccer 2AB**
BSC32	**Boys Soccer 3AB**		**GSC32**	**Girls Soccer 3AB**
BSC42	**Boys Soccer 4AB**		**GSC42**	**Girls Soccer 4AB**

FWISD NO.	TEAM SPORT		FWISD NO.	TEAM SPORT
BTS12	Boys Tennis 1AB		GTS12	Girls Tennis 1AB
BTS22	Boys Tennis 2AB		GTS22	Girls Tennis 2AB
BTS32	Boys Tennis 3AB		GTS32	Girls Tennis 3AB
BTS42	Boys Tennis 4AB		GTS42	Girls Tennis 4AB
FWISD NO.	TEAM SPORT		FWISD NO.	TEAM SPORT
BTK12	Boys Track 1AB		GTK12	Girls Track 1AB
BTK22	Boys Track 2AB		GTK22	Girls Track 2AB
BTK32	Boys Track 3AB		GTK32	Girls Track 3AB
BTK42	Boys Track 4AB		GTK42	Girls Track 4AB
FWISD NO.	TEAM SPORT		FWISD NO.	TEAM SPORT
BW12	Boys Wrestling IA		GW12	Girls Wrestling IA
BW22	Boys Wrestling IB		GW22	Girls Wrestling IB
BW32	Boys Wrestling IIA		GW32	Girls Wrestling IIA
BW42	Boys Wrestling IIB		GW42	Girls Wrestling IIB
FWISD NO.	TEAM SPORT		FWISD NO.	TEAM SPORT
BB12	Baseball 1AB		CC12	Cross Country 1AB
BB22	Baseball 2AB		CC22	Cross Country 2AB
BB32	Baseball 3AB		CC32	Cross Country 3AB
BB42	Baseball 4AB		CC42	Cross Country 4AB
FWISD NO.	TEAM SPORT		FWISD NO.	TEAM SPORT
FB12	Football 1AB		GF12	Golf 1AB
FB22	Football 2AB		GF22	Golf 2AB
FB32	Football 3AB		GF32	Golf 3AB
FB42	Football 4AB		GF42	Golf 4AB
FWISD NO.	TEAM SPORT		FWISD NO.	TEAM SPORT
SB12	Softball 1AB		SM12	Swimming 1AB
SB22	Softball 2AB		SM22	Swimming 2AB
SB32	Softball 3AB		SM32	Swimming 3AB
SB42	Softball 4AB		SM42	Swimming 4AB
FWISD NO.	TEAM SPORT			
VB12	Volleyball 1AB			
VB22	Volleyball 2AB			
VB32	Volleyball 3AB			
VB42	Volleyball 4AB			

ATHLETICS FOR LOCAL CREDIT

Before a student may qualify to enroll in any athletics course for local credit, he/she must have completed the required PE credit or the PE substitution credit, or also be enrolled in such a qualifying course. ***Parental approval is required*** ***using the FWISD Athletics State Elective – Local Credit Option form for any student to opt out of an athletics state elective credit course to take an athletics course for local credit only. Students may not change their schedules after the 10-day class period ends without a penalty.***

The following athletics course numbers are to be used when an athletic course is being used as a LOCAL only credit course. As a local credit, these courses will not count toward graduation and they will not count in the calculation of the student's grade point average (GPA).

Course Coding	*PEIMS #*	*Course Titles*
Local Course Athletics 1 (LCATH1) (1/2 -1 Credit)	**84200027**	**5399A— Local Course Competitive Athletics IA (LC ATHLETICS 1A)**
		5399B— Local Course Competitive Athletics IB (LC ATHLETICS 1B)
Local Course Athletics 2 (LCATH2) (1/2 -1 Credit)	**84200028**	**5402A— Local Course Competitive Athletics IIA (LC ATHLETICS 2A)**
		5402B— Local Course Competitive Athletics IIB (LC ATHLETICS 2B)
Local Course Athletics 3 (LCATH3) (1/2 -1 Credit)	**84200029**	**5404A— Local Course Competitive Athletics IIIA (LC ATHLETICS 3A)**
		5404B— Local Course Competitive Athletics IIIB (LC ATHLETICS 3B)
Local Course Athletics 4 (LCATH4) (1/2 -1 Credit)	**84200030**	**5406A— Local Course Competitive Athletics IVA (LC ATHLETICS 4A)**
		5406B— Local Course Competitive Athletics IVB (LC ATHLETICS 4B)

Athletic Sports for Local Credit

Prerequisite: Student is required approval from head coach for placement into a specific sport course. In addition, student is required to complete the UIL Pre-Participation Evaluation — Medical History form and the UIL Pre-Participation Evaluation-Physical Examination form before participation in any practice before, during, or after school. Fort Worth ISD requires the completion of seven (7) Fort Worth ISD/UIL Pre-Participation forms before participating in athletic class. Forms must be complete before the tenth day of the new school year.

Grade Placement: 9 - 12

Credit: .5 - 4

Provides instruction and practice for members of competitive athletics teams.

The following athletic course section has been created for students who do not want the athletic courses beyond the required PE course or PE substitution to count in their grade point average (GPA) calculations.

Athletic Sports Course Numbers for Local Credit Only

Students enrolling in the following athletic sports courses that are identified with an L at the end of the FWISD number will receive local credit only for each course. These courses will NOT count in the calculation of the student's grade point average (GPA). These local course credits will NOT count toward graduation credit and will not count for the PE substitution requirement for graduation.

FWISD NO.	TEAM SPORT		FWISD NO.	TEAM SPORT
BBK12L	**Boys Basketball 1AB**		**GBK12L**	**Girls Basketball 1AB**
BBK22L	**Boys Basketball 2AB**		**GBK22L**	**Girls Basketball 2AB**
BBK32L	**Boys Basketball 3AB**		**GBK32L**	**Girls Basketball 3AB**
BBK42L	**Boys Basketball 4AB**		**GBK42L**	**Girls Basketball 4AB**
FWISD NO.	**TEAM SPORT**		**FWISD NO.**	**TEAM SPORT**
BSC12L	**Boys Soccer 1AB**		**GSC12L**	**Girls Soccer 1AB**
BSC22L	**Boys Soccer 2AB**		**GSC22L**	**Girls Soccer 2AB**
BSC32L	**Boys Soccer 3AB**		**GSC32L**	**Girls Soccer 3AB**

BSC42L	**Boys Soccer 4AB**		**GSC42L**	**Girls Soccer 4AB**
FWISD NO.	**TEAM SPORT**		**FWISD NO.**	**TEAM SPORT**
BTS12L	**Boys Tennis 1AB**		**GTS12L**	**Girls Tennis 1AB**
BTS22L	**Boys Tennis 2AB**		**GTS22L**	**Girls Tennis 2AB**
BTS32L	**Boys Tennis 3AB**		**GTS32L**	**Girls Tennis 3AB**
BTS42L	**Boys Tennis 4AB**		**GTS42L**	**Girls Tennis 4AB**
FWISD NO.	**TEAM SPORT**		**FWISD NO.**	**TEAM SPORT**
BTK12L	**Boys Track 1AB**		**GTK12L**	**Girls Track 1AB**
BTK22L	**Boys Track 2AB**		**GTK22L**	**Girls Track 2AB**
BTK32L	**Boys Track 3AB**		**GTK32L**	**Girls Track 3AB**
BTK42L	**Boys Track 4AB**		**GTK42L**	**Girls Track 4AB**
FWISD NO.	**TEAM SPORT**		**FWISD NO.**	**TEAM SPORT**
BW12L	**Boys Wrestling IA**		**GW12L**	**Girls Wrestling IA**
BW22L	**Boys Wrestling IB**		**GW22L**	**Girls Wrestling IB**
BW32L	**Boys Wrestling IIA**		**GW32L**	**Girls Wrestling IIA**
BW42L	**Boys Wrestling IIB**		**GW42L**	**Girls Wrestling IIB**
FWISD NO.	**TEAM SPORT**		**FWISD NO.**	**TEAM SPORT**
BB12L	**Baseball 1AB**		**CC12L**	**Cross Country 1AB**
BB22L	**Baseball 2AB**		**CC22L**	**Cross Country 2AB**
BB32L	**Baseball 3AB**		**CC32L**	**Cross Country 3AB**
BB42L	**Baseball 4AB**		**CC42L**	**Cross Country 4AB**
FWISD NO.	**TEAM SPORT**		**FWISD NO.**	**TEAM SPORT**
FB12L	**Football 1AB**		**GF12L**	**Golf 1AB**
FB22L	**Football 2AB**		**GF22L**	**Golf 2AB**
FB32L	**Football 3AB**		**GF32L**	**Golf 3AB**
FB42L	**Football 4AB**		**GF42L**	**Golf 4AB**
FWISD NO.	**TEAM SPORT**		**FWISD NO.**	**TEAM SPORT**
SB12L	**Softball 1AB**		**SM12L**	**Swimming 1AB**
SB22L	**Softball 2AB**		**SM22L**	**Swimming 2AB**
SB32L	**Softball 3AB**		**SM32L**	**Swimming 3AB**
SB42L	**Softball 4AB**		**SM42L**	**Swimming 4AB**
FWISD NO.	**TEAM SPORT**			
VB12L	**Volleyball 1AB**			
VB22L	**Volleyball 2AB**			
VB32L	**Volleyball 3AB**			
VB42L	**Volleyball 4AB**			

Physical Education Substitution Activities

The following substitution activities of drill team, cheerleading, marching band, and JROTC may be awarded one PE substitution credit toward graduation that may satisfy the physical education credit requirement.
See substitution charts on the following pages.

MARCHING BAND SUBSTITUTION

NOTE: State law requires that any student who is taking a PE course, or class that substitutes for PE, participate in annual fitness testing.

The following PE substitution codes are available.		**PE Substitution Marching Band (SUBMB)** **PEIMS #PES00012 provides ½ credit per semester, up to a total of 1 credit.** **Fall semesters only**
1372A PE Substitution Marching Band Activity (SUBMB1)		
1376A PE Substitution Marching Band (SUBMB2)		

Marching Band may be substituted for ½ credit to 1 credit of physical education. PE substitutions for these courses will not receive a weighted course grade. Only the FINE ARTS Honors Marching Band course numbers/PEIMS numbers will qualify for weighted course grade.

DRILL TEAM SUBSTITUTION

NOTE: State law requires that any student who is taking a PE course, or class that substitutes for PE, participate in annual fitness testing.

Course Codes	
The ½ - 1 Drill Team credit to count as a PE substitution is to be coded as follows:	
Course #	**Title**
5389A/B	**PE Substitution Drill Team (SUBDT)** **PEIMS # PES00014**
The above PE substitution Drill Team (SUBDT) course ***WILL count as a state graduation credit and WILL be calculated into the student's grade point average as a 4.0 course.*** *Both fall and spring semesters of Drill Team may now substitute for PE credit, provided students engage in 100 minutes of "moderate to vigorous activity" per five –day school week.*	

LOCAL CREDIT ONLY COURSES		
All of the Drill Team course numbers provided directly below are to be used for Drill Team credits that go beyond the total of the 1 credit allowed for as a PE Drill Team substitution. The following Drill Team courses are LOCAL CREDIT ONLY and WILL NOT count toward graduation credit and WILL NOT be calculated in a student's grade point average. Before a student may qualify to enroll in any Drill Team Local Credit Courses, he/she must have completed the required PE credit or PE substitution credit or be enrolled in such a qualifying course.		
5391A	**Drill Team IA**	**DRILLT1A**
5392B	**Drill Team IB**	**DRILLT1B**
5393A	**Drill Team IIA**	**DRILLT2A**
5394B	**Drill Team IIB**	**DRILLT2B**
5395A	**Drill Team IIIA**	**DRILLT3A**
5396B	**Drill Team IIIB**	**DRILLT3B**
5397A	**Drill Team IVA**	**DRILLT4A**
5398B	**Drill Team IVB**	**DRILLT4B**

Grade Placement: 9 - 12
Credit: .5 - 1 (PE substitution credit, additional credits count only as local credit.)

Includes training to enable members of the drill team to perform at football games, basketball games, and other school functions. One credit for PE substitution will be available. All Drill Team classes after the one credit PE substitution will only count as a local credit.

CHEERLEADING SUBSTITUTION

NOTE: State law requires that any student who is taking a PE course, or class that substitutes for PE, participate in annual fitness testing.

Course Codes	
The ½ - 1 Team Cheerleading credit to count as a PE substitution is to be coded as follows:	
Course #	***Title***
5433A/B	**PE Substitution Cheerleading** **(SUBCHLDG)** **PEIMS # PES00013**
The above PE substitution Team Cheerleading (SUBCHLDG) course ***WILL count as a state graduation credit and WILL be calculated into the student's grade point average as a 4.0 course.*** *Both fall and spring semesters of Team Cheerleading may now substitute for PE credit, provided*	

Course Titles		
All of the Team Cheerleading course numbers provided directly below are to be used for Team Cheerleading credits that go beyond the total of the 1 credit allowed as a PE Team Cheerleading substitution. The following Team Cheerleading courses are LOCAL CREDIT ONLY and WILL NOT count toward graduation credit and WILL NOT be calculated in a student's grade point average. Before a student may qualify to enroll in any Team Cheerleading Local Credit Courses, he/she must have completed the required PE credit or PE substitution credit or be enrolled in such a qualifying course.		
5435A	**Cheerleading IA**	**CHEERLEA1A**
5436B	**Cheerleading IB**	**CHEERLEA1B**
5437A	**Cheerleading IIA**	**CHEERLEA2A**
5438B	**Cheerleading IIB**	**CHEERLEA2B**

students engage in 100 minutes of "moderate to vigorous activity" per five –day school week.		**5439A**	**Cheerleading IIIA**	**CHEERLEA3A**
		5440B	**Cheerleading IIIB**	**CHEERLEA3B**
		5441A	**Cheerleading IVA**	**CHEERLEA4A**
		5442B	**Cheerleading IVB**	**CHEERLEA4B**

Prerequisite: Cheerleader
Grade Placement: 9 – 12

One credit for PE substitution will be available. All Cheerleading classes after the one credit PE substitution will only count as a local credit. Local credit courses do not count toward graduation credits and are not calculated into GPA.

JROTC SUBSTITUTION

NOTE: State law requires that any student who is taking a PE course, or class that substitutes for PE, participate in annual fitness testing.
A student who successfully completes JROTC may receive a substitution of one semester of PE for each semester of JROTC completed, up to one credit. A student can receive credit for a separate PE class while receiving a JROTC elective credit (see JROTC course descriptions section).

If a student has completed or is enrolled in a separate course that provides for a PE substitution, the student qualifies to enroll in the JROTC1 course number 5949AB which results in ROTC1 on his/her transcript.

Course number and coding to be used for JROTC to count as a PE substitution		
5951A/B	**PE Substitution JROTCI (SUBJ1)**	**PEIMS # PES00004**
Short title on transcript (SUBJ1)		**½ credit per semester, up to a total of 1 credit**
Course number and coding to be used for JROTC when another course is providing PE substitution credit		
5949A/B	**Junior Reserve Officer Training IA/B**	**PEIMS # 03160100**
Short title on transcript ROTC1A/B		**1/2 credit per semester, up to 1 credit for ROTC1A/B**

OFF CAMPUS ACTIVITY SUBSTITUTION

To code all FWISD approved PE off-campus programs, use the designated course title/short title and accompanying PEIMS number.				
Course Number	***Course Title***	***Short Title***	***Credit(s)***	***PEIMS #***
5409 A/B	**PE Substitution Non-District Program 1**	**SUBPRO1**	**.5 - 1**	**PES00008**
5411 A/B	**PE Substitution Non-District Program 2**	**SUBPRO2**	**.5 - 1**	**PES00009**
5413 A/B	**PE Substitution Non-District Program 3**	**SUBPRO3**	**.5 - 1**	**PES00010**
5415 A/B	**PE Substitution Non-District Program 4**	**SUBPRO4**	**.5 - 1**	**PES00011**

OFF CAMPUS ACTIVITY SUBSTITUTION

The Fort Worth ISD Physical Education Waiver Program provides an opportunity for students in grades 7-12 to receive credit for participation in an off-campus, athletic/training program. FWISD is authorized by the Texas Education Agency (TEA) to substitute participation in private or commercially sponsored programs for the FWISD middle school physical education requirement (7th and 8th grades) and the state-required high school physical education graduation credit. The FWISD Health and Physical Education Department must ensure the program, agency, and instructor meet the waiver criteria in order to approve all requests through the application process.

DISTRICT-APPROVED OFF-CAMPUS ACTIVITIES

District-approved off-campus activities may also substitute for required physical education if specific criteria are met, listed in 19 Administrative Code Chapter 74, Subchapter F and EIF (LEGAL) and (LOCAL) policies.

(iii) Appropriate private or commercially-sponsored physical activity programs conducted on or off campus. The district must apply to the commissioner of education for approval of such programs, which may be substituted for state graduation credit in physical education. Such approval may be granted under the following conditions:

(I) Olympic-level participation and/or competition includes a minimum of 15 hours per week of highly intensive, professional, supervised training. The training facility, instructors, and the activities involved in the program must be certified by the superintendent to be of exceptional quality. Students qualifying and participating at this level may be dismissed from school one hour per day. Students dismissed may not miss any class other than physical education.

(II) Private or commercially-sponsored physical activities include those certified by the superintendent to be of high quality and well supervised by appropriately trained instructors. Students participating in at least five hours per week is required. Students certified to participate at this level may not be dismissed from any part of the regular school day.

The purpose of this program is to accommodate students who are making a serious effort to develop high level capabilities and to allow them to be involved in an off-campus program that provides training exceeding that offered in the school district. The ability to offer this option is regulated by the Texas Education Agency.

All inquiries and applications for this option are to be directed to the Director of the FWISD Health and Physical Education Department. Applications must be submitted prior to Labor Day for the fall semester and by January 15 for the spring semester. A FWISD enrollment fee of $100.00 will be assessed per semester unless a single payment of $150.00 for both semesters is made at the beginning of the year. Fees are subject to change. The Director will notify the counselor and parent whether or not the requested off-campus activity has been approved as a physical education substitution. Attendance and grade reporting is made to the counselor every six weeks. The final grade for each semester will be included on the student's transcript and will count in the calculation of the student's grade point average.

DISTRICT-APPROVED OFF-CAMPUS ACTIVITY SUBSTITUTION

All of these courses will be calculated into the student's grade point average (GPA) as Tier III courses.

The grade provided is to be a letter grade; the counselor will commute this to a numerical grade using the following letter grade conversion charts.

Letter/Numerical	*Letter/Numerical*	*Letter/Numerical*	*Letter/Numerical*
A+ = 99	B+ = 89	C+ = 79	D = 70
A = 96	B = 86	C = 76	F = 65
A- = 92	B- = 82	C- = 72	

Additional PE Substitution Credits

Beginning in 2014-2015, for students that are on the Foundation High School Program, the TAC §74.12 (b)(6)(B), states that in accordance with local district policy, the required credit may be earned through completion of any TEKS-based course that meets the requirement for 100 minutes of moderate to vigorous physical activity per five-day school week and that is not being used to satisfy another specific graduation requirement.

SHOW CHOIR II (VOCAL ENSEMBLE II) SUBSTITUTION

NOTE: State law requires that any student who is taking a PE course, or class that substitutes for PE, participate in annual fitness testing.

Course Codes	
The ½ - 1 Show Choir II credit to count as a PE substitution is to be coded as follows:	
Course #	***Title***
1444PE A/B	***PE Substitution Show Choir II*** ***(SUBSHOWCH)*** **PEIMS # PES00015**
The above PE substitution Show Choir II (SUBSHOWCH) course ***WILL count as a state graduation credit and WILL be calculated into the student's grade point average as a 4.0 course.*** *Both fall and spring semesters of Show Choir II may now substitute for PE credit, provided students engage in 100 minutes of "moderate to vigorous activity" per five –day school week. Provides ½ credit per semester; up to a total of 1 credit.*	

Prerequisite: Show Choir I (Vocal Ensemble I)
Grade Placement: 9 – 12
Credit: .5 - 1 (PE substitution credit)

Introduces students to different musical genres and performance styles that are not typically taught in a classical choral setting. This musical style includes choreography and physical movement, as well as vocal techniques necessary for understanding and appreciating fine musical performances through various styles of literature, such as pop, rock, contemporary a cappella and jazz. Attendance at all performances and rehearsals is required. One credit for PE substitution will be available.

PRINCIPLES OF DANCE II SUBSTITUTION

NOTE: State law requires that any student who is taking a PE course, or class that substitutes for PE, participate in annual fitness testing.

Course Codes	
The ½ - 1 Principles of Dance II credit to count as a PE substitution is to be coded as follows:	
Course #	***Title***
1503PE A/B	***PE Substitution Principles of Dance II*** ***(SUBDANCE)*** **PEIMS # PES00015**
The above PE substitution Principles of Dance II (SUBDANCE) course ***WILL count as a state graduation credit and WILL be calculated into the student's grade point average as a 4.0 course.*** *Both fall and spring semesters of Principles of Dance II may now substitute for PE credit, provided students engage in 100 minutes of "moderate to vigorous activity" per five –day school week. Provides ½ credit per semester; up to a total of 1 credit.*	

Prerequisite: Dance, Level I
Grade Placement: 9-12
Credit: .5 - 1 (PE substitution credit)

Focuses on classical ballet, modern, and multicultural dance, tap, and jazz. Expands students' experience with dance vocabulary, dimensions of creativity, choreography, artistic judgment, and dance in diverse cultures in contemporary society. Attendance at all performances and rehearsals is required. One credit for PE substitution will be available.

TECHNICAL THEATRE II SUBSTITUTION

NOTE: State law requires that any student who is taking a PE course, or class that substitutes for PE, participate in annual fitness testing.

Course Codes	
The ½ - 1 Technical Theatre II credit to count as a PE substitution is to be coded as follows:	
Course #	***Title***
3754PE A/B	***PE Substitution Technical Theatre II*** ***(SUBTECHTH)*** **PEIMS # PES00015**
The above PE substitution Technical Theatre II (SUBTECHTH) course ***WILL count as a state graduation credit and WILL be calculated into the student's grade point average as a 4.0 course.*** *Both fall and spring semesters of Technical Theatre II may now substitute for PE credit, provided students engage in 100 minutes of "moderate to vigorous activity" per five –day school week. Provides ½ credit per semester; up to a total of 1 credit.*	

Prerequisite: Technical Theatre I
Grade Placement: 9-12
Credit: .5 - 1 (PE substitution credit)

This course provides instruction in a laboratory and practical settings, in makeup, costuming design, set design and construction, lighting and sound design, business and theatre management, and other technical areas needed for theatrical and performing arts productions. Students will climb ladders, adjust lights, etc. as well as handle heavy materials, machinery and tools. Students will be expected to participate in all behind-the-scenes action of productions. Attendance at all performances and rehearsals is required, as well as behind-the-scenes action of productions. One credit for PE substitution will be available.

MUSICAL THEATRE II SUBSTITUTION

NOTE: State law requires that any student who is taking a PE course, or class that substitutes for PE, participate in annual fitness testing.

Course Codes	
The ½ - 1 Musical Theatre II credit to count as a PE substitution is to be coded as follows:	
Course #	***Title***
1474PE A/B	***PE Substitution Musical Theatre II*** ***(SUBMUSICTH)*** **PEIMS # PES00015**
The above PE substitution Musical Theatre II (SUBMUSICTH) course ***WILL count as a state graduation credit and WILL be calculated into the student's grade point average as a 4.0 course.*** *Both fall and spring semesters of Musical Theatre II may now substitute for PE credit, provided students engage in 100 minutes of "moderate to vigorous activity" per five –day school week. Provides ½ credit per semester; up to a total of 1 credit.*	

Prerequisite: Musical Theatre I
Grade Placement: 9-12
Credit: .5 - 1 (PE substitution credit)

Students will be active in a wide range of on-stage performance disciplines, including acting performance, vocal performance, and dance performance. The course will also provide an atmosphere in which students benefit from a teaching and learning experience in these performance disciplines of Broadway-style musical theatre.

The course will enable students to study and perform the varied styles of musical theatre with special attention to the principles of stage movement, stage vocal technique, stage choreography, acting, characterization, and all other aspects of a musical production. Attendance at all performances and rehearsals is required. One credit for PE substitution will be available.

COLOR GUARD SUBSTITUTION

NOTE: State law requires that any student who is taking a PE course, or class that substitutes for PE, participate in annual fitness testing.

Course Codes	
The ½ - 1 Color Guard credit to count as a PE Substitution is to be coded as follows:	
Course #	***Title***
9004A/B	**PE Substitution Color Guard** **(SUBCOLORGD)** **PEIMS # PES00012**
The above PE substitution Color Guard (SUBCOLORGD) course ***WILL count as a state graduation credit and WILL be calculated into the student's grade point average as a 4.0 course.*** *Both fall and spring semesters of Color Guard may now substitute for PE credit, provided students engage in 100 minutes of "moderate to vigorous activity" per five –day school week.*	

Course Titles	
All of the Color Guard course numbers provided directly below are to be used for Color Guard credits that go beyond the total of the 1 credit allowed as a PE Color Guard substitution. The following Color Guard courses are LOCAL CREDIT ONLY and WILL NOT count toward graduation credit and WILL NOT be calculated in a student's grade point average. Before a student may qualify to enroll in any Color Guard Local Credit Courses, he/she must have completed the required PE credit or PE substitution credit or be enrolled in such a qualifying course.	
Course #	**Course Title**
CLGD1AB	**PE EQ1 - Color Guard IAB**
CLGD2AB	**PE EQ2 - Color Guard IIAB**
CLGD3AB	**PE EQ3 - Color Guard IIIAB**
CLGD4AB	**PE EQ4 - Color Guard IVAB**

Prerequisite: Color Guard Member
Grade Placement: 9-12
Credit: .5 - 1 (PE substitution credit; additional credits count only as local credit)

Students must audition to be accepted in Color Guard. This course deals with learning the basics of Color Guard performance (flag techniques, body movement, and performance skills). This is one of the many sections that make up the marching band that will perform at football games, marching contests, parades, and pep rallies. By taking this course, the student understands that they must attend all rehearsals, performances, and contests that take place outside the school day (regardless of placement). In addition, members will need to attend camps and other rehearsals that my take place during school vacations. After marching season students will participate in winter guard season, learning more comprehensive, in-depth skills while performing indoors. Students will audition for one of several ability- based winter guard groups at the end of the fall semester.

One credit for PE substitution will be available. All Color Guard classes after the one credit PE substitution will only count as a local credit. Local credit courses do not count toward graduation credits and are not calculated into GPA.

JROTC (one to four credits) may be used to count as state graduation elective credit(s). Students may also use JROTC to substitute for the 1 credit of PE which is required for graduation; therefore, two semesters of JROTC will fulfill the 1 PE credit requirement.

Students entering Grade 9 beginning with school year 2014-2015 and thereafter will be graduating under the Foundation High School Program. This graduation program requires students to complete the required subject courses, plus an endorsement made up of four courses/four credits in the student's area of career or college interest. Courses used to meet the named subject credits required may also be used as courses making up an endorsement. Four levels of JROTC courses (I, II, III, and IV) qualifies as a public service endorsement, meeting the endorsement graduation requirement.

All ROTC Students may select how they want the JROTC Level IA/B 1 credit course to count toward graduation:

1. As a PE substitution with the short title on their transcripts of SUBJ1 showing the course meets the 1 credit PE Graduation requirement

OR

2. As a JROTC course credit with the short title of ROTC, AFROTC, or NROTC appearing on the student's transcript for 1 elective credit/no credit for PE. A student using this option has either to have already completed a PE course or PE substitution (such as athletics, marching band, or drill team etc.) or be enrolled in such a PE credited course at the same time as they are enrolled in JROTC.

NOTE: State law requires that any student who is taking a PE course, or class that substitutes for PE, participate in annual fitness testing.

JUNIOR RESERVE OFFICERS TRAINING I AB (PE SUBSTITUTION) **JUNIOR RESERVE OFFICERS TRAINING I AB (NO PE CREDIT AWARDED)**	**5951 AB (PE Substitution) or 5949 AB**
(Introduction to Leadership and Citizenship Development) JROTC is a "world-class," student-centered academic, STEM-based leadership program which familiarizes students with the concept of leadership, rights, responsibilities, privileges, and freedoms that underlie good citizenship. Focus on STEM–LEGO and VEX Robotics. Students individually and within teams will engage in hands-on teaching and learning, applying academic content by creatively solving real-world problems with innovative design-based thinking. Students will begin developing appreciation of teamwork through instruction in STEM– LEGO and VEX Robotics, Cybersecurity, Problem Solving, Drill, and wearing of the uniform	PES000004 (PE Substitution) or 03160100 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: *Student Text & HB Instructor Guide, Curriculum Manager Portable Drive, VEX Robotics/No state-adopted textbook/Contact JROTC Director Web Portal* Prerequisites: 14 years of age	College Hour(s): N/A **Tier III**
JUNIOR RESERVE OFFICERS TRAINING II AB	**5953 AB**
(Leadership and Citizenship Development) This course is designed with the latest interactive instructional strategies to maximize student engagement and learning. This course improves leadership ability, communications, decision-making, and goal setting through study and practical leadership experience as a cadet noncommissioned officer. Course provides introductory instruction in American military history with emphasis on the origin and role of the U.S. Army (JROTC), U.S. Air Force (AFJROTC), or U.S. Navy (NJROTC). Students will participate in service learning (community service) activities. Course enhances social and ethical values, and introduces physical conditioning, proper diet and nutrition.	03160200 Grade level: 10 - 12 HS Credit(s): 1 College Hour(s): N/A **Tier III**
Instructional Material: *Student Text & HB Instructor Guide, Curriculum Manager Portable Drive, VEX Robotics/No state-adopted textbook/Contact JROTC Director Web Portal* Prerequisites: JROTC I	
JUNIOR RESERVE OFFICERS TRAINING III AB	**5955 AB**
(Applied Leadership Development) This course improves leadership ability through study and practical leadership experience as a cadet officer in the JROTC. Course provides practical experience in applying leadership assessment principles, training and supervising subordinates, communications, service learning and problem solving. Cadets complete DL courses: Conflict Resolution, Time Management, Improving Writing Skills, Test Taking, Internet Safety, and First Aid. Continues instruction in military history as it relates to American culture and the future.	03160300 Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): N/A **Tier III**
Instructional Material: *Student Text & HB Instructor Guide, Curriculum Manager Portable Drive, VEX Robotics/No state-adopted textbook/Contact JROTC Director Web Portal* Prerequisites: JROTC II	

HONORS JUNIOR RESERVE OFFICERS TRAINING III AB	5958 AB
The honors course is designed to provide mid-level staff and primary cadet leaders the opportunity for applying advanced academic leadership and management skills, using proven and creative techniques, while employing multiple intelligences and learning strategies to maximize individual potential. Honors cadets will be challenged by the daily rigors of program requirements necessary to ensure highly successful ratings in all functional areas during inspections. Further leadership development via involvement in Team competitions, Peer Mentorship, Adopt-a-School programs. Moreover, developing techniques to integrate STEM learning, STEM research and engineering projects with leadership, creativity and teamwork.	03160300 Grade level: 11 HS Credit(s): 1 College Hour(s): N/A **Tier II**
Instructional Material: *Student Text & HB Instructor Guide, Curriculum Manager Portable Drive, VEX Robotics/No state-adopted textbook/Contact JROTC Director Web Portal* Prerequisites: JROTC I and II	
JUNIOR RESERVE OFFICERS TRAINING IV AB	**5957 AB**
(Advanced Leadership Development) Course provides students with advanced leadership and instructional experiences while allowing them to serve as senior cadet commanders and staff officers. Emphasis is on effective application of training management, planning management, leadership and communication skills, ethical reasoning, office administration, and decision-making in an assigned command or staff position. Applied service learning (community service projects) involves developing a concept, planning, resourcing, and leading a service project. Students are provided access to ACT/SAT prep courses, guidance in selecting a college and pursuing available scholarships, and mentoring in establishing long-range life goals. Students will lead major competitions, activities, and external inspections. At Arlington Heights High School, the NJROTC enters advanced naval operations, intelligence, communications, seamanship, and applied staff and command.	03160400 Grade level: 12 HS Credit(s): 1 College Hour(s): N/A **Tier III**
Instructional Material: *Student Text & HB Instructor Guide, Curriculum Manager Portable Drive, VEX Robotics/No state-adopted textbook/Contact JROTC Director Web Portal* Prerequisites: JROTC III	
HONORS JUNIOR RESERVE OFFICERS TRAINING IV AB	**5959 AB**
This honors course is designed to provide senior-level and primary cadet leaders the opportunity for applying advanced academic supervisory leadership and management skills, using proven and creative techniques while employing multiple intelligences and learning strategies. Cadets complete DL courses, Conflict Resolution, Time Management, Improving Writing Skills, Test Taking, Internet Safety, and First Aid. Cadets are eligible to enroll in courses for college credits. Students are provided access to ACT/SAT prep courses, guidance in selecting a college and pursuing available scholarships, and mentoring in establishing long-range life goals. Honors cadets will apply rigorous practical decision-making techniques to resolve a myriad of complex situations, requiring exceptional leadership, citizenship, and management skills in complex situations throughout the evaluation period. This will ensure highly successful ratings in all functional areas during inspections.	03160400 Grade level: 12 HS Credit(s): 1 College Hour(s): N/A **Tier II**
Instructional Material: *Student Text & HB Instructor Guide, Curriculum Manager Portable Drive, VEX Robotics/No state-adopted textbook/Contact JROTC Director Web Portal* Prerequisites: JROTC II and III	
HONORS UNITED STATES MILITARY HISTORY AB **SPECIAL TOPICS IN SOCIAL STUDIES**	**5975 AB** **5975 AB** **5978 AB**
This course presents a comprehensive U. S. Military History review, providing students an awareness of responsible leadership roles of men and women in past and present history. Students will gain an understanding of U.S. military history and strategy from an intellectual, social, economic and political perspective. Students will apply critical-thinking skills to understand the impact of geographic factors, current world events and the role of diplomacy from the perspective of both scholars and from the perspective of those who have fought our wars. Cadet leaders are provided the opportunity to participate in world affairs discussions and seminars, staff rides to military installations, museums, historic battlefields and monuments, panel discussions, community service projects, leadership labs, leadership camps, as well as participation in classroom discussion, and debate projects on local and world events. Students will gain a world-view perspective and a greater appreciation and understanding of culture, history and government.	033800## Grade level: 10 - 12 HS Credit(s): 1 College Hour(s): N/A **Tier II**
Instructional Material: *Provided by ROTC Department/Locally adopted textbook* - Lookingbill's *The American Military: A Narrative History, John Wiley Press, 2014, ISBN: 9781444337365* Prerequisites: Student must have completed JROTC I or seeking Humanities Endorsement *033800## - 1st Time ##=02, 2nd Time ##=22, 3rd Time ##=32, 4th Time ##=42*	
AIR FORCE JUNIOR RESERVE OFFICER TRAINING I AB (PE SUBSTITUTION) **AIR FORCE JUNIOR RESERVE OFFICER TRAINING I AB (NO PE CREDIT)**	**5963 AB** **(PE Substitution) or** **5947 AB (No PE Credit)**
AFJROTC1. AS-1 - A JOURNEY into AVIATION HISTORY: This is an aviation history course focusing on the development of flying throughout the centuries. The emphasis is on civilian and military contributions to aviation. LE-1-Citizenship, Character and Air Force Tradition: Focuses on the AFJROTC mission and organization, customs and courtesies, and the meaning and purpose of standards, discipline, and conduct. A Health and Wellness program is 20% of the total program instruction and encourages students to develop lifelong fitness goals.	PES00004 (PE Substitution) or 03160100 (No PE Credit) Grade level: 9 - 12 HS Credit(s): 1 College Hour(s): N/A
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC/Air Force* Prerequisites: 14 years of age	**Tier III**

AIR FORCE JUNIOR RESERVE OFFICER TRAINING II AB	5965 AB
AFJROTC2. AS-2 – The Science of Flight; A Gateway to New Horizons: This second-year course covers the aerospace environment, the human requirements for flight, principles of aircraft flight, and principles of navigation. Discussions include the forces of lift, drag, thrust and weight. LE-1-Citizenship, Character and Air Force Tradition: Focuses on the AFJROTC mission and organization, customs and courtesies, and the meaning and purpose of standards, discipline, and conduct. A Health and Wellness program is 20% of the total program instruction and encourages students to develop lifelong fitness goals.	03160200 Grade level: 10 - 12 HS Credit(s): 1 College Hour(s): N/A **Tier III**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC/Air Force* Prerequisites: AFJROTC IAB	
AIR FORCE JUNIOR RESERVE OFFICER TRAINING III AB	**5967 AB**
AFJROTC3. AS-3 -Exploring Space; The High Frontier: This course examines our Solar System, the Sun, Earth, and Moon and the planets, the latest advances in space technology, and continuing challenges of space and manned space flight. LE-3-Life Skills and Career Opportunities: Comprehend the importance of obtaining a degree or skill after high school comprehend the importance of financial planning, and know what career opportunities are available. A Health and Wellness program is 20% of the total program instruction and encourages students to develop lifelong fitness goals and skills.	03160300 Grade level: 10 HS Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC/Air Force* Prerequisites: AFJROTC IIAB	
HONORS AIR FORCE JUNIOR RESERVE OFFICER TRAINING III ABH	**5969 AB/H**
Student assigned to honors AFJROTC will be required to meet all the requirements of AFJROTC3 in addition the following requirements: The honors course is designed to provide mid-level staff and primary cadet leaders the opportunity for applying advanced academic leadership and management skills, using proven and creative techniques, while employing multiple intelligences and learning strategies. Honors cadets will be challenged by the daily rigors of program requirements necessary to ensure a highly successful unit.	03160300 Grade level: HS Credit(s): 1 College Hour(s): N/A **Tier II**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC/Air Force* Prerequisites: AFJROTC IAB and IIAB	
AIR FORCE JUNIOR RESERVE OFFICER TRAINING IV AB	**5971 AB**
AFJROTC3. AS-4H – Management of the Cadet Corps: The cadets manage the entire corps during their fourth year in the AFJROTC program. This hands-on experience affords the cadets the opportunity to put theories of previous leadership courses into practice. LE-4-Leadership Education: The students will comprehend the importance of self-management and the management of others and comprehend the concepts and skills of problem solving, decision making and negotiation. A Health and Wellness program is 20% of the total program instruction and encourages students to develop lifelong fitness goals and skills.	03160400 Grade level: 12 HS Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC/Air Force* Prerequisites: AFJROTC IIIAB	
HONORS AIR FORCE JUNIOR RESERVE OFFICER TRAINING IVA/B/H	**5973 AB**
(Advance Management of the Cadet Corps) The requirements for this course are in addition to the requirements of AS4 and LE4. This course provides students with advance leadership and instructional experiences while allowing them to serve as senior cadet commanders and staff officers. Emphasis is on effective application of training management, planning management, leadership and communication skills, ethical reasoning, office administration, decision making in an assigned command or staff position. Applied service learning (community service projects) involves developing a concept, setting measurable goals, planning and leading a service project. Students will lead major competitions, activities and external inspections	03380002 Grade level: 12 HS Credit(s): 1 College Hour(s): N/A **Tier II**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC/Air Force* Prerequisites: AFJROTC IIAB and IIIAB	
HONORS AVIATION GROUND SCHOOL ABH	**5961 AB**
AFJROTC4. AS-4 Honors – Aviation Honors Ground School: The material covered is a more advance, more-in-depth study of the previous aerospace topics. When the course is complete, the students should be prepared to take and pass the Federal Aviation Administration (FAA) written examination. The Private Pilot Manual is the source for initial study and review. The course covers advanced weather, aerodynamics, FAA regulations, flight planning and navigation. At the end of this course, the student should pass the 60-question FAA written exam.	N1290400 Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): N/A **Tier II**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC Dept.* Prerequisites: AFJROTC AS IIAB	
NAVY SCIENCE JUNIOR RESERVE OFFICER TRAINING I AB (PE SUBSTITUTION) **NAVY SCIENCE JUNIOR RESERVE OFFICER TRAINING I AB (NO PE CREDIT)**	**5977 AB (PE Substitution)** **or 5979 AB (No PE Credit)**
NJROTC1. This Naval Science 1 course introduces students to fundamental elements of the meaning of citizenship, understanding the American Government, and the elements of leadership; the value of scholarship in attaining life goals; promotes an awareness of the importance of a healthy lifestyle, including physical fitness, a proper diet, and controlling stress and drug awareness; provides the principles of health and first aid; includes geography, orienteering, survival and map reading skills, financial skills and an introduction to the U.S. Navy with an overview of Naval ships and aircraft.	PES00004 (PE Substitution) 3160100 (No PE Credit) Grade level: 9 - 12 HS Credit(s): 1 College Hour(s): N/A **Tier III**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC Dept.* Prerequisites: 14 years of age	

NAVY SCIENCE JUNIOR OFFICER RESERVE TRAINING II AB	5981 AB
NJROTC2. The Naval Science 2 course builds on the general introduction provided in Naval Science 1 to further develop the traits of citizenship and leadership, and to introduce cadets to the technical areas of naval science and the role of the U.S. Navy in maritime history and the vital importance of the world's oceans to the continued well-being of the United States. Students are introduced to Maritime History, including the American Revolution, Civil Ware, the rise of the U.S. to world power status, World Wars 1 and 2, the Cold War Era and the 1990s and Beyond; introduction to Nautical Sciences to include Maritime Geography, Oceanography, Meteorology, Astronomy, and Physical Sciences.	03160200 Grade level: 10 - 12 HS Credit(s): 1 College Hour(s): N/A **Tier III**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC Dept.* Prerequisites: NJROTC I	
NAVY SCIENCE JUNIOR OFFICER RESERVE TRAINING III AB	**5983 AB**
NJROTC3. The Naval Science 3 course broadens the understanding of students in the operative principles of military leadership, the concept and significance of teamwork, the intrinsic value of good order and discipline in the accomplishment of objectives, and the importance of sea power and national security. Students gain a more in-depth knowledge of Naval ships and aircraft and an introduction to marine navigation and seamanship. This course also provides instruction on Naval Operations and Support Functions, Military Law, and International Law and the Sea. Provides introduction to ship construction and damage control, shipboard organization and watch standing, basic seamanship, marine navigation, and naval weapons and aircraft. Includes on-going instruction in leadership, citizenship and discipline.	03160300 Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): N/A **Tier III**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC Dept.* Prerequisites: NJROTC II	
HONORS NAVY SCIENCE JUNIOR OFFICER RESERVE TRAINING III AB	**5985 AB**
NJROTC3/Honors. Student assigned to honors NJROTC will be required to meet all the requirements of NJROTC3 in addition the following requirements: The honors course is designed to provide mid-level staff and primary cadet leaders the opportunity for applying advanced academic leadership and management skills, using proven and creative techniques, while employing multiple intelligences and learning strategies. Honors cadets will be challenged by the daily rigors of program requirements necessary to ensure a highly successful unit. Students are provided access to ACT/SAT prep courses, guidance in selecting a college and pursuing available scholarships, and mentoring in establishing long-range life goals.	03160300 Grade level: 9 - 12 HS Credit(s): 1 College Hour(s): N/A **Tier II**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC Dept.* Prerequisites: AFJROTC I and II	
NAVY SCIENCE JUNIOR OFFICER RESERVE TRAINING IV AB	**5987 AB**
NJROTC4. Naval Science 4 course focus is primarily on practical leadership techniques and implementation. The intent is to assist seniors in understanding leadership and improving their leadership skills by putting them in positions of leadership, under supervision, then helping them analyze the reasons for them vary degrees of success throughout the year. Classroom activities include seminars, reading assignments, classroom presentations, and practical work with younger cadets. This hands-on experience affords the cadets the opportunity to put theories of previous leadership courses into practice. Seniors are mentored/guided in their presentation for life after high school to include college preparation, scholarship applications, and the variety of choices that are available to them. Instruction is provided in theoretical and applied aspects of leadership, training, and evaluation of performance. Students will become aware of the techniques used to create motivation, develop goals and activities for a work group, and the proper ways to set a leadership example. Students are provided access to ACT/SAT prep courses, guidance in selecting a college and pursuing available scholarships, and mentoring in establishing long-range life goals.	03160400 Grade level: 12 HS Credit(s): 1 College Hour(s): N/A **Tier III**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC Dept.* Prerequisites: NJROTC III	
HONORS NAVY SCIENCE JUNIOR OFFICER RESERVE TRAINING IV AB	**5989 AB**
NJROTC4/Honors The requirements for this course are in addition to regular course requirements. Requires students with advance leadership and instructional experiences while allowing them to serve as senior cadet commanders and staff officers. Emphasis is on effective application of training management, planning management, leadership and communication skills, ethical reasoning, office administration, decision making in an assigned command or staff position. Applied service learning (community service projects) involves developing a concept, setting measurable goals, planning and leading a service project. Students will lead major competitions, activities and external inspections.	03160400 Grade level: 12 HS Credit(s): 1 College Hour(s): N/A **Tier II**
Instructional Material: *Textbooks, Instructor Guide, CD, DVD provided by the JROTC Dept.* Prerequisites: NJROTC II and III	

Career and Technical Education (CTE)

Public Notification of Non-Discrimination in Career and Technical Education Programs

The Fort Worth Independent School District offers CTE programs in the following Career Areas:

Agriculture, Food and Natural Resources;
Architecture and Construction;
Arts, Audio Video Technology, and Communications (*Arts A/V*);
Business, Marketing, and Finance;
Education and Training;
Energy (*P-Tech Program only*);
Health Science;
Hospitality and Tourism;
Human Services;
Information Technology;
Law and Public Service;
Manufacturing;
Science, Technology, Engineering and Mathematics (*STEM*);
Transportation, Distribution and Logistics.

Admission to the above programs is based on interest, lottery selection, age appropriateness, and class space availability.

It is the policy of the District not to discriminate on the basis of race, color, religion, gender, national origin, age, sexual orientation, disability, gender identity and expression, military/veteran status, or any other basis prohibited by law in its vocational programs, services or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.

Fort Worth ISD will take steps to assure that the lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs.

The Fort Worth Independent School District prohibits discrimination, including harassment, against any employee on the basis of race, color, religion, gender, national origin, age, sexual orientation, disability, gender identity and expression, military/veteran status, or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of District policy. The following persons have been designated to handle inquiries regarding the non-discrimination policies: Patricia Sutton, Director of Special Services, 100 N University Dr., Fort Worth, TX 76107, 817.814.2458, E-mail: Patricia.Sutton@fwisd.org or Kevin Greene, Director of Title IX, 100 N. University Dr., Fort Worth, TX 76107, 817.814.1830, E-mail: Kevin.Greene@fwisd.org or Dr. Lisa Langston, Director of UIL Compliance, 1501 University Dr, Fort Worth, TX 76107, 817.815.7307, Email: Lisa.Langston@fwisd.org.

Fort Worth ISD Career & Technical Education (CTE) offers a variety of Programs of Study. Each Program of Study has a developed coherent sequence of courses to provide students with an option to receive an Endorsement with their high school diploma based on House Bill 5/Foundation Graduation Program Requirements. Each Program of Study begins with foundation courses that allow students to explore the careers and learn basic concepts and skills needed within that focus. As students move forward in the Program of Study, they will begin to take technical courses that provide them with advanced knowledge and skills in preparation for postsecondary education and/or for jobs in their chosen career field. Many Programs of Study also prepare students to complete industry certifications that will allow them to become more employable with higher starting wages and provide them with a Performance Acknowledgement in an Endorsement.

What is an industry endorsement?

Endorsements are made up of four courses for four or more credits taken in a coherent sequent providing advanced or more in-depth knowledge and skills in a curriculum area. Middle school students should explore career information related to the endorsement areas listed below so they may begin to think about what areas they will want to take more in-depth course work during their educational career in high school.

Each endorsement requires students to complete a foundation of academic courses and a coherent sequence of courses within the endorsement area that lead to advanced studies. Endorsements are earned by successfully completing 26 credits including:

4 math credits	**4 science** credits	**4 or more** credits in a coherent sequence aligned to their endorsement area	**2 additional elective** credits (can be part of the endorsement coherent sequence)

What is a Program of Study?

Did you know that there are thousands of different careers in the United States? To help organize the thousands of careers, the U.S. Department of Labor has organized them into 16 career areas with occupations and broad industries that share certain features. In FWISD Career and Technical Education (CTE), the many available programs of study provide you with a developed coherent sequence that can lead to an industry endorsement with your high school diploma. Think of a program of study as being like a college major. Each program of study begins with foundation courses that allow you to explore the careers within the focus and to learn basic concepts and skills needed for careers within that program of study. As you move forward in the program of study, you will begin to take technical courses that provide you with advanced knowledge and skills in preparation for postsecondary training and/or for jobs in your chosen career field. Many programs of study will lead into a capstone experience junior or senior year, that allows you to graduate with a performance acknowledgement on your diploma. These experiences include earning dual credit, a level I or II college certificate, an industry-based certificate, a work-based learning experience, and/or a paid internship opportunity. A CTE Capstone Experience will help you build industry relationships and prepare for the real-world which will, in turn, help you to become more employable in high-need, high-wage jobs of your interest. Additionally, you can use this opportunity to find a job that could help pay for college or post-secondary education.

Business and Industry Endorsement

Agriculture, Food & Natural Resources careers focus on 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.

Architecture & Construction careers focus on designing, planning, managing, building and maintaining the built environment.

Arts, A/V Technology & Communications careers focus on designing, producing, exhibiting, performing, writing, and publishing multimedia content. These focuses include visual and performing arts, design, journalism, and entertainment services.

Business, Marketing & Finance careers focus on planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.

Energy careers focus on processing, refining, and distributing petroleum and gas. It introduces CTE learners to the process of regulating the flow of oil into pipelines, controlling pumping systems, and operating and maintaining machinery to generate electric power.

Hospitality & Tourism careers focus on preparing individuals for employment in careers that encompass the management, marketing and operations of restaurants, food/ beverage services, lodging, attractions, recreation events and travel related services.

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

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

Transportation, Distribution & Logistics careers focus on 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.

Public Services Endorsement

Education & Training careers focus on planning, managing and providing education and training services, and related learning support services such as administrative support, and professional support services.

Health Science careers focus on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Human Services careers focus on preparing individuals for employment in careers that relate to families and human needs such as counseling and mental health services, family and community services, personal care, and consumer services. Cosmetology is one specific career that is covered under human services.

Law and Public Service careers focus on preparing individuals for employment in careers in correction services, emergency and fire management services, law enforcement, legal services, security and protective services, as well as careers that are related to Foreign Service, national security, governance, planning, public management and administration, and regulation.

STEM Endorsement

Science, Technology, Engineering & Mathematics (STEM) careers focus on planning, managing, problem solving, and providing scientific research and professional and technical services (e.g. physical science, social science, engineering) including laboratory and testing services, and research and development services.

Further details about specific programs of study and those with multiple endorsement opportunities, can be found on the CTE Programs of Study Alignment to Endorsements page on the http://tea.texas.gov site.

What is the difference between a program of study program of study and an industry endorsement?

A *program of study* is a sequence of courses within a career cluster and link what students learn in school with the knowledge and skills they need for success in college and careers. *Industry Endorsements* require that the students take four courses from basic skills to advanced courses in the sequence to receive the endorsement when the student graduates from high school.

What is a coherent sequence?

A *coherent sequence* is a series of courses that relate to a student's career interest and program of study. A coherent sequence builds from foundation and/or exploratory courses to courses that include higher level skills and knowledge to courses that allow the student to practice the high-level skills they have learned either in a lab setting or in the workplace.

Why is it important to offer a coherent sequence of courses?

A *coherent sequence of courses* helps students take various levels of courses throughout high school that prepares students for their secondary and postsecondary level career goals. The sequence lets students build their knowledge and skills from the basic level to a more technical and advanced level. The more advanced technical level courses provide students with the opportunity to take an industry-based certification offered within their program/career area as well as graduate high school with an industry endorsement.

How do you know if you are in a coherent sequence?

A coherent sequence of courses builds from foundation-level to workplace-level skills and knowledge. If you follow one of the programs of study listed in this CTE section of the course catalog, you will be participating in a coherent sequence.

Is a program of study flexible, if I decide to change?

Students should stay in the courses of their selected program of study in order to receive an endorsement when they graduate, but course curriculum can be flexible. Since there are a variety of jobs and positions at different levels within each occupational group, the courses students take for one career pathway may apply to a variety of different careers within the same pathway. Therefore, students have the opportunity to explore a variety of occupations within a chosen program of study and to learn a variety of skills that allows flexibility within students' education and career goals. For example, learning Business Entrepreneurship within their Culinary Program of Study.

What if you change your mind?

Students need to take the basic prerequisite courses to build the knowledge and skills before taking the higher-level courses. However, some courses are offered in other programs of study where the student can easily transfer. Additionally, some programs allow for students to switch programs of study after taking the first-level course within the sequence and without repeating the first-level course in the new program. The student will need to get guidance from their assigned counselor and CTE teacher, prior to changing. However, even if students start over at the basic course level, students really have not lost anything since they will have gained transferable knowledge and skills from the previous program of study that can used throughout life.

What is a 4-year progression plan (graduation plan)?

A progression/graduation plan maps out a student's suggested high school coursework that will lead them to their chosen pathway. This helps students choose their future courses and helps guide in scheduling students correctly, which includes all core, elective, and coherent sequence of courses within their selected program of study. Progression plans identify whether students are on track for graduation as well as determine whether a student will graduate with a college and/or career preparedness measure and industry endorsement. Counselors review progression plans with each student annually and update as changes to courses or programs of study arise.

Guidance for Reading CTE Career Focus Charts

CAREER FOCUS	***LANDSCAPE ARCHITECT***
9TH GRADE	Principles of Agriculture, Food and Natural Resources: AG00201AB OR Honors: AGH00201AB
10TH GRADE	Horticulture Science: AG02002AB OR Honors: AGH02002AB
11TH GRADE	Greenhouse Operations and Production AB AG02200AB OR Honors AG02200AB AND/OR Landscape Design: AG01901T OR Honors: AGH01901T AND Turf Grass Management: AG01911T OR Honors: AGH01911T OPTIONAL: Principles and Elements of Floral Design: AG01802ABOR Honors: AGH01802AB
12TH GRADE	Advanced Plant and Soil Science: AG02102AB OR Honors: AGH02102AB AND/OR Unpaid Practicum in Agriculture Food, & Natural Resources/d A/B: AG02502AB OR Honors: AGH02502AB OR Paid Practicum in Agriculture Food, & Natural Resources/Extended A/B: AG02512AB OR Honors: AGH02512AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Texas Certified Nursery Professional; Texas High School Floral Design Certification Level 1; Texas Master Gardner **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General
Available At	**Arlington Heights HS** and **Diamond Hill-Jarvis HS**

SAMPLE

As you move through the CTE career endorsement areas, you will find a table that depicts each of the CTE Career Focuses offered under that Career Area. The following is presented to guide you through understanding each chart.
The example above is taken from the Landscape Architect career focus. You can see the grade level where certain courses are to be taken along with the number of credits that can be earned.

Notice that one of the courses offered for 9th grade is denoted with the abbreviation of 'T' (short for 'Term') in the course number. These courses are only one semester in length and will allow students to earn 0.5 credit. However, these course types are able to be taken in either the fall or the spring semester.

Notice also that the other course for 9th grade spans an entire year. These courses consist of both an 'A' and 'B' component that must be taken in order for the student to earn 1.0 credit. This is exactly how most students think of taking any core class like English or math. These courses are **not** to be broken up into separate years of high school.
Students qualify for certain Practicum Experiences as they near graduation. Each Endorsement will vary in the availability and content of these experiences.

Finally, we know the options can quickly become overwhelming. You are therefore urged to contact your campus counselor or the CTE office for any questions you may have at **817.814.1530**.

CTE Elective Courses

CTE students are expected to follow a four-year coherent sequence of courses as designated in the CTE Career Programs of Study and Focus Charts. However, there are some courses that students are able to take as an elective or enrichment course, outside of a coherent sequence, which may also offer industry-based certification exam opportunities. The CTE elective courses and descriptions are listed below.

COURSE DESCRIPTIONS FOR CTE ELECTIVE CLASSES

PROFESSIONAL COMMUNICATIONS T (PROFCOMM T)	**AV09901T**
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 software applications, manipulate computer graphics, and conduct Internet research. This course is also offered at middle school campuses for high school speech and CTE credit. The credit is earned only if the middle school teacher was certified to teach the course at the time the student was enrolled.	13009900 Grade level: 8 - 12 HS Credit(s): 0.5
Instructional Material: *Professional Communications, 2017 Edition,* Goodheart-Willcox Co. Prerequisite(s): None *Professional Communications can be taught by any teacher certified in speech or career and technical education who has been credentialled through the district to teach this course. Contact the CTE Dept. for credentialing and training information.*	College Hour(s): NA **Tier III**
TOUCH SYSTEM DATA ENTRY T (TSDATAE T)	**BA11301T**
In Touch System Data Entry, students apply technical skills to address business applications of emerging technologies. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students will need to apply touch system data entry skills for production of business documents. This course is also offered at middle school campuses that can qualify for high school CTE credit. The credit is earned only if the middle school teacher was certified to teach the course at the time the student was enrolled.	13011300 Grade level: 8 - 10 HS Credit(s): 0.5
Instructional Material: *Century 21 computer skills and Applications, Lesson 1-90, 10th Edition* Cengage Learning Prerequisite(s): None	College Hour(s): NA **Tier III**
BUSINESS INFORMATION MANAGEMENT I AB (BUSIM1 AB)	**BA11412AB**
In Business Information Management I, 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.	13011400 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: *Cashman Series*: *Microsoft Office 365 and Office 2016: Introductory,* Cengage Learning, Inc. Prerequisite(s): None	College Hour(s): NA **Tier III**
HONORS BUSINESS INFORMATION MANAGEMENT I AB (BUSIM1 AB/H)	**BAH11412AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13011400 Grade level: 9 - 12
Instructional Material: *Cashman Series*: *Microsoft Office 365 and Office 2016: Introductory,* Cengage Learning, Inc. Prerequisite(s): None *Offered at: All high school campuses*	HS Credit(s): 1 College Hour(s): NA **Tier II**
MONEY MATTERS AB (MONEYM AB)	**FN16201AB**
In Money Matters, students will investigate money management from a personal financial perceptive. Students will apply critical-thinking skills to analyze financial options based on current and projected economic factors. Students will gain knowledge and skills necessary to establish short-term and long-term financial goals. Students will examine various methods of achieving short-term and long-term financial goals through various methods such as investing, tax planning, asset allocating, risk management, retirement planning, and estate planning.	13016200 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): None *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
HONORS MONEY MATTERS AB (MONEYM AB/H)	**FNH16201AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13016200 Grade level: 9 – 12
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): None *Offered at: All high school campuses*	HS Credit(s): 1 College Hour(s): NA **Tier II**

CHILD DEVELOPMENT AB (CHILDDEV AB)	HV24701AB
This technical laboratory course addresses knowledge and skills related to child growth and development from prenatal through school-age children. Students are equipped with child development skills necessary to promote the well-being and healthy development of children and to investigate careers related to the care and education of children. Students explore the principles and procedures for promoting the physical, emotional, social, and intellectual development of young children, including those with special needs. Topics include characteristics of quality child care and career options related to the care and education of children.	13024700 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: *Child Development 8th Edition,* Goodheart-Willcox Co. Prerequisite(s): None *Offered only at: Carter Riverside, Arlington Heights, Eastern Hills, Paschal and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS CHILD DEVELOPMENT AB (CHILDDEV AB/H)	**HVH24701AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13024700 Grade level: 9 - 12
Instructional Material: *Child Development 8th Edition,* Goodheart-Willcox Co. Prerequisite(s): None *Offered only at: Carter Riverside, Arlington Heights, Eastern Hills, Paschal and Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**
LIFETIME NUTRITION AND WELLNESS T (LNURTWEL T)	**HV24501T**
This laboratory course allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness. This course concentrates on nutrition, food choices, and food management skills. Students address nutrition and food preparation from the perspective of food habits and wellness, menu planning, special dietary needs, food costs and budgeting, consumer food-buying strategies, food safety and sanitation, preparation and storage practices. This course will help students gain the knowledge to pursue careers related to hospitality and tourism, education and training, human services, and health sciences.	13024500 Grade level: 10 - 12 HS Credit(s): 0.5
Instructional Material: *Guide to Good Food,* Goodheart-Willcox Co., *ISBN#: 9781683111764* Prerequisite(s): None *Offered only at: Arlington Heights HS, Carter Riverside HS, Diamond Hill-Jarvis HS, Dunbar HS, Eastern Hills HS, North Side, Polytechnic, Southwest, and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS LIFETIME NUTRITION AND WELLNESS T (LNURTWEL T/H)	**HVH24501T**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13024500 Grade level: 10 - 12
Instructional Material: *Guide to Good Food,* Goodheart-Willcox Co., *ISBN#: 9781683111764* Prerequisite(s): None *Offered only at: Arlington Heights, Carter Riverside, Diamond Hill-Jarvis, Dunbar HS, Eastern Hills, North Side, Polytechnic, Southwest, and Trimble Tech*	HS Credit(s): 0.5 College Hour(s): NA **Tier II**
CAREER PREPARATION I AB (CAREERP1 AB)	**CP01300AB**
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction, and are employed for ten hours per week (or average of 20 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	12701300 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None	College Hour(s): NA **Tier III**
CAREER PREPARATION II AB (CAREERP2 AB)	**CP01400AB**
The Career Preparation II course is for those students who are taking a Career Preparation course for the second time and continue or have new employment during the duration of the course; working ten hours per week (or average of 20 hours across two weeks). This course provides the same opportunities and requirements as the Career Preparation I course.	12701400 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None	College Hour(s): NA **Tier III**

CAREER PREPARATION I/EXTENDED I AB (EXCAREE1 AB)	CP01302AB
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I/Extended provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction, and are employed for fifteen hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	12701305 Grade level: 11-12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None	College Hour(s): NA **Tier III**
CAREER PREPARATION II/EXTENDED (EXCAREE2 AB)	**CP01402AB**
The Career Preparation I/Extended course is for those students who are taking a Career Preparation course for the second time and continue or have new employment during the duration of the course; working fifteen hours per week (or average of 30 hours across two weeks). This course provides the same opportunities and requirements as the Career Preparation I/Extended course.	12701405 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None	College Hour(s): NA **Tier III**
FUNDAMENTALS OF COMPUTER SCIENCE AB (TAFCS AB)	**2140AB**
Fundamentals of Computer Science is intended as a first course for those students just beginning the study of computer science. Students will learn about the computing tools that are used every day. Students will foster their creativity and innovation through opportunities to design, implement, and present solutions to real-world problems. Students will collaborate and use computer science concepts to access, analyze, and evaluate information needed to solve problems. Students will learn the problem-solving and reasoning skills that are the foundation of computer science. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of computer science through the study of technology operations and concepts.	03580140 Grade level: 9 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials. Prerequisite(s): None *Offered at: Eastern Hills and as an elective course at select high schools*	College Hour(s): NA **Tier III**
HONORS FUNDAMENTALS OF COMPUTER SCIENCE AB/H (TAFCS AB/H)	**2150AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	03580140 Grade level: 9 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered at: Eastern Hills and as an elective course at select high schools*	College Hour(s): NA **Tier II**
COMPUTER SCIENCE I AB (TACS 1AB)	**2151AB** ***WL2151AB**
Students develop a solid foundation in computer terminology and programming, binary and hexadecimal number systems, computer ethics (including copyright laws and privacy), and structured programming and programming techniques on personal computers are emphasized. Students will study and write programs utilizing the high- level languages FORTRAN, Pascal, and/ or C++. Students may be awarded one *LOTE credit (WL2151 AB) or one elective credit (2151 AB) for successful completion of this course.	03580200 Grade level: 9 -12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials (Windows Programming & Java Programming, CompuScholar; ISBN#: 9780988707009) Prerequisite(s) (for those pursuing the course as an elective or following the Computer Science sequence): None Prerequisite(s) (for those following the Cybersecurity sequence): Principles of Information Technology or Foundations of Cybersecurity *Offered as an elective course at select high schools.*	College Hour(s): NA **Tier III**
HONORS COMPUTER SCIENCE I AB/H (TACS 1AB/H)	**2141AB** ***WL2141AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study. Students may be awarded one *LOTE credit (WL2141 AB) or one elective credit (2141 AB) for successful completion of this course.	03580200 Grade level: 9 - 12 HS Credit(s): 1

Instructional Material: Contact Career and Technical Education Department for related materials (Windows Programming & Java Programming, CompuScholar; ISBN#: 9780988707009) Prerequisite(s) (for those pursuing the course as an elective or following the Computer Science sequence): None Prerequisite(s) (for those following the Cybersecurity sequence): Principles of Information Technology or Foundations of Cybersecurity *Offered as an elective course at select high schools.*	College Hour(s): NA **Tier II**
COMPUTER SCIENCE II AB (TACS 2AB)	**2153AB** ***WL2153AB**
Computer Science II will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of computer science through the study of technology operations, systems, and concepts. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts. Students may be awarded one *LOTE credit (WL2143 AB) or one elective credit (2143 AB) for successful completion of this course.	03580300 Grade level: 10 – 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials (Python Programming, CompuScholar) Prerequisite(s): Computer Science I *Offered as an elective course at select high schools.*	College Hour(s): NA **Tier III**
HONORS COMPUTER SCIENCE II AB/H (TACS 2AB/H)	**2143AB** ***WL2143AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study. Students may be awarded one *LOTE credit (WL2143 AB) or one elective credit (2143 AB) for successful completion of this course.	03580300 Grade level: 10 – 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials (Python Programming, CompuScholar) Prerequisite(s): Computer Science I *Offered as an elective course at select high schools.*	College Hour(s): NA **Tier II**
AP COMPUTER SCIENCE A AB (APTACSA 1AB, APTACSAL AB, APTACSAM AB)	**2142AB** ***WL2142AB** ****M2142AB**
AP Computer Science A is designed for qualified students in grades 10 - 12 who wish to complete the equivalent of a college introductory course in computer science. The course will focus on programming methodology, and procedural abstraction. It also includes the study of algorithms, data structures, and data abstraction, but covered in less depth than in the Computer Science III AB course. The course follows the College Board AP® Computer Science A Curriculum Framework. Students **must** be scheduled into two of the following three course numbers for this course: 2142 AB for an elective credit, M2142 AB for a math credit, and WL2142 AB for a LOTE credit. Students will be awarded two credits for successful completion of this course.	A3580120, A3580120, A3580110 Grade level: 10 - 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials (Java Programming, CompuScholar) Prerequisite(s): Computer Science I OR Computer Science II OR AP Computer Science Principles *Offered as an elective course at select high schools.*	College Hour(s): NA **Tier I**
OnRamps COMPUTER SCIENCE 1AB (TACS 1 AB OR)	**2159AB**
Thriving in Our Digital World is a new dual enrollment course that teaches computer science principles, a set of core ideas that shapes the landscape of computer science and its impact on our society. In addition to learning about the magic and beauty of computing, students will acquire essential Texas College and Career Readiness skills, applying critical thinking, problem solving, and communication within a project-based learning framework. Students will experience high-quality curriculum designed by the faculty at The University of Texas at Austin (UT). Students can earn three hours of UT credit with feedback and assessment provided by UT course staff. OnRamps works through a dual-enrollment model. Using a hybrid delivery approach, students meet rigorous university-level college readiness standards and have the opportunity to earn UT Austin credit from a UT faculty member and high school credit from their local teacher.	A3580300 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Selected and provided by the University of Texas at Austin Recommended Prerequisite(s): Algebra II (*preferred*) Prerequisite(s): Algebra I What's Next? NA *Offered as an elective course at select high schools.*	College Hour(s): 3 hours **Tier I**

AP COMPUTER SCIENCE PRINCIPLES AB (APTACS PRIN)	**2157AB** ***WL2157AB**
This course introduces students to the foundational ideas of computer science, while providing exposure to computational content, computational thinking skills, creative aspects of the field and their impact on the world. Students will be provided the opportunity to investigate the innovations in other fields of computing while examining the ethical implications of new computing technologies. The course follows the College Board AP® Computer Science Principles Curriculum Framework. Students may be awarded one *LOTE credit (TAWL2157 AB) or one elective credit (TA2157 AB) for successful completion of this course.	A3580300 Grade level: 10 – 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s) (for those pursuing the course as an elective): None Prerequisite(s) (for those following the Cybersecurity sequence): Honors PLTW Computer Science Essentials or Foundations of Cybersecurity Prerequisite(s) (for those following the Computer Science sequence): None *Offered as an elective course at select high schools.*	College Hour(s): NA **Tier I**
HONORS INDEPENDENT STUDY IN TECHNOLOGY APPLICATIONS (FIRST TIME TAKEN) AB/H (TAIND AB/H)	**2144AB**
Honors Independent Study is designed for qualified students in grades 10 - 12 who wish to complete the equivalent of a college introductory course in computer science. The course will focus on programming methodology and procedural abstraction. It also includes the study of algorithms, data structures, and data abstraction covered in substantial depth. In honors courses, students will complete additional projects and activities related to the program of study.	03580900 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Successful completion of AP Computer Science A, student interest; teacher recommendation; taken in sequence. *Offered as an elective course at: Arlington Heights HS, IM Terrell HS, and Paschal HS*	College Hour(s): NA **Tier I**
HONORS INDEPENDENT STUDY IN TECHNOLOGY APPLICATIONS (SECOND TIME TAKEN) AB/H (TAIND 2AB)	**2146AB**
Honors Independent Study is designed for qualified students in grades 10 - 12 who wish to complete the equivalent of a college introductory course in computer science. The course will focus on programming methodology and procedural abstraction. It also includes the study of algorithms, data structures, and data abstraction covered in substantial depth. In honors courses, students will complete additional projects and activities related to the program of study.	03581000 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Successful completion of AP Computer Science A, student interest; teacher recommendation; taken in sequence. *Offered as an elective course at: Arlington Heights HS, IM Terrell HS, and Paschal HS*	College Hour(s): NA **Tier I**
HONORS INDEPENDENT STUDY IN TECHNOLOGY APPLICATIONS (THIRD TIME TAKEN) AB/H (TAIND 3AB/H)	**2148AB**
Honors Independent Study is designed for qualified students in grades 10 - 12 who wish to complete the equivalent of a college introductory course in computer science. The course will focus on programming methodology and procedural abstraction. It also includes the study of algorithms, data structures, and data abstraction covered in substantial depth. In honors courses, students will complete additional projects and activities related to the program of study.	03581100 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Successful completion of AP Computer Science A, student interest; teacher recommendation; taken in sequence. *Offered as an elective course at: Arlington Heights HS, IM Terrell HS, and Paschal HS*	College Hour(s): NA **Tier I**

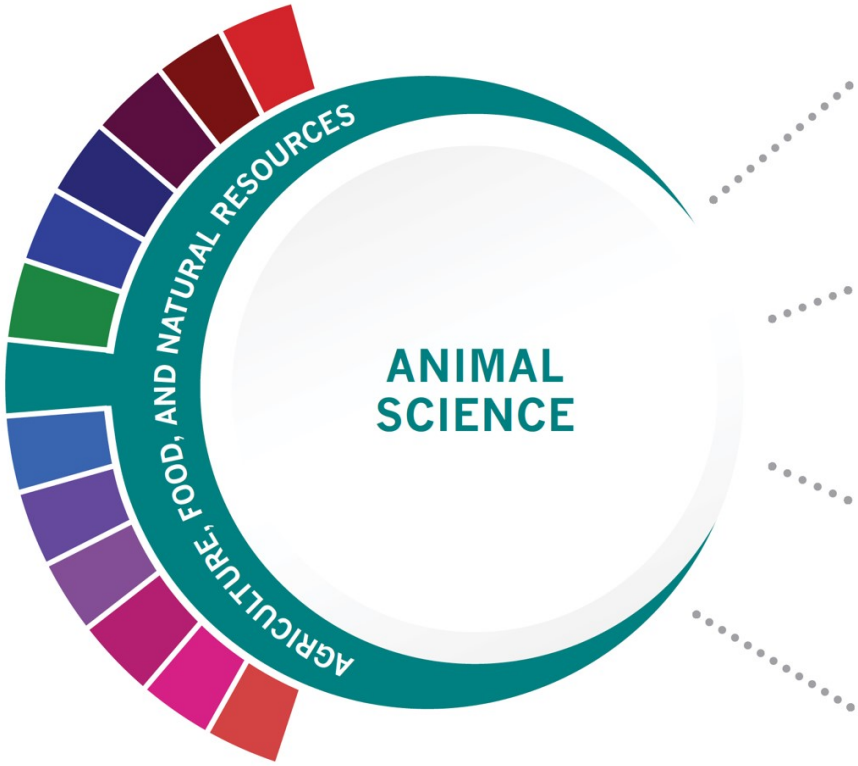
For the graduating class of 2024 and beyond only.

ANIMAL SCIENCE
(Previously Livestock Production and Veterinary Medical Assistant)

APPLIED AGRICULTURAL ENGINEERING
(Previously Agriculture Mechanics)

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator:
Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.



	Courses
9th	**Principles of Agriculture, Food, and Natural Resources:** AG00201 AB OR AGH00201 AB
10th	**Small Animal Management T:** AG00402 T OR AGH00402 T AND **Equine Science T:** AG00501 T OR AGH00501 T
11th	**Livestock Production[1,2]:** AG00302 AB OR AGH00302 AB
12th	**Veterinary Medical Applications/Lab/d[3]:** AG00610 AB OR: AGH00610 AB OR **Unpaid Practicum in Agriculture, Food, and Natural Resources/d:** AG02502 AB OR AGH02502 AB OR **Paid Practicum in Agriculture, Food, and Natural Resources:** AG02512 AB OR AGH02512 AB OR **Honors Project-Based Research:** CPH01500 AB

Enrichment Courses:

- **Floral Design:** AG01802 AB OR Honors: AGH01802 AB
- **Advanced Animal Science:** AG00702 AB OR Honors: AGH00702 AB
- **Wildlife, Fisheries and Ecology Management:** AG01501 AB OR Honors: AGH01501 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Feedyard Technician in Cattle Care and Handling[2]; Certified Veterinary Assistant; or Licensed Veterinary Technician[3]
- Not counted toward Performance Acknowledgment: OSHA 10-Hour Agriculture Industry Certification[1]

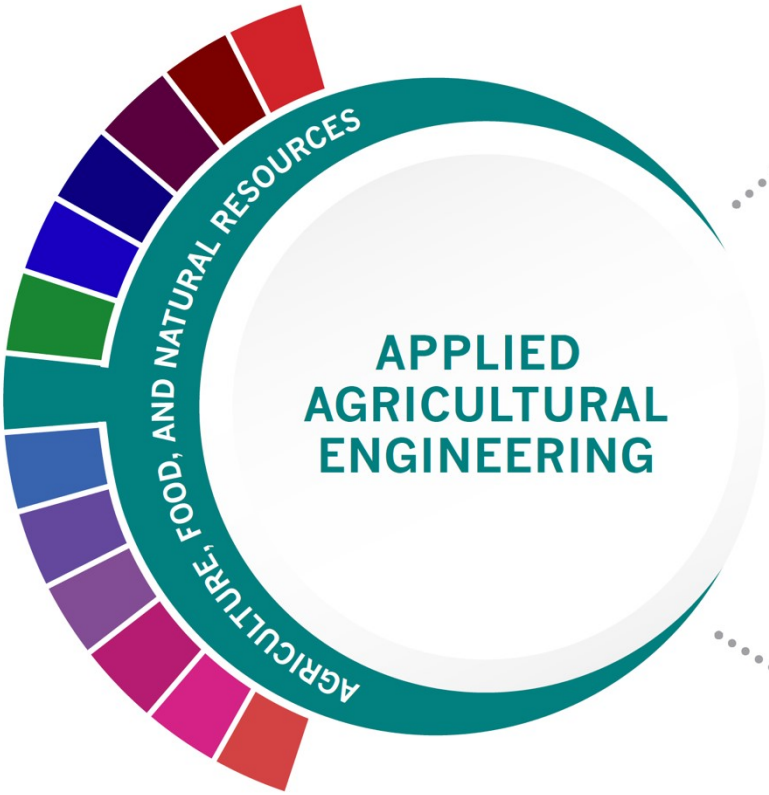
Available at:

- Arlington Heights HS
- Diamond-Hill Jarvis HS

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

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

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



	Courses
9th	**Principles of Agriculture, Food, and Natural Resources:** AG00201 AB OR AGH00201 AB
10th	**Agricultural Mechanics and Metal Technologies[1]:** AG00203 AB OR AGH00203 AB
11th	**Agricultural Structures Design and Fabrications/Lab/d[2]:** AG02310 AB OR AGH02310 AB
12th	**Agricultural Equipment Design and Fabrication/Lab/d:** AG02360 AB OR AGH02360 AB OR **Unpaid Practicum in Agriculture, Food, and Natural Resources/d:** AG02502 AB OR AGH02502 AB OR **Paid Practicum in Agriculture, Food, and Natural Resources:** AG02512 AB OR AGH02512 AB OR **Honors Project-Based Research:** CPH01500 AB

Enrichment Courses:

- **Floral Design:** AG01802 AB OR AGH01802 AB
- **Wildlife, Fisheries and Ecology Management:** AG01501 AB OR AGH01501 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: AWS D1.1, AWS D9.1[2,] or Feedyard Technician in Machinery, Operation, Repair and Maintenance[2] Certifications
- Not Counted towards Performance Acknowledgment: OSHA 10-Hour Agriculture Industry Certification[1]

Available at:

- Arlington Heights HS

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

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

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

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the online version of the course catalog.

The Agriculture, Food, and Natural Resources Career Cluster focuses on 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.

FWISD offers three (3) Career Focuses in the Agriculture, Food, & Natural Resources Career Cluster.

CAREER FOCUS	***LIVESTOCK PRODUCTION***	***VETERINARY MEDICAL ASSISTANT***
9TH GRADE	Principles of Agriculture, Food and Natural Resources: AG00201AB OR Honors: AGH00201AB	Principles of Agriculture, Food and Natural Resources: AG00201AB OR Honors: AGH00201AB
10TH GRADE	Equine Science: AG00501T OR Honors: AGH00501T OPTIONAL: Wildlife, Fisheries and Ecology Management: AG01501AB OR Honors: AGH01501AB	Small Animal Management: AG00402T OR Honors: AGH00402T AND Equine Science: AG00501T OR Honors: AGH00501T OPTIONAL: Livestock Production: AG00302AB OR Honors: AGH00302AB OPTIONAL: Wildlife, Fisheries and Ecology Management: AG01501AB OR Honors: AGH01501AB
11TH GRADE	Livestock Production: AG00302AB OR Honors: AGH00302AB OPTIONAL: Floral Design: AG01802AB OR Honors: AGH01802AB	Veterinary Medical Applications: AG00602AB OR Honors: AGH00602AB OPTIONAL: Advanced Animal Science AB: AG00702AB OR Honors: AGH00702AB
12TH GRADE	Advanced Animal Science AB: AG00702AB OR Honors: AGH00702AB AND/OR Unpaid Practicum in Agriculture, Food, & Natural Resources/d AB: AG02502AB OR Honors: AGH02502AB OR Paid Practicum in Agriculture, Food, & Natural Resources/Extended AB: AG02512AB OR Honors: AGH02512AB	Advanced Animal Science AB: AG00702AB OR Honors: AGH00702AB AND/OR Unpaid Practicum in Agriculture, Food, & Natural Resources/d AB: AG02502AB OR Honors: AGH02502AB OR Paid Practicum in Agriculture, Food, & Natural Resources/Extended AB: AG02512AB OR Honors: AGH02512AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Feedyard Technician in Cattle Care & Handling **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification	**Industry Certification Opportunities for Performance Acknowledgement:** Texas Veterinary Medical Association's Certified Veterinary Assistant **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification
Available At	**Arlington Heights HS**	**Arlington Heights HS** and **Diamond Hill-Jarvis HS**

CAREER FOCUS	***AGRICULTURE MECHANICS***
9TH GRADE	Principles of Agriculture, Food, and Natural Resources: AG00201AB OR Honors: AGH00201AB
10TH GRADE	Agricultural Mechanics and Metal Technologies AB: AG00203AB OR Honors: AGH00203AB
11TH GRADE	Agricultural Structures Design and Fabrications/Lab/d AB: AG02310AB OR Honors: AGH02310AB
12TH GRADE	Agricultural Equipment Design and Fabrication/Lab/d AB: AG02360AB OR Honors: AG0H2360AB OR Unpaid Practicum in Agriculture, Food, & Natural Resources/d A/B: AG02502AB OR Honors: AGH02502AB OR Paid Practicum in Agriculture, Food, & Natural Resources/Extended A/B: AG02512AB OR Honors: AGH02512AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Feedyard Technician in Machinery Operations Repair and Maintenance **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General
Available At	**Arlington Heights HS**

COURSE DESCRIPTIONS FOR AGRICULTURE, FOOD & NATURAL RESOURCES CLASSES

PRINCIPLES OF AGRICULTURE, FOOD, AND NATURAL RESOURCES AB (PRINAFNR AB)	**AG00201AB**
Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations	13000200 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: *Principles of Agriculture, Food & Natural Resources,* Goodheart-Willcox Co. Prerequisite(s): None *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF AGRICULTURE, FOOD, AND NATURAL RESOURCES AB (PRINAFNR AB/H)	**AGH00201AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13000200 Grade level: 9 – 10
Instructional Material: *Principles of Agriculture, Food & Natural Resources,* Goodheart-Willcox Co Prerequisite(s): None *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ADVANCED ANIMAL SCIENCE AB (ADVANSCI AB)	**AG00702AB**
Advanced Animal Science examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.	13000700 Grade level: 11-12 HS Credit(s): 1
Instructional Material: *ICEV Agricultural Science,* CEV Multimedia Ltd. Prerequisite(s): Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier III**
HONORS ADVANCED ANIMAL SCIENCE AB (ADVANSCI AB/H)	**AGH00702AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13000700 Grade level: 11-12
Instructional Material: *ICEV Agricultural Science,* CEV Multimedia Ltd. Prerequisite(s): Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production *Course taught by certified in Agriculture and highly qualified or meet HOUSE in science.* *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	HS Credit(s): 1 College Hour(s): NA **Tier II**
EQUINE SCIENCE T (EQUINSCI T)	**AG00501T**
In Equine Science, students will acquire knowledge and skills related to equine animal systems and the equine industry. Equine Science may address topics related to horses, donkeys, and mules.	13000500 Grade level: 10 – 12
Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): Principles of Agriculture, Food, and Natural Resources *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	HS Credit(s): 0.5 College Hour(s): NA **Tier III**
HONORS EQUINE SCIENCE T (EQUINSCI T/H)	**AGH00501T**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13000500 Grade level: 10 – 12
Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): Principles of Agriculture, Food, and Natural Resources *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	HS Credit(s): 0.5 College Hour(s): NA **Tier II**
LIVESTOCK PRODUCTION AB (LIVEPROD AB)	**AG00302AB**
In Livestock Production, students will acquire knowledge and skills related to livestock and the livestock production industry. Livestock Production may address topics related to beef cattle, dairy cattle, swine, sheep, goats, and poultry.	13000300 Grade level: 10 – 12 HS Credit(s): 1
Instructional Material: *Introduction to Livestock & Companion Animals 5e,* Pearson Education Prerequisite(s): Equine Science T or Small Animal Management T *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier III**
HONORS LIVESTOCK PRODUCTION AB (LIVEPROD AB/H)	**AGH00302AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13000300 Grade level: 10 – 12
Instructional Material: *Introduction to Livestock & Companion Animals 5e,* Pearson Education Prerequisite(s): Equine Science T or Small Animal Management T *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	HS Credit(s): 1 College Hour(s): NA **Tier II**
SMALL ANIMAL MANAGEMENT T (SMANIMGT T)	**AG00402T**
In Small Animal Management, students will acquire knowledge and skills related to small animals and the small animal management industry. Small Animal Management may address topics related to small mammals such as dogs and cats, amphibians, reptiles, and birds.	13000400 Grade level: 10 - 12 HS Credit(s): 0.5

Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): Principles of Agriculture, Food, and Natural Resources *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier III**
HONORS SMALL ANIMAL MANAGEMENT T (SMANIMGT T/H)	**AGH00402T**
In addition to the regular course curriculum, curriculum enhancements for the honors course include web research, integration of applications to increase productivity in animal husbandry, and problem solving in other advanced livestock production processes. In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13000400 Grade level: 10 - 12 HS Credit(s): 0.5
Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): Principles of Agriculture, Food, and Natural Resources *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier II**
VETERINARY MEDICAL APPLICATIONS AB (VETMEDAP AB) (*Available through Spring 2022)*	**AG00602AB**
Veterinary Medical Applications covers topics relating to veterinary practices, including practices for large and small animal species. This course provides students a laboratory and/or field experience opportunity. To prepare for careers in agriculture, food, and natural resources, students must acquire knowledge and skills that meet entry requirements and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer academic knowledge and technical skills in a variety of settings in preparation for an industry certification, the workforce and/or higher education in this field.	13000600 Grade level: 11-12 HS Credit(s): 1
Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): Small Animal Management and/or Equine Science. *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier III**
HONORS VETERINARY MEDICAL APPLICATIONS AB (VETMEDAP AB/H) (*Available through Spring 2022)*	**AGH00602AB**
In addition to the regular course curriculum, curriculum enhancements for the honors course include web research, integration of applications to increase skills in basic handling of animals and administration of medicines and medical procedures, and problem solving in other advanced veterinary applications. In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13000600 Grade level: 11-12 HS Credit(s): 1
Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): Small Animal Management and/or Equine Science *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier II**
VETERINARY MEDICAL APPLICATIONS/LAB/D AB (VETMEDLAB AB)	**AG00610AB**
Veterinary Medical Applications covers topics relating to veterinary practices, including practices for large and small animal species. This course provides students a laboratory and/or field experience opportunity. To prepare for careers in agriculture, food, and natural resources, students must acquire knowledge and skills that meet entry requirements and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer academic knowledge and technical skills in a variety of settings in preparation for an industry certification, the workforce and/or higher education in this field.	13000610 Grade level: 11-12 HS Credit(s): 2
Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): Small Animal Management and/or Equine Science *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier III**
HONORS VETERINARY MEDICAL APPLICATIONS/LAB/D AB (VETMEDLAB AB/H)	**AGH00610AB**
In addition to the regular course curriculum, curriculum enhancements for the honors course include web research, integration of applications to increase skills in basic handling of animals and administration of medicines and medical procedures, and problem solving in other advanced veterinary applications. In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13000610 Grade level: 11-12 HS Credit(s): 2
Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): Small Animal Management and/or Equine Science *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier II**
WILDLIFE, FISHERIES AND ECOLOGY MANAGEMENT AB (WFECGT AB)	**AG01501AB**
Wildlife, Fisheries, and Ecology Management examines the management of game and non-game wildlife species, fish, and aqua crops and their ecological needs as related to current agricultural practices. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.	13001500 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: *Wildlife & Natural Resources Management,* Cengage Learning Inc. Prerequisite(s): Principles of Agriculture, Food, and Natural Resources *Offered only at: Arlington Heights*	College Hour(s): NA **Tier III**
HONORS WILDLIFE, FISHERIES AND ECOLOGY MANAGEMENT AB (WFECGT AB/H)	**AGH01501AB**
In addition to the regular course curriculum, curriculum enhancements for the honors course include web research, integration of applications to increase productivity in wildlife management and aquaculture production, and problem solving with habitat management. In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13001500 Grade level: 11 - 12 HS Credit(s): 1

Instructional Material: *Wildlife & Natural Resources Management,* Cengage Learning Inc. Prerequisite(s): Principles of Agriculture, Food, and Natural Resources *Offered only at: Arlington Heights*	College Hour(s): NA **Tier II**
GREENHOUSE OPERATION AND PRODUCTION AB (GREOP AB)	**AG02200AB**
Greenhouse Operation and Production is designed to develop an understanding of greenhouse production techniques and practices. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.	13002050 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Horticulture Science *Offered only at: Arlington Heights*	College Hour(s): NA **Tier III**
HONORS GREENHOUSE OPERATION AND PRODUCTION AB (GREOP AB/H)	**AGH02200AB**
Curriculum enhancements for the honors course include web research, integration of applications to increase productivity in turf grass and landscape design, and problem solving with soil and drainage conditions. In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13002050 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Horticulture Science *Offered only at: Arlington Heights*	College Hour(s): NA **Tier II**
FLORAL DESIGN AB (FLORAL AB)	**AG01802AB**
Floral Design is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students will develop respect for the traditions and contributions of diverse cultures. Students will respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations.	13001800 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Principles of Floral Design: An Illustrated Guide,* Goodheart-Willcox Co. Prerequisite(s): Horticulture Science *Teacher must be highly qualified in fine arts.* *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier III**
HONORS FLORAL DESIGN AB/H (FLORAL AB/H)	**AGH01802AB**
In addition to the regular course curriculum, curriculum enhancements for the honors course include web research, integration of applications to increase expertise with floral structures and aesthetics, and problem solving for product shelf-life marketability. In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13001800 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Principles of Floral Design: An Illustrated Guide,* Goodheart-Willcox Co. Prerequisite(s): Horticulture Science *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN AGRICULTURE, FOOD, AND NATURAL RESOURCES/D AB (PRACAFNR1 AB)	**AG02502AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. This course is designed to give students supervised practical application of knowledge and skills. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13002500 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): 2 credits from courses in the Agriculture, Food, and Natural Resources Cluster *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN AGRICULTURE, FOOD, AND NATURAL RESOURCES/D AB/H (PRACAFNR1 AB/H)	**AGH02502AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13002500 Grade level: 11 – 12
Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): 2 credits from courses in the Agriculture, Food, and Natural Resources Cluster *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN AGRICULTURE, FOOD, AND NATURAL RESOURCES/EXTENDED AB (EXPRAFNR2 AB)	**AG02512AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. This course is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experiences such as employment, independent study, internships, assistantships, mentorships, or laboratories. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. To remain in this practicum, a student must be employed for fifteen hours per week at an approved training station within ten days of enrollment in the program.	13002515 Grade level: 11 - 12 HS Credit(s): 3

Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): 1 credit from courses in the Agriculture, Food, and Natural Resources Cluster *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN AGRICULTURE, FOOD, AND NATURAL RESOURCES/EXTENDED AB (EXPRAFNR2 AB/H)	**AGH02512AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13002515 Grade level: 11 - 12
Instructional Material: *ICEV Agricultural Science Site,* CEV Multimedia Ltd. Prerequisite(s): 1 credit from courses in the Agriculture, Food, and Natural Resources Cluster *Offered only at: Arlington Heights and Diamond Hill-Jarvis*	HS Credit(s): 3 College Hour(s): NA **Tier II**
AGRICULTURAL MECHANICS AND METAL TECHNOLOGIES AB (AGMECMT AB)	**AG00203AB**
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.	13002200 Grade level: 10-11 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Agriculture, Food and Natural Resources *Offered only at: Arlington Heights*	College Hour(s): NA **Tier III**
HONORS AGRICULTURAL MECHANICS AND METAL TECHNOLOGIES AB (AGMECMT AB/H)	**AGH00203AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13002200 Grade level: 10-11
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Agriculture, Food and Natural Resources *Offered only at: Arlington Heights*	HS Credit(s): 1 College Hour(s): NA **Tier II**
AGRICULTURAL STRUCTURES DESIGN AND FABRICATIONS/LAB/D AB (AGSDFLAB AB)	**AG02310AB**
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. The lab experience is designed to provide students a laboratory and/or field experience opportunity. To prepare for careers in agriculture, food, and natural resources, students must acquire knowledge and skills that meet entry requirements and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer academic knowledge and technical skills in a variety of settings.	13002310 Grade level: 11-12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Agricultural Mechanics and Metal Technologies *Offered only at: Arlington Heights*	College Hour(s): NA **Tier III**
HONORS AGRICULTURAL STRUCTURES DESIGN AND FABRICATIONS/LAB/D AB (AGSDFLAB AB/H)	**AGH02310AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13002310 Grade level: 11-12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Agricultural Mechanics and Metal Technologies *Offered only at: Arlington Heights*	HS Credit(s): 2 College Hour(s): NA **Tier II**
AGRICULTURAL EQUIPMENT DESIGN AND FABRICATION/LAB/D AB (AGEQDFLAB AB)	**AG02360AB**
In Agricultural Equipment Design and Fabrication, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment. To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural structures design and fabrication. The lab experience is designed to provide students a laboratory and/or field experience opportunity. To prepare for careers in agriculture, food, and natural resources, students must acquire knowledge and skills that meet entry requirements and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer academic knowledge and technical skills in a variety of settings.	13002360 Grade level: 11-12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Agricultural Structures Design and Fabrications/Lab AB *Offered only at: Arlington Heights*	College Hour(s): NA **Tier III**
HONORS AGRICULTURAL EQUIPMENT DESIGN AND FABRICATION/LAB/D AB (AGEQDFLAB AB/H)	**AGH02360AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13002360 Grade level: 11-12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Agricultural Structures Design and Fabrications/Lab AB *Offered only at: Arlington Heights*	HS Credit(s): 2 College Hour(s): NA **Tier II**

HONORS PROJECT-BASED RESEARCH AB (PROBS1 AB/H) *(Available Fall 2023)*	**CPH01500AB**
Students will research a real-world problem and possible solutions throughout this course. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. This course must be cooperatively planned and supervised by the teacher ensuring that the student has guidance and support of a mentor or interdisciplinary team. The district must maintain a written project plan for each student enrolled in the course.	12701500 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Specific to program focus/pathway and is the previous course in the sequence. *Offered at: All high school campuses*	College Hour(s): NA **Tier II**

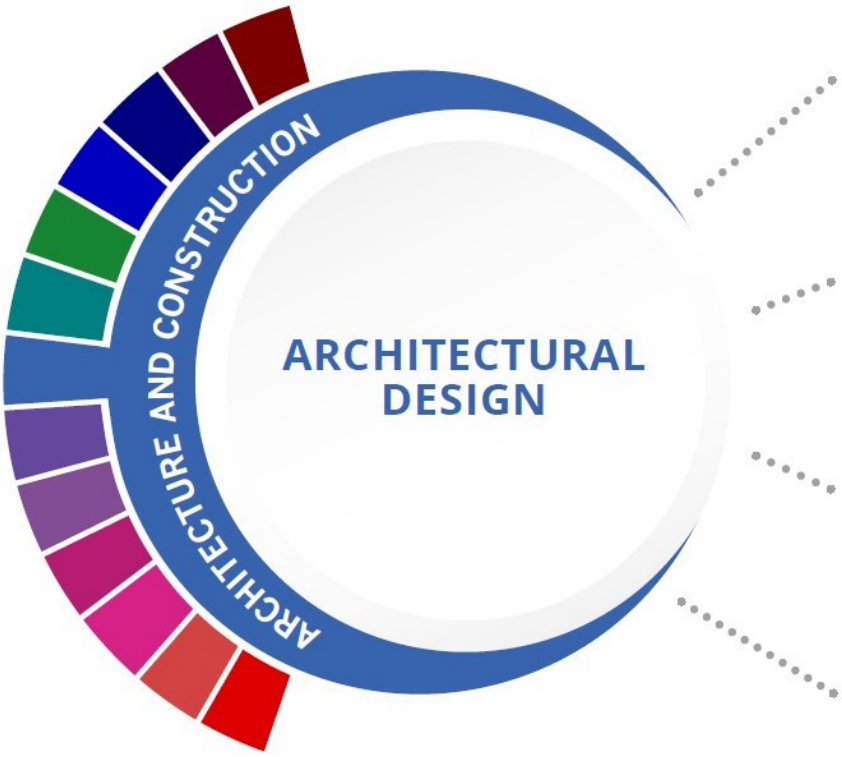
ARCHITECTURAL DESIGN
(Previously Architecture)

CARPENTRY
- Construction Technology
- Mill and Cabinet Technology

ELECTRICAL
(Previously Electrical Technology)

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator:
Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.



	Courses
9th	**Principles of Architecture:** AR04200 AB OR ARH04200 AB
10th	**Architectural Design I[1]:** AR04602 AB OR ARH04602 AB
11th	**Architectural Design II/d[2]:** AR04702 AB OR ARH04702 AB
12th	**Paid Practicum in Architectural Design[3]:** AR04812 ABOR ARH04812 AB OR **Unpaid Practicum in Architectural Design/d[3]:** AR04802 AB OR ARH04802 AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Autodesk Certified Professional or User in AutoCAD[2], Autodesk Certified Professional or User in Revit Architecture[3]
- Not Counted Towards Performance Acknowledgment: OSHA 10-Hour Construction Industry[1]

Available at:

- Diamond Hill-Jarvis HS
- Trimble Technical HS

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

The Architectural and Construction Career Cluster® focuses on designing, planning, managing, building, and maintaining the built environment. Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management.

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

CARPENTRY:
CONSTRUCTION TECHNOLOGY

	Courses
9th	**Principles of Construction:** AR04202 AB OR ARH04202 AB
10th	**Construction Technology I/d[1,2]:** AR00512 AB OR ARH00512 AB
11th	**Construction Technology II/d[3]:** AR05202 AB OR ARH05202 AB
12th	**Paid Practicum in Construction Technology:** AR05212 AB OR ARH05212 AB OR **Unpaid Practicum in Construction Technology/d:** AR06202 AB OR ARH06202 AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: NCCER Core Curriculum[2], NCCER Construction Technology[3] AND/OR OSHA 30-Hour Construction Industry Certification[3]
- Not Counted Towards Performance Acknowledgment: N/A

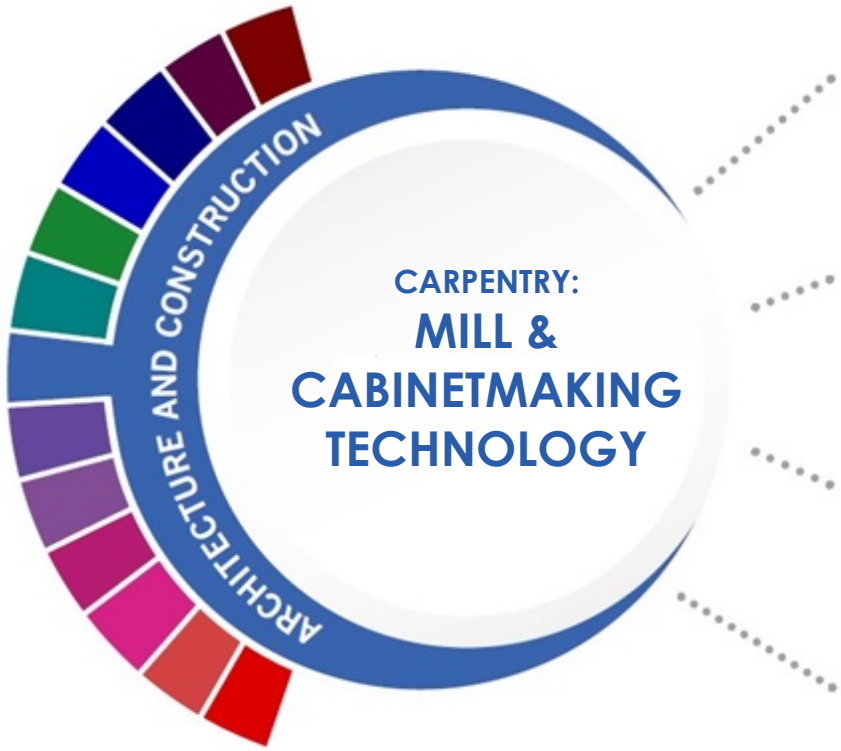
Available at:

- Diamond Hill-Jarvis HS
- O.D. Wyatt HS
- Trimble Technical HS

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

The Architecture and Construction Career Cluster® focuses on designing, planning, managing, building, and maintaining the built environment.

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



	Courses
9th	**Principles of Construction:** AR04202 AB OR ARH04202 AB
10th	**Construction Technology I/d[1,2]:** AR00512 AB OR ARH00512 AB
11th	**Mill & Cabinetmaking Technology/d[3]:** AR05302 AB OR ARH05302 AB
12th	**Paid Practicum in Construction Technology:** AR05312 AB OR ARH05312 AB OR **Unpaid Practicum in Construction Technology/d:** AR06202 AB OR ARH06202 AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: NCCER Core Curriculum[1], NCCER Construction Technology[2], NCCER Carpentry Level I[3], AND/OR OSHA 30-hour Construction Industry Certification[3]
- Not Counted Towards Performance Acknowledgment: ~~N~~/A

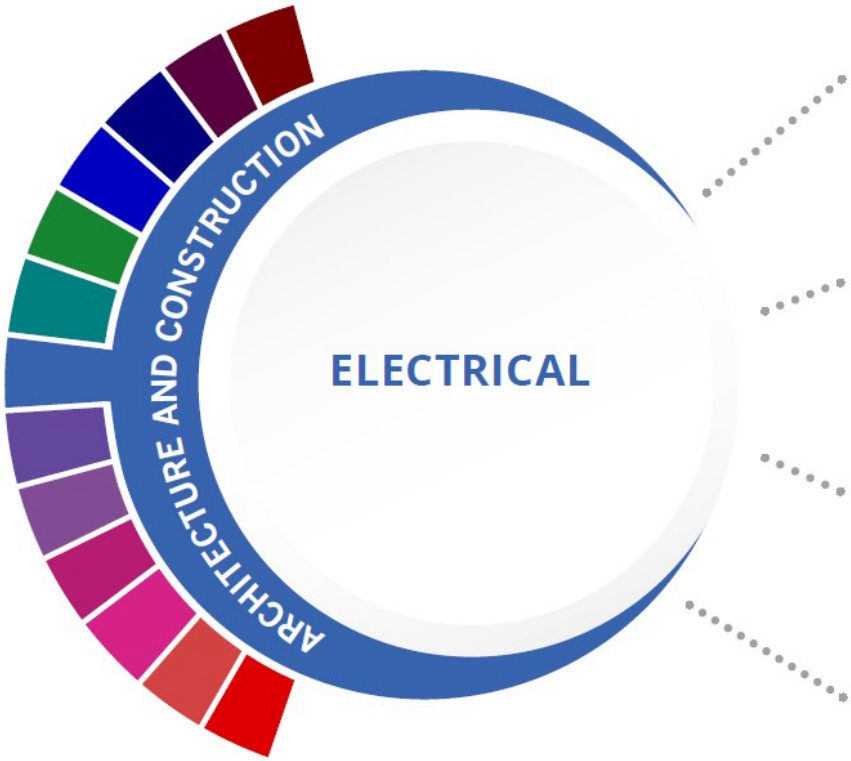
Available at:

- Trimble Technical HS

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

The Architecture and Construction Career Cluster® focuses on designing, planning, managing, building, and maintaining the built environment.

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



	Courses
9th	**Principles of Construction:** AR04202 AB OR ARH04202 AB
10th	**Electrical Technology I[1,2]:** AR05602 AB OR ARH05602 AB
11th	**Electrical Technology II/d[3]:** AR05702 AB OR ARH05702 AB
12th	**Paid Practicum in Construction Technology: [4]** AR05712 AB or ARH05712 AB OR **Unpaid Practicum in Construction Technology/d:** AR05700 AB OR ARH05700 AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: NCCER Core Curriculum[1], NCCER Electrical Level I[2], AND/OR OSHA 30-hour Construction Industry Certification[3], IEC Electrical Apprenticeship Certification Level I[4]
- Not Counted Towards Performance Acknowledgment: N/A

Available at:

- Trimble Technical HS

The Electrical program of study explores the occupations and educational opportunities associated with installing, maintaining, and repairing electrical wiring, equipment, and fixtures. This program of study may also include exploration into installing and repairing telecommunications cable including fiber optics.

The Architecture and Construction Career Cluster® focuses on designing, planning, managing, building, and maintaining the built environment.

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

Architecture & Construction - Business and Industry Endorsement

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

The Architecture and Construction Career Cluster focuses on designing, planning, managing, building, and maintaining the built environment.

FWISD offers four (4) Career Focuses in the Architecture & Construction Career Cluster.

CAREER FOCUS	***ARCHITECTURE***	***CONSTRUCTION TECHNOLOGY***
9TH GRADE	Principles of Architecture: AR04200 AB OR Honors: ARH04200 AB	Principles of Construction: AR04202 AB OR Honors: ARH04202 AB
10TH GRADE	Architectural Design I: AR04602 AB OR Honors: ARH04602 AB	Construction Technology I/d: AR00512 AB OR Honors: ARH00512 AB
11TH GRADE	Architectural Design II/d: AR04702 AB OR Honors: ARH04702 AB	Construction Technology II/d: AR05202AB OR Honors: ARH05202 AB
12TH GRADE	Unpaid Practicum in Architectural Design/d: AR04802 AB OR Honors: ARH04802AB OR Paid Practicum in Architectural Design/Extended: AR04812AB OR Honors: ARH04812AB	Construction Management I/d: AR04902 AB OR Honors: ARH04902 AB OR Paid Practicum in Construction Technology/Extended: AR05212AB OR Honors: ARH05212AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Autodesk Certified Professional or User in AutoCAD; Autodesk Certified Professional or User in Revit Architecture **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certificate	**Industry Certification Opportunities for Performance Acknowledgement:** NCCER Core Curriculum NCCER Construction Technology OSHA 30-Hour Construction Industry Certificate **Not Counted towards Performance Acknowledgement:** N/A
Available At	**Diamond Hill-Jarvis HS, South Hills HS, Trimble Tech HS, and Western Hills HS**	**Diamond Hill-Jarvis HS, Trimble Tech HS, and O. D. Wyatt HS**

CAREER FOCUS	ELECTRICAL TECHNOLOGY	MILL AND CABINET TECHNOLOGY
9TH GRADE	Principles of Construction: AR04202 AB OR Honors: ARH04202 AB	Principles of Construction: AR04202 AB OR Honors: ARH04202 AB
10TH GRADE	Electrical Technology I: AR05602 AB OR Honors: ARH05602 AB	Construction Technology I/d: AR00512 AB OR Honors: ARH00512 AB
11TH GRADE	Electrical Technology II/d: AR05702 AB OR Honors: ARH05702 AB	Mill and Cabinetmaking Technology/d: AR05302 AB OR Honors: ARH05302 AB
12TH GRADE	Unpaid Practicum in Construction Technology Electrical/d: AR05700 AB OR Honors: ARH05700 AB OR Paid Practicum in Construction Technology Electrical/Extended: AR05712 AB OR Honors: ARH05712 AB	Construction Management I/d: AR04902 AB OR Honors: ARH04902 AB OR Paid Practicum in Construction Technology Mill and Cabinet/Extended: AR05312 AB OR Honors: ARH05312 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** NCCER Core Curriculum; NCCER Electrical, Level I; NCCER Electrical, Level II; Electrical Apprentice License (Texas Dept. of Licensing and Regulation) OSHA 30-Hour Construction Industry Certificate **Not Counted towards Performance Acknowledgement:** N/A	**Industry Certification Opportunities for Performance Acknowledgement:** NCCER Core Curriculum; NCCER Carpentry Level I; NCCER Construction Technology OSHA 30-Hour Construction Industry Certificate **Not Counted towards Performance Acknowledgement:** N/A
Available At	**Trimble Tech HS**	**Trimble Tech HS**

COURSE DESCRIPTIONS FOR ARCHITECTURE AND CONSTRUCTION CLASSES

PRINCIPLES OF ARCHITECTURE AB (PRINARCH AB)	**AR04200AB**
Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management. Achieving proficiency in decision making and problem solving is an essential skill for career planning and lifelong learning. Students use self-knowledge, education, and career information to set and achieve realistic career and educational goals. Job-specific training can be provided through training modules that identify career goals in trade and industry areas. Classroom studies include topics such as safety, work ethics, communication, information technology applications, systems, health, environment, leadership, teamwork, ethical and legal responsibility, employability, and career development and include skills such as problem solving, critical thinking, and reading technical drawings.	13004210 Grade level: 9 – 10 HS Credit(s): 1
Instructional Material: *Architecture, Construction, Transportation and Manufacturing*, iCEV Prerequisite(s): None *Offered only at: Diamond Hill-Jarvis, South Hills, Trimble Tech, and Western Hills*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF ARCHITECTURE AB (PRINARCH AB/H)	**ARH04200AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13004210 Grade level: 9 – 10
Instructional Material: *Architecture, Construction, Transportation and Manufacturing*, iCEV Prerequisite(s): None *Offered only at: Diamond Hill-Jarvis, South Hills, Trimble Tech, and Western Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ARCHITECTURAL DESIGN I AB (ARCHDSN1 AB)	**AR04602AB**
In Architectural Design I, students will gain knowledge and skills needed to enter a career in architecture or construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, or landscape architecture. Architectural Design I include the knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for nonresidential or residential architectural purposes.	13004600 Grade level: 10 – 12 HS Credit(s): 1
Instructional Material: *Architecture: Residential Drafting and Design*, Goodheart-Willcox Co. Prerequisite(s): Principles of Architecture, Algebra I, and English I Recommended Prerequisite(s): Geometry *Offered only at: Diamond Hill-Jarvis, South Hills, Trimble Tech, and Western Hills*	College Hour(s): NA **Tier III**
HONORS ARCHITECTURAL DESIGN I AB (ARCHDSN1 AB/H)	**ARH04602AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13004600 Grade level: 10 – 12
Instructional Material: *Architecture: Residential Drafting and Design*, Goodheart-Willcox Co. Prerequisite(s): Principles of Architecture, Algebra I, and English I Recommended Prerequisite(s): Geometry *Offered at: Diamond Hill-Jarvis, South Hills, Trimble Tech, and Western Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ARCHITECTURAL DESIGN II/d AB (ARCHDSN2 AB)	**AR04702AB**
In Architectural Design II, students will gain advanced knowledge and skills needed to enter a career in architecture or construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, or landscape architecture. Architectural Design II includes the advanced knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for nonresidential or residential architectural purposes.	13004700 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Architectural Design I, Geometry *Offered at: Diamond Hill-Jarvis, South Hills, Trimble Tech, and Western Hills*	College Hour(s): NA **Tier III**
HONORS ARCHITECTURAL DESIGN II/d AB (ARCHDSN2 AB/H)	**ARH04702AB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13004700 Grade level: 11 – 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Architectural Design I, Geometry *Offered at: Diamond Hill-Jarvis, South Hills, Trimble Tech, and Western Hills*	HS Credit(s): 2 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN ARCHITECTURAL DESIGN/d AB (PRACADSN AB)	**AR04802AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This is an occupationally-specific course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13004800 Grade level: 12 HS Credit(s): 2

Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Architectural Design II *Offered at: Diamond Hill-Jarvis, South Hills, Trimble Tech, and Western Hills*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN ARCHITECTURAL DESIGN/d AB (PRACADSN AB/H)	**ARH04802AB**
In addition to the regular course curriculum, students in this course will complete additional projects and activities related to the program of study.	13004800 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Architectural Design II *Offered at: Diamond Hill-Jarvis, South Hills, Trimble Tech, and Western Hills*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN ARCHITECTURAL DESIGN/EXTENDED AB (EXPRADS1 AB)	**AR04812AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This is an occupationally specific course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13004805 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Architectural Design II *Offered at: Diamond Hill-Jarvis, South Hills, Trimble Tech, and Western Hills*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN ARCHITECTURAL DESIGN AB/EXTENDED	**ARH04812AB**
In addition to the regular course curriculum, students in this course will complete additional projects and activities related to the program of study.	13004805 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Architectural Design II *Offered at: Diamond Hill-Jarvis, South Hills, Trimble Tech, and Western Hills*	HS Credit(s): 3 College Hour(s): NA **Tier II**
PRINCIPLES OF CONSTRUCTION AB (PRINCON AB)	**AR04202AB**
Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. For safety and liability considerations, limiting course enrollment to 15 students is recommended. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.	13004220 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: *Architecture, Construction, Transportation and Manufacturing*, iCEV Prerequisite(s): None *Offered only at: Diamond Hill-Jarvis, Trimble Tech and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF CONSTRUCTION AB (PRINCON AB/H)	**ARH04202AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13004220 Grade level: 9 – 10
Instructional Material: *Architecture, Construction, Transportation and Manufacturing*, iCEV Prerequisite(s): None *Offered only at: Diamond Hill-Jarvis, Trimble Tech and OD Wyatt*	HS Credit(s): 1 College Hour(s): NA **Tier II**
CONSTRUCTION TECHNOLOGY I/D AB (CONSTECH AB)	**AR00512AB**
In Construction Technology I, students will gain knowledge and skills needed to enter the workforce as carpenters or building maintenance supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will acquire knowledge and skills in safety, tool usage, building materials, codes, and framing. For safety and liability considerations, limiting course enrollment to 15 students is recommended.	13005100 Grade level: 10 - 12 HS Credit(s): 2
Instructional Material: *NCCER Core Curriculum E-Text,* Pearson Prerequisite(s): Principles of Construction *Offered only at: Diamond Hill-Jarvis, Trimble Tech, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS CONSTRUCTION TECHNOLOGY I/D AB (CONSTECH AB/H)	**ARH00512AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13005100 Grade level: 10 – 12
Instructional Material: *NCCER Core Curriculum E-Text,* Pearson Prerequisite(s): Principles of Construction *Offered only at: Diamond Hill-Jarvis, Trimble Technical, and OD Wyatt*	HS Credit(s): 2 College Hour(s): NA **Tier II**

CONSTRUCTION TECHNOLOGY II/D AB (CONSTECH2 AB)	**AR05202AB**
In Construction Technology II, students will gain advanced knowledge and skills needed to enter the workforce as carpenters, building maintenance technicians, or supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will build on the knowledge base from Construction Technology I and are introduced to exterior and interior finish out skills. For safety and liability considerations, limiting course enrollment to 15 students is recommended.	13005200 Grade level: 11 – 12 HS Credit(s): 2
Instructional Material: *NCCER Construction Technology Print and E-Text,* Pearson Prerequisite(s): Construction Technology I/d *Offered only at: Diamond Hill-Jarvis, Trimble Technical, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS CONSTRUCTION TECHNOLOGY II/D AB (CONSTECH2 AB/H)	**ARH05202AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13005200 Grade level: 11 – 12
Instructional Material: *NCCER Construction Technology Print and E-Text,* Pearson Prerequisite(s): Construction Technology I/d *Offered only at: Diamond Hill-Jarvis, Trimble Technical, and OD Wyatt*	HS Credit(s): 2 College Hour(s): NA **Tier II**
CONSTRUCTION MANAGEMENT I/D AB (CONSMGT1 AB) (*Available through Spring 2023)*	**AR04902AB**
In Construction Management I, students will gain knowledge and skills needed to enter the workforce as apprentice carpenters or building maintenance supervisors' assistants or to build a foundation toward a postsecondary degree in architecture, construction science, drafting, or engineering. Construction Management I include the knowledge of design techniques and tools related to the management of architectural and engineering projects.	13004900 Grade level: 12 HS Credit(s): 2
Instructional Material: *NCCER Construction Technology Print and E-Text,* Pearson Prerequisite(s): Algebra I and Geometry; Construction Technology II/d *Offered only at: Diamond Hill-Jarvis, Trimble Technical, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS CONSTRUCTION MANAGEMENT I/D AB (CONSMGT1 AB/H) (*Available through Spring 2023)*	**ARH04902AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13004900 Grade level: 12
Instructional Material: *NCCER Construction Technology Print and E-Text,* Pearson Prerequisite(s): Algebra I and Geometry; Construction Technology II/d *Offered only at: Diamond Hill-Jarvis, Trimble Technical, and OD Wyatt*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN CONSTRUCTION TECHNOLOGY/EXTENDED AB (EXPRCT1 AB)	**AR05212AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. Students in this course will be challenged with the application of gained knowledge and skills from prior Construction courses. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13005255 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Construction Technology II/d *Offered only at: Diamond Hill-Jarvis, Trimble Technical, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN CONSTRUCTION TECHNOLOGY/EXTENDED AB (EXPRCT1 AB/H)	**ARH05212AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13005255 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Construction Technology II/d *Offered only at: Diamond Hill-Jarvis, Trimble Technical, and OD Wyatt*	College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN CONSTRUCTION TECHNOLOGY/D AB (PRACCONS AB)	**AR06202AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. Students in this course will be challenged with the application of gained knowledge and skills from prior Construction courses. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	130052050 Grade level: 12 HS Credit(s): 2

Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Construction Technology II/d *Offered only at: Diamond Hill-Jarvis, Trimble Technical, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN CONSTRUCTION TECHNOLOGY/D AB (PRACCONS AB/H)	**ARH06202AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	130052050 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Construction Technology II/d *Offered only at: Diamond Hill-Jarvis, Trimble Tech, and OD Wyatt*	HS Credit(s): 2 College Hour(s): NA **Tier II**
MILL AND CABINETMAKING TECHNOLOGY/D AB (MACTECH AB)	**AR05302AB**
In Mill and Cabinetmaking Technology, students will gain knowledge and skills needed to enter the workforce in mill work and cabinet manufacturing and installation. Students may also apply these skills to professions in carpentry or building maintenance supervision or use the skills as a foundation for a postsecondary degree in construction management, architecture, or engineering. Students will acquire knowledge and skills in cabinet design, tool usage, jointing methods, finishes, and industry-level practices such as numerical and computer-control production methods.	13005300 Grade level: 11 – 12 HS Credit(s): 2
Instructional Material: *NCCER Cabinetmaking Print and E-Text,* Pearson Prerequisite(s): Construction Technology II/d *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS MILL AND CABINETMAKING TECHNOLOGY/D AB (MACTECH AB/H)	**ARH05302AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13005300 Grade level: 11 – 12
Instructional Material: *NCCER Cabinetmaking Print and E-Text,* Pearson Prerequisite(s): Construction Technology II/d *Offered only at: Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
EXTENDED PRACTICUM IN CONSTRUCTION TECHNOLOGY: MILL AND CABINET MAKING (EXPRCT2 MAC AB)	**AR05312AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. Students in this course will be challenged with the application of gained knowledge and skills from prior Construction courses. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13005265 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Mill and Cabinet Making Technology/d *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN CONSTRUCTION TECHNOLOGY: MILL AND CABINET MAKING/EXTENDED AB (EXPRCT2 MAC AB/H)	**ARH05312AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13005265 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Mill and Cabinet Making Technology/d *Offered only at: Trimble Tech*	HS Credit(s): 3 College Hour(s): NA **Tier II**
ELECTRICAL TECHNOLOGY I AB (ELECTEC AB)	**AR05602AB**
In Electrical Technology I, students will gain knowledge and skills needed to enter the workforce as an electrician or building maintenance supervisor, prepare for a postsecondary degree in a specified field of construction or construction management, or pursue an approved apprenticeship program. Students will acquire knowledge and skills in safety, electrical theory, tools, codes, installation of electrical equipment, and the reading of electrical drawings, schematics, and specifications.	13005600 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: *NCCER Electrical Level 1 Print and E-Text*, Pearson Prerequisite(s): Principles of Construction *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS ELECTRICAL TECHNOLOGY I AB (ELECTEC AB/H)	**ARH05602AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13005600 Grade level: 10 - 11
Instructional Material: *NCCER Electrical Level 1 Print and E-Text*, Pearson Prerequisite(s): Principles of Construction *Offered only at: Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**

ELECTRICAL TECHNOLOGY II/D AB (ELECTECH2 AB)	AR05702AB
In Electrical Technology II, students will gain advanced knowledge and skills needed to enter the workforce as an electrician, a building maintenance technician, or a supervisor; prepare for a postsecondary degree in a specified field of construction or construction management; or pursue an approved apprenticeship program. Students will acquire knowledge and skills in safety, electrical theory, tools, codes, installation of electrical equipment, alternating current and direct current motors, conductor installation, installation of electrical services, and electric lighting installation.	13005700 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: *NCCER Electrical Level 2 Print and E-Text*, Pearson Prerequisite(s): Electrical Technology I *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS ELECTRICAL TECHNOLOGY II/D AB (ELECTECH2 AB/H)	**ARH05702AB**
In In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13005700 Grade level: 11 - 12
Instructional Material: *NCCER Electrical Level 2 Print and E-Text*, Pearson Prerequisite(s): Electrical Technology I *Offered only at: Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN CONSTRUCTION TECHNOLOGY: ELECTRICAL/D AB (PRACCT ELE AB)	**AR05700AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. In this course, students will be challenged with the application of gained knowledge and skills from prior Construction courses. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13005250 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Electrical Technology II/d *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN CONSTRUCTION TECHNOLOGY: ELECTRICAL/D AB (PRACCT ELE AB/H)	**ARH05700AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13005250 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Electrical Technology II/d *Offered only at: Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN CONSTRUCTION TECHNOLOGY: ELECTRICAL/EXTENDED AB (EXPRCT1 ELE AB)	**AR05712AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. Practicum in Construction Technology, students will be challenged with the application of gained knowledge and skills from prior Construction courses. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13005255 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Electrical Technology II/d *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN CONSTRUCTION TECHNOLOGY: ELECTRICAL/EXTENDED AB (EXPRCT1 ELE AB/H)	**ARH05712AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13005255 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Electrical Technology II/d *Offered only at: Trimble Tech*	HS Credit(s): 3 College Hour(s): NA **Tier II**

For the graduating class of 2024 and beyond only.

DESIGN AND MULTIMEDIA ARTS

- Graphic Design and Illustration*
- Commercial Photography
- Fashion Design
- Animation
- Digital Gaming

DIGITAL COMMUNICATIONS

(Previously Audio Video Production)

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator:
Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.

**Tier 1 -Graphic Design & Illustration Program of Study*

	Courses
9th	**Principles of Arts, A/V Technology, and Communications:** AV08202 AB OR AVH08202 AB
10th	**Graphic Design and Illustration I[1]:** AV08802 AB OR AVH08802 AB
11th	**Graphic Design and Illustration II[2]:** AV08810 AB OR AVH08810 AB
12th	**Unpaid Practicum in Graphic Design and Illustration/d:** AV09002 AB OR AVH09002 AB **OR** **Paid Practicum in Graphic Design and Illustration:** AV09012AB OR AVH09012AB

Enrichment Courses:

- **Digital Media:** IT27802 AB OR ITH27802 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Adobe Certified Professional[1] - Photoshop, Adobe Certified Professional - Illustrator, and Adobe Certified Professional – InDesign[2].
- Not counted towards Performance Acknowledgment: N/A

Available at:

- Arlington Heights HS
- Benbrook HS
- Carter Riverside HS
- Diamond Hill-Jarvis HS
- Dunbar HS
- Eastern Hills HS
- North Side HS
- OD Wyatt HS
- Paschal HS
- Polytechnic HS
- South Hills HS
- Southwest HS
- Western Hills HS
- Young Women's Leadership Academy HS

The Design and Multimedia Arts program of study has 5 sub pathways. It explores the occupations and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. This program of study may also include exploration into designing clothing and accessories, and creating special effects, animation, or other visual images using film, video, computers, or other electronic tools and media, for use in computer games, movies, music videos, and commercials.

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

Successful completion of the Graphic Design & Multimedia Arts program of study will fulfill requirements of a Business and Industry Endorsement. Approved Statewide Program of Study - September 2019.

	Courses
9th	**Principles of Arts, A/V Technology, and Communications:** AV08202 AB OR AVH08202 AB
10th	**Commercial Photography I[1]:** AV09102 AB OR AVH09102 AB
11th	**Commercial Photography II/Lab[2,3]:** AV09202L AB OR AVH09202L AB
12th	**Unpaid Practicum in Commercial Photography/d:** AV09200 AB OR AVH09200 AB OR **Paid Practicum in Commercial Photography:** AV09212 AB OR AVH09212 AB

Enrichment Courses

- **Digital Media:** IT27802 AB OR ITH27802 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Adobe Certified Professional – Photoshop[1] AND Adobe Certified Professional – InDesign[2], Adobe Certified Expert – Illustrator[3] *(optional)*
- Not counted towards Performance Acknowledgment: N/A

Available at:

- Trimble Technical HS

The Design and Multimedia Arts program of study has 5 sub pathways. It explores the occupations and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. This program of study may also include exploration into designing clothing and accessories, and creating special effects, animation, or other visual images using film, video, computers, or other electronic tools and media, for use in computer games, movies, music videos, and commercials.

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

Successful completion of the Graphic Design & Multimedia Art's Commercial Photography program of study will fulfill requirements of a Business and Industry Endorsement. Approved Statewide Program of Study - September 2019.

	Courses
9th	**Principles of Arts, A/V Technology, and Communications:** AV08202 AB OR AVH08202 AB
10th	**Fashion Design I:** AV09302 AB OR Honors AVH09302 AB
11th	**Fashion Design II/Lab[1]:** AV09402L AB OR Honors AVH09402L AB
12th	**Unpaid Practicum in Entrepreneurship/d[2]:** MK34801 AB OR MKH34801AB

Enrichment Courses:

- **Digital Media:** IT27802 AB OR ITH27802 AB
- **Fashion Marketing:** MK34301 T OR MKH34301 T

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Adobe Certified Professional – Illustrator[1]; Entrepreneurship and Small Business (ESB)[2] Certification *(optional)*
- Not counted towards Performance Acknowledgment: N/A

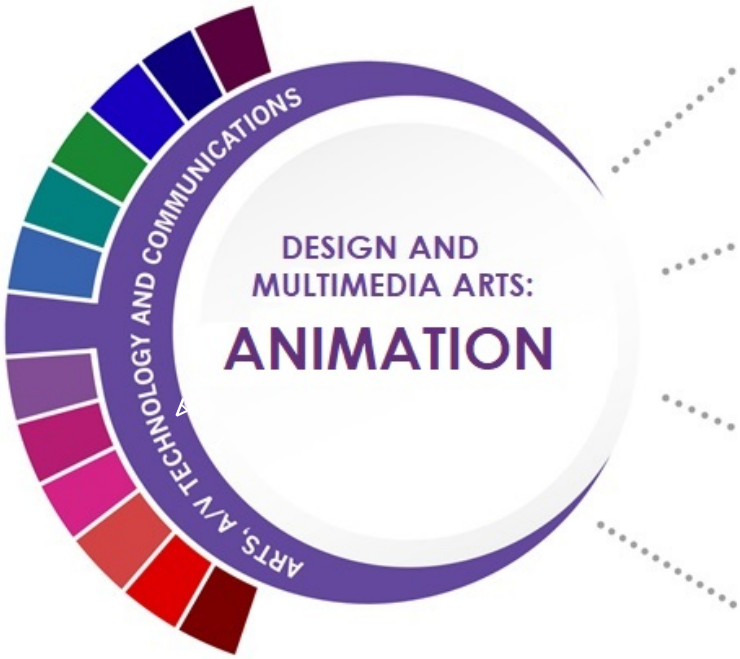
Available at:

- Diamond Hill-Jarvis HS
- Trimble Technical HS

The Design and Multimedia Arts program of study has 5 sub pathways. It explores the occupations and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. This program of study may also include exploration into designing clothing and accessories, and creating special effects, animation, or other visual images using film, video, computers, or other electronic tools and media, for use in computer games, movies, music videos, and commercials.

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

Successful completion of the Graphic Design & Multimedia Art's Fashion Design program of study will fulfill requirements of a Business and Industry Endorsement. Approved Statewide Program of Study - September 2019.



	Courses
9th	**Principles of Arts, A/V Technology, and Communications:** AV08202 AB OR AVH08202 AB
10th	**Animation I[1]:** AV08302 AB OR AVH08302 AB
11th	**Animation II[2]:** AV08402 AB OR AVH08402 AB
12th	**Unpaid Practicum in Animation/d:** AV08450 AB OR AVH08450AB

Enrichment Courses:

- **Digital Media:** IT27802 AB OR ITH27802 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Adobe Certified Professional – Animate[1] and Adobe Certified Professional - After Effects[2]
- Not counted towards Performance Acknowledgment: N/A

Available at:

- North Side HS
- OD Wyatt HS
- Polytechnic HS
- South Hills HS
- Trimble Technical HS
- Western Hills HS

The Design and Multimedia Arts program of study has 5 sub pathways. It explores the occupations and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. This program of study may also include exploration into designing clothing and accessories, and creating special effects, animation, or other visual images using film, video, computers, or other electronic tools and media, for use in computer games, movies, music videos, and commercials.

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

Successful completion of the Graphic Design & Multimedia Art's Animation program of study will fulfill requirements of a Business and Industry Endorsement. Approved Statewide Program of Study - September 2019

	Courses
9th	**Principles of Arts, A/V Technology, and Communications:** AV08202 AB OR AVH08202 AB
10th	**Video Game Design:** AV00992 AB OR AVH00992 AB AND **Video Game Programming:** AV00994 AB OR AVH00994 AB
11th	**Advanced Video Game Programming[1]:** AV00995 AB OR AVH00995 AB
12th	**Unpaid Practicum in Animation/d:** AV08450 AB OR AVH08450AB

Enrichment Courses:

- **Animation I:** AV08302 AB OR AVH08302 AB
- **Digital Media:** IT27802 AB OR ITH27802 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Adobe Certified Professional - Animate or After Effects; Microsoft Technology Associate (MTA) - Introduction to Programing using Java, Introduction to Programing using JavaScript, or Introduction to Programing using Python[1].
- Not counted towards Performance Acknowledgment: N/A

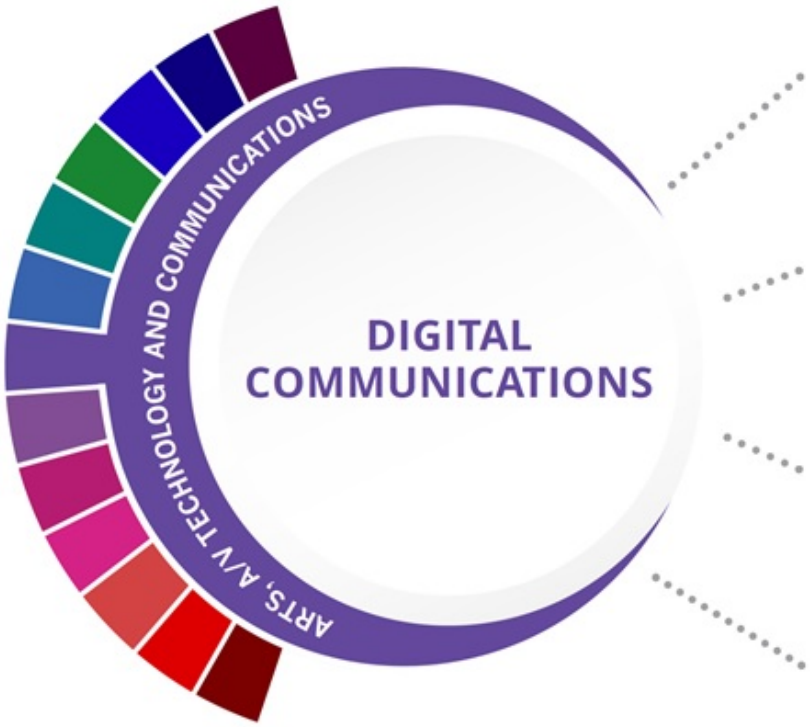
Available at:

- South Hills HS

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

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

Successful completion of the Graphic Design & Multimedia Art's Digital Gaming program of study will fulfill requirements of a Business and Industry Endorsement. Approved Statewide Program of Study - September 2019.



	Courses
9th	**Principles of Arts, A/V Technology, and Communications:** AV08202 AB OR AVH08202 AB
10th	**Audio/Video Production I:** AV08502 AB OR AVH08502 AB
11th	**Audio Video Production II[1]:** AV08602 AB OR AVH08602 AB
12th	**Unpaid Practicum of Audio/Video Production/d:** AV08702 AB OR AVH08702 AB

Enrichment Courses:

- **Digital Audio Technology I:** AV00882 AB OR AVH00882 AB
- **Digital Media:** IT27802 AB OR ITH27802 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Adobe Certified Professional - Premier Pro[1]
- Not counted towards Performance Acknowledgment: N/A

Available at:

- Polytechnic HS
- Southwest HS
- Trimble Technical HS
- Western Hills HS

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

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

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

Arts, A/V Technology, & Communications - Business and Industry Endorsement

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

The Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

FWISD offers ten (10) Career Focuses in the Arts, Audio/Video Technology & Communications Career Cluster.

CAREER FOCUS	***AUDIO VIDEO PRODUCTION***	***DIGITAL AUDIO TECHNOLOGY***	***GRAPHIC DESIGN AND ILLUSTRATION***
9TH GRADE	Principles of Arts, Audio Video Technology and Communications: AV08202 AB OR Honors: AVH08202 AB	Principles of Arts, Audio Video Technology and Communications: AV08202 AB OR Honors: AVH08202 AB	Principles of Arts, Audio Video Technology and Communications: AV08202 AB OR Honors: AVH08202 AB
10TH GRADE	Audio Video Production I: AV08502 AB OR Honors: AVH08502 AB OPTIONAL: Digital Media: IT27802 AB OR Honors: ITH27802 AB	Digital Audio Technology I: AV00882 AB OR Honors: AVH00882 AB OPTIONAL: Digital Media: IT27802 AB OR Honors: ITH27802 AB	Graphic Design and Illustration I: AV08802 AB OR Honors: AVH08802 AB OPTIONAL: Digital Media: IT27802 AB OR Honors: ITH27802 AB
11TH GRADE	Audio Video Production II AB: AV08602 AB OR Honors: AVH08602 AB	Digital Audio Technology II: AV00892AB OR Honors: AVH00892 AB	Graphic Design and Illustration II AB: AV08810 AB OR Honors: AVH08810 AB
12TH GRADE	Unpaid Practicum in Audio Video Production/d: AV08702 AB OR Honors: AVH08702 AB	Unpaid Practicum in Audio Technology/d: AV00802 AB OR Honors: AVH00802 AB	Unpaid Practicum in Graphic Design and Illustration/d: AV09002 AB OR Honors: AVH09002 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Adobe Certified Professional - Premiere		**Industry Certification Opportunities for Performance Acknowledgement:** Adobe Certified Professional - Photoshop; Adobe Certified Professional - Illustrator; and Adobe Certified Professional - InDesign
Available At	**Polytechnic HS, Trimble Tech HS**, **Southwest HS,** and **Western Hills HS**	**Western Hills HS**	**Arlington Heights HS, Carter Riverside HS, Diamond Hill-Jarvis HS, Eastern Hills HS, North Side HS, Paschal HS, Trimble Tech HS, Southwest HS, Western Hills HS, and YWLA**

CAREER FOCUS	***COMMERCIAL PHOTOGRAPHY***	***PRINTING AND IMAGING TECHNOLOGY***	***FASHION DESIGN***
9TH GRADE	Principles of Arts, Audio Video Technology and Communications: AV08202 AB OR Honors: AVH08202 AB	Principles of Arts, Audio Video Technology and Communications: AV08202 AB OR Honors: AVH08202 AB	Principles of Arts, Audio Video Technology and Communications: AV08202 AB OR Honors: AVH08202 AB
10TH GRADE	Commercial Photography I: AV09102 AB OR Honors: AVH09102 AB OPTIONAL: Digital Media: IT27802 AB OR Honors: ITH27802 AB	Printing and Imaging Technology I: AV09602 AB OR Honors: AVH09602 AB OPTIONAL: Digital Media: IT27802 AB OR Honors: ITH27802 AB	Fashion Design I: AV09302 AB OR Honors: AVH09302 AB OPTIONAL: Digital Media: IT27802 AB OR Honors: ITH27802AB
11TH GRADE	Commercial Photography II/ Lab/d: AV09202L AB OR Honors: AVH09202L AB	Printing and Imaging Technology II/Lab/d: AV09702L AB OR Honors: AVH09702L AB	Fashion Design II AB/Lab/d: AV09402L AB OR Honors: AVH09402L AB
12TH GRADE	Unpaid Practicum in Commercial Photography/d: AV09200AB OR Honors: AVH09200AB OR Paid Practicum in Commercial Photography/Extended AB: AV09212AB OR Honors: AVH09212AB	Unpaid Practicum in Printing and Imaging Technology/d: AV09802AB OR Honors: AVH09802AB OR Paid Practicum in Printing and Imaging Technology/Extended: AV09810AB OR Honors: AVH09810AB	Unpaid Practicum in Fashion Design/d: AV09502AB OR Honors: AVH09502AB OR Paid Practicum in Fashion Design/Extended: AV09512 OR Honors: AVH09512 OPTIONAL: Fashion Marketing: MK34301T OR Honors: MKH3401T
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Adobe Certified Professional - Photoshop	**Industry Certification Opportunities for Performance Acknowledgement:** Adobe Certified Professional - Photoshop; Adobe Certified Professional - Illustrator; and Adobe Certified Professional - InDesign	Adobe Certified Professional - Illustrator
Available At	**Trimble Tech HS**	**Trimble Tech HS**	**Diamond Hill-Jarvis HS and Trimble Tech HS**

CAREER FOCUS	***DIGITAL MULTIMEDIA AND ANIMATION***	***DIGITAL GAMING PRODUCTION***	***DIGITAL GAMING DESIGN***
9TH GRADE	Principles of Arts, Audio Video Technology and Communications: AV08202 AB OR Honors: AVH08202 AB	Principles of Arts, Audio Video Technology and Communications: AV08202 AB OR Honors: AVH08202 AB	Principles of Arts, Audio Video Technology and Communications: AV08202 AB OR Honors: AVH08202 AB
10TH GRADE	Digital Media: IT27802 AB OR Honors: ITH27802 AB	Video Game Design: AV00992AB OR Honors: AVH00992 AB	Video Game Design: AV00992 AB OR Honors: AVH00992 AB
11TH GRADE	Animation I: AV08302 AB OR Honors: AVH08302 AB	Graphic Design and Illustration I: AV08802 AB OR Honors: AVH08802 AB	Animation I: AV08302 AB OR Honors: AVH08302 AB
12TH GRADE	Animation II: AV08402 AB OR Honors: AVH08402 AB	Graphic Design and Illustration II: AV08810 AB OR Honors: AVH08810 AB	Animation II: AV08402 AB OR Honors: AVH08402 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Adobe Certified Professional - Animate and Adobe Certified Professional - After Affects **Not Counted towards Performance Acknowledgement:** N/A	**Industry Certification Opportunities for Performance Acknowledgement:** Adobe Certified Professional - Photoshop; Adobe Certified Professional - Illustrator; and Adobe Certified Professional - InDesign	**Industry Certification Opportunities for Performance Acknowledgement:** Adobe Certified Professional - Animate and Adobe Certified Professional - After Affects **Not Counted towards Performance Acknowledgement:** N/A
Available At	**Arlington Heights HS, North Side HS, O.D. Wyatt HS, and Trimble Tech HS**	**South Hills HS**	**South Hills HS**

CAREER FOCUS	***DIGITAL GAMING CODING***
9TH GRADE	Principles of Arts, Audio Video Technology and Communications: AV08202 AB OR Honors: AVH08202 AB
10TH GRADE	Video Game Design: AV00992 AB OR Honors: AVH00992 AB
11TH GRADE	AP Computer Science Principles: TA2157 AB
12TH GRADE	AP Computer Science A: TA2142 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Microsoft Technology Associate (MTA) Introduction to Programing Using Java; Microsoft Technology Associate (MTA) Introduction to Programming Using JavaScript; and/or Microsoft Technology Associate (MTA) Introduction to Programming Using Python Outstanding Performance on AP exam
Available At	**South Hills HS**

COURSE DESCRIPTIONS FOR
ARTS, AUDIO VIDEO TECHNOLOGY, AND COMMUNICATIONS CLASSES

PRINCIPLES OF ARTS, AUDIO VIDEO TECHNOLOGY AND COMMUNICATIONS AB (PRINAAVTC AB)	**AV08202AB**
The Arts, Audio Video Technology, and Communications career cluster require, in addition to creative aptitude, a strong background in computer applications, a strong academic foundation, and a proficiency in oral and written communications in this course, students are introduced to skills and a basic understanding of career opportunities and training requirements in the areas of audio video production, fashion design, printing and imaging technology, and graphic design and illustration. 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.	13008200 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: *Principles of Arts, Audio and Video Technology and Communication Texas Student, Pearson Education, Inc.* Prerequisite(s): None. This course is a required prerequisite for ALL other courses in the Arts and AV cluster. *Offered at: All Tier 1 comprehensive high schools*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF ARTS, AUDIO VIDEO TECHNOLOGY, AND COMMUNICATIONS AB (PRINAAVTC AB/H)	**AVH08202AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13008200 Grade level: 9 - 10
Instructional Material: *Principles of Arts, Audio and Video Technology and Communication Texas Student, Pearson Education, Inc.* Prerequisite(s): None. This course is a required prerequisite for ALL other courses in the Arts and AV cluster. *Offered at: All Tier 1 comprehensive high schools*	HS Credit(s): 1 College Hour(s): NA **Tier II**
AUDIO VIDEO PRODUCTION I AB (AVPROD AB)	**AV08502AB**
Careers in audio and video technology and film production span all aspects of the audio video communications industry. Students will be expected to develop an understanding of the industry as they focus on pre-production, production, and post-production audio and video activities. In this double-period course, students develop general video production skills necessary for successful employment in broadcasting video production. Students learn to operate video cameras, edit linear and nonlinear video, use audio techniques, control and monitor equipment, create media graphics, generate special effects, provide lighting, design sets, write scripts, and direct.	13008500 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: *Learning Audio/Video Production, 2017 Ed.* Pearson Publishing Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Polytechnic, Southwest, Trimble Tech and Western Hills*	College Hour(s): NA **Tier III**
HONORS AUDIO VIDEO PRODUCTION I AB (AVPROD AB/H)	**AVH08502AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13008500 Grade level: 10 – 12
Instructional Material: *Learning Audio/Video Production, 2017 Ed.,* Pearson Publishing Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Polytechnic, Southwest, Trimble Tech and Western Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
AUDIO VIDEO PRODUCTION I AB/ AUDIO/VIDEO PRODUCTION I LAB/D (AVPLAB1 AB)	**AV08512AB**
Careers in audio and video technology and film production span all aspects of the audio video communications industry. Students will be expected to develop an understanding of the industry as they focus on pre-production, production, and post-production audio and video activities. In this double-period course, students develop general video production skills necessary for successful employment in broadcasting video production. Students learn to operate video cameras, edit linear and nonlinear video, use audio techniques, control and monitor equipment, create media graphics, generate special effects, provide lighting, design sets, write scripts, and direct.	13008510 Grade level: 10 - 11 HS Credit(s): 2
Instructional Material: *Learning Audio/Video Production, 2017 Ed.* Pearson Publishing Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Southwest*	College Hour(s): NA **Tier III**
HONORS AUDIO VIDEO PRODUCTION I AB/ AUDIO/VIDEO PRODUCTION I LAB/D (AVPLAB1 AB/H)	**AVH08512AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13008510 Grade level: 10 – 12
Instructional Material: *Learning Audio/Video Production, 2017 Ed.,* Pearson Publishing Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Southwest*	HS Credit(s): 2 College Hour(s): NA **Tier II**
AUDIO VIDEO PRODUCTION II AB (AVPROD2 AB)	**AV08602AB**
In Audio Video Production II, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post-production activities. This course may be implemented in an advanced format including both audio and video. The students will begin a portfolio of their video and audio production projects. This course includes a co-requisite lab, which affords necessary time devoted specifically to the production and post-production process.	13008600 Grade level: 11 - 12 HS Credit(s): 1

Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Audio Video Production I *Offered only at: Polytechnic, Trimble Tech and Western Hills*	College Hour(s): NA **Tier III**
HONORS AUDIO VIDEO PRODUCTION II AB (AVPROD2 AB/H)	**AVH08602AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13008600 Grade level: 11 - 12
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Audio Video Production I *Offered only at: Polytechnic, Trimble Tech, and Western Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
AUDIO VIDEO PRODUCTION II AB/ AUDIO/VIDEO PRODUCTION II LAB/D (AVPLAB2 AB)	**AV08602LAB**
In Audio Video Production II, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post-production activities. This course may be implemented in an advanced format including both audio and video. The students will begin a portfolio of their video and audio production projects. This course includes a co-requisite lab, which affords necessary time devoted specifically to the production and post-production process.	13008610 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Audio Video Production I *Offered only at: Southwest*	College Hour(s): NA **Tier III**
HONORS AUDIO VIDEO PRODUCTION II AB/ AUDIO VIDEO PRODUCTION II LAB/D (AVPRO2L AB/H)	**AVH08602LAB** 13008610
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Audio Video Production I *Offered only at: Southwest*	College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN AUDIO VIDEO PRODUCTION/D AB (PRACAVT AB)	**AV08702AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. In this course, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production audio and video activities in a studio environment. This course may be implemented in an advanced audio/video or audio format. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Some students may be selected to participate in an unpaid externship with the FWISD instructional radio and television department to explore advanced techniques and theories in all areas of the media industry. Students will build a professional portfolio demonstrating skills in advanced video production, production of narrative media, advanced video screenwriting, documentary preproduction, and TV and radio news production.	13008700 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Audio Video Production I and II *Offered only at: Southwest*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN AUDIO VIDEO PRODUCTION/D AB (PRACAVT AB/H)	**AVH08702AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13008700 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Audio Video Production I and II *Offered only at: Polytechnic, Southwest, Trimble Tech and Western Hills*	HS Credit(s): 2 College Hour(s): NA **Tier II**
DIGITAL AUDIO TECHNOLOGY I AB (DIGAUD AB)	**AV00882AB**
Digital Audio Technology I was designed to provide students interested in audio production careers such as audio for radio and television broadcasting, audio for video and film, audio for animation and game design, music production and live sound, and additional opportunities and skill sets. Students will be expected to develop an understanding of the audio industry with a technical emphasis on production and critical-listening skills.	13009950 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: *Learning Audio/Video Production, 2017 Ed.,* Pearson Publishing Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Polytechnic and Western Hills*	College Hour(s): NA **Tier III**
HONORS DIGITAL AUDIO TECHNOLOGY I AB (DIGAUD AB/H)	**AVH00882AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13009950 Grade level: 10 – 11
Instructional Material: *Learning Audio/Video Production, 2017 Ed.,* Pearson Publishing Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Polytechnic and Western Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**

DIGITAL AUDIO TECHNOLOGY II AB (DIGAUD2 AB)	AV00892AB
Digital Audio Technology II provides additional opportunities and skill sets for students interested in audio production careers such as audio for radio and television broadcasting, audio for video and film, audio for animation and game design, and music production and live sound.	13009960 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Learning Audio/Video Production, 2017 Ed.,* Pearson Publishing Prerequisite(s): Digital Audio Technology I *Offered only at: Polytechnic and Western Hills*	College Hour(s): NA **Tier III**
HONORS DIGITAL AUDIO TECHNOLOGY II AB (DIGAUD2 AB/H)	**AVH00892AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study.	13009960 Grade level: 11 - 12
Instructional Material: *Learning Audio/Video Production, 2017 Ed.,* Pearson Publishing Prerequisite(s): Digital Audio Technology I *Offered only at: Polytechnic and Western Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN AUDIO VIDEO PRODUCTION: DIGITAL TECHNOLOGY/D AB (PRACAUDTEH AB)	**AV00802AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. In this course, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production audio and video activities in a studio environment. This course may be implemented in an advanced audio/video or audio format and instruction may be delivered through lab-based classroom experiences or career preparation opportunities. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Some students may be selected to participate in an unpaid externship with the FWISD instructional radio and television department to explore advanced techniques and theories in all areas of the media industry. Students will build a professional portfolio demonstrating skills in advanced video production, production of narrative media, advanced video screenwriting, documentary preproduction, and TV and radio news production.	13008700 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Audio Video Production I and II *Offered only at: Polytechnic and Western Hills*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN AUDIO VIDEO PRODUCTION: DIGITAL TECHNOLOGY/D AB (PRACAUDTEH AB/H)	**AVH00802AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13008700 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Audio Video Production I and II *Offered only at: Polytechnic and Western Hills*	HS Credit(s): 2 College Hour(s): NA **Tier II**
GRAPHIC DESIGN AND ILLUSTRATION I AB (GRAPHDI AB)	**AV08802AB**
Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design. In this course, students will receive job-specific training for entry-level employment in advertising design careers. Instruction emphasizes creation and design of graphic materials for use as illustration, advertising, and computer graphics. Students will employ a creative design process to create original two- or three- dimensional projects; and apply art elements and principles to photographic works and multimedia applications.	13008800 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: *Communicating Through Graphic Design,* Davis Publications, Inc. Prerequisite(s): Principles of Arts, A/V Technology, and Communications	College Hour(s): NA **Tier III**
HONORS GRAPHIC DESIGN AND ILLUSTRATION I AB (GRAPHDI AB/H)	**AVH08802AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13008800 Grade level: 10 – 11 HS Credit(s): 1
Instructional Material: *Communicating Through Graphic Design,* Davis Publications, Inc. Prerequisite(s): Principles of Arts, A/V Technology, and Communications	College Hour(s): NA **Tier II**
GRAPHIC DESIGN AND ILLUSTRATION FOR YEARBOOK I AB (GRAPHDI-YB 1AB)	**AV08812AB**
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, design, and written/visual communications. Students will communicate in a variety of forms such as print, digital, or online media for a variety of audiences and purposes. High school students are expected to plan, draft, and complete written and/or visual communications for the campus yearbook and carefully examining their copy for clarity, engaging language, and the correct use of the conventions and mechanics. Students are expected to become analytical consumers of media and technology to enhance their skills. Students will also apply publishing ethics and	13008800 Grade level: 10 - 11 HS Credit(s): 1

standards to the yearbook. Published works are5 used as tools for learning as students create, clarify, critique, write, and produce effective work. Students will refine and enhance their skills, research, and plan, and organize in order to successfully complete yearbook projects.	
Instructional Material: *Communicating Through Graphic Design,* Davis Publications, Inc. Prerequisite(s): None	College Hour(s): NA **Tier III**
HONORS GRAPHIC DESIGN AND ILLUSTRATION FOR YEARBOOK I AB (GRAPHDI-YB 1AB/H)	**AVH08812AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13008800 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: *Communicating Through Graphic Design,* Davis Publications, Inc. Prerequisite(s): None	College Hour(s): NA **Tier II**
GRAPHIC DESIGN AND ILLUSTRATION II AB (GRAPHDI2 AB)	**AV08810AB**
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.	13008900 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Communicating Through Graphic,* Davis Publications, Inc. Prerequisite(s): Graphic Design and Illustration I	College Hour(s): NA **Tier III**
HONORS GRAPHIC DESIGN AND ILLUSTRATION II AB (GRAPHDI2 AB)	**AVH08810AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13008900 Grade level: 11 – 12 HS Credit(s): 1
Instructional Material: *Communicating Through Graphic,* Davis Publications, Inc. Prerequisite(s): Graphic Design and Illustration I	College Hour(s): NA **Tier II**
GRAPHIC DESIGN AND ILLUSTRATION FOR YEARBOOK II AB (GRAPHDI-YB 2AB)	**AV08814AB**
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 understanding of the industry with a focus on mastery of content knowledge and skills. Students will communicate in a variety of forms such as print, digital, or online media for a variety of audiences and purposes. High school students are expected to plan, draft, and complete written and/or visual communications for the campus yearbook and carefully examining their copy for clarity, engaging language, and the correct use of the conventions and mechanics. Students are expected to become analytical consumers of media and technology to enhance their skills. Students will also apply publishing ethics and standards to the yearbook. Published works are used as tools for learning as students create, clarify, critique, write, and produce effective work. Students will refine and enhance their skills, research, and plan, and organize in order to successfully complete yearbook projects.	13008900 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Communicating Through Graphic,* Davis Publications, Inc. Prerequisite(s): Graphic Design and Illustration I	College Hour(s): NA **Tier III**
HONORS GRAPHIC DESIGN AND ILLUSTRATION FOR YEARBOOK II AB (GRAPHDI-YB 2AB/H)	**AVH08814AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13008900 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Communicating Through Graphic,* Davis Publications, Inc. Prerequisite(s): Graphic Design and Illustration I	College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN GRAPHIC DESIGN AND ILLUSTRATION/D AB (PRACCGRADI AB)	**AV09002AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. Careers in graphic design and illustration span all aspects of the advertising and visual communications industry. In this course, 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. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Students will build a professional portfolio demonstrating skills in Graphic Design and Illustration.	13009000 Grade level: 12 HS Credit(s): 2
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Graphic Design and Illustration II and Graphic Design and Illustration Lab II	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN GRAPHIC DESIGN AND ILLUSTRATION/D AB (PRACCGRADI AB/H)	**AVH09002AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13009000 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Graphic Design and Illustration I and II	College Hour(s): NA **Tier II**

COMMERCIAL PHOTOGRAPHY I AB (COMMPHOT AB)	AV09102AB
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, students will be expected to develop an understanding of the commercial photography industry with a focus on creating quality photographs. Emphasis is on the basics of photography, commercial composition, print-making, and finishing. In this course, students will analyze principles of commercial photography such as working with clients, interpreting client instructions, developing production schedules, and delivering products in a competitive market. They will produce a variety of photographs using current, industry-standard production processes; and evaluate photographs using principles of art, commercial photography standards, and critical-thinking skills.	13009100 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: *Photography: Portfolio to Profession,* Goodheart-Willcox Co. Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS COMMERCIAL PHOTOGRAPHY I AB (COMMPHOT AB/H)	**AVH09102AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13009100 Grade level: 10 - 11
Instructional Material: *Photography: Portfolio to Profession,* Goodheart-Willcox Co. Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**
COMMERCIAL PHOTOGRAPHY II/COMMERCIAL PHOTOGRAPHY II LAB/D AB (CPHLAB2 AB)	**AV09202LAB**
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, students in this advanced course will develop additional technical knowledge and skills needed for success in the field of commercial photography. They will also be expected to develop an understanding of the commercial photography industry with a focus on producing, promoting, and presenting professional quality photographs. Students in this advanced class will work toward Adobe certifications that will provide a performance acknowledgement for their Business and Industry Endorsement. This course includes a co- requisite lab, which affords necessary time devoted to master the content in Commercial Photography II. Each student will maintain a career portfolio to document work experiences, licenses, certifications, and work samples.	13009210 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Commercial Photography I *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS COMMERCIAL PHOTOGRAPHY II/COMMERCIAL PHOTOGRAPHY II LAB/D AB (CPHLAB2 AB/H)	**AVH09202LAB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13009210 Grade level: 11 - 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Commercial Photography I *Offered only at: Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN COMMERCIAL PHOTOGRAPY/D AB (PRACCPH1 AB)	**AV09200AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. Careers in commercial photography span all aspects of the industry from setting up a shot to delivering products in a competitive market. In This course, 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. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Students will build a professional portfolio demonstrating skills in Commercial Photography.	13009250 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Commercial Photography II or Commercial Photography Lab II *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN COMMERCIAL PHOTOGRAPY/D AB (PRACCPH1 AB/H)	**AVH09200AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13009250 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Commercial Photography II or Commercial Photography Lab II *Offered only at: Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN COMMERCIAL PHOTOGRAPY/EXTENDED AB (EXPRCPH2 AB)	**AV09212AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. In this course, students will be challenged with the application of knowledge and skills from Commercial Photography at paid employment in the photography field. The co-requisite extension is included in the Practicum, and is designed to give students	13009265 Grade level: 12 HS Credit(s): 3

supervised practical application of previously studied knowledge and skills. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Commercial Photography II or Commercial Photography Lab II *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN COMMERCIAL PHOTOGRAPY/EXTENDED AB (EXPRCPH2 AB/H)	**AVH09212AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13009265 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Commercial Photography II or Commercial Photography Lab II *Offered only at: Trimble Tech*	HS Credit(s): 3 College Hour(s): NA **Tier II**
PRINTING AND IMAGING TECHNOLOGY I AB (PRIMTECH I AB)	**AV09602AB**
Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. 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 printing industry with a focus on digital prepress and publishing. Students learn basic principles of offset printing, composition of type using impact and computerized phototypesetting processes, computer technology, camera reproduction, letterpress printing, screen printing, entrepreneurship, safety, leadership, and investigate career opportunities	13009600 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PRINTING AND IMAGING TECHNOLOGY AB (PRIMTECH I AB/H)	**AVH09602AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13009600 Grade level: 10 - 11
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**
PRINTING AND IMAGING TECHNOLOGY II/ PRINTING AND IMAGING TECHNOLOGY II LAB/D AB (PRILAB2 AB)	**AV09702LAB**
Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. Students will be expected to develop an advanced understanding of the printing industry with a focus on press operations. Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. Within this context, students will be expected to develop an advanced understanding of the printing industry with a focus on digital prepress and digital publishing. In this course, student will learn to manage the printing process to prepare customer materials for printing. They will be able to explain and apply printing processes related to lithographic, planographic, gravure, intaglio, and screen; apply knowledge of inks and ink processes used for various types of printing including an understanding of how properties of ink affect coverage, color, and color separation. The student will begin to develop a portfolio to demonstrate the work they have produced. This course includes a co-requisite lab, which affords necessary time devoted to master the content in Printing and Imagining Technology II.	13009710 Grade level: 11-12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Printing and Imaging Technology I *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PRINTING AND IMAGING TECHNOLOGY II/PRINTING AND IMAGING TECHNOLOGY II LAB AB (PRILAB2 AB/H)	**AVH09702LAB**
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study.	13009710 Grade level: 11-12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Printing and Imaging Technology I *Offered only at: Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN PRINTING AND IMAGING TECHNOLOGY AB/D (PRACPRI AB)	**AV09802AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. Within this context, in addition to developing advanced technical knowledge and skills needed for success within this pathway, students in this unpaid internship will be expected to develop an advanced technical understanding of the printing industry with a focus on finishing and bindery operations and customer-based projects. In this double period class, the	13009800 Grade level: 12 HS Credit(s): 2

student implements an advanced technical understanding of professional printing and imaging. Students in this advanced course will show the ability to manage the printing process; prepare customer documents using appropriate printing processes; apply binding processes, including cutting, folding, and trimming; and meet customer needs with regard to labeling, packaging, and shipping according to regulatory standards. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Students will build a professional portfolio demonstrating skills in Printing and Imaging Technology.	
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Printing and Imaging Technology I and II *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN PRINTING AND IMAGING TECHNOLOGY AB/D (PRACPRI AB/H)	**AVH09802AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the business and industry environment.	13009800 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Printing and Imaging Technology I and II *Offered only at: Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN PRINTING AND IMAGING TECHNOLOGY/EXTENDED AB (EXPRPRI2 AB)	**AV09810AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. In this paid internship, students will be expected to develop an advanced technical understanding of the printing industry with a focus on finishing and bindery operations and customer-based Students will make a full year commitment to this course. The co-requisite extension is included in the Practicum, and is designed to give students supervised practical application of previously studied knowledge and skills. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13009815 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Printing and Imaging Technology I and II *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN PRINTING AND IMAGING TECHNOLOGY/EXTENDED AB (EXPRPRI2 AB/H)	**AVH09810AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the business and industry environment.	13009815 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Printing and Imaging Technology I and II *Offered only at: Trimble Tech*	HS Credit(s): 3 College Hour(s): NA **Tier II**
FASHION DESIGN I AB (FASHDSN AB)	**AV09302AB**
Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio Video Technology, and Communications career cluster, students will be expected to develop an understanding of fashion and the textile and apparel industries. Students learn to manage a clothing budget, to construct, repair and alter apparel, to plan and maintain an appropriate wardrobe, and to identify quality apparel construction.	13009300 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site***,** CEV Multimedia Ltd. Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Diamond Hill-Jarvis and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS FASHION DESIGN I AB (FASHDSN AB/H)	**AVH09302AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13009300 Grade level: 10 - 11
Instructional Material: *CEV Business, Marketing, Finance, IT & Media Site***,** CEV Multimedia Ltd. Prerequisite(s): Principles of Arts, A/V Technology, and Communications *Offered only at: Diamond Hill-Jarvis and Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**
FASHION DESIGN II/ FASHION DESIGN II LAB/D AB (FASLAB2 AB)	**AV09402LAB**
Careers in fashion span all aspects of the textile and apparel industries. Students will be expected to develop an advanced understanding of fashion, with emphasis on design and production. In this double-period course, students will examine textile design and production, and apparel design practices and influences. Topics include fibers, fabrics, textile and apparel manufacturing systems, product marketing techniques, technology	13009410 Grade level: 11 - 12 HS Credit(s): 2

applications, and the international impact of textiles and apparel industries, federal regulations, and career options. Students will create a portfolio of fashion designs that include fashion figure drawing; application of design elements and principles to create fashion drawings; demonstration of the properties and characteristics of color; original computer-aided fashion designs; and examples of appropriate textiles to use in specific designs. This course includes a co-requisite lab, which affords necessary time devoted to master the content in Fashion Design II.	
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site*, CEV Multimedia Ltd. Prerequisite(s): Fashion Design I *Offered only at: Diamond Hill-Jarvis and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS FASHION DESIGN II/ FASHION DESIGN II LAB/D AB (FASLAB2 AB/H)	**AVH09402LAB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13009410 Grade level: 11 - 12
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site*, CEV Multimedia Ltd. Prerequisite(s): Fashion Design I *Offered only at: Diamond Hill-Jarvis and Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN FASHION DESIGN/D AB (PRACFASH AB)	**AV09502AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the fashion design industry, students will be expected to develop an advanced technical understanding of the business aspects of fashion, with emphasis on promotion and retailing. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Students will build a professional portfolio demonstrating skills in Fashion Design.	13009500 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Fashion Design I and II *Offered only at: Diamond Hill-Jarvis and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN FASHION DESIGN/D AB (PRACFASH AB/H)	**AVH09502AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13009500 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Fashion Design I and II *Offered only at: Diamond Hill-Jarvis and Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN FASHION DESIGN /EXTENDED AB (EXPRFAS2 AB)	**AV09512AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. Careers in fashion span all aspects of the textile and apparel industries. Within this context, students will be expected to develop an advanced technical understanding of the business aspects of fashion, with emphasis on promotion and retailing. Instruction will be a combination of lab-based classroom experiences and work within the fashion industry in a paid internship. The co-requisite extension is included in the Practicum, and is designed to give students supervised practical application of previously studied knowledge and skills. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the Career Preparation learning experiences. The co-requisite extension is included in the Practicum, and is designed to give students supervised practical application of previously studied knowledge and skills In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13009515 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Fashion Design I and II *Offered only at: Diamond Hill-Jarvis and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN FASHION DESIGN/EXTENDED AB (EXPRFAS2 AB/H)	**AVH09512AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13009515 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Fashion Design I and II *Offered only at: Diamond Hill-Jarvis and Trimble Tech*	HS Credit(s): 3 College Hour(s): NA **Tier II**

FASHION MARKETING T (FASHMKTG T)	MK34301T
This specialized course is for students who have a career interest in apparel, fashion, and/or accessory marketing. Instruction will cover all aspects of the industry. Students in this course will focus on each of the functions of marketing and how they relate to the fashion industry. Students will be able to apply these principles and concepts in marketing in their careers and in everyday life. Students in Fashion Marketing will gain a working knowledge of promotion, textiles, merchandising, mathematics, selling, visual merchandising, and career opportunities in this field.	13034300 Grade level: 11-12 HS Credit(s): 0.5
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site***,** CEV Multimedia Ltd. Prerequisite(s): Principles of Business, Marketing, and Finance or Fashion Design I *Course can only be taught by a marketing or family consumer science certified teacher.* *Offered only at: Arlington Heights, Diamond Hill-Jarvis, Paschal and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS FASHION MARKETING T (FASHMKTG T/H)	**MKH34301T**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13034300 Grade level: 11 - 12
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site***,** CEV Multimedia Ltd. Prerequisite(s): Principles of Business, Marketing, and Finance or Fashion Design I *Offered only at: Arlington Heights, Diamond Hill-Jarvis, Paschal and Trimble Tech*	HS Credit(s): 0.5 College Hour(s): NA **Tier II**
DIGITAL MEDIA AB (DIMEDIA AB)	**IT27802AB**
Through the study of Digital Media and its application in information technology, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve a problem. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. This course will prepare students to prepare to take several Adobe certification exams in areas such as Photoshop, Dreamweaver, InDesign, or Illustrator. These certifications will provide a performance acknowledgement for the Business and Industry Endorsement.	13027800 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: *Digital Media – Concepts and Applications 4th Edition 2017;* Cengage Learning Prerequisite(s): Principles of Arts and A/V or Business Information Management I	College Hour(s): NA **Tier III**
HONORS DIGITAL MEDIA AB (DIMEDIA AB/H)	**ITH27802AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13027800 Grade level: 10 – 11 HS Credit(s): 1
Instructional Material: *Digital Media – Concepts and Applications 4th Edition 2017;* Cengage Learning Prerequisite(s): Principles of Arts and A/V or Business Information Management I	College Hour(s): NA **Tier II**
ANIMATION I AB (ANIMAT1 AB)	**AV08302AB**
Careers in animation span all aspects of motion graphics. Within this context, in addition to developing technical knowledge and skills needed for creating motion graphics, students will be expected to develop an understanding of the history and techniques of the animation industry. This course includes a co-requisite lab, which affords necessary time devoted to master the content in Animation I through projects and take the Adobe certification to become an Adobe Certified Professional in Animate. This industry certification provides a performance acknowledgement for the Business and Industry Endorsement.	13008300 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Arts and AV and Digital Media, Graphic Design and Illustration I, or Video Game Design *Offered only at: North Side, OD Wyatt, Polytechnic, Trimble Tech, and Western Hills*	College Hour(s): NA **Tier III**
HONORS ANIMATION I AB (ANIMAT1 AB/H)	**AVH08302AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13008300 Grade level: 11 - 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Arts and AV and Digital Media, Graphic Design and Illustration I, or Video Game Design *Offered only at: North Side, OD Wyatt, Polytechnic, Trimble Tech, and Western Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ANIMATION II AB (ANIMAT2 AB)	**AV08402AB**
Careers in animation span all aspects of motion graphics. Within this context, students will be expected to create two- and three-dimensional animations. The instruction in this class also assists students seeking careers in the animation industry. This course includes a co-requisite lab, which affords necessary time devoted to master the content in Animation II through projects, and take the Adobe certification to become an Adobe Certified Professional in Animate. This industry certification provides a performance acknowledgement for the Business and Industry Endorsement.	13008400 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Animation I and Animation I Lab *Offered only at: North Side, OD Wyatt, Polytechnic, Trimble Tech, and Western Hills*	College Hour(s): NA **Tier II**
HONORS ANIMATION II (ANIMAT2 AB/H)	**AVH08402AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13008400 Grade level: 11-12

Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Animation I and Animation I Lab *Offered only at: North Side, OD Wyatt, Polytechnic, Trimble Tech, and Western Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
VIDEO GAME DESIGN AB (VIDEOGD AB)	**AV00992AB**
In Video Game Design, the student will be provided the opportunity to design, program, and create a functional video game. The course will introduce basic programming language and skills that are essential to developing a video game. Topics covered are math, physics, design, and computer programming. This course will instruct students on how to apply the design or problem-solving process in order to create a real-world solution and learn the basics of programming structure and functions.	13009970 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: *Video Game Design Foundations,* Goodheart-Willcox Co., Prerequisite(s): Principles of Arts, Audio Video Technology and Communications *Offered only at: South Hills*	College Hour(s): NA **Tier III**
HONORS VIDEO GAME DESIGN AB (VIDEOGD AB/H)	**AVH00992AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13009970 Grade level: 10 – 11
Instructional Material: *Video Game Design Foundations,* Goodheart-Willcox Co. Prerequisite(s): Principles of Arts, Audio Video Technology and Communications *Offered only at: South Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
AP COMPUTER SCIENCE PRINCIPLES AB (APTACS PRIN) *(Available through 2022-2023 in Video Game Coding strand)*	**2157AB** ***WL2157AB**
This course introduces students to the foundational ideas of computer science, while providing exposure to computational content, computational thinking skills, creative aspects of the field and their impact on the world. Students will be provided the opportunity to investigate the innovations in other fields of computing while examining the ethical implications of new computing technologies. The course follows the College Board AP® Computer Science Principles Curriculum Framework. (Teachers teaching this course must be Computer Information Systems and GT certified.) Students may be awarded one LOTE credit (TAWL2157 AB) or one elective credit (TA2157 AB) for successful completion of this course.	A3580300 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Advanced Academic Services Prerequisite(s): None *Offered at: South Hills, Also offered as an elective course at select high schools.*	College Hour(s): NA **Tier I**
AP COMPUTER SCIENCE A AB (APTACSA 1AB, APTACSAL AB, APTACSAM AB) *(Available through 2023-2024 in Video Game Coding strand)*	**2142AB** ***WL2142AB** ****M2142AB**
AP Computer Science A is designed for qualified students in grades 10 - 12 who wish to complete the equivalent of a college introductory course in computer science. The course will focus on programming methodology, and procedural abstraction. It also includes the study of algorithms, data structures, and data abstraction, but covered in less depth than in the Computer Science III AB course. The course follows the College Board AP® Computer Science A Curriculum Framework. Students **must** be scheduled into two of the following three course numbers for this course: 2142 AB for an elective credit, M2142 AB for a math credit, and WL2142 AB for a LOTE credit. Students will be awarded two credits for successful completion of this course.	A3580120, A3580120, A3580110 Grade level: 10 - 12 HS Credit(s): 2
Instructional Material: Java Programming, CompuScholar Prerequisite(s): AP Computer Science Principles I *Offered at: South Hills, Also offered as an elective course at select high schools.*	College Hour(s): NA **Tier I**
UNPAID PRACTICUM IN ENTREPRENEURSHIP AB (PRACENTRE AB) *(Available Fall 2023)*	**MK34801AB**
The description for this course can be found in the Business, Marketing & Finance section of the Career and Technical Education course descriptions.	N1303425 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Fashion Design II, Entrepreneurship II, Business Management or Mobile Application Development	HS Credit(s): 2 College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN ENTREPRENEURSHIP AB/H (PRACENTRE AB/H) *(Available Fall 2023)*	**MKH34801AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study. See the description for Unpaid Practicum in Entrepreneurship in the Career and Technical Education, Business, Marketing & Finance section of this document.	N1303425 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Fashion Design II, Entrepreneurship II, Business Management or Mobile Application Development	College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN ANIMATION AB (PRACANI1 AB) *(Available Fall 2023)*	**AV08450AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. In this course, students develop advanced technical knowledge and skills needed for success in the Arts, Audio/Video industry. Students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production animation products in a professional environment. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone	13008450 Grade level: 12 HS Credit(s): 2

experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Students will build a professional portfolio demonstrating skills in Animation.	
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Animation I *Offered only at: Arlington Heights, Northside, OD Wyatt, South Hills, and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN ANIMATION AB/H (PRACANI1 AB/H) *(Available Fall 2023)*	**AVH08450AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13008450 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Animation I *Offered only at: Arlington Heights, Northside, OD Wyatt, South Hills, and Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
VIDEO GAME PROGRAMMING AB (VIDEOPR AB) *(Available Fall 2021)*	**AV00994AB**
Video Game Programming expands on the foundation created in Video Game Design through programming languages such as: C# programming, XNA game studio, Java, and Android App. In this course, students will investigate the inner workings of a fully functional role-playing game (RPG) by customizing playable characters, items, maps, and chests and eventually applying customizations by altering and enhancing the core game code.	N1300994 Grade level: 10-11 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered only at: South Hills*	College Hour(s): NA **Tier III**
HONORS VIDEO GAME PROGRAMMING AB (VIDEOPR AB) *(Available Fall 2021)*	**AVH00994AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1300994 Grade level: 10-11
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered only at: South Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ADVANCED VIDEO GAME PROGRAMMING AB (ADVIDEOGP AB) *(Available Fall 2022)*	**AV00995AB**
Advanced Video Game Programming students will be introduced to mobile application design and programming using Java and Eclipse for Android devices. Time will be spent learning basic Java programming and working with Android Studio to develop real working apps. Using Unity as an introduction to 3D game development, students will have exposure to and an understanding of: object-oriented programming concepts; game development skill with programs such as Unity; 3D modeling with programs such as Blender; image manipulation with programs such as GIMP; concepts related to the design process; and the ability to communicate and collaborate on group-based projects.	N1300995 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None Recommended Prerequisite(s): Video Game Programming *Offered only at: South Hills*	College Hour(s): NA **Tier III**
HONORS ADVANCED VIDEO GAME PROGRAMMING AB (ADVIDEOGP AB/H) *(Available Fall 2022)*	**AVH00995AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1300995 Grade level: 11-12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None Recommended Prerequisite(s): Video Game Programming *Offered only at: South Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
HONORS PROJECT-BASED RESEARCH AB (PROBS1 AB/H) *(Available Fall 2023)*	**CPH01500AB**
Students will research a real-world problem and possible solutions throughout this course. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. This course must be cooperatively planned and supervised by the teacher ensuring that the student has guidance and support of a mentor or interdisciplinary team. The district must maintain a written project plan for each student enrolled in the course.	12701500 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Specific to program focus/pathway and is the previous course in the sequence. *Offered at: All high school campuses*	College Hour(s): NA **Tier II**

For the graduating class of 2024 and up only.

ACCOUNTING & FINANCIAL SERVICES

ENTREPRENUERSHIP*

MARKETING & SALES

SOCIAL MEDIA MARKETING

RETAIL & ENTREPRENEURSHIP

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator: Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.

**Tier 1 Entrepreneurship Program of Study*

	Courses
9th	**Business Information Management[1,2]:** BA11412 AB OR BAH11412 AB
10th	**Accounting I:** FN16612 AB OR FNH16612 AB
11th	**Accounting II[3]:** FN16722 AB OR FNH16722 AB
12th	**Paid Practicum in Business Management[4]:** BA12212 AB OR BAH12212 AB OR **Unpaid Practicum in Business Management/d[4]:** BA12202 AB OR BAH12202 AB

Enrichment Courses:

- **Money Matters:** FN16201AB OR FNH16201AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Microsoft Office Specialist (MOS)-Word& Excel[1], Microsoft Office Specialist (MOS)- Word & Excel Expert[2] *(optional),* and Intuit QuickBooks Certified User (QBCU)[3]
- Not counted toward Performance Acknowledgment: OSHA 10-Hour General Industry Certification[4]

Available at:

- Polytechnic HS

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

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

Successful completion of the Accounting & Financial Services program of study will fulfill requirements of the Business and Industry Endorsement. Approved Program of Study-September 2019.

	Courses
9th	**Business Information Management[1,2]:** BA11412 AB OR BAH11412 AB
10th	**Entrepreneurship:** MK34401 AB OR MKH34401 AB
11th	**Entrepreneurship II[3]:** MK03423 AB OR MKH03423 AB
12th	**Paid Practicum in Business Management[4]:** BA12212 AB OR BAH12212 AB OR **Unpaid Practicum in Entrepreneurship/d[4]:** MK34801 AB OR MKH34801 AB OR **Honors Project-Based Research AB[4]:** CPH01500 AB

Enrichment Courses:

- **Accounting I:** FN16612AB OR FNH16612AB
- **Money Matters:** FN16201AB OR FNH16201AB
- **Mobile Application Development:** TA80390 AB OR TAH80390 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Microsoft Office Specialist MOS)-Word & Excel[1], Microsoft Office Specialist (MOS)- Word & Excel Expert[2] *(optional),* and Entrepreneurship and Small Business (ESB) [3] Certifications
- Not Counted towards Performance Acknowledgment: OSHA 10-Hour General Industry Certification[4]

Available at:

- Arlington Heights HS
- Carter-Riverside HS
- Diamond-Hill Jarvis HS
- Dunbar HS
- Eastern Hills HS
- North Side HS
- OD Wyatt HS
- Paschal HS
- Polytechnic HS
- South Hills HS
- Southwest HS
- Western Hills
- World Languages Institute HS
- Young Men's Leadership Academy HS

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

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

Successful completion of the Accounting & Financial Services program of study will fulfill requirements of the Business and Industry Endorsement. Approved Program of Study-September 2019.

	Courses
9th	**Principles of Business, Marketing, and Finance:** BA11201 AB OR BAH11201 AB
10th	**Fashion Marketing T:** MK34301 T OR MKH34301 T AND **Sports and Entertainment Marketing T:** MK34601 T OR MKH34601 T
11th	**Social Media Marketing T[1]:** MK34901 T OR MKH34901 T AND **Advertising T[1]:** MK34201 T OR MKH34201
12th	**Advanced Marketing/d[2]:** MK34700 AB OR MKH34700 AB OR **Paid Practicum in Marketing[2]:** MK34812 AB OR MKH34812 AB

Enrichment Courses:

- **Entrepreneurship:** MK34401 AB OR MKH34401 AB
- **Accounting I:** FN16612 AB OR FNH16612 AB
- **Money Matters:** FN16201 AB OR FNH16201 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Entrepreneurship and Small Business (ESB) Certification[1]
- Not Counted towards Performance Acknowledgment: OSHA 10-Hour General Industry Certification[2]

Available at:

- Benbrook HS
- Paschal HS

The Marketing program of study teaches CTE concentrators how to collect information to determine potential sales 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.

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

Successful completion of the Accounting & Financial Services program of study will fulfill requirements of the Business and Industry Endorsement. Approved Program of Study-September 2019.

	Courses
9th	**Principles of Business, Marketing, and Finance:** BA11201 AB OR BAH11201 AB
10th	**Social Media Marketing T:** MK34901 T OR MKH34901 T AND **Advertising T:** MK34201 T OR MKH34201
11th	**Advanced Marketing/d[1]:** MK34700 AB OR MKH34700 AB
12th	**Unpaid Practicum in Entrepreneurship/d[2]:** MK34801 AB OR MKH34801 AB OR **Paid Practicum in Marketing[2]:** MK34812 AB OR MKH34812 AB

Enrichment Courses:

- **Entrepreneurship:** MK34401 AB OR MKH34401 AB
- **Sports and Entertainment Marketing T:** MK34601 T OR MKH34601 T
- **Fashion Marketing T:** MK34301 T OR MKH34301 T
- **Virtual Business:** BA11201 AB or BAH11201 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Entrepreneurship and Small Business (ESB) Certification[1]
- Not Counted towards Performance Acknowledgment: OSHA 10-Hour General Industry Certification[2]

Available at:

- Trimble Technical High School

The Social Media Marketing program of study teaches CTE concentrators how to collect information to determine potential sales 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, using digital analytics.

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

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

	Courses
9th	**Principles of Business, Marketing, and Finance:** BA11201 AB OR BAH11201 AB
10th	**Business Law:** MK34901 T OR MKH34901 T
11th	**Business Management[1]:** BA12102 AB OR BAH12102 AB
12th	**Paid Practicum in Business Management[2]:** BA12212 AB OR BAH12212 AB OR **Unpaid Practicum in Entrepreneurship/d[2]:** MK34801 AB OR MKH34801 AB

Enrichment Courses:

- **Virtual Business:** BA11201 AB or BAH11201 AB
- **Global Business:** BA11801T OR Honors: BAH11801T

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Entrepreneurship and Small Business (ESB) Certification[1]
- Not Counted towards Performance Acknowledgment: OSHA 10-Hour General Industry Certification[2]

Available at:

- Trimble Technical High School

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

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

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

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

The Business, Marketing, and Finance Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations. The Finance Career Cluster focuses on planning, services for financial and investment planning, banking, insurance, and business financial management.

FWISD offers five (5) Career Focuses in the Business, Marketing, & Finance Career Cluster.

CAREER FOCUS	***BUSINESS MANAGEMENT***	***BUSINESS INFORMATION MANAGEMENT***
9TH GRADE	Principles of Business, Marketing, and Finance: BA11201 AB OR Honors: BAH11201 AB	Principles of Business, Marketing, and Finance: BA11201 AB OR Honors: BAH11201 AB
10TH GRADE	Business Information Management I: BA11412 AB OR Honors: BAH11412 AB	Business Information Management I: BA11412 AB OR Honors: BAH11412 AB
11TH GRADE	Entrepreneurship: MK34401 AB OR Honors: MKH34401 AB AND/OR Business Management: BA12102 AB OR Honors: BAH12102 AB OPTIONAL: Business Law: BA11701 AB OR Honors: BAH11701 AB OR Global Business: BA11801T OR Honors: BAH11801T	Business Information Management II: BA11522 AB OR Honors: BAH11522 AB
12TH GRADE	Accounting I: FN16612 AB OR Honors: FNH16612 AB AND/OR Paid Practicum in Business Management/Extended: BA12212 AB OR Honors: BAH12212 AB AND/OR Practicum in Business Management/d AB: BA12202 AB OR Honors: BAH12202 AB	Accounting I: FN16612 AB OR Honors: FNH16612 AB AND/OR Paid Practicum in Business Management/Extended: BA12212 AB OR Honors: BAH12212 AB AND/OR Practicum in Business Management/d: BA12202 AB OR Honors: BAH12202 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Microsoft Office Specialist (MOS) Certification - Word, Excel, PowerPoint, and Access; Entrepreneurship and Small Business (ESB) Certification	**Industry Certification Opportunities for Performance Acknowledgement:** Microsoft Office Specialist (MOS) Certification – Word, Excel, PowerPoint, and Access
Available At	**Eastern Hills HS, Arlington Heights HS, Dunbar HS, Paschal HS, Trimble Tech HS, O. D. Wyatt HS, Southwest HS, Western Hills HS, YMLA, WLI**	**Diamond Hill-Jarvis HS, Eastern Hills HS, North Side HS, Polytechnic HS, Trimble Tech HS, South Hills HS, Southwest HS, Western Hills HS**

CAREER FOCUS	***MARKETING***	***RETAIL & ENTREPRENEURSHIP***
9TH GRADE	Principles of Business, Marketing, and Finance: BA11201 AB OR Honors: BAH11201 AB	Principles of Business, Marketing, and Finance: BA11201 AB OR Honors: BAH11201 AB
10TH GRADE	Sports and Entertainment Marketing: MK34601T OR Honors: MKH34601T OR Fashion Marketing: MK34301T OR Honors: MKH34301T AND Advertising: MK34201T OR Honors: MKH34201T	Business Information Management I: BA11412 AB OR Honors: BAH11412 AB AND Fashion Marketing: MK34301T OR Honors: MKH34301T AND Advertising: MK34201T OR Honors: MKH34201T
11TH GRADE	Entrepreneurship: MK34401 AB OR Honors: MKH34401 AB AND/OR Advanced Marketing/d: MK34700 AB OR Honors: MKH34700 AB	Entrepreneurship: MK34401 AB OR Honors: MKH34401 AB AND Accounting I: FN16612 AB OR Honors: FNH16612 AB
12TH GRADE	Paid Practicum in Marketing/Extended AB: MK34812 AB OR Honors: MKH34812 AB OPTIONAL: Social Media Marketing: MK34901T OR Honors: MKH34901T	Advanced Marketing/d: MK34700 AB OR Honors MKH34700AB AND/OR Social Media Marketing: MK34901T OR Honors: MKH34901T
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Entrepreneurship and Small Business (ESB) Certification **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification	**Industry Certification Opportunities for Performance Acknowledgement:** Entrepreneurship and Small Business (ESB) Certification **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification
Available At	**Arlington Heights HS, Benbrook HS, and Paschal HS**	**Trimble Technical HS**

CAREER FOCUS	***ACCOUNTING AND FINANCE***
9TH GRADE	Principles of Business, Marketing, and Finance: BA11201 AB OR Honors: BAH11201 AB
10TH GRADE	Money Matters: FN16201 AB OR Honors: FNH16201 AB
11TH GRADE	Accounting I: FN16612 AB OR Honors: FNH16612 AB
12TH GRADE	Accounting II: FN16722 AB OR Honors: FNH16722 AB OR Paid Practicum in Business Management/Extended: BA12212 AB OR Honors: BAH12212 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Intuit QuickBooks Certification
Available At	Carter Riverside HS, Polytechnic HS, Trimble Tech HS, and O. D. Wyatt HS

COURSE DESCRIPTIONS FOR BUSINESS, MARKETING, AND FINANCE CLASSES

PRINCIPLES OF BUSINESS, MARKETING, AND FINANCE AB (PRINBMF AB)	**BAH11201AB**
In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economies and 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.	13011200 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: Principles of Business, Marketing, and Finance, 9th Edition 2017, Goodheart-Willcox Co. Prerequisite(s): None *Offered at: Benbrook MHS, Paschal HS*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF BUSINESS, MARKETING, AND FINANCE AB (PRINBMF AB/H)	**BAH11201AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13011200 Grade level: 9 - 10
Instructional Material: Principles of Business, Marketing, and Finance, 9th Edition 2017, Goodheart-Willcox Co. Prerequisite(s): None *Offered at: Benbrook MHS, Paschal HS*	HS Credit(s): 1 College Hour(s): NA **Tier II**
TOUCH SYSTEM DATA ENTRY T (TSDATAE T)	**BA11301T**
In Touch System Data Entry, students apply technical skills to address business applications of emerging technologies. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students will need to apply touch system data entry skills for production of business documents.	13011300 Grade level: 9 - 10 HS Credit(s): 0.5
Instructional Material: *Century 21 computer skills and Applications, Lesson 1-90, 10th Edition* Cengage Learning Prerequisite(s): None	College Hour(s): NA **Tier III**
BUSINESS LAW AB (BUSLAW AB)	**BA11701AB**
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.	13011700 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Law for Business and Personal Use, 2017,* Cengage Learning Inc. Prerequisite(s): Principles of Business, Marketing and Finance	College Hour(s): NA **Tier III**
HONORS BUSINESS LAW AB (BUSLAW AB/H)	**BAH11701AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13011700 Grade level: 11 – 12 HS Credit(s): 1
Instructional Material: *Law for Business and Personal Use, 2017,* Cengage Learning Inc. Prerequisite(s): Principles of Business, Marketing and Finance	College Hour(s): NA **Tier II**
BUSINESS MANAGEMENT AB (BUSMGT AB)	**BA12102AB**
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.	13012100 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Business Management 14th edition, 2017,* Cengage Learning Inc. Prerequisite(s): Business Information Management	College Hour(s): NA **Tier III**
HONORS BUSINESS MANAGEMENT AB (BUSMGT AB/H)	**BAH12102AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13012100 Grade level: 11-12 HS Credit(s): 1
Instructional Material: *Business Management 14th edition, 2017,* Cengage Learning Inc. Prerequisite(s): Business Information Management	College Hour(s): NA **Tier II**
GLOBAL BUSINESS T (GLOBBUS T)	**BA11801T**
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.	13011800 Grade level: 11 - 12 HS Credit(s): 0.5
Instructional Material: *Business, Marketing, Finance, IT & Media Site,* CEV Multimedia Ltd. Prerequisite(s): Business Law or Business Management	College Hour(s): NA **Tier III**
HONORS GLOBAL BUSINESS T (GLOBBUS T/H)	**BAH11801T**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13011800 Grade level: 11 - 12 HS Credit(s): 0.5
Instructional Material: *Business, Marketing, Finance, IT & Media Site,* CEV Multimedia Ltd. Prerequisite(s): Business Law or Business Management	College Hour(s): NA **Tier II**

BUSINESS INFORMATION MANAGEMENT I AB (BUSIM1 AB)	BA11412AB
In Business Information Management I, 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.	13011400 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: *Cashman Series*: *Microsoft Office 365 and Office 2016: Introductory,* Cengage Learning, Inc. Prerequisite(s): None	College Hour(s): NA **Tier III**
HONORS BUSINESS INFORMATION MANAGEMENT I AB (BUSIM1 AB/H)	**BAH11412AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13011400 Grade level: 9 – 12 HS Credit(s): 1
Instructional Material: *Cashman Series*: *Microsoft Office 365 and Office 2016: Introductory,* Cengage Learning, Inc. Prerequisite(s): None	College Hour(s): NA **Tier II**
BUSINESS INFORMATION MANAGEMENT II AB (BUSIM2 AB)	**BA11522AB**
In Business Information Management II, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software. Upon completion of this course, they are prepared to test for Microsoft Office Specialist (MOS) industry standard certification to receive a performance acknowledgement for the Business and Industry Endorsement.	13011500 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Microsoft Office 2013: Advanced, Enhanced,* Cengage Learning, Inc. Prerequisite(s): Business Information Management I	College Hour(s): NA **Tier III**
HONORS BUSINESS INFORMATION MANAGEMENT II AB (BUSIM2 AB/H)	**BAH11522AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13011500 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Cashman Series*: *Microsoft Office 365 and Office 2016: Intermediate,* Cengage Learning, Inc. Prerequisite(s): Business Information Management I	College Hour(s): NA **Tier II**
DUAL CREDIT BUSINESS INFORMATION MANAGEMENT I AB (BUSIM1 AB DC) **TCC COURSE: Business Computer Applications (BCIS 1305)** **Courses may change due to availability*	**BAD11412AB**
Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets databases, presentation graphics, and business-oriented utilization of the Internet.	13011400 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: TCC Course: Business Computer Applications (BCIS 1305) FWISD Prerequisite(s): None TCC Prerequisite(s): TSI *Offered only at: Marine Creek and TCC South Collegiate HS (P-Tech)*	College Hour(s): 3 **Tier I**
UNPAID PRACTICUM IN BUSINESS MANAGEMENT AB (PRACBM AB)	**BA12202AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Students will build a professional portfolio demonstrating skills in Business Management.	13012200 Grade level: 11-12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): 2 credits from a combination of Business courses *Offered at: Paschal and TCC South Collegiate HS*	College Hour(s): NA **Tier III**

HONORS UNPAID PRACTICUM IN BUSINESS MANAGEMENT AB (PRACBM AB/H)	BAH12202AB
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13012200 Grade level: 11-12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): 2 credits from a combination of Business courses *Offered at: Paschal and TCC South Collegiate HS*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN BUSINESS MANAGEMENT/EXTENDED AB (EXPBM2 AB)	**BA12212AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decision. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13012215 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): 2 credits from a combination of Business courses *Offered only at: Carter Riverside, North Side, Paschal, Polytechnic, Trimble Tech and O. D. Wyatt*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN BUSINESS MANAGEMENT/EXTENDED AB (EXPBM2 AB/H)	**BAH12212AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13012215 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): 2 credits from a combination of Business courses *Offered only at: Carter Riverside, North Side, Paschal, Polytechnic, Trimble Tech and O. D. Wyatt*	HS Credit(s): 3 College Hour(s): NA **Tier II**
MONEY MATTERS AB (MONEYM AB)	**FN16201AB**
In Money Matters, students will investigate money management from a personal financial perceptive. Students will apply critical-thinking skills to analyze financial options based on current and projected economic factors. Students will gain knowledge and skills necessary to establish short-term and long-term financial goals. Students will examine various methods of achieving short-term and long-term financial goals through various methods such as investing, tax planning, asset allocating, risk management, retirement planning, and estate planning.	13016200 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): None	College Hour(s): NA **Tier III**
HONORS MONEY MATTERS AB (MONEYM AB/H)	**FNH16201AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13016200 Grade level: 10 – 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): None	College Hour(s): NA **Tier II**
ACCOUNTING I AB (ACCOUNT1 AB)	**FN16612AB**
In Accounting I, students will investigate the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students will reflect on this knowledge as they engage in the process of recording, classifying, summarizing, analyzing, and communicating accounting information. Students will formulate and interpret financial information for use in management decision making. Accounting includes such activities as bookkeeping, systems design, analysis, and interpretation of accounting information.	13016600 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Century 21 Accounting: General Journal,* Cengage Learning Prerequisite(s): Money Matters *Offered only at: Arlington Heights, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Trimble Tech, Western Hills, and O.D. Wyatt*	College Hour(s): NA **Tier III**

HONORS ACCOUNTING I AB (ACCOUNT1 AB/H)	FNH16612AB
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13016600 Grade level: 11 – 12
Instructional Material: *Century 21 Accounting: General Journal,* Cengage Learning Prerequisite(s): Money Matters in Accounting & Finance Focus or Business Information Management II if Business Information Management Focus *Offered at: Arlington Heights, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Trimble Tech, Western Hills, and O.D. Wyatt*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ACCOUNTING II AB (ACCOUNT2 AB)	**FN16722AB**
In Accounting II, students will continue the investigation of the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students will reflect on this knowledge as they engage in various managerial, financial, and operational accounting activities. Students will formulate, interpret, and communicate financial information for use in management decision-making. Students will use equations, graphical representations, accounting tools, spreadsheet software, and accounting systems in real-world situations to maintain, monitor, control, and plan the use of financial resources.	13016700 Grade level: 12 HS Credit(s): 1
Instructional Material: *Century 21 Accounting: General Journal,* Cengage Learning Prerequisite(s): Accounting I *Offered only at: Polytechnic*	College Hour(s): NA **Tier III**
HONORS ACCOUNTING II AB (ACCOUNT2 AB/H)	**FNH16722AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13016700 Grade level: 12
Instructional Material: *Century 21 Accounting: General Journal,* Cengage Learning Prerequisite(s): Accounting I *Offered only at: Polytechnic*	HS Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT ACCOUNTING IA (ACCOUNT1 A DC) **TCC Course: Principles of Financial Accounting: (ACCT 2301)** **Courses may change due to availability*	**FND16612A**
This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholders' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company. Students will be exposed to International Financial Reporting Standards (IFRS).	13016600 Grade level: 11 - 12 HS Credit(s): 0.5
Instructional Material: TCC Course: Principles of Financial Accounting (ACCT 2301) TCC Prerequisite(s): TSI compliant in Math TCC Recommended Co-requisites: MATH 1324 *Course taught by an approved adjunct instructor.* *Offered only at: Marine Creek and TCC South Collegiate HS (P-Tech)*	College Hour(s): 3 **Tier I**
DUAL CREDIT ACCOUNTING IB (ACCOUNT1B DC) **TCC Course: Principles of Managerial Accounting: (ACCT 2302)** **Courses may change due to availability*	**FND16612B**
This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation.	13016600 Grade level: 11 - 12 HS Credit(s): 0.5
Instructional Material: TCC Course: Principles of Managerial Accounting (ACCT 2302) TCC Prerequisite(s): ACCT-2301 *Course taught by an approved adjunct instructor.* *Offered only at: Marine Creek and TCC South Collegiate HS (P-Tech)*	College Hour(s): 3 **Tier I**
ENTREPRENEURSHIP AB (ENTREP AB)	**MK34401AB**
Students will be introduced to knowledge and skills entrepreneurs use on a daily basis. In this course, students will participate in activities to use the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students understand the capital required, the return on investment desired, and the potential for profit.	13034400 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Entrepreneurship: Owning Your Future 12e,* Pearson Education, Inc. Prerequisite(s): Advertising or Business Information Management *Offered only at: Arlington Heights, Benbrook, Eastern Hills, North Side, Paschal, Trimble Tech, OD Wyatt and YMLA*	College Hour(s): NA **Tier III**

HONORS ENTREPRENEURSHIP AB (ENTREP AB/H)	**MKH34401AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13034400 Grade level: 11 – 12
Instructional Material: *Entrepreneurship: Owning Your Future 12e,* Pearson Education, Inc. Prerequisite(s): Advertising or Business Information Management *Offered only at: Arlington Heights, Benbrook, Eastern Hills, North Side, Paschal, Trimble Tech, OD Wyatt and YMLA*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ENTREPRENEURSHIP II AB (ENTPRNR2 AB) *(Available Fall 2022)*	**MK03423AB**
Students will be introduced to knowledge and skills entrepreneurs use on a daily basis. In this course, students will participate in activities to use the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students understand the capital required, the return on investment desired, and the potential for profit.	N1303423 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Entrepreneurship: Owning Your Future 12e,* Pearson Education, Inc. Prerequisite(s): Entrepreneurship *Offered only at: Arlington Heights, Benbrook, Eastern Hills, North Side, Paschal, Trimble Tech, OD Wyatt and YMLA*	College Hour(s): NA **Tier III**
HONORS ENTREPRENEURSHIP II AB (ENTPRNR2 AB/H) *(Available Fall 2022)*	**MKH03423AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303423 Grade level: 11 – 12
Instructional Material: *Entrepreneurship: Owning Your Future 12e,* Pearson Education, Inc. Prerequisite(s): Entrepreneurship *Offered only at: Arlington Heights, Benbrook, Eastern Hills, North Side, Paschal, Trimble Tech, OD Wyatt and YMLA*	HS Credit(s): 1 College Hour(s): NA **Tier II**
MOBILE APPLICATION DEVELOPMENT (TAMBAD AB) *(Available Fall 2022)*	**TA80390AB**
Mobile Application Development fosters creativity and innovation by presenting opportunities to design, implement, and deliver meaningful projects using mobile computing devices. Students will collaborate with one another, their instructor, and various electronic communities to solve problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use software development concepts to access, analyze, and evaluate information needed to program mobile devices. By using software design knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of mobile application development through the study of development platforms, programming languages, and software design standards.	03580390 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials. Prerequisite(s): Entrepreneurship	College Hour(s): NA **Tier III**
HONORS MOBILE APPLICATION DEVELOPMENT (TAMBAD AB/H) *(Available Fall 2022)*	**TAH80390AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	03580390 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials. Prerequisite(s): Entrepreneurship	College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN ENTREPRENEURSHIP AB (PRACENTRE AB) *(Available Fall 2023)*	**MK34801AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. In addition to developing advanced technical knowledge and skills needed for success in the career fields of interest, students will be expected to develop an increasing understanding of the industry with a focus on applying management, finances, product development, and other entrepreneurship concepts in a professional environment. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Students will build a professional portfolio demonstrating skills in Entrepreneurship.	N1303425 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials. Prerequisite(s): (Dependent upon program) Fashion Design II, Entrepreneurship II, Business Management, or Mobile Application Development	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN ENTREPRENEURSHIP AB/H (PRACENTRE AB/H) *(Available Fall 2023)*	**MKH34801AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303425 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials. Prerequisite(s): Entrepreneurship II, Business Management, or Mobile Application Development	College Hour(s): NA **Tier II**

ADVERTISING T (ADV T)	MK34201T
Advertising focuses on the concepts and skills associated with the dynamic advertising industry. The course introduces the principles and practices of advertising. Students will gain knowledge of techniques used in current advertising, including print, broadcast, and digital media. The course explores the social, ethical, and legal issues of advertising, historical influences, strategies, and media decision processes as well as integrated marketing communications. The course provides an overview of how communication tools can be used to reach target audiences and increase consumer knowledge. Students will learn the goals and objectives of advertising, identify and analyze advertisements, select media, and develop advertisements. Students with plans to major in business and marketing gain insight into the marketing arena and learn skills they need to compete successfully for jobs of the future.	13034200 Grade level: 10 - 12 HS Credit(s): 0.5
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site***,** CEV Multimedia Ltd.**,** Prerequisite(s): Principles of Business, Marketing, and Finance *This course is to be taught by a marketing certified teacher.* *Offered only at: Benbrook, Paschal and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS ADVERTISING T (ADV T/H)	**MKH34201T**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13034200 Grade level: 10 – 12
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site***,** CEV Multimedia Ltd. Prerequisite(s): Principles of Business, Marketing, and Finance *Course taught by locally certified gifted CTE and marketing teacher* *Offered only at: Benbrook, Paschal and Trimble Tech*	HS Credit(s): 0.5 College Hour(s): NA **Tier II**
FASHION MARKETING T (FASHMKTG T)	**MK34301T**
This specialized course is for students who have a career interest in apparel, fashion, and/or accessory marketing. Instruction will cover all aspects of the industry. Students in this course will focus on each of the functions of marketing and how they relate to the fashion industry. Students will be able to apply these principles and concepts in marketing in their careers and in everyday life. Students in Fashion Marketing will gain a working knowledge of promotion, textiles, merchandising, mathematics, selling, visual merchandising, and career opportunities in this field.	13034300 Grade level: 10 - 12 HS Credit(s): 0.5
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site***,** CEV Multimedia Ltd. Prerequisite(s): Principles of Business, Marketing, and Finance or Fashion Design *Course taught by either a marketing or family consumer sciences certified teacher* *Offered only at: Benbrook and Paschal*	College Hour(s): NA **Tier III**
HONORS FASHION MARKETING T (FASHMKTG T/H)	**MKH34301T**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13034300 Grade level: 10 – 12
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site***,** CEV Multimedia Ltd. Prerequisite(s): Principles of Business, Marketing, and Finance or Fashion Design *Course taught by locally certified gifted marketing or family consumer sciences certified teacher* *Offered only at: Benbrook and Paschal*	HS Credit(s): 0.5 College Hour(s): NA **Tier II**
SPORTS AND ENTERTAINMENT MARKETING T (SPORTSEM T)	**MK34601T**
Sports and Entertainment Marketing provides students information about careers in the sports and entertainment industry. They will learn the basic principles of marketing and how they apply to the sponsorships, promotion, advertising, sales, event marketing, and communications necessary for a successful sports or entertainment event. Students will acquire the knowledge required to produce a sports and entertainment event and explore the education requirements to become a professional in this growing industry. The areas this course will cover include basic marketing, target marketing and segmentation, sponsorship, event marketing, promotions, sponsorship proposals, and implementation of sports and entertainment marketing plans. This course will also provide students an opportunity to develop promotional plans, sponsorship proposals, endorsement contracts, sports and entertainment marketing plans, and evaluation and management techniques.	13034600 Grade level: 10 - 12 HS Credit(s): 0.5
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site***,** CEV Multimedia Ltd.**,** Prerequisite(s): Principles of Business, Marketing, and Finance *Offered only at: Benbrook, and Paschal*	College Hour(s): NA **Tier III**
HONORS SPORTS AND ENTERTAINMENT MARKETING T (SPORTSEM T/H)	**MKH34601T**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13034600 Grade level: 10 - 12
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site***,** CEV Multimedia Ltd. Prerequisite(s): Principles of Business, Marketing, and Finance *Offered only at: Benbrook, and Paschal*	HS Credit(s): 0.5 College Hour(s): NA **Tier II**
SOCIAL MEDIA MARKETING (SOCMEDMK T)	**MK34901T**
The course is designed to look at the rise of social media and how it has transformed the business as we once knew it. It will look at how marketers are integrating social media tools in their overall marketing strategy and how they are measuring success in this brave new world. The students will learn about the multi-disciplinary implications and how to manage a successful social media presence for an organization, as well as techniques	13034650 Grade level: 11 - 12 HS Credit(s): 0.5

for gaining customer and consumer buy-in to achieve their marketing goals.	
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site*, CEV Multimedia Ltd. Prerequisite(s): Any Marketing course *Offered only at: Benbrook, Paschal and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS SOCIAL MEDIA MARKETING T (SOCMEDMK T/H)	**MKH34901T**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13034650 Grade level: 11 – 12
Instructional Material: *ICEV Business, Marketing, Finance, IT & Media Site*, CEV Multimedia Ltd. Prerequisite(s): Any Marketing course *Offered only at: Benbrook, Paschal and Trimble Tech*	HS Credit(s): 0.5 College Hour(s): NA **Tier II**
ADVANCED MARKETING AB/D (ADVMKT AB)	**MK34700AB**
In Advanced Marketing, students will gain knowledge and skills that help them become proficient in one or more of the marketing functional areas. In this double period course, students will illustrate appropriate management and research skills to solve problems related to marketing. This course covers technology, communication, and customer-service skills.	13034700 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Two Marketing courses within the Marketing strand *Offered only at: Arlington Heights, Benbrook, Paschal and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS ADVANCED MARKETING/D AB (ADVMKT AB/H)	**MKH34700AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13034700 Grade level: 11 – 12
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Two Marketing courses *Offered only at: Arlington Heights, Benbrook, Paschal and Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN MARKETING/EXTENDED AB (EXPRMKT1 AB)	**MK34812AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. Classroom instruction focuses on advanced concepts and skills for marketing occupations with an emphasis on the total marketing process, sales promotion, buying, management, entrepreneurship, and careers in the field of marketing. Through course required employment, students gain knowledge and skills that help them become proficient in one or more of the marketing functional areas. Students will illustrate appropriate management and research skills to create the marketing mix. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. The co-requisite extension is included in the Practicum, and is designed to give students supervised practical application of previously studied knowledge and skills. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or an average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13034805 Grade level: 12 HS Credit(s): 3
Instructional Material: *Goodheart - Willcox Marketing Dynamics, 3rd Edition 2014,* Goodheart-Willcox Co. Prerequisite(s): Two Marketing courses within the Marketing strand *Offered only at: Benbrook and Paschal*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN MARKETING AB/EXTENDED (EXPRMKT1 AB/H)	**MKH34812AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13034805 Grade level: 12
Instructional Material: *Goodheart - Willcox Marketing Dynamics, 3rd Edition 2014,* Goodheart-Willcox Co. Prerequisite(s): Two Marketing courses within the Marketing strand *Offered only at: Benbrook and Paschal*	HS Credit(s): 3 College Hour(s): NA **Tier II**
HONORS PROJECT-BASED RESEARCH AB (PROBS1 AB/H) *(Available Fall 2023)*	**CPH01500AB**
Students will research a real-world problem and possible solutions throughout this course. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. This course must be cooperatively planned and supervised by the teacher ensuring that the student has guidance and support of a mentor or interdisciplinary team. The district must maintain a written project plan for each student enrolled in the course.	12701500 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Specific to program focus/pathway and is the previous course in the sequence. *Offered at: All high school campuses*	College Hour(s): NA **Tier II**

For the graduating class of 2024 and up only.

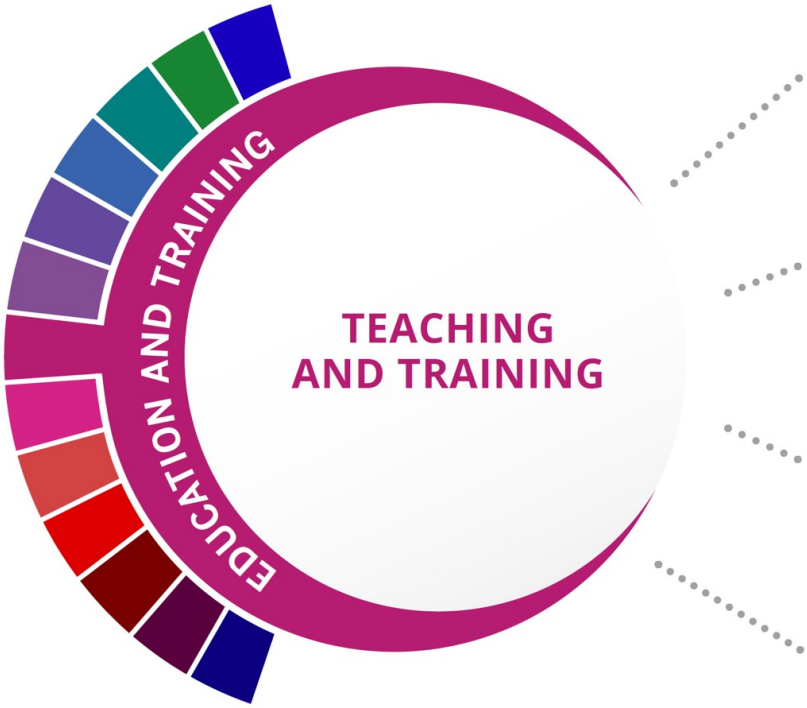
TEACHING AND TRAINING*

(Previously Teaching & Learning)

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator: Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.

**Tier 1 Teaching & Training Program of Study*



	Courses
9th	**Principles of Education and Training:** ED14201 AB OR EDH14201 AB
10th	**Human Growth and Development[2]:** ED14302 AB OR EDH14302 AB
11th	**Instructional Practices/d:** ED14402 AB OR EDH14402 AB
12th	**Unpaid Practicum in Education and Training/d[1]:** ED14502 AB OR EDH14502 AB OR **Paid Practicum in Education and Training[1]:** ED14512 AB OR EDH14512 AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Educational Aide I[1]
- Not Counted towards Performance Acknowledgment: OSHA 10-Hour General Industry Certification[2]

Available at:

- Arlington Heights HS
- Benbrook HS
- Carter-Riverside HS
- Diamond Hill Jarvis HS
- Dunbar HS
- Eastern Hills HS
- North Side HS
- OD Wyatt HS
- Paschal HS
- Polytechnic HS
- South Hills HS
- Southwest HS
- Western Hills HS

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

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

Successful completion of the Teaching and Training program of study will fulfill requirements of the Public Service Endorsement.
Approved Statewide Program of Study – September 2019.

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.

FWISD offers one (1) Career Focus in the Education and Training Career Cluster.

CAREER FOCUS	***TEACHING & LEARNING***
9TH GRADE	Principles of Education and Training: ED14201 AB OR Honors: EDH14201 AB
10TH GRADE	Human Growth and Development: ED14302 AB OR Honors: EDH14302 AB
11TH GRADE	Instructional Practices in Education and Training/d: ED14402 AB OR Honors: EDH14402 AB
12TH GRADE	Unpaid Practicum in Education and Training/d: ED14502 AB OR Honors: EDH14502 AB OR Paid Practicum in Education and Training: ED14512 AB OR Honors: EDH14512 AB OPTIONAL: Lifetime Nutrition and Wellness: HV24501T OR Honors: HVH24501T
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Educational Aide I **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification
Available At	**Arlington Heights HS, Dunbar HS, Carter-Riverside HS, South Hills HS, Diamond Hill-Jarvis HS, Eastern Hills HS, North Side HS, Paschal HS, Polytechnic HS, Trimble Tech HS, Southwest HS, Western Hills HS, and O. D. Wyatt HS**

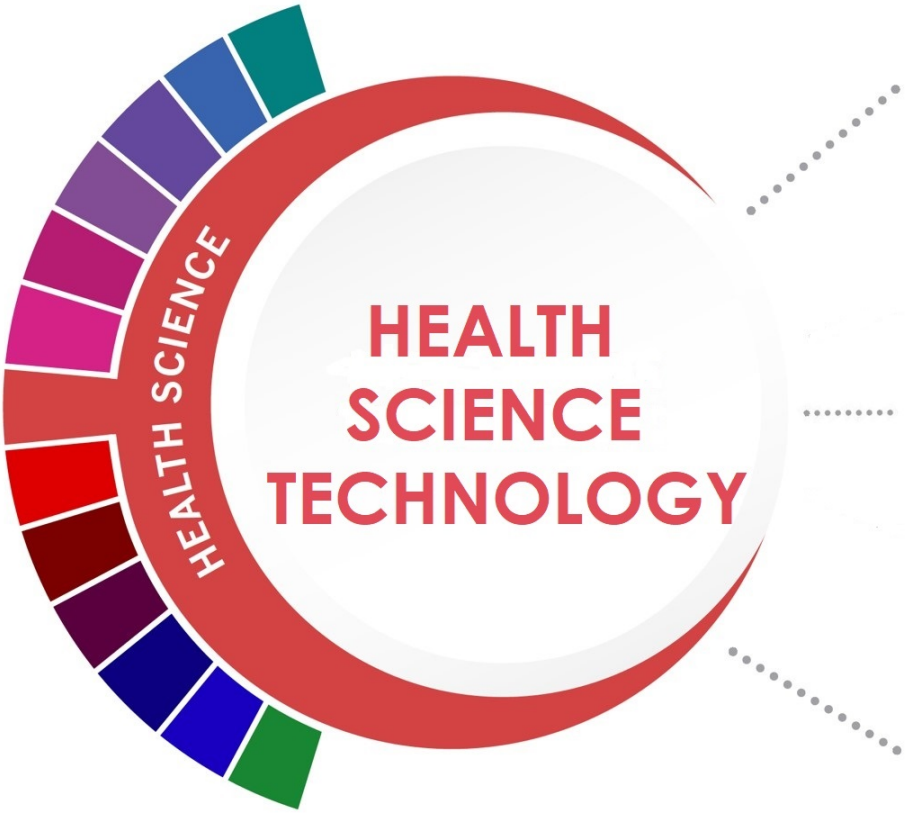
COURSE DESCRIPTIONS FOR ALL EDUCATION AND TRAINING CLASSES

PRINCIPLES OF EDUCATION AND TRAINING AB (PRINEDTR AB)	**ED14201AB**
The course, Principles of Education and Training, is designed to introduce students to the various careers available within the education and training career cluster. Students use self-knowledge and educational and career information to analyze various careers within the education and training career cluster. They will also gain an understanding of the basic knowledge and skills essential to careers within the education and training career cluster.	13014200 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: *ICEV Family and Consumer Sciences Site,* CEV Multimedia Ltd., *ISBN#: 9781614594963* Prerequisite(s): None *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF EDUCATION AND TRAINING AB (PRINEDTR AB/H)	**EDH14201AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13014200 Grade level: 9 – 10
Instructional Material: *ICEV Family and consumer Sciences Site,* CEV Multimedia Ltd. Prerequisite(s): None *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	HS Credit(s): 1 College Hour(s): NA **Tier II**
HUMAN GROWTH AND DEVELOPMENT AB (HUGRDEV AB)	**ED14302AB**
Human Growth and Development is an examination of human development across the lifespan with emphasis upon research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones. The course covers material that is generally taught in a postsecondary, one-semester introductory course in developmental psychology or human development.	13014300 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: *Lifespan Development* Goodheart-Willcox Co. Prerequisite(s): Principles of Education and Training *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS HUMAN GROWTH AND DEVELOPMENT AB (HUGRDEV ABH)	**EDH14302AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13014300 Grade level: 10 – 12
Instructional Material: *Lifespan Development,* Goodheart-Willcox Co. Prerequisite(s): Principles of Education and Training *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	HS Credit(s): 1 College Hour(s): NA **Tier II**
INSTRUCTIONAL PRACTICES IN EDUCATION AND TRAINING/D AB (INPREDTR AB)	**ED14402AB**
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. In this double-period course, 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 and middle school 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.	13014400 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Human Growth and Development *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS INSTRUCTIONAL PRACTICES IN EDUCATION AND TRAINING/D AB (INPREDTR AB/H)	**EDH14402AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13014400 Grade level: 11 - 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Human Growth and Development *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	HS Credit(s): 2 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN EDUCATION AND TRAINING/D AB (PRACEDTR AB)	**ED14502AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. Unpaid Practicum in Education and Training is an unpaid field-based internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. In this double-period course, 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 and middle school 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	13014500 Grade level: 12 HS Credit(s): 2

other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Instructional Practices in Education and Training *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN EDUCATION AND TRAINING/D AB (PRACEDTR AB/H)	**EDH14502AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13014500 Grade level: 12
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Instructional Practices in Education and Training *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	HS Credit(s): 2 College Hour(s): NA **Tier II**
DUAL CREDIT UNPAID PRACTICUM IN EDUCATION AND TRAINING/D A (PRACEDTR A DC) **TCC Course: Introduction to the Teaching Profession (EDUC 1301)** **Courses may change due to availability*	**EDD14502A**
A study of the physical, emotional, social, language, and cognitive factors impacting growth and development of children through adolescence. An enriched, integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high-need fields. The course provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations and provides students with support from college and school faculty, preferable in small cohort groups, for the purpose of introduction to analysis of the culture of schooling and classrooms. Course content should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Course must include a minimum of 16 contact hours of field experience in P-12 classrooms. Criminal background check required prior to enrolling. Field experience required.	13014500 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Instructional Practices in Education and Training TCC Prerequisite(s): TSI *Course taught by an approved adjunct instructor.* *Offered only at: Polytechnic (P-TECH Program)*	College Hour(s): 3 **Tier I**
DUAL CREDIT UNPAID PRACTICUM IN EDUCATION AND TRAINING/D B (PRACEDTR B DC) **TCC Course: Introduction to Special Populations (EDUC 2301)** **Courses may change due to availability*	**EDD14502B**
An enriched, integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspective of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning. The course provides students with opportunities to participate in early field observations of P-12 special populations and should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Must include a minimum of 15 contact hours of field experience in P-12 classrooms with special populations. Criminal background check required prior to enrolling.	13014500 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Instructional Practices in Education and Training TCC Prerequisite(s): TSI; EDUC 1301 *Course taught by an approved adjunct instructor.* *Offered only at: Polytechnic (P-TECH Program)*	College Hour(s): 3 **Tier I**
PAID PRACTICUM IN EDUCATION AND TRAINING/EXTENDED AB (EXPREDT2 AB)	**ED14512AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is a field-based paid internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13014515 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Instructional Practices in Education and Training *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	College Hour(s): NA **Tier III**

HONORS PAID PRACTICUM IN EDUCATION AND TRAINING/EXTENDED AB (EXPREDT2 AB/H)	**EDH14512AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13014515 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Instructional Practices in Education and Training *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	HS Credit(s): 3 College Hour(s): NA **Tier II**
LIFETIME NUTRITION AND WELLNESS T (LNURTWEL T) *(Available through 2022)*	**HV24501T**
This laboratory course allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness. This course concentrates on nutrition, food choices, and food management skills. Students address nutrition and food preparation from the perspective of food habits and wellness, menu planning, special dietary needs, food costs and budgeting, consumer food-buying strategies, food safety and sanitation, preparation and storage practices. This course will help students gain the knowledge to pursue careers related to hospitality and tourism, education and training, human services, and health sciences.	13024500 Grade level: 10 - 12 HS Credit(s): 0.5
Instructional Material: *Guide to Good Food,* Goodheart-Willcox Co. Prerequisite(s): Principles of Human Services, Principles of Hospitality and Tourism, Principles of Health Science, or Principles of Education and Training *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS LIFETIME NUTRITION AND WELLNESS T (LNURTWEL T/H) *(Available through 2022)*	**HVH24501T**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13024500 Grade level: 10 - 12
Instructional Material: *Guide to Good Food,* Goodheart-Willcox Co. Prerequisite(s): Principles of Human Services, Principles of Hospitality and Tourism, Principles of Health Science, or Principles of Education and Training *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	HS Credit(s): 0.5 College Hour(s): NA **Tier II**

For the graduating class of 2024 and up only.



MEDICAL BILLING & CODING

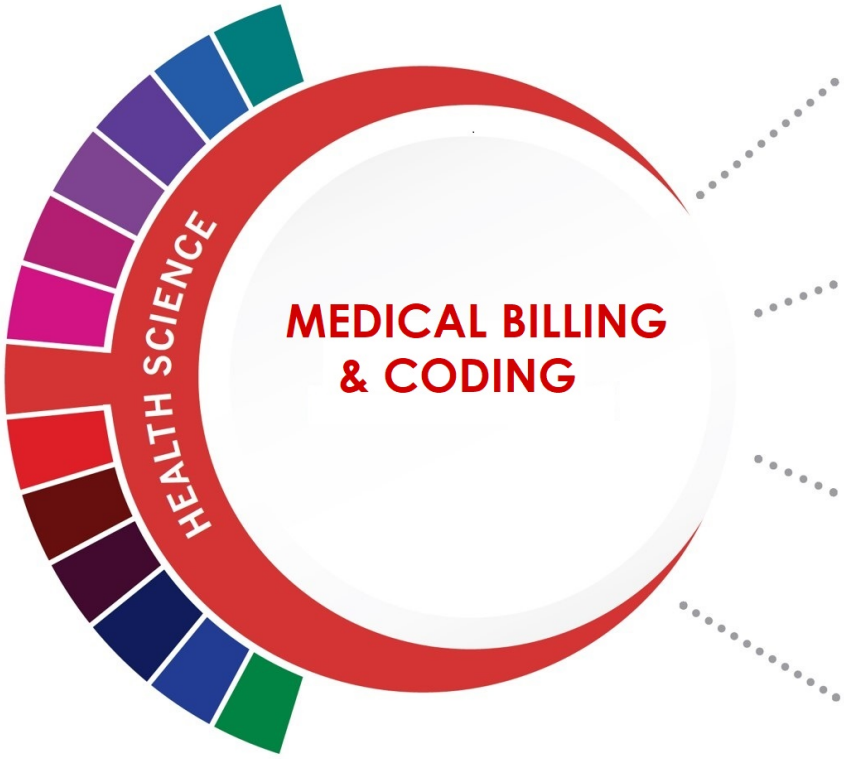
CENTRAL STERILE PROCESSING

HEALTHCARE THERAPEUTICS:

- PATIENT CARE TECHNICIAN
- PHARMACY TECHNICIAN
- EMERGENCY MEDICAL CARE

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator:
Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.



	Courses
9th	**Principles of Health Science:** HS02022 AB OR HSH02022 AB
10th	**Health Science Theory:** HS02042 AB OR HSH02042 AB
11th	**Unpaid Practicum in Health Science I/d (General Clinical Skills)[2]:** HS05010 AB OR HSH05010 AB
12th	**Unpaid Practicum in Health Science II/d (Medical Billing and Coding)[1]:** HS05134 AB OR HSH05134 AB OR **World Health Research AB[1]:** HS02092 AB OR HSH02092 AB OR **Project Based Research in Health Science[1]**: HS01532 AB OR HSH01532 AB

Enrichment Courses:

- **Business Information Management I**: BA11412 AB OR BAH11412 AB
- **Anatomy and Physiology**: HS02062 AB OR HSH02062 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Certified Coding Associate or Medical Coding and Billing Specialist Certification[1]
- Not Counted towards Performance Acknowledgment: OSHA 10-Hour General Industry Certification; BLS/CPR Certification[2]

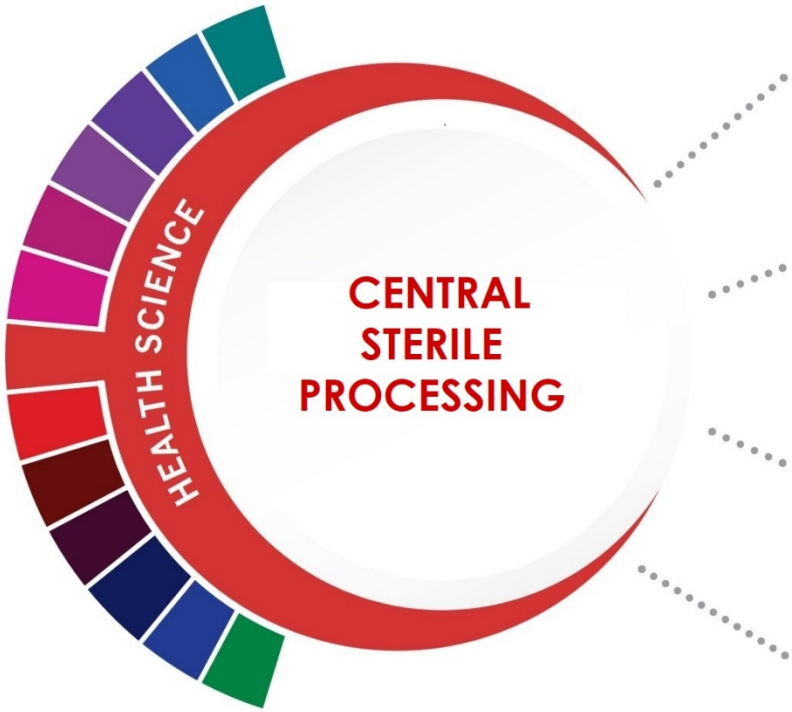
Available at:

- North Side HS
- OD Wyatt HS
- Trimble Technical HS

The Medical Billing and Coding program of study focuses on exposing students to the management and use of patient information in the healthcare field. Students may learn about and research recent modifications of computerized healthcare and the process of creating and maintaining hospital and patient records and billing in accordance with regulatory requirements of the healthcare system. Students may also practice writing and interpreting medical reports.

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

Successful completion of the Health Informatics program of study will fulfill requirements of the Public Service Endorsement. Locally approved Program of Study - September 2019.



	Courses
9th	**Principles of Health Science:** HS02022 AB OR HSH02022 AB AND/OR **Honors Principles of Biomedical Science (PLTW)**: HSH2092 AB
10th	**Honors Human Body Systems (PLTW):** HSH2093 AB
11th	**Unpaid Practicum in Health Science I/d (General Clinical Skills)[2,3]:** HS05010 AB OR HSH05010 AB
12th	**Dual Credit Unpaid Practicum in Health Science II/d (Central Sterile Processing)[1]:** HSD02052 AB OR **Project Based Research in Health Science:** HS01532 AB OR HSH01532 AB

Enrichment Courses:

- **Anatomy and Physiology:** HS02062 AB OR HSH02062 AB
- **Medical Microbiology:** HS02071 AB OR HSH02071 AB
- **Pathophysiology:** HS20801 AB OR HSH20801 AB
- **Pharmacology:** HS02044 AB OR HSH2044 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: N/A
- Not Counted towards Performance Acknowledgment: Sterile Processing and Distribution Technician Certification[1], OSHA 10-Hour General Industry Certification[2] and BLS/CPR Certification[3]

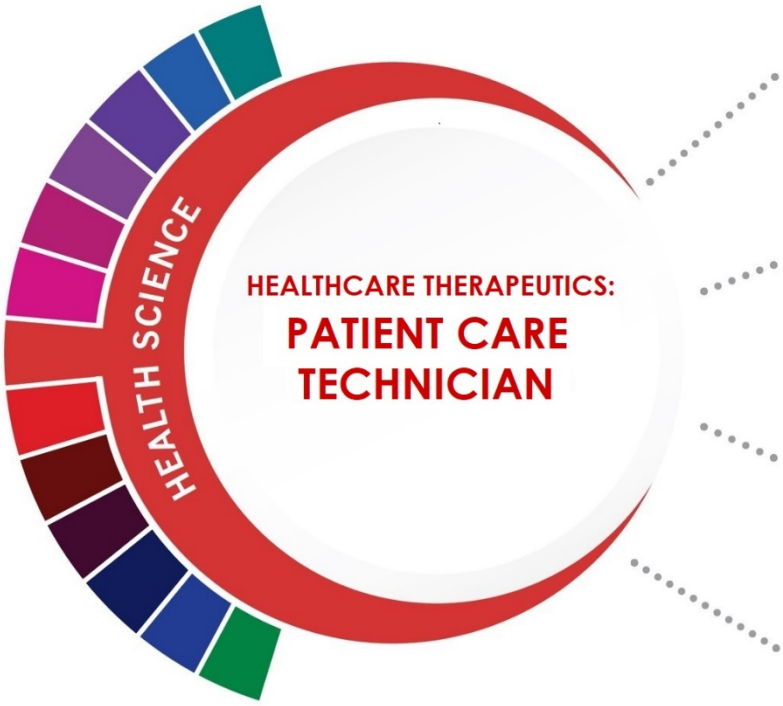
Available at:

- Texas Academy of Biomedical Sciences (TABS) HS

Healthcare Therapeutic' s Certified Sterile Processing program of study under the Healthcare Therapeutics focuses on the practice of the cleaning and sterilization of used surgical instruments and other medical supplies to ensure the safety, redistribution, and reuse of instruments for future patients.

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

Successful completion of the Healthcare Therapeutic: Central Sterile Processing program of study will fulfill requirements of the Public Service Endorsement. Locally approved Program of Study - September 2019.



	Courses
9th	**Principles of Health Science:** HS02022 AB OR HSH02022 AB
10th	**Health Science Theory:** HS02042 AB OR HSH02042 AB
11th	**Unpaid Practicum in Health Science I/d (General Clinical Skills)[5,6]:** HS05010 AB OR HSH05010 AB
12th	**Unpaid Practicum in Health Science II/d (Patient Care Technician)[1,2,3,4]:** HS30204 AB OR HSH30204 AB OR **Project Based Research in Health Science:** HS01532 AB OR HSH01532 AB

Enrichment Courses:

- **Anatomy and Physiology:** HS02062 AB OR HSH02062 AB
- **Medical Microbiology:** HS02071 AB OR HSH02071 AB
- **Pathophysiology:** HS20801 AB OR HSH20801 AB
- **Pharmacology:** HS02044 AB OR HSH2044 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Patient Care Technician Certification[1], Phlebotomy Certification (CPT)[2], Emergency Medical Technician (EMT) Certification[3], and Certified EKG Technician (CET)[4]
- Not Counted towards Performance Acknowledgment: OSHA 10-Hour General Industry Certification[5] and BLS/CPR Certification[6]

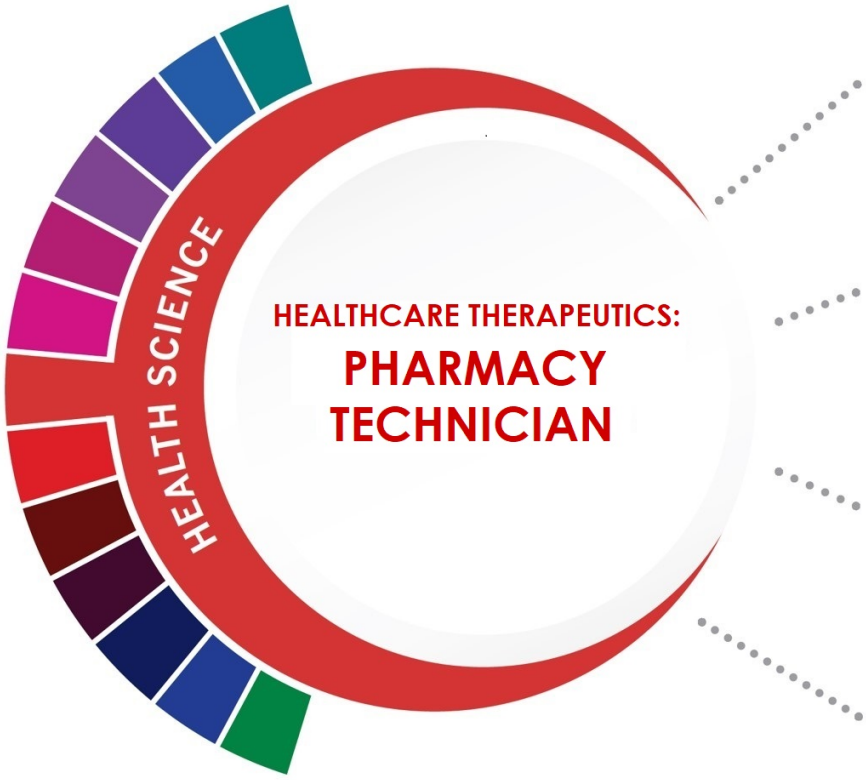
Available at:

- North Side HS
- OD Wyatt HS
- Texas Academy of Biomedical Sciences (TABS) HS
- Trimble Technical HS

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

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

Successful completion of the Healthcare Therapeutics: Patient Care Technician program of study will fulfill requirements of the Public Service Endorsement. Locally approved Program of Study - September 2019.



	Courses
9th	**Principles of Health Science:** HS02022 AB OR HSH02022 AB
10th	**Health Science Theory:** HS02042 AB OR HSH02042 AB
11th	**Unpaid Practicum in Health Science I/d (General Clinical Skills)[2,3]:** HS05010 AB OR HSH05010 AB
12th	**Unpaid Practicum in Health Science II/ d (Pharmacy Technician)[1]:** HS05214 AB OR HSH05214 AB OR **Project Based Research in Health Science:** HS01532 AB OR HSH01532 AB

Enrichment Courses:

- **Pharmacology:** HS02044 AB OR HSH2044 AB
- **Anatomy and Physiology:** HS02062 AB OR HSH02062 AB
- **Medical Microbiology:** HS02071 AB OR HSH02071 AB
- **Pathophysiology:** HS20801 AB OR HSH20801 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Certified Pharmacy Technician (CPhT)[1]
- Not Counted towards Performance Acknowledgment: OSHA 10-Hour General Industry Certification[2] and BLS/CPR Certification[3]

Available at:

- North Side HS
- OD Wyatt HS
- Texas Academy of Biomedical Sciences (TABS) HS
- Trimble Technical HS

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

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

Successful completion of the Healthcare Therapeutics: Pharmacy Technician program of study will fulfill requirements of the Public Service Endorsement. Locally approved Program of Study - September 2019.

	Courses
9th	**Principles of Health Science:** HS02022 AB OR HSH02022 AB
10th	**Health Science Theory:** HS02042 AB OR HSH02042 AB
11th	**Unpaid Practicum in Health Science I/d (General Clinical Skills)** [5,6]**:** HS05010 AB OR HSH05010 AB
12th	**Unpaid Practicum in Health Science II/d (Emergency Medical Care)** [1,2,3,4,7]**:** HS05033 AB OR HSHS05033 AB OR **Project Based Research in Health Science:** HS01532 AB OR HSH01532 AB[7]

Enrichment Courses:

- **Anatomy and Physiology:** HS02062 AB OR HSH02062 AB
- **Medical Microbiology:** HS02071 AB OR HSH02071 AB
- **Pathophysiology:** HS20801 AB OR HSH20801 AB
- **Pharmacology:** HS02044 AB OR HSH2044 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Emergency Medical Technician (EMT) [1], Patient Care Technician [2] Phlebotomy Certification (CPT) [3], and Certified EKG Technician (CET) [4]
- Not Counted towards Performance Acknowledgment: OSHA 10-Hour General Industry Certification [5], BLS/CPR Certification [6], and Emergency Medical Responder (EMR) Certifications [7]

Available at:

- North Side HS
- OD Wyatt HS
- Trimble Technical HS

Healthcare Therapeutic's Emergency Medical Care 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 ultrasonic technology.

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

Successful completion of the Healthcare Therapeutics: Emergency Medical Care program of study will fulfill requirements of the Public Service Endorsement. Locally approved Program of Study - September 2019.

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development.

FWISD offers six (6) Career Focuses in the Health Science Technology Career Cluster.

CAREER FOCUS	***PHARMACY TECHNICIAN***	***PATIENT CARE TECHNICIAN***
9TH GRADE	Principles of Health Science: HS02022 AB OR Honors: HSH02022 AB	Principles of Health Science: HS02022 AB OR Honors: HSH02022 AB
10TH GRADE	Health Science Theory: HS02042 AB OR Honors: HSH02042 AB	Health Science Theory: HS02042 AB OR Honors: HSH02042 AB
11TH GRADE	Practicum in Health Science I: General Clinical Skills: HS05010 AB OR Honors: HSH05010 AB OR Health Science Theory: HS02042 AB OR Honors: HSH02042 AB *(2019-20 11th graders only)* AND Pharmacology: HS02044 AB OR Honors: HSH02044 AB AND/OR Pathophysiology: HS20801 AB OR Honors: HSH20801 AB OPTIONAL: Anatomy and Physiology: HS02062 AB OR Honors: HSH02062 AB	Practicum in Health Science I: General Clinical Skills: HS05010AB OR Honors: HSH05010 AB AND/OR Pathophysiology: HS20801 AB OR Honors: HSH20801 AB OPTIONAL: Anatomy and Physiology: HS02062 AB OR Honors: HSH02062 AB
12TH GRADE	Practicum in Health Science II: Pharmacy Tech/d: HS05214AB OR Honors: HSH05214AB AND/OR Honors Project Based Research in Health Science: HSH01532AB OPTIONAL: Anatomy and Physiology: HS02062AB OR Honors: HSH02062AB	Practicum in Health Science II: Patient Care Technician/d: HS30204AB OR Honors: HSH30204AB AND/OR Honors Project Based Research in Health Science: HSH01532AB AND Anatomy and Physiology: HS02062AB OR Honors: HSH02062AB *(if not taken in 11th grade)*
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Certified Pharmacy Technician (CPhT) **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification; BLS/CPR Certification	**Industry Certification Opportunities for Performance Acknowledgement:** Patient Care Technician (PCT) and Certified Phlebotomy Technician (CPT) **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification; BLS/CPR Certification
Available At	**Trimble Tech HS, O.D. Wyatt, TABS, and North Side HS**	**North Side HS, O.D. Wyatt HS, Trimble Tech HS and TABS**

CAREER FOCUS	EMERGENCY MEDICAL CARE	MEDICAL ADMINISTRATION
9TH GRADE	Principles of Health Science: HS02022 AB OR Honors: HSH02022 AB	Principles of Health Science: HS02022 AB OR Honors: HSH02022 AB
10TH GRADE	Health Science Theory: HS02042 AB OR Honors: HSH02042 AB	Health Science Theory: HS02042 AB OR Honors: HSH02042 AB
11TH GRADE	Practicum in Health Science I: General Clinical Skills: HS05010 AB OR Honors: HSH05010 AB AND/OR Pathophysiology: HS20801 AB OR Honors: HSH20801AB OPTIONAL: Anatomy and Physiology: HS02062 AB OR Honors: HSH02062 AB	Practicum in Health Science I: General Clinical Skills: HS05010 AB OR Honors: HSH05010 AB OR Health Science Theory: HS02042 AB OR Honors: HSH02042 AB *(2019-20 11th graders only)* AND/OR Pathophysiology: HS20801 AB OR Honors: HSH20801AB OPTIONAL: Anatomy and Physiology: HS02062 AB OR Honors: HSH02062 AB
12TH GRADE	Practicum in Health Science II: Emergency Medical Care/d: HS05033 AB OR Honors: HSH05033 AB AND/OR Honors Project Based Research in Health Science: HSH01532 AB AND Anatomy and Physiology: HS02062 AB OR Honors: HSH02062 AB *(if not taken in 11th grade)*	Practicum in Health Science II: Medical Billing and Coding/d: HS05134 AB OR Honors HSH05134 AB AND/OR Honors Project Based Research in Health Science: HSH01532 AB OPTIONAL: Anatomy and Physiology: HS02062 AB OR Honors: HSH02062 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Emergency Medical Responder (EMR); Emergency Medical Technician (EMT) **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification; BLS/CPR Certification	**Industry Certification Opportunities for Performance Acknowledgement:** Nationally Certified Insurance and Coding Specialist (NCICS) **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification; BLS/CPR Certification)
Available At	**Trimble Tech HS, OD Wyatt HS, and North Side HS**	**North Side HS, O.D. Wyatt HS, and Trimble Tech HS**

CAREER FOCUS	BIOMEDICAL TECHNOLOGY	CENTRAL STERILE PROCESSING
9TH GRADE	Honors Principles of Biomedical Science (PLTW): HSH2092 AB AND Principles of Health Science: HS02022 AB OR Honors: HSH02022 AB	Honors Principles of Biomedical Science (PLTW): HSH2092 AB AND Principles of Health Science: HS02022 AB OR Honors: HSH02022 AB
10TH GRADE	Honors Human Body Systems (PLTW): HSH2093 AB	Honors Human Body Systems (PLTW): HSH2093 AB
11TH GRADE	Honors Medical Intervention (PLTW): HSH30209 AB AND Pathophysiology: HS20801 AB OR Honors: HSH20801 AB OPTIONAL: Anatomy and Physiology: HS02062 AB OR Honors: HSH02062 AB	Practicum in Health Science I: General Clinical Skills: HS05010 AB OR Honors: HSH05010 AB AND/OR Pathophysiology: HS20801 AB OR Honors: HSH20801 AB OPTIONAL: Anatomy and Physiology: HS02062 AB OR Honors: HSH02062 AB
12TH GRADE	World Health Research: HS02092AB OR Honors: HSH02092AB OR Honors Scientific Research and Design III: STH37222AB AND Anatomy and Physiology: HS02062AB OR Honors: HSH02062AB *(if not taken in 11th grade)* OPTIONAL: Medical Microbiology: HS02071AB OR Honors: HSH02071	Dual Credit Practicum in Health Science II: Central Sterile Processing: HSD02052 AND/OR Honors Project Based Research in Health Science: HSH01532 AB OPTIONAL: Medical Microbiology: HS02071AB OR Honors: HSH02071 Anatomy and Physiology: HS02062AB OR Honors: HSH02062AB *(if not taken in 11th grade)*
Certification Options	**Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification; BLS/CPR Certification	**Not Counted towards Performance Acknowledgement:** Certified Sterile Processing and Distribution Technician; OSHA 10-Hour General Industry Certification; BLS/CPR Certification
Available At	**TABS HS**	**TABS HS**

HONORS PRINCIPLES OF BIOMEDICAL SCIENCE AB (PLTW) (PRBIOSCI AB/H)	HSH2092AB
In this Project Lead the Way course, students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, research processes and bioinformatics. This course is designed to provide an overview of all the courses in the Biomedical Sciences program and lay the scientific foundation for subsequent courses. Students in this honors course will complete a project using the five phases of project management used in the business and industry environment. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1302092 Grade level: 9 HS Credit(s): 1
Instructional Material: *PLTW CURRICULUM* Prerequisite(s): None *Offered only at: TABS, a Project Lead the Way approved school.*	College Hour(s): NA **Tier II**
ANATOMY AND PHYSIOLOGY AB (ANATPHYS AB)	**HS02062AB**
In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.	13020600 Grade level: 11 – 12 HS Credit(s): 1
Instructional Material: *Introduction to Anatomy & Physiology,* Goodheart Willcox Co. *ISBN#: 9781683113065* Prerequisite(s): Biology and Chemistry *Anatomy and Physiology may be taught by any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of sciences.*	College Hour(s): NA **Tier III**
HONORS ANATOMY AND PHYSIOLOGY AB (ANATPHYS AB/H)	**HSH02062AB**
Students in this honors course will complete a project using the five phases of project management used in the business and industry environment. Anatomy and Physiology may be taught by any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of sciences. It may also be taught by a certified secondary science teacher. 19 TAC Chapter 231. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020600 Grade level: 11 – 12 HS Credit(s): 1
Instructional Material: *Introduction to Anatomy & Physiology,* Goodheart Willcox Co. Prerequisite(s): Biology and Chemistry	College Hour(s): NA **Tier II**
HONORS HUMAN BODY SYSTEMS AB (PLTW) (HUMBODSY AB/H)	**HSH2093AB**
In this Project Lead the Way course, students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real-world cases and often play the role of biomedical professionals to solve medical mysteries. Students in this honors course will complete a project using the five phases of project management used in the business and industry environment. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1302093 Grade level: 10 HS Credit(s): 1
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Medical Terminology and Principles of Biomedical Science *Offered only at: TABS, a Project Lead the Way approved school*	College Hour(s): NA **Tier II**
HONORS MEDICAL INTERVENTIONS AB (PLTW) (MEDINT AB/H)	**HSH30209AB**
Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family. The course is a "How-To" manual for maintaining overall health and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1302094 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Contact CTE Director for related materials* Prerequisite(s): Human Body Systems *Offered only at: TABS, a Project Lead the Way approved school*	College Hour(s): NA **Tier II**
MEDICAL MICROBIOLOGY AB (MICRO AB)	**HS02071AB**
Students in Medical Microbiology explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. Pathogenic and nonpathogenic organisms will be identified to assist in the understanding of specific diseases, causative agents, and treatment options. Activities will include a variety of lab experiences designed to build microbiology lab skills and techniques. In this course, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving.	13020700 Grade level: 11 - 12 HS Credit(s): 1

Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Biology and Chemistry. *This course may be taught by a certified secondary science teacher or any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of sciences. 19 TAC Chapter 231.*	College Hour(s): NA **Tier III**
HONORS MEDICAL MICROBIOLOGY AB (MICRO AB/H)	**HSH02071AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020700 Grade level: 11 - 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Biology and Chemistry *This course may be taught by a certified secondary science teacher or any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of sciences. 19 TAC Chapter 231.*	HS Credit(s): 1 College Hour(s): NA **Tier II**
PATHOPHYSIOLOGY AB (PATHO AB)	**HS20801AB**
In Pathophysiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Pathophysiology study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease. Students will differentiate between normal and abnormal physiology.	13020800 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Human Disease 4th edition; Cengage Learning* Prerequisite(s): Biology and Chemistry; Principles of Health Science *4th year science credit*	College Hour(s): NA **Tier III**
HONORS PATHOPHYSIOLOGY AB (PATHO AB/H)	**HSH20801AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020800 Grade level: 11 – 12 HS Credit(s): 1
Instructional Material: *Human Disease 4th edition; Cengage Learning* Prerequisite(s): Biology and Chemistry; Principles of Health Science *4th year science credit*	College Hour(s): NA **Tier II**
WORLD HEALTH RESEARCH AB (WORLDHR AB)	**HS02092AB**
This course examines major world health problems and emerging technologies as solutions to these medical concerns. The course 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.	13020900 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Health Science Theory and Clinical *Offered only at: TABS*	College Hour(s): NA **Tier III**
HONORS WORLD HEALTH RESEARCH AB (WORLDHR AB/H)	**HSH02092AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020900 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Health Science Theory and Clinical *This course is designed to provide students an opportunity to earn one advanced measure for the Distinguished Achievement.* *Offered only at: TABS*	HS Credit(s): 1 College Hour(s): NA **Tier II**
PRINCIPLES OF HEALTH SCIENCE AB (PRINHLSC AB)	**HS02022AB**
Principles of Health Science provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry. Students learn that to pursue a career in the health science industry, they must be able to reason, think critically, make decisions, solve problems, and communicate effectively. They learn that quality health care depends on the ability to work well with others. Students identify and research employment opportunities, technology, and safety requirements of the different systems within health science field. They apply knowledge and skills needed to pursue a health science career. Students are expected to employ their ethical and legal responsibilities, identify limitations, as well as understand the implications of their actions. This course will also introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations.	13020200 Grade level: 9 HS Credit(s): 1
Instructional Material: *Principles of Health Science Texas Student Edition* and *Medical Terminology, A Living Language, Third Edition, 2017, Pearson Education* Prerequisite(s): Medical Terminology *Offered only at: North Side, Trimble Tech, OD Wyatt, and TABS*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF HEALTH SCIENCE AB (PRINHLSC AB/H)	**HSH02022AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020200 Grade level: 9
Instructional Material: *Principles of Health Science Texas Student Edition* and *Medical Terminology, A Living Language, Third Edition, 2017, Pearson Education* Prerequisite(s): Medical Terminology *Offered only at: North Side, Trimble Tech, OD Wyatt, and TABS*	HS Credit(s): 1 College Hour(s): NA **Tier II**

HEALTH SCIENCE THEORY AB (HLTHSCI AB)	HS02042AB
This course allows students to gain the knowledge and skills necessary for employment or continuing education in the health care industry. The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.	13020400 Grade level: 11 HS Credit(s): 1
Instructional Material: *DHO Health Science, Updated 8th Edition,* Cengage Learning Inc. Prerequisite(s): Principles of Health Science *Offered only at: North Side, Trimble Tech, OD Wyatt, and TABS*	College Hour(s): NA **Tier III**
PRACTICUM IN HEALTH SCIENCE I: GENERAL CLINICAL SKILLS AB	**HS05010AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. The Practicum is designed to give students practical application of previously studied knowledge and skills. In this double period course, students will gain knowledge and skills that will prepare them for their senior clinical certification course. In this course the student will learn to perform skills that will prepare them to work in the hospital setting, including taking vitals, assisting with activities of daily living, and providing comfort care. The student will gain basic knowledge of medical terms, ethics, legal issues, and anatomy and physiology. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13020500 Grade level: 11 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Health Science Theory *Offered only at: North Side, O.D. Wyatt, Trimble Tech and TABS*	College Hour(s): NA **Tier III**
HONORS PRACTICUM IN HEALTH SCIENCE I: GENERAL CLINICAL SKILLS AB	**HSH05010AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020500 Grade level: 11
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Health Science Theory *Offered only at: North Side, O.D. Wyatt, Trimble Tech and TABS*	HS Credit(s): 2 College Hour(s): NA **Tier II**
HONORS HEALTH SCIENCE THEORY AB (HLTHSCI AB)	**HSH02042AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020400 Grade level: 11
Instructional Material: *DHO Health Science, Updated 8th Edition,* Cengage Learning Inc. Prerequisite(s): Principles of Health Science *Offered only at: North Side, Trimble Tech, OD Wyatt, and TABS*	HS Credit(s): 1 College Hour(s): NA **Tier II**
PRACTICUM IN HEALTH SCIENCE II: EMERGENCY MEDICAL CARE/D AB (PRACHLS2 EMC AB)	**HS05033AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This practicum is designed to give students practical application of previously studied knowledge and skills. In this course students will gain an understanding of the pathophysiology of common medical and trauma emergencies and become proficient in the skills necessary to treat them in the pre-hospital setting. This course will prepare the student to take the national Emergency Medical Technician exam. EMTB (basic) level certification is the standard beginning level to work in an ambulance. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13020510 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills or permission of the CTE Department *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PRACTICUM IN HEALTH SCIENCE II: EMERGENCY MEDICAL CARE/D AB (PRACHLS2 EMC AB/H)	**HSH05033AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020510 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills or permission of the CTE Department *Offered only at: Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PRACTICUM IN HEALTH SCIENCE II: MEDICAL BILLING AND CODING/D AB (PRACHLS2 MB AB)	**HS05134AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course introduces the student to health insurance and reimbursement. In this course the student will become familiar with common medical billing practices, the health insurance industry, legal and regulatory issues and differences in reimbursement methodologies. The student will learn principles of medical billing related to proper claim form preparation, submission, and payment processing, and the follow up process. This course is recommended for anyone who is preparing for a career in a medical billing department at a physician's office, clinic, or other	13020510 Grade level: 12 HS Credit(s): 2

healthcare entity, and as a claim's examiner for insurance carriers. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills *Offered only at: North Side, Trimble Tech, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS PRACTICUM IN HEALTH SCIENCE II: MEDICAL BILLING AND CODING/D AB (PRACHLS2 MB AB/H)	**HSH05134AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020510 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills *Offered only at: North Side, Trimble Tech, and OD Wyatt*	HS Credit(s): 2 College Hours(s):NA **Tier II**
PRACTICUM IN HEALTH SCIENCE II: PATIENT CARE TECHNICIAN/D AB (PHSPCT 2AB)	**HS30204AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. The Practicum is designed to give students practical application of previously studied knowledge and skills. In this double period course, students will gain knowledge and skills to pursue a national Patient Care Technician certification. In this course the student will learn to perform skills like performing phlebotomy and ECG, taking vitals, assisting with activities of daily living, and providing comfort care. The student will gain basic knowledge of medical terms, ethics, legal issues, and anatomy and physiology. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13020510 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills *Offered only at: North Side, O.D. Wyatt, Trimble Tech and TABS*	College Hour(s): NA **Tier III**
HONORS PRACTICUM IN HEALTH SCIENCE II: PATIENT CARE TECHNICIAN/D AB (PHSPCT 2AB/H)	**HSH30204AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020510 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills *Offered only at: North Side, O.D. Wyatt, Trimble Tech and TABS*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PRACTICUM IN HEALTH SCIENCE II: PHARMACY TECH/D AB (PHSPHT 2AB)	**HS05214AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This Practicum is designed to give students practical application of previously studied knowledge and skills. The student will gain knowledge and skills in this double-period course to pursue a Pharmacy Technician Certification. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. In this course students will document technical knowledge and skills in an updated professional portfolio that includes technical skill competencies, licensures or certifications, awards and scholarships, and extended learning experiences such as community service and active participation in career and technical student organizations and professional organizations. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13020510 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills or Pharmacology *Offered only at: North Side, Trimble Tech, OD Wyatt, and TABS*	College Hour(s): NA **Tier III**
HONORS PRACTICUM IN HEALTH SCIENCE II: PHARMACY TECH/D AB (PHSPHT 2AB/H)	**HSH05214AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020510 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills or Pharmacology *Offered only at: North Side, Trimble Tech, OD Wyatt, and TABS*	HS Credit(s): 2 College Hour(s): NA **Tier II**

PROJECT-BASED RESEARCH IN HEALTH SCIENCE AB (PROBS2 AB)	HS01532AB
Project Based Research in Health Science is a course for students who have the ability to research a real-world problem. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge, skills, and technologies in a variety of settings. This course must be cooperatively planned by the student and teacher, continuously supervised by the teacher, and conducted by the student with the guidance and support of a mentor or interdisciplinary team. The district must maintain a written project plan for each student enrolled in the course.	12701500 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills *This course is designed to provide students an opportunity to earn one advanced measure for the Distinguished Achievement Program.* *Offered only at: North Side, Trimble Tech, OD Wyatt, and TABS*	College Hour(s): NA **Tier III**
HONORS PROJECT-BASED RESEARCH IN HEALTH SCIENCE AB (PROBS2 AB/H)	**HSH01532AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	12701500 Grade level: 12
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills *This course is designed to provide students an opportunity to earn one advanced measure for the Distinguished Achievement Program.* *Offered only at: North Side, Trimble Tech, OD Wyatt, and TABS*	HS Credit(s): 1 College Hour(s): NA **Tier II**
PHARMACOLOGY AB (PHARM AB)	**HS02044AB**
The Pharmacology course is designed to study how natural and synthetic chemical agents such as drugs affect biological systems. Knowledge of the properties of therapeutic agents is vital in providing quality health care. It is an ever-changing, growing body of information that continually demands greater amounts of time and education from health care workers.	13020950 Grade level:11 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Biology and Chemistry Co-Requisite: Practicum in Health Science I: General Clinical Skills *Offered only at: Trimble Tech, North Side, OD Wyatt, and TABS*	College Hour(s): NA **Tier III**
HONORS PHARMACOLOGY AB (PHARM AB/H)	**HSH02044AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020950 Grade level: 11
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Biology and Chemistry. Co-Requisite: Practicum in Health Science I: General Clinical Skills *Offered only at: Trimble Tech, North Side, OD Wyatt, and TABS*	HS Credit(s): 1 College Hour(s): NA **Tier II**
DUAL CREDIT PRACTICUM IN HEALTH SCIENCE: CENTRAL STERILE PROCESSING (PHSCSP A DC) TCC COURSE: (HPRS 1470) Central Sterile Processing and (HPRS 1370) Central Sterile Processing II	**HSD02052A**
This Practicum is designed to give students practical application of previously studied knowledge and skills. In this double-period course, students will gain knowledge and skills to pursue a certification as Central Sterile Processing Technician. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. Sterile processing technicians are specially trained healthcare workers who use their specialized skills and knowledge to clean and sterilize medical instruments, equipment, and supplies. In this course students will document technical knowledge and skills in an updated professional portfolio that includes technical skill competencies; licensures or certifications, awards and scholarships and extended learning experiences such as community service and active participation in career and technical student organizations and professional organizations.	13020510 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills *Offered only at: TABS*	College Hour(s): 7 **Tier I**
DUAL CREDIT PRACTICUM IN HEALTH SCIENCE: CENTRAL STERILE PROCESSING (PHSCSP B DC) TCC COURSE: (HPRS 1471) Central Sterile Processing III and (HPRS 1561) Central Sterile Processing Clinicals	**HSD02052B**
This Practicum is designed to give students practical application of previously studied knowledge and skills. In this double-period course, students will gain knowledge and skills to pursue a certification as Central Sterile Processing Technician. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. Sterile processing technicians are specially trained healthcare workers who use their specialized skills and knowledge to clean and sterilize medical instruments, equipment, and supplies. In this course students will document technical knowledge and skills in an updated professional portfolio that includes technical skill competencies; licensures or certifications, awards and scholarships and extended learning experiences such as community service and active participation in career and technical student organizations and professional organizations.	13020510 Grade level: 12 HS Credit(s): 1

Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Practicum in Health Science I: General Clinical Skills *Offered only at: TABS*	College Hour(s): 9 **Tier I**
HONORS SCIENTIFIC RESEARCH AND DESIGN III AB (SCIRD3 AB/H)	**STH37222AB**
The student conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices. These investigations must involve actively obtaining and analyzing data with physical equipment, but may also involve experimentation in a simulated environment as well as field observations that extend beyond the science or CTE classrooms. Research in an area of bio-related technology; communication; construction; energy, power, and transportation; or engineering align with various CTE clusters. Students apply research to problem solving and development of prototypes and working models. Special projects are included in this honors level course. Independent research is a required component of the all Honors Scientific Research and Design courses. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037220 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): To receive 4th year science credit students must have completed three (3) units of science (Biology, Chemistry, Physics) one (1) of which may be taken concurrently. *Course taught by locally certified gifted teacher and may be taught by any certified secondary science teacher or CTE teacher with a baccalaureate degree and 18 semester credit hours.*	College Hour(s): NA **Tier II**

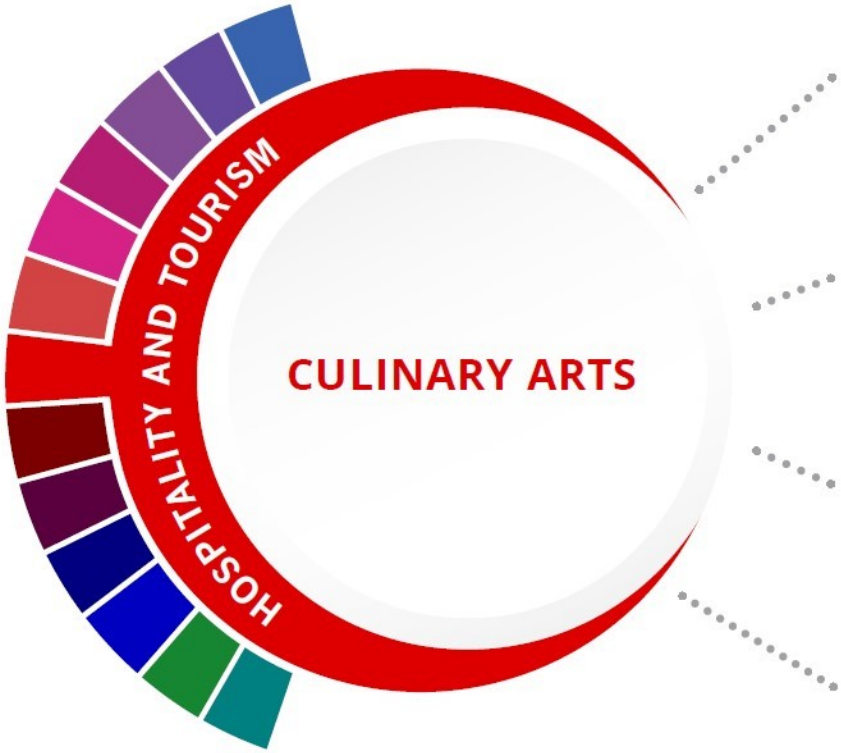
For the graduating class of 2024 and up only.

CULINARY ARTS
(Previously Restaurant Management)

LODGING AND RESORT MANAGEMENT
(Previously Hospitality and Tourism)

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator:
Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.



	Courses
9th	**Principles of Hospitality and Tourism:** HT22201 AB OR HTH22201 AB
10th	**Introduction to Culinary Arts[1]:** HT22400 AB OR HTH22400
11th	**Culinary Arts/d[2]:** HT22602 AB OR HTH22602 AB
12th	**Advanced Culinary Arts/d[3,4]:** HT22603 AB OR HTH22603 AB OR **Paid Practicum in Culinary Arts[3,4]:** HT22712 AB OR HTH22712 AB

Enrichment Courses:

- **Food Science:** HT23002 AB OR HTH23002 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: ServSafe Food Managers Certification[2] AND Certified Fundamentals Cook.[4]
- Not counted towards Performance Acknowledgement: ServSafe Food Handlers Certification[1], ServSafe Food Allergens[3]

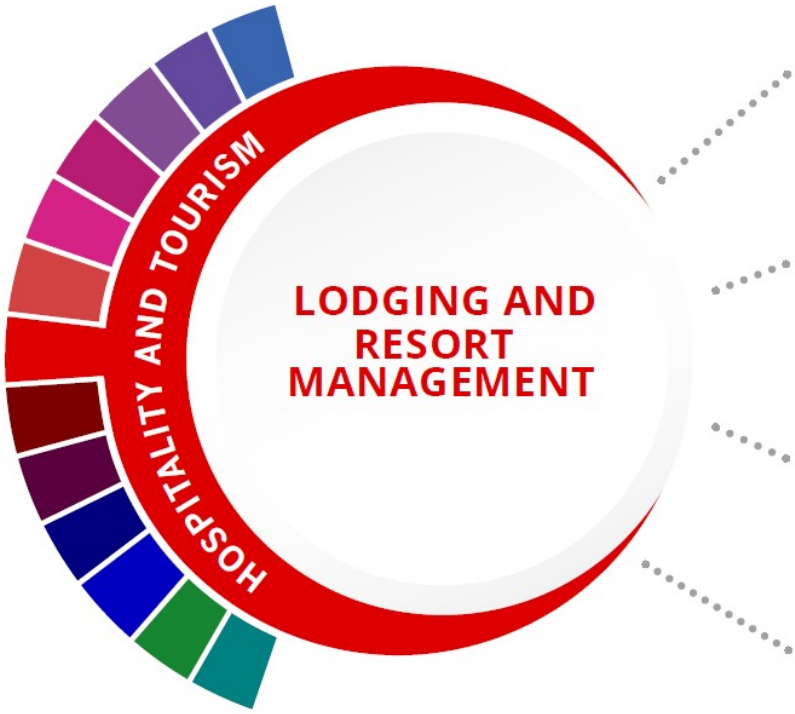
Available at:

- North Side HS
- OD Wyatt HS
- Polytechnic HS
- South Hills HS
- Trimble Technical HS

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

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

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



	Courses
9th	**Principles of Hospitality and Tourism:** HT22201 AB OR HTH22201 AB
10th	**Travel and Tourism Management AB** HT22500 AB OR HTH22500 AB
11th	**Hospitality Services/d[1]:** HT22802 AB OR HTH22802 AB
12th	**Unpaid Practicum in Hospitality Services/d:** HT22902 AB OR HTH22902 AB OR **Paid Practicum in Hospitality Services:** HT22912 AB OR HTH22912 AB

Enrichment Courses:

- **Food Science:** HT23002 AB OR HTH23002 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: ServSafe Food Managers Certification[1].
- Not counted towards Performance Acknowledgment: N/A

Available at:

- North Side HS
- South Hills HS

The Lodging and Resort Management program of study introduces students to occupations and educational opportunities related to the logistical and operational management of lodging and resorts. This program of study also explores opportunities related to human resources, financial analysis, and marketing.

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

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

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.

FWISD offers two (2) Career Focuses in the Hospitality & Tourism Career Cluster.

CAREER FOCUS	***HOSPITALITY AND TOURISM***	***RESTAURANT MANAGEMENT***
9TH GRADE	Principles of Hospitality and Tourism: HT22201 AB OR Honors: HTH22201 AB	Principles of Hospitality and Tourism: HT22201 AB OR Honors: HTH22201 AB
10TH GRADE	Hotel Management: HT22301 AB OR Honors: HTH22301 AB	Introduction to Culinary Arts: HT22400 AB OR Honors HT22400 AB
11TH GRADE	Hospitality Services/d: HT22802 AB OR Honors: HTH22802AB	Culinary Arts/d: HT22602 AB OR Honors: HTH22602 AB
12TH GRADE	Unpaid Practicum in Hospitality Services/d: HT22902AB OR Paid Practicum in Hospitality Services/Extended: HT22912 AB OR Honors: HTH22912 AB OPTIONAL: Food Science: HT23002 AB OR Honors: HTH23002 AB	Advanced Culinary Arts/d: HT22603 AB OR Honors: HTH22603 AB OR Paid Practicum in Culinary Arts/Extended: HT22712 AB OR Honors: HTH22712 AB OPTIONAL: Food Science: HT23002 AB OR Honors: HTH23002 AB
Certification Options	**Industry Certification Options for Performance Acknowledgement:** ServSafe Food Managers Certification **Not Counted towards Performance Acknowledgement:** ServSafe Food Handlers Certification	**Industry Certification Options for Performance Acknowledgement:** ServSafe Food Managers Certification **Not Counted towards Performance Acknowledgement:** ServSafe Food Handlers Certification; ServSafe Food Allergens
Available At	**North Side HS**	**South Hills HS, North Side HS, Polytechnic HS, Trimble Tech HS, and O.D. Wyatt HS**

COURSE DESCRIPTIONS FOR HOSPITALITY AND TOURISM CLASSES

PRINCIPLES OF HOSPITALITY AND TOURISM AB (PRINHOSP AB)	HT22201AB
Principles of Hospitality and Tourism introduces students to an industry that encompasses lodging, travel and tourism, recreation, amusements, attractions, and food/beverage operations. Students learn knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success in that industry.	13022200 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: *Foundations of Restaurant Management and Culinary Arts Level One,* Pearson Education Prerequisite(s): None *Offered at: North Side, Polytechnic, South Hills, Trimble Tech, OD Wyatt*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF HOSPITALITY AND TOURISM AB (PRINHOSP AB/H)	**HTH22201AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13022200 Grade level: 9 - 10
Instructional Material: *Foundations of Restaurant Management and Culinary Arts Level One,* Pearson Education Prerequisite(s): None *Offered only at: North Side, Polytechnic, South Hills, Trimble Tech, OD Wyatt*	HS Credit(s): 1 College Hour(s): NA **Tier II**
HOTEL MANAGEMENT AB (HOTELMGT AB)	**HT22301AB**
Hotel Management focuses on the knowledge and skills needed to pursue staff and management positions available in the hotel industry. This in-depth study of the lodging industry includes departments within a hotel such as front desk, food and beverage, housekeeping, maintenance, human resources, and accounting. This course will focus on, but not be limited to, professional communication, leadership, management, human resources, technology, and accounting.	13022300 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: *ICEV Family and Consumer Sciences Site,* CEV Multimedia Ltd. Prerequisite(s): Principles of Hospitality and Tourism *Offered only at: North Side*	College Hour(s): NA **Tier III**
HONORS HOTEL MANAGEMENT AB (HOTELMGT AB/H)	**HTH22301AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13022300 Grade level: 10 - 12
Instructional Material: *ICEV Family and Consumer Sciences Site,* CEV Multimedia Ltd., Prerequisite(s): Principles of Hospitality and Tourism *Offered only at: North Side*	HS Credit(s): 1 College Hour(s): NA **Tier II**
HOSPITALITY SERVICE/D AB (HOSPSRVS AB)	**HT22802AB**
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. Instruction may be delivered through laboratory training or through internships, mentoring, or job shadowing.	13022800 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: *ICEV Family and Consumer Sciences Site,* CEV Multimedia Ltd. Prerequisite(s): Principles of Hospitality *Offered only at: North Side*	College Hour(s): NA **Tier III**
HONORS HOSPITALITY SERVICE/D AB (HOSPSRVS AB/H)	**HTH22802AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13022800 Grade level: 11 - 12
Instructional Material: *ICEV Family and Consumer Sciences Site,* CEV Multimedia Ltd. Prerequisite(s): Principles of Hospitality and Tourism *Offered only at: North Side*	HS Credit(s): 2 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN HOSPITALITY SERVICES/D AB (PRACHOS1 AB)	**HT22902AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. Practicum in Hospitality Services is a unique practicum experience to provide opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Hospitality Services integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing culinary art-based workplace. Students are taught employability skills, including job specific skills applicable to their training plan, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Practicum in Hospitality Services is relevant and rigorous, supports student attainment of academic and technical standards, and effectively prepares students for college and career success. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or	13022900 Grade level: 12 HS Credit(s): 2

industry training off-site, outside of school. Students will build a professional portfolio demonstrating skills in Animation.	
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Hospitality Service I *Offered only at: North Side*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN HOSPITALITY SERVICES/D AB (PRACHOS1 AB/H)	**HTH22902AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13022900 Grade level: 12
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Hospitality Services I *Offered only at: North Side*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN HOSPITALITY SERVICES AB/EXTENDED (EXPRHOS2 AB)	**HT22912AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course provides unique opportunities for students to participate in work-based learning that combines classroom instruction with actual business and industry career experiences. integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of further enhancing the knowledge, skills, and industry-based experiences that students receive through workplace application. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13022915 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Hospitality Services I *Offered only at: North Side.*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN HOSPITALITY SERVICES AB/EXTENDED (EXPRHOS2 AB/H)	**HTH22912AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13022915 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Hospitality Services I *Offered only at: North Side*	College Hour(s): NA **Tier II**
INTRODUCTION TO CULINARY ARTS AB (INCULART AB)	**HT22400AB**
Introduction to Culinary Arts will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. The course will provide insight into the operation of a well- run restaurant. Introduction to Culinary Arts will provide insight into food production skills, various levels of industry management, and hospitality skills. This is an entry level course for students interested in pursuing a career in the food service industry. This course is offered as a classroom and laboratory-based course.	13022550 Grade level: 9 -10 HS Credit(s): 1
Instructional Material: *Introduction to Culinary Arts, 3e,* Pearson Education Prerequisite(s): Principles of Hospitality and Tourism *Offered only at: North Side, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS INTRODUCTION TO CULINARY ARTS AB (INCULART AB)	**HTH22400AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13022550 Grade level: 9 -10
Instructional Material: *Introduction to Culinary Arts, 3e Student Edition,* Pearson Education, Prerequisite(s): Principles of Hospitality and Tourism *Offered only at: North Side, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	HS Credit(s): 1 College Hour(s): NA **Tier II**
CULINARY ARTS/D AB (CULARTS AB)	**HT22602AB**
Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking. Through both classroom and laboratory experience provided in an industrial kitchen laboratory in this double-period class, students develop skills for employment in the area of food production, management, and services. The course stresses operation and management of food service establishments, marketing strategies, quality food production skills, food presentation and service techniques. In this course, students will have the opportunity to take the ServSafe Food Safety Certification Exam that can count as a performance acknowledgement for their Business and Industry Endorsement. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.	13022600 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: *The Culinary Professional, 3rd Edition,* Goodheart-Willcox Co. Prerequisite(s): Introduction to Culinary Arts *Offered only at: North Side, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	College Hour(s): NA **Tier III**

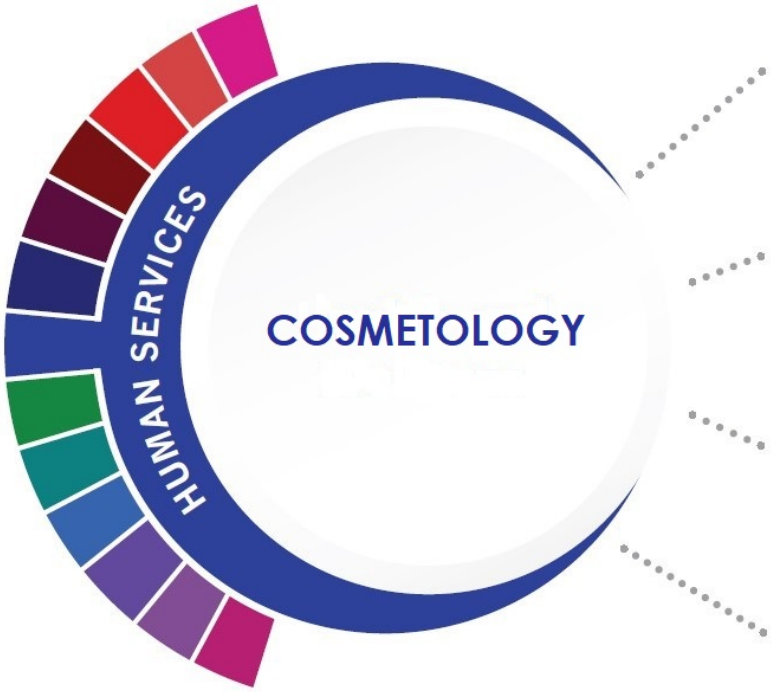
HONORS CULINARY ARTS/D AB (CULARTS AB/H)	HTH22602AB
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13022600 Grade level: 11 – 12
Instructional Material: *The Culinary Professional, 3rd Edition,* Goodheart-Willcox Co. Prerequisite(s): Principles of Hospitality and Tourism and Restaurant Management *Offered only at: North Side, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	HS Credit(s): 2 College Hour(s): NA **Tier II**
ADVANCED CULINARY ARTS/D AB (ADVCULARTS AB)	**HT22603AB**
Advanced Culinary Arts will extend content and enhance skills introduced in Culinary Arts by in-depth instruction of industry-driven standards in order to prepare students for success in higher education, certifications, and/or immediate employment. Students can pursue a ServSafe certification, a Texas Culinary Specialist Certification, or any other appropriate industry certification to count toward their performance acknowledgement for their Business and Industry Endorsement.	13022650 Grade level: 12 HS Credit(s): 2
Instructional Material: *ICEV Family and Consumer Sciences Site,* CEV Multimedia Ltd. Prerequisite(s): Culinary Arts I *Offered only at: North Side, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS ADVANCED CULINARY ARTS/D AB (ADVCULARTS AB/H)	**HTH22603AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13022650 Grade level: 12
Instructional Material: *ICEV Family and Consumer Sciences Site,* CEV Multimedia Ltd. Prerequisite(s): Culinary Arts I *Offered only at: North Side, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN CULINARY ARTS AB/EXTENDED (EXPRCUL2 AB)	**HT22712AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course continues in-depth experiences in food service and management. This classroom part of this course should be taught in an industrial kitchen laboratory so students can explore principles of entrepreneurship and develop the professional skills needed for careers such as chef, hotel/ motel management, and food service entrepreneur. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13022715 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Advanced Culinary Arts *Offered only at: North Side, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN CULINARY ARTS AB/EXTENDED (EXPRCUL2 AB/H)	**HTH22712AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13022715 Grade level: 12
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Advanced Culinary Arts *Offered only at: North Side, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	HS Credit(s): 3 College Hour(s): NA **Tier II**
FOOD SCIENCE AB (FOODSCI AB)	**HT23002AB**
In Food Science students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Food Science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public. Upon completion of this course, students will be prepared to take the ServSafe Food Safety Certification Exam. The course should be taught in a kitchen laboratory with some industrial equipment to provide the students with real-world experience in commercial foods.	13023000 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Principles of Food Science,* Goodheart-Willcox Co. *ISBN#: 9781683112365* Prerequisite(s): Three units of science, including chemistry and biology. and Culinary Arts I or Hospitality Services *Offered only at: North Side, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS FOOD SCIENCE AB (FOODSCI AB/H)	**HTH23002AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13023000 Grade level: 11 - 12
Instructional Material: *Principles of Food Science,* Goodheart-Willcox Co. *ISBN#: 9781683112365* Prerequisite(s): Three units of science, including chemistry and biology. and Culinary Arts I or Hospitality Services *Offered only at: North Side, Polytechnic, South Hills, Trimble Tech, and OD Wyatt*	HS Credit(s): 1 College Hour(s): NA **Tier II**

DUAL CREDIT CULINARY ARTS A DC (CULARTS A DC) **TCC Course: (CHEF 1305) Sanitation & Safety** **Courses may change depending on availability*	**HTD22602A**
In this dual credit 1-semester course, students will engage in the study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illnesses caused by food contamination (Hazard Analysis Critical Control Points); and workplace safety standards. Students will identify causes and prevention procedures for food- borne illness, intoxication, and infection; discuss personal hygiene and safety food handling procedures; describe food storage and refrigeration techniques; explain sanitation of dishes, equipment and kitchens including cleaning material, garbage, and refuse disposal; discuss Occupational Safety and Health Administration (OSHA) requirements and workplace safety programs.	13022600 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *ServSafe Manager, 7th Ed. (w/Access Code and myservsafelab), Prentice Hall. ISBN#: 9780134772899.* Contact Career and Technical Education Department for additional related materials. Prerequisite(s): Introduction to Culinary Arts TCC Prerequisite(s): TSI *Course taught by an approved embedded instructor.* *Offered only at: North Side*	College Hour(s): 3 **Tier I**
DUAL CREDIT ADVANCED CULINARY ARTS/d A DC (ADVCULARTS A DC) **TCC Course: (RSTO 1304 + Lab) Dining Room Service *** *Courses may change depending on availability*	**HTD22603A**
In this dual credit 1-semester course, students will apply the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel. Students will identify and utilize equipment and supplies used in table service; specify the types of table service and the serving sequence for each type of service; properly prepare dining room and side station for service; explain the relationship of wait staff to customers and their perception of the establishment; and employ principles of dining room organization, scheduling, and management of food service personnel.	13022650 Grade level: 12 HS Credit(s): 1
Instructional Material: *Remarkable Service, CIA., John Wiley & Sons. ISBN#: 9781118116876* Contact Career and Technical Education Department for additional related materials. Prerequisite(s): Dual Credit Culinary Arts A DC TCC Prerequisite(s): TSI *Course taught by an approved embedded instructor.* *Offered only at: North Side*	College Hour(s): 3 **Tier I**

COSMETOLOGY

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator:
Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.



	Courses
9th	**Principles of Cosmetology Design and Color Theory:** HV25100 AB OR HVH25100 AB
10th	**Introduction to Cosmetology:** HV25102 AB OR HVH25102 AB
11th	**Cosmetology I/Cosmetology I Lab/t[2]:** HV25210 AB OR HVH25210 AB OR **Cosmetology I/d[2]:** HV25202 AB OR HVH25202 AB
12th	**Cosmetology II/Cosmetology II Lab/t[1]:** HV25310 AB OR HVH25310 AB **OR** **Cosmetology II/d[1]:** HV25302 AB OR HVH25302 AB

Enrichment Courses:

- **Microbiology and Safety for Cosmetology:** HV25402 AB OR HVH25402 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Cosmetology Operator License[1]
- Not Counted towards Performance Acknowledgment: OSHA 10-Hour General Industry Certification[2]

Available At:

- Dunbar HS
- North Side HS
- Trimble Technical HS

Cosmetology is an extended course of study that enables students to become licensed cosmetologists through Texas Department of Licensing and Regulation (TDLR). Cosmetology is one program of study that allows students to earn an industry certificate that launches them into a professional career immediately, yet also specifies rigorous core curricula that prepares the student to be successful in a post-secondary learning environment

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

Successful completion of the Cosmetology program of study will fulfill requirements of the Public Service Endorsement. Regionally approved Program of Study - September 2019 beginning 2020-2021.

Human Services – Public Services Endorsement

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

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

FWISD offers two (2) Career Focuses in the Human Services Career Cluster.

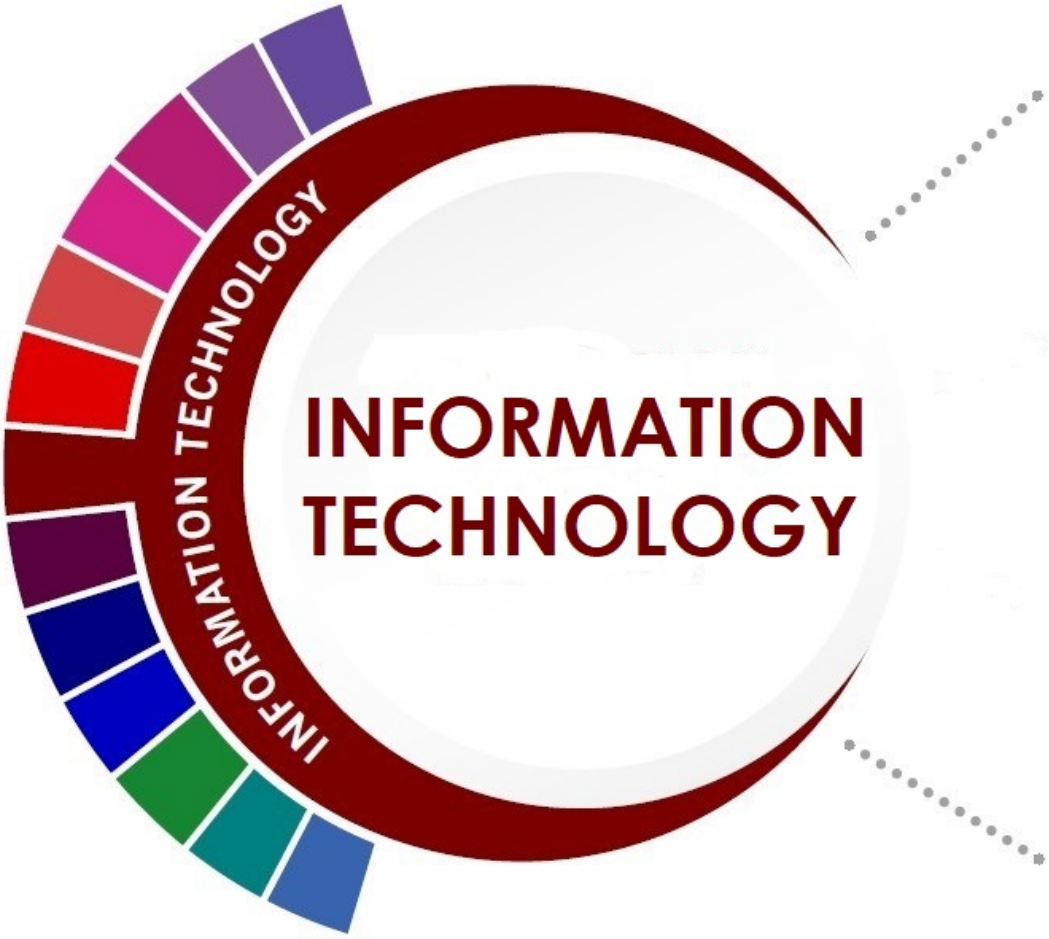
CAREER FOCUS	***COSMETOLOGY***
9TH GRADE	Principles of Cosmetology Design and Color Theory: HV25100 AB OR Honors: HVH25100 AB OR Principles of Business, Marketing, and Finance: BA11201 AB OR Honors: BAH11201 AB
10TH GRADE	Introduction to Cosmetology: HV25102 AB OR Honors HVH25102 AB AND Microbiology and Safety for Cosmetology: HV25402 AB OR Honors HVH25402 AB
11TH GRADE	Cosmetology I/d: HV25202 AB OR Honors: HVH25202 AB OR Cosmetology I/Lab/t: HV25210 AB OR Honors: HVH25210 AB
12TH GRADE	Cosmetology II/d: HV25302 AB OR Honors: HVH25302 AB OR Cosmetology II/Lab/t: HV25310 AB OR Honors: HVH25310 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Cosmetology Operators License from Texas Department of Licensing and Regulation **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification
Available At	**Dunbar HS, North Side HS, and Trimble Tech HS**

COURSE DESCRIPTIONS FOR HUMAN SERVICES CLASSES

PRINCIPLES OF COSMETOLOGY DESIGN AND COLOR THEORY AB (PRINCDCT AB)	HV25100AB
In Principles of Cosmetology Design and Color Theory, students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job-specific training for employment in cosmetology careers. Students will attain academic skills and knowledge as well as technical knowledge and skills related to cosmetology design and color theory. Students will develop knowledge and skills regarding various cosmetology design elements such as form, lines, texture, structure and illusion or depth as they relate to the art of cosmetology. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the TDLR requirements for licensure upon passing the state examination. Analysis of career opportunities, license requirements, knowledge and skills expectations, and development of workplace skills are included.	13025050 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Registration fee $25 that is payable to the Texas Cosmetology Commission (must be paid the first week of school). The $25 fee registers students with the Texas, Cosmetology Commission to allow the clock hours. *Offered only at: Dunbar, North Side, and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF COSMETOLOGY DESIGN AND COLOR THEORY AB (PRINCDCT AB/H)	**HVH25100AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13025050 Grade level: 9 – 10
Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Registration fee $25 that is payable to the Texas Cosmetology Commission (must be paid the first week of school). The $25 fee registers students with the Texas, Cosmetology Commission to allow the clock hours *Offered only at: Dunbar, North Side, and Trimble Tech*	HS Credit(s): 0.5 College Hour(s): NA **Tier II**
INTRODUCTION TO COSMETOLOGY AB (INTCOSMO AB)	**HV25102AB**
This course introduces skills that may lead to a lifetime career in cosmetology. Students explore areas such as bacteriology, sterilization and sanitation, hair styling, manicuring, shampooing and the principles of hair cutting, hair styling, hair coloring, skin care, and facial makeup. The student researches careers in the personal care services industry. To prepare for success, students must have skills relative to this industry, as well as academic knowledge and skills. Students may begin to earn clock hours needed to prepare for the Texas Department of Licensing and Regulation Examination.	13025100 Grade level: 10 HS Credit(s): 1
Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Principles of Cosmetology Design and Color Theory or Principles of Business, Marketing, and Finance *Offered only at: Dunbar, North Side, and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS INTRODUCTION TO COSMETOLOGY AB (INTCOSMO AB/H)	**HVH25102AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13025100 Grade level: 10
Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Principles of Cosmetology Design and Color Theory or Principles of Business, Marketing, and Finance *Offered only at: Dunbar, North Side, and Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**
COSMETOLOGY I/D AB (COSMET1 AB)	**HV25202AB**
The Cosmetology I course provides students classroom and lab time to develop proficient and mastery level cosmetology skills and techniques as required by Texas Department of Licensing and Regulation licensing standards. Students will be expected to demonstrate mastery in conducting the skills and techniques learned with little to no guidance. The course meets licensing and regulation requirements for licensure upon passing the Texas Department of Licensing and Regulation Examination. Analysis of career opportunities, requirements, expectations, and development of workplace skills is included.	13025200 Grade level: 11 HS Credit(s): 2
Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Introduction to Cosmetology *Offered only at: Dunbar, North Side, and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS COSMETOLOGY I/D AB (COSMET1 AB/H)	**HVH25202AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13025210 Grade level: 11
Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Introduction to Cosmetology *Offered only at: Dunbar, North Side, and Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
COSMETOLOGY I/ COSMETOLOGY I LAB/t AB (COSLAB1 AB)	**HV25210AB**
The Cosmetology I/Lab course provides students additional classroom and lab time to develop proficient and mastery level cosmetology skills and techniques as required by Texas Department of Licensing and Regulation licensing standards. Students will be expected to demonstrate mastery in conducting the skills and techniques learned with little to no guidance. The course meets licensing and regulation requirements for licensure upon passing the Texas Department of Licensing and Regulation Examination. Analysis of career opportunities, requirements, expectations, and development of workplace skills is included.	13025210 Grade level: 11 HS Credit(s): 3

Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Introduction to Cosmetology *Offered only at: Dunbar, North Side, and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS COSMETOLOGY I/ COSMETOLOGY I LAB/t AB (COSLAB1 AB)	**HVH25210AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13025210 Grade level: 11
Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Introduction to Cosmetology *Offered only at: Dunbar, North Side, and Trimble Tech*	HS Credit(s): 3 College Hour(s): NA **Tier II**
MICROBIOLOGY AND SAFETY FOR COSMETOLOGY CAREERS AB (MICROS AB)	**HV25402AB**
Students who enroll in Microbiology and Safety for Cosmetology Careers will receive instruction in the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, identification of microorganisms, drug resistant organisms, and emerging diseases. Additionally, students will explore and apply concepts as they apply to the safety and health of individuals pursuing a career in cosmetology services. Students may be provided with an opportunity to attain the Occupational Safety and Health Administration (OSHA) 10-hour safety training certification. This course also includes an opportunity for students to solve an in-depth analytical problem concerning occupational health and safety in cosmetology. This course is a co-requisite to Cosmetology I.	N1302540 Grade level: 11 HS Credit(s): 1
Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Introduction to Cosmetology Co-requisite: Cosmetology I *Offered only at: Dunbar, North Side, and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS MICROBIOLOGY AND SAFETY FOR COSMETOLOGY CAREERS AB (MICROS AB/H)	**HVH25402AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1302540 Grade level: 11
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Introduction to Cosmetology Co-requisite: Cosmetology I *Offered only at: Dunbar, North Side, and Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**
COSMETOLOGY II/D AB (COSMET2 AB)	**HV25302AB**
The Cosmetology II course provides students classroom and lab time to develop proficient and mastery level cosmetology skills and techniques as required by Texas Department of Licensing and Regulation licensing standards. Students will be expected to demonstrate mastery in conducting the skills and techniques learned in Cosmetology I with little to no guidance. The course meets licensing and regulation requirements for licensure upon passing the Texas Department of Licensing and Regulation Examination. Analysis of career opportunities, requirements, expectations, and development of workplace skills are included.	13025300 Grade level: 12 HS Credit(s): 2
Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Cosmetology I *Offered only at: Dunbar, North Side, and Trimble Tech*	College Hour(s): NA **Tier III**
HONORS COSMETOLOGY II/D AB (COSMET2 AB/H)	**HVH25302AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13025300 Grade level: 12
Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Cosmetology I *Offered only at: Dunbar, North Side, and Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
COSMETOLOGY II/COSMETOLOGY II LAB/t AB (COSLAB2 AB)	**HV25310AB**
The Cosmetology II Lab course provides students additional classroom and lab time to develop proficient and mastery level cosmetology skills and techniques as required by Texas Department of Licensing and Regulation licensing standards. Students will be expected to demonstrate mastery in conducting the skills and techniques learned in Cosmetology I with little to no guidance. The course meets licensing and regulation requirements for licensure upon passing the Texas Department of Licensing and Regulation Examination. Analysis of career opportunities, requirements, expectations, and development of workplace skills are included.	13025310 Grade level: 12 HS Credit(s): 3
Instructional Material: *Milady Standard Cosmetology*; Cengage; Prerequisite(s): Cosmetology I *Offered only at: Dunbar, North Side, Trimble Tech*	College Hour(s): NA **Tier III**
HONORS COSMETOLOGY II/COSMETOLOGY II LAB/t AB (COSLAB2 AB)	**HVH25310AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13025310 Grade level: 12
Instructional Material: *Milady Standard Cosmetology*; Cengage Prerequisite(s): Cosmetology I *Offered only at: Dunbar, North Side, Trimble Tech*	HS Credit(s): 3 College Hour(s): NA **Tier II**

For the graduating class of 2024 and beyond only.

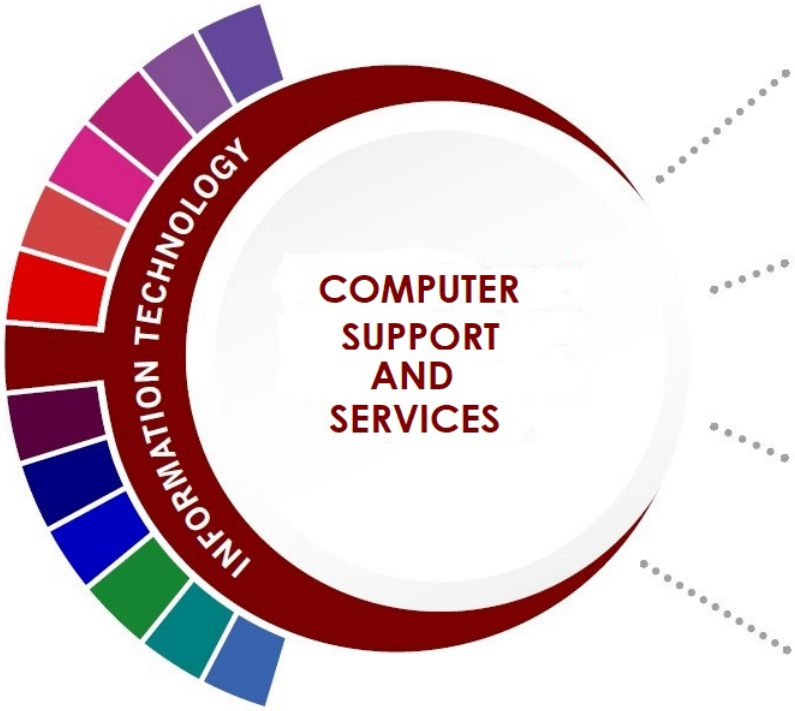


COMPUTER SUPPORT AND SERVICES
(Previously Computer Maintenance)

NETWORKING SYSTEMS
(Previously Internetworking Technology)

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator:
Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.



	Courses
9th	**Principles of Information Technology[1]:** IT27201 AB OR ITH27201 AB
10th	**Computer Maintenance:** IT27302 AB OR ITH27302 AB
11th	**Computer Technician Practicum/d[2]:** IT27502 AB OR ITH27502 AB
12th	**Unpaid Practicum in Information Technology/d[3]:** IT27202 AB OR ITH27202 AB OR **Paid Practicum of Information Technology[3]:** IT27212 AB OR ITH27212 AB OR **Honors Project-Based Research AB[3]:** CPH01500 AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: CompTIA IT Fundamentals+[1], CompTIA A+[2]
- Not Counted Towards Performance Acknowledgment: OSHA 10-Hour General Industry[3]

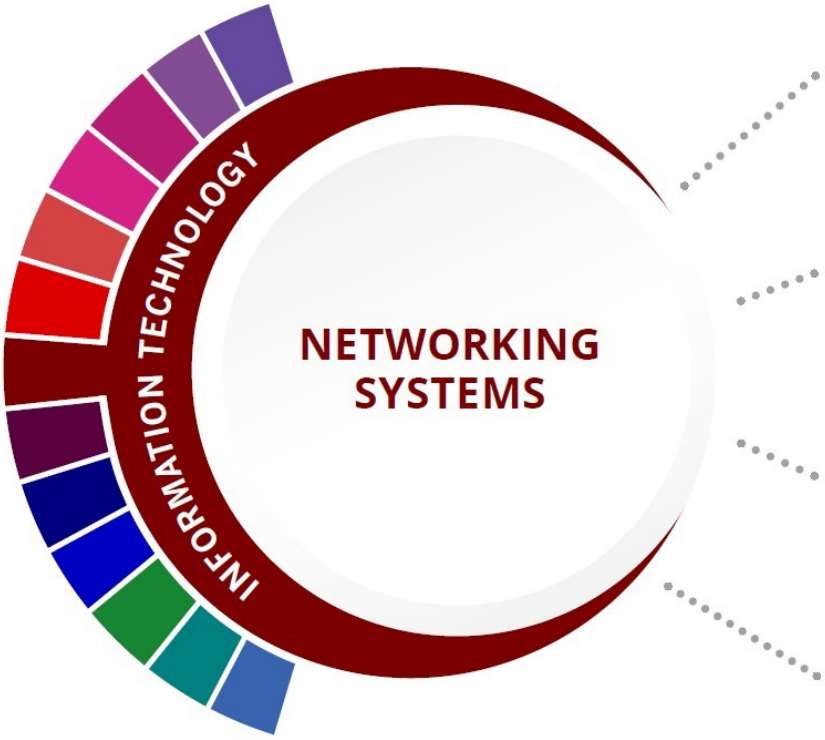
Available at:

- Polytechnic HS
- South Hills HS
- Trimble Technical HS
- Western Hills HS

The Information Technology Computer Support and Services program of study explores the occupations and educational opportunities associated with administering, testing, and implementing computer databases and applying knowledge of database management systems. This program of study may also include analyzing user requirements and problems to automate or improve existing systems and review computer system capabilities. This program of study may also include exploration into the research, design, or testing of computer or computer-related equipment for commercial, industrial, military, or scientific use.

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

Successful completion of the Information Technology Support and Services program of study will fulfill requirements of a Business and Industry Endorsement. Approved Statewide Program of Study - September 2019.



	Courses
9th	**Principles of Information Technology**[1]**:** IT27201 AB OR ITH27201 AB
10th	**Internetworking Technologies I:** IT28012 AB OR ITH28012 AB
11th	**Internetworking Technologies II**[3]**:** IT28022 AB OR ITH28022 AB
12th	**Networking**[2,4]**:** IT27402 AB OR ITH27402 AB OR **Paid Practicum in Information Technology**[4]**:** IT27212 AB OR ITH27212 AB OR **Unpaid Practicum in Information Technology/d**[4]**:** IT27202 AB OR ITH27202 AB O4 **Honors Project-Based Research AB**[4]**:** CPH01500AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: CompTIA IT Fundamentals[1], CompTIA Net+[2], Cisco Certified Entry Networking Technician (CCENT)[3]
- Not Counted Towards Performance Acknowledgment: OSHA 10-Hour General Industry[4]

Available at:

- Carter-Riverside HS

The Networking Systems program of study explores the occupations and educational opportunities associated with designing and implementing computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. This program of study may also include exploration into analyzing science, engineering, and other data processing problems to implement and improve computer systems.

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

Successful completion of the Information Technology Support and Services program of study will fulfill requirements of a Business and Industry Endorsement. Approved Statewide Program of Study - September 2019.

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

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

FWISD offers two (2) Career Focuses in the Information Technology Career Cluster.

CAREER FOCUS	***INTERNETWORKING TECHNOLOGY***	***COMPUTER PROGRAMMING***
9TH GRADE	Principles of Information Technology: IT27201 AB OR Honors: ITH27201 AB	Principles of Information Technology: IT27201 AB OR Honors: ITH27201 AB *(No longer accepting freshman in this strand)*
10TH GRADE	Networking: IT27402 AB OR Honors: ITH27402 AB	AP Computer Science Principles: 2157 AB OR Computer Science I: 2151 AB OR Honors: 2141 AB
11TH GRADE	Honors Internetworking Technologies I: ITH28012 AB	AP Computer Science A (MATH): TA2142 AB OR Computer Science II: 2153 AB OR Honors: 2143 AB
12TH GRADE	Honors Internetworking Technologies II: ITH28022 AB OR Honors Unpaid Practicum in Information Technology/d: ITH27202 AB OR Honors Paid Practicum in Information Technology/Extended: ITH27212 AB	Honors Unpaid Practicum in Information Technology/d: ITH27202 AB OR Honors Paid Practicum in Information Technology/Extended AB: ITH27212 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** CompTIA© A+ Certification; CISCO Certified Entry Network Technician (CCENT) **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification	**Industry Certification Opportunities for Performance Acknowledgement:** Oracle Java SE 8 Programmer I; Microsoft Technology Associate Introduction to Programming Using JavaScript; Microsoft Technology Associate Introduction to Programming Using Python **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification
Available At	**Carter Riverside HS**	**Paschal HS and Trimble Tech HS** *(No longer accepting freshman in this strand)*

COURSE DESCRIPTIONS FOR INFORMATION TECHNOLOGY CLASSES

PRINCIPLES OF INFORMATION TECHNOLOGY AB (PRINIT AB)	**IT27201AB**
In Principles of Information Technology, students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.	13027200 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: *Principles of Information Technology – Texas Student Edition,* Pearson Education, Inc., Prerequisite(s): None *Offered only at: Carter-Riverside and World Languages Institute*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF INFORMATION TECHNOLOGY AB (PRINIT AB/H)	**ITH27201AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13027200 Grade level: 9 - 10
Instructional Material: *Principles of Information Technology – Texas Student Edition,* Pearson Education, Inc. Prerequisite(s): None *Offered only at: Carter-Riverside and World Languages Institute*	HS Credit(s): 1 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN INFORMATION TECHNOLOGY/D (PRACIT1 AB)	**IT27202AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. In the Practicum in Information Technology, students will gain advanced knowledge and skills in the application, design, production, implementation, maintenance, evaluation, and assessment of products, services, and systems. Knowledge and skills in the proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology-driven society. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13028000 Grade level: 12 HS Credit(s): 2
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Internetworking Technologies I, Computer Science II or AP Computer Science *Offered only at: Trimble Tech and Carter Riverside*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN INFORMATION TECHNOLOGY/D (PRACIT1 AB/H)	**ITH27202AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13028000 Grade level: 12
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Internetworking Technologies I, Computer Science II or AP Computer Science *Offered only at: Trimble Tech and Carter Riverside*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN INFORMATION TECHNOLOGY AB/EXTENDED (EXPRIT2 AB)	**IT27212AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. In this course, students will gain advanced knowledge and skills in the application, design, production, implementation, maintenance, evaluation, and assessment of products, services, and systems. Knowledge and skills in the proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology-driven society. Critical thinking, IT experience, and product development may be conducted in a classroom setting along with paid employment in the IT industry. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13028050 Grade level: 12 HS Credit(s): 3
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Internetworking Technologies I, Computer Science II or AP Computer Science A *Offered only at: Trimble Tech and Carter Riverside*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN INFORMATION TECHNOLOGY AB/EXTENDED (EXPRIT2 AB/H)	**ITH27212AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13028050 Grade level: 12
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Internetworking Technologies I, Computer Science II or AP Computer Science A *Offered only at: Trimble Tech and Carter Riverside*	HS Credit(s): 3 College Hour(s): NA **Tier II**

NETWORKING AB (NTWRK AB)	IT27402AB
This course provides a basic introduction to telecommunications and the operational and technical aspects of network systems. Students explore the various types and uses of networks and online services. Students will learn to install, configure and troubleshoot basic networking hardware, protocols and services. To prepare for success, students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. This course prepares students for the Computer Technology Industry Association (CompTIA©) A+ Exam.	13027400 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Principles of Information Technology *Offered only at: Carter Riverside and Eastern Hills*	College Hour(s): NA **Tier III**
HONORS NETWORKING AB (NTWRK AB/H)	**ITH27402AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13027400 Grade level: 10 - 11
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Principles of Information Technology *Offered only at: Carter Riverside and Eastern Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
HONORS INTERNETWORKING TECHNOLOGIES I AB (INTNET1 AB/H)	**ITH28012AB**
Using a lab setting that corresponds to the work place, students design local and wide-area networks. Students focus on network fundamentals, router theory, router technologies, network design, and network management. Students begin preparation for CISCO industry certification. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1302803 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Networking I *Teacher must be CISCO certified.* *Offered only at: Carter Riverside*	College Hour(s): NA **Tier II**
HONORS INTERNETWORKING TECHNOLOGIES II AB (INTNET2 AB/H)	**ITH28022AB**
This high-tech learning environment provides students the knowledge and experience to enter the workforce and/or further their education and training in the computer-networking field. Students work in a lab to prepare for CISCO industry certification. Teacher must be CISCO certified. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1302804 Grade level: 12 HS Credit(s): 1
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Internetworking Technologies I *Teacher must be CISCO certified.* *Offered only at: Carter Riverside*	College Hour(s): NA **Tier II**
COMPUTER MAINTENANCE AB (COMPMTN AB)	**IT27302AB**
In Computer Maintenance, students will acquire knowledge of computer maintenance and creating appropriate documentation. Students will analyze the social responsibility of business and industry regarding the significant issues relating to the environment, ethics, health, safety, and diversity in society and in the workplace as related to computer maintenance. Students will apply technical skills to address the IT industry and emerging technologies.	13027300 Grade level: 10 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Information Technology *Offered only at: Eastern Hills, Polytechnic, South Hills, Trimble Tech and Western Hills*	College Hour(s): NA **Tier III**
HONORS COMPUTER MAINTENANCE AB/H (COMPMTN AB/H)	**ITH27302AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13027300 Grade level: 10
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Information Technology *Offered only at: Eastern Hills, Polytechnic, South Hills, Trimble Tech and Western Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
UNPAID COMPUTER TECHNICIAN PRACTICUM/d AB (COMPT1 AB) *(Available Fall 2022)*	**IT27502AB**
In the Computer Technician Practicum, students will gain knowledge and skills in computer technologies, including advanced knowledge of electrical and electronic theory, computer principles, and components related to the installation, diagnosis, service, and repair of computer-based technology systems. Students will reinforce, apply, and transfer their knowledge and skills to a variety of settings and problems. Proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology-driven society. Critical thinking, IT experience, and product development may be conducted in a classroom setting with an instructor, with an industry mentor, or both.	13027500 Grade level: 11 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Computer Maintenance *Offered only at: Polytechnic, South Hills, Trimble Tech and Western Hills*	College Hour(s): NA **Tier III**
HONORS UNPAID COMPUTER TECHNICIAN PRACTICUM/d AB/H (COMPT1 AB/H) *(Available Fall 2022)*	**ITH27502AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13027500 Grade level: 11

Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Computer Maintenance *Offered only at: Polytechnic, South Hills, Trimble Tech and Western Hills*	HS Credit(s): 2 College Hour(s): NA **Tier II**
UNPAID COMPUTER TECHNICIAN PRACTICUM II/d AB (COMPT2 AB) *(Available Fall 2022) If taken a second time senior year*	**IT27510AB**
In the Computer Technician Practicum, students will gain knowledge and skills in computer technologies, including advanced knowledge of electrical and electronic theory, computer principles, and components related to the installation, diagnosis, service, and repair of computer-based technology systems. Students will reinforce, apply, and transfer their knowledge and skills to a variety of settings and problems. Proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology-driven society. Critical thinking, IT experience, and product development may be conducted in a classroom setting with an instructor, with an industry mentor, or both.	13027510 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Computer Maintenance *Offered only at: Polytechnic, South Hills, Trimble Tech and Western Hills*	College Hour(s): NA **Tier III**
HONORS UNPAID COMPUTER TECHNICIAN PRACTICUM II d AB/H (COMPT2 AB/H) *(Available Fall 2022) If taken a second time senior year*	**ITH27510AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13027510 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Computer Maintenance *Offered only at: Polytechnic, South Hills, Trimble Tech and Western Hills*	HS Credit(s): 2 College Hour(s): NA **Tier II**
COMPUTER SCIENCE I AB (TACS 1AB)	**2151AB** ***WL2151AB**
Students develop a solid foundation in computer terminology and programming, binary and hexadecimal number systems, computer ethics (including copyright laws and privacy), and structured programming and programming techniques on personal computers are emphasized. Students will study and write programs utilizing the high-level languages FORTRAN, Pascal, and/ or C++. Students may be awarded one *LOTE credit (WL2151 AB) or one elective credit (2151 AB) for successful completion of this course.	03580200 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials (Windows Programming & Java Programming, CompuScholar; ISBN#: 9780988707009) Prerequisite(s): None *Offered at: Paschal and Trimble Tech. Also offered as an elective course at select high schools.*	College Hour(s): NA **Tier III**
HONORS COMPUTER SCIENCE I AB/H (TACS 1AB/H)	**2141AB** ***WL2141AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study. Students may be awarded one *LOTE credit (WL2141 ABH) or one elective credit (2141 AB) for successful completion of this course.	03580200 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials (Windows Programming & Java Programming, CompuScholar; ISBN#: 9780988707009) Prerequisite(s): None *Offered at: Paschal and Trimble Tech. Also offered as an elective course at select high schools*	College Hour(s): NA **Tier II**
AP COMPUTER SCIENCE PRINCIPLES AB (APTACS PRIN)	**2157AB** ***WL2157AB**
This course introduces students to the foundational ideas of computer science, while providing exposure to computational content, computational thinking skills, creative aspects of the field and their impact on the world. Students will be provided the opportunity to investigate the innovations in other fields of computing while examining the ethical implications of new computing technologies. The course follows the College Board AP® Computer Science Principles Curriculum Framework. (Teachers teaching this course must be Computer Information Systems and GT certified.) Students may be awarded one *LOTE credit (TAWL2157 AB) or one elective credit (TA2157 AB) for successful completion of this course.	A3580300 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered at: Paschal and Trimble Tech. Also offered as an elective course at select high schools.*	College Hour(s): NA **Tier I**
COMPUTER SCIENCE II AB (TACS 2AB)	**2153AB** **WL2153AB**
Students learn advanced skills in programming languages and structured programming techniques through the use of advanced data structures and the discussion of memory allocation and de-allocation. The course offers students the opportunity to explore projects related to individual interests such as business applications, computer graphics, and sound. Students may be awarded one LOTE credit (TAWL2153AB) or one elective credit (TA2153AB) for successful completion of this course.	03580300 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials (Python Programming, CompuScholar) Prerequisite(s): Computer Science I or AP Computer Science Principles *Offered at: Paschal and Trimble Tech. Also offered as an elective course at select high schools.*	College Hour(s): NA **Tier III**

HONORS COMPUTER SCIENCE II AB/H (TACS 2AB/H)	**2143AB** **WL2143AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study. Students may be awarded one LOTE credit (WL2143AB) or one elective credit (2143AB) for successful completion of this course.	03580300 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials (Python Programming, CompuScholar) Prerequisite(s): Computer Science I or AP Computer Science Principles *Offered at: Paschal and Trimble Tech. Also offered as an elective course at select high schools.*	College Hour(s): NA **Tier II**
AP COMPUTER SCIENCE A AB (APTACSA 1AB, APTACSAL AB, APTACSAM AB)	**2142AB** ***WL2142AB** ****M2142AB**
AP Computer Science A is designed for qualified students in grades 10 - 12 who wish to complete the equivalent of a college introductory course in computer science. The course will focus on programming methodology, and procedural abstraction. It also includes the study of algorithms, data structures, and data abstraction, but covered in less depth than in the Computer Science III AB course. The course follows the College Board AP® Computer Science A Curriculum Framework. Students **must** be scheduled into two of the following three course numbers for this course: 2142 AB for an elective credit, M2142 AB for a math credit, and WL2142 AB for a LOTE credit. Students will be awarded two credits for successful completion of this course.	A3580120, A3580120, A3580110 Grade level: 10 - 12 HS Credit(s): 2
Instructional Material: Java Programming, CompuScholar Prerequisite(s): AP Computer Science Principles OR Computer Science I *Offered at: Paschal and Trimble Tech. Also offered as an elective course at select high schools.*	College Hour(s): NA **Tier I**
HONORS PROJECT-BASED RESEARCH AB (PROBS1 AB/H) *(Available Fall 2023)*	**CPH01500AB**
Students will research a real-world problem and possible solutions throughout this course. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. This course must be cooperatively planned and supervised by the teacher ensuring that the student has guidance and support of a mentor or interdisciplinary team. The district must maintain a written project plan for each student enrolled in the course.	12701500 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Specific to program focus/pathway and is the previous course in the sequence. *Offered at: All high school campuses*	College Hour(s): NA **Tier II**

For the graduating class of 2024 and up only.

EMERGENCY SERVICES
(Previously Fire Technology)

LAW ENFORCEMENT

LEGAL STUDIES

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator:
Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.

	Courses
9th	**Principles of Law, Public Safety, Corrections, and Security:** LA29201 AB OR LAH29201 AB
10th	**Firefighter I/d[1]:** LA29902 AB OR LAH29901 AB
11th	**Firefighter II/t:** LA30002 AB OR LAH30002 AB
12th	**Unpaid Practicum in Law, Public Safety, Corrections, and Security/d:** LA30102 AB OR LAH30102 AB OR **Paid Practicum in Law, Public Safety, Corrections, and Security:** LA30112 AB OR LAH30112 AB

Enrichment Courses:

- **Forensic Science:** LA29502 AB OR LAH29502 AB
- **Disaster Response:** LA03012 AB OR LAH03012 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Emergency Medical Technician (EMT) Certification[2]
- Not counted towards Performance Acknowledgment: OSHA 10-hour General Industry[1]

Available At:

- Eastern Hills HS

The Emergency Services program of study focuses on training students to respond to emergency situations, namely medical emergencies and fire-based emergencies. Students may learn how to prevent emergencies, respond appropriately and in accordance with rules and regulations during crises, and investigate and delineate the source of the emergency.

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

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

	Courses
9th	**Principles of Law, Public Safety, Corrections, and Security:** LA29201 AB OR LAH29201 AB
10th	**Law Enforcement I:** LA29302 AB OR LAH29302 AB
11th	**Law Enforcement II[1]:** LA29402 AB OR LAH29402 AB
12th	**Unpaid Practicum in Law, Public Safety, Corrections, and Security/d:** LA30102 AB OR LAH30102 AB OR **Paid Practicum in Law, Public Safety, Corrections, and Security:** LA30112 AB OR LAH30112 AB

Enrichment Courses:

- **Forensic Science:** LA29502 AB OR LAH29502 AB
- **Criminal Investigations:** LA29300 AB OR LAH29300 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: International Academy of Emergency Dispatch (IAED) Emergency Telecommunicator Certification[1] (TBD)
- Not counted towards Performance Acknowledgment: OSHA 10-hour General Industry Certification

Available At:

- Eastern Hills HS

The Law Enforcement program of study teaches students about the development of, adherence to, and protection of various branches of law. Students may learn how to appropriately and legally respond to breaches in the law according to statutory rules and regulations as well as investigate how and why the breaches occurred.

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

Successful completion of the Law Enforcement, Investigations, Security and Corrections program of study will fulfill requirements of the Public Service Endorsement. Approved Statewide Program of Study - September 2019.

	Courses
9th	**Principles of Law, Public Safety, Corrections, and Security:** LA29201 AB OR LAH29201 AB
10th	**Court Systems and Practices:** LA29602 AB OR LAH29602 AB
11th	**Legal and Research Writing**[1]**:** LA03014 AB OR LAH03014 AB
12th	**Unpaid Practicum in Law, Public Safety, Corrections, and Security/d:** LA30102 AB OR LAH30102 AB OR **Paid Practicum in Law, Public Safety, Corrections, and Security:** LA30112 AB OR LAH30112 AB OR **Honors Project-Based Research:** CPH01500AB

Enrichment Courses:

- **Business Information Management:** BA11412 AB OR BAH11412 AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Entrepreneurship and Small Business (ESB) [1] Certification
- Not counted towards Performance Acknowledgment: N/A

Available At:

- Eastern Hills HS

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

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

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

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

The Law Enforcement & Public Safety, previously Law, Public Safety, Corrections, and Security, Career Cluster focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services.

FWISD offers three (3) Career Focuses in the Law Enforcement & Public Safety Career Cluster.

CAREER FOCUS	***LAW ENFORCEMENT***	***LEGAL SERVICES***	***FIRE TECHNOLOGY***
9TH GRADE	Principles of Law and Public Safety: LA29201 AB OR Honors: LAH29201 AB	Principles of Law and Public Safety: LA29201 AB OR Honors: LAH29201 AB	Principles of Law and Public Safety: LA29201 AB OR Honors: LAH29201 AB OR Principles of Health Science: HS02022 AB OR Honors: HSH02022 AB
10TH GRADE	Court Systems and Practices: LA29602 AB OR Honors: LAH29602 AB	Business Information Management I: BA11412 AB OR Honors: BAH11412 AB	Firefighter I/d: LA29902 AB OR Honors: LAH29902 AB
11TH GRADE	Law Enforcement I: LA29302 AB OR Honors: LAH29302 AB AND/OR Criminal Investigations: LA29300 AB OR Honors: LAH29300 AB	Court Systems and Practices: LA29602 AB OR Honors: LAH29602 AB AND/OR Law Enforcement I: LA29302AB OR Honors: LAH29302 AB	Firefighter II/t: LA30002 AB OR Honors: LAH30002 AB
12TH GRADE	Law Enforcement II: LA29402 AB OR Honors: LAH29402 AB AND Forensic Science: LA29502 AB OR Honors: LAH29502 AB	Unpaid Practicum in Law and Public Safety/d: LA30102 AB OR Honors: LAH30102 AB OR Paid Practicum in Law and Public Safety/Extended: LA30112 AB OR Honors: LAH30112 AB	Firefighter III/t AB: LA30105 AB OR Honors LAH30105 AB OPTIONAL: Forensic Science: LA29502 AB OR Honors: LAH29502 AB
Certification Options	**Counted towards Performance Acknowledgement:** IAED Emergency Telecommunicator Certification (TBD) **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification	**Counted towards Performance Acknowledgement:** Entrepreneurship and Small Business (ESB) Certification	**Counted towards Performance Acknowledgement:** Emergency Medical Technician (EMT) Certification
Available At	**Eastern Hills HS**	**Eastern Hills HS**	**Eastern Hills HS**

COURSE DESCRIPTIONS FOR ALL LAW ENFORCEMENT & PUBLIC SAFETY CLASSES

PRINCIPLES OF LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY AB (PRINLPCS AB)	**LA29201AB**
The course, Principles of Law and Public Safety, introduces students to professions in the courts and criminal justice system such as law enforcement, security, corrections, and emergency management services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of emergency services. The course provides students with an overview of the skills necessary for careers in law enforcement, security, and corrections.	13029200 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered only at: Eastern Hills*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY AB (PRINLPCS AB/H)	**LAH29201AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13029200 Grade level: 9 - 10
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Course taught by locally certified gifted teacher.* *Offered only at: Eastern Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
COURT SYSTEMS AND PRACTICES AB (COURTSP AB)	**LA29602AB**
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.	13029600 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Law and Public Safety *Offered only at: Eastern Hills*	College Hour(s): NA **Tier III**
HONORS COURT SYSTEMS AND PRACTICES AB (COURTSP AB/H)	**LAH29602AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13029600 Grade level: 10 - 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Law and Public Safety *Offered only at: Eastern Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
LAW ENFORCEMENT I AB (LAWENF1 AB)	**LA29302AB**
Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. This course includes the role of constitutional law, the United States legal system, criminal law, law enforcement terminology, and the classification and elements of crime. Students study of the nature of criminal law and its philosophical and historical development, with major definitions and concepts. Instruction includes the classifications of crimes and the elements of crimes and penalties using Texas statutes as illustrations.	13029300 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Criminal Justice, Prentice Hall Publishing/Pearson Learning, ISBN#: 0321194608* Prerequisite(s): Court Systems and Practices I *Offered only at: Eastern Hills*	College Hour(s): NA **Tier III**
HONORS LAW ENFORCEMENT I AB (LAWENF1 AB/H)	**LAH29302AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13029300 Grade level: 11 – 12
Instructional Material: *Criminal Justice, Prentice Hall Publishing/Pearson Learning* Prerequisite(s): Court Systems and Practices I *Offered only at: Eastern Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
LAW ENFORCEMENT II AB (LAWENF2 AB)	**LA29402AB**
Law Enforcement II provides the knowledge and skills necessary to prepare for a career in law enforcement. This course includes the ethical and legal responsibilities, operation of police and emergency telecommunication equipment, and courtroom testimony.	13029400 Grade level: 12 HS Credit(s): 1
Instructional Material: *Criminal Justice, Prentice Hall Publishing/Pearson Learning* Prerequisite(s): Law Enforcement I *Offered only at: Eastern Hills*	College Hour(s): NA **Tier III**
HONORS LAW ENFORCEMENT II AB (LAWENF2 AB/H)	**LAH29402AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13029400 Grade level: 12
Instructional Material: *Criminal Justice, Prentice Hall Publishing/Pearson Learning* Prerequisite(s): Law Enforcement I *Offered only at: Eastern Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**

CRIMINAL INVESTIGATIONS AB (CRIM INV AB)	LA29300AB
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.	13029550 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Law and Public Safety *Offered only at: Eastern Hills*	College Hour(s): NA **Tier III**
HONORS CRIMINAL INVESTIGATIONS AB (CRIM INV AB/H)	**LAH29300AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13029550 Grade level: 10 - 11
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Principles of Law and Public Safety *Offered only at: Eastern Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**
FIREFIGHTER I/D AB (FIRE1 AB)	**LA29902AB**
Firefighter I introduces students to firefighter safety and development. In this double period class, students will analyze Texas Commission on Fire Protection rules and regulations, proper incident reporting and records, proper use of personal protections equipment, and the principles of fire safety.	13029900 Grade level: 10 HS Credit(s): 2
Instructional Material: *Firefighter's Handbook: Firefighting and Emergency Response, 3rd Edition,* Cengage Delmar Learning Prerequisite(s): Principles of Law and Public Safety or Principles of Health Science Technology *Offered only at: Eastern Hills*	College Hour(s): NA **Tier III**
HONORS FIREFIGHTER I/D AB (FIRE1 AB/H)	**LAH29902AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13029900 Grade level: 10
Instructional Material: *Firefighter's Handbook: Firefighting and Emergency Response, 3rd Edition,* Cengage Delmar Learning Prerequisite(s): Principles of Law and Public Safety or Principles of Health Science Technology *Offered only at: Eastern Hills*	HS Credit(s): 2 College Hour(s): NA **Tier II**
FIREFIGHTER II/T AB (FIRE2 AB)	**LA30002AB**
Firefighter II is the second course in a series for students studying firefighter safety and development. Students will understand Texas Commission on Fire Protection rules and regulations, proper incident reporting and records, proper use of personal protective equipment, and the principles of fire safety. Students will demonstrate proper use of fire extinguishers, ground ladders, fire hoses, and water supply apparatus systems. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations. Students completing this triple period course are preparing for admission to the Fire Academy.	13030000 Grade level: 11 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Firefighter I *Offered only at: Eastern Hills*	College Hour(s): NA **Tier II**
HONORS FIREFIGHTER II/T AB (FIRE2 AB/H)	**LAH30002AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13030000 Grade level: 11
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Firefighter I *Offered only at: Eastern Hills*	HS Credit(s): 3 College Hour(s): NA **Tier II**
FORENSIC SCIENCE AB (FORENSCI AB)	**LA29502AB**
Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science.	13029500 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Biology and Chemistry	College Hour(s): NA **Tier III**
HONORS FORENSIC SCIENCE AB (FORENSCI AB/H)	**LAH29502AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13029500 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Biology and Chemistry	College Hour(s): NA **Tier II**

UNPAID PRACTICUM IN LAW AND PUBLIC SAFETY/D AB (PRACLPCS AB)	LA30102AB
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. The double-period practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Law and Public Safety cluster. The unpaid practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. The student documents technical knowledge and skills in an updated professional portfolio that includes licensures or certifications; awards and scholarships; examples of extended learning experiences such as community service and active participation in career and technical student organizations and professional organizations; an updated resume; samples of work; and evaluations from the practicum supervisor. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13030100 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Completion of two courses in this career focus *Offered only at: Eastern Hills*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN LAW AND PUBLIC SAFETY/D AB (PRACLPCS AB/H)	**LAH30102AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13030100 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Completion of two courses in this career focus *Offered only at: Eastern Hills*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN LAW AND PUBLIC SAFETY AND SECURITY/EXTENDED AB (EXPRLPS2 AB)	**LA30112AB**
The practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses in the Law and Public Safety cluster. This course is designed to give students supervised practical application of previously studied knowledge and skills. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13030115 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Completion of two courses in this career focus *Offered only at: Eastern Hills*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN LAW AND PUBLIC SAFETY AND SECURITY/EXTENDED AB (EXPRLPS2 AB/H)	**LAH30112AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13030115 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Completion of two courses in this career focus *Offered only at: Eastern Hills*	HS Credit(s): 3 College Hour(s): NA **Tier II**
LEGAL AND RESEARCH WRITING AB (LEGRW AB) *(Available Fall 2022)*	**LA03014AB**
Legal Research and Writing provides an introduction into the study and practice of legal writing and research. This course is designed to introduce students to the methods and tools used to conduct legal research, develop and frame legal arguments, produce legal writings such as briefs, memorandums, and other legal documents, study U.S. Constitutional law, and prepare for appellate argument(s).	N1303014 Grade level: 11 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered only at: Eastern Hills*	College Hour(s): NA **Tier III**
HONORS LEGAL AND RESEARCH WRITING AB (LEGRW AB/H) (*Available Fall 2022)*	**LAH03014AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303014 Grade level: 11
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered only at: Eastern Hills*	HS Credit(s): 1 College Hour(s): NA **Tier II**

HONORS PROJECT-BASED RESEARCH AB (PROBS1 AB/H) *(Available Fall 2023)*	**CPH01500AB**
Students will research a real-world problem and possible solutions throughout this course. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. This course must be cooperatively planned and supervised by the teacher ensuring that the student has guidance and support of a mentor or interdisciplinary team. The district must maintain a written project plan for each student enrolled in the course. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	12701500 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Specific to program focus/pathway and is the previous course in the sequence. *Offered at: All high school campuses*	College Hour(s): NA **Tier II**

Government and Public Administration – Public Services Endorsement

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

The Government and Public Administration Career Cluster focuses on planning and performing governmental functions at the local, state, and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.

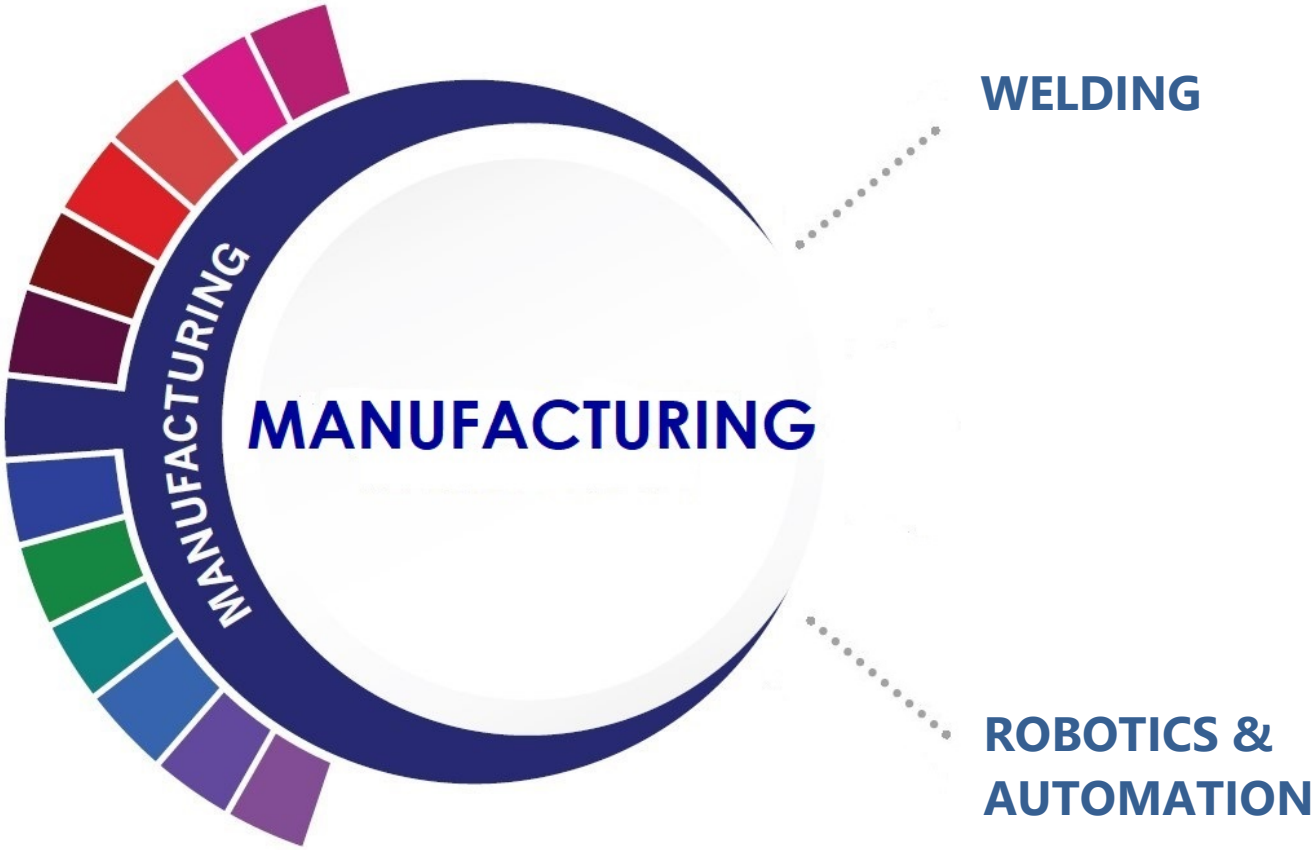
FWISD offers one (1) Career Focus in the Government and Public Administration Career Cluster.

CAREER FOCUS	***PUBLIC ADMINISTRATION***
9TH GRADE	Principles of Government and Public Administration: GP18201 AB OR Honors: GPH18201 AB *No longer accepting incoming freshman in this strand*
10TH GRADE	Public Management and Administration: GP18602 AB OR Honors: GPH18602 AB
11TH GRADE	Planning and Governance: GP18702 AB OR Honors: GPH18702 AB AND Business Law: BA11701 AB OR Honors: BAH11701 AB
12TH GRADE	Unpaid Practicum in Local, State, and Federal Government/d: GP19002 AB OR Honors: GPH19002 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** None **Not Counted towards Performance Acknowledgement:** None
Available At	**Benbrook HS** *No longer accepting incoming freshman in this strand*

COURSE DESCRIPTIONS FOR GOVERNMENT & PUBLIC ADMINISTRATION CLASSES

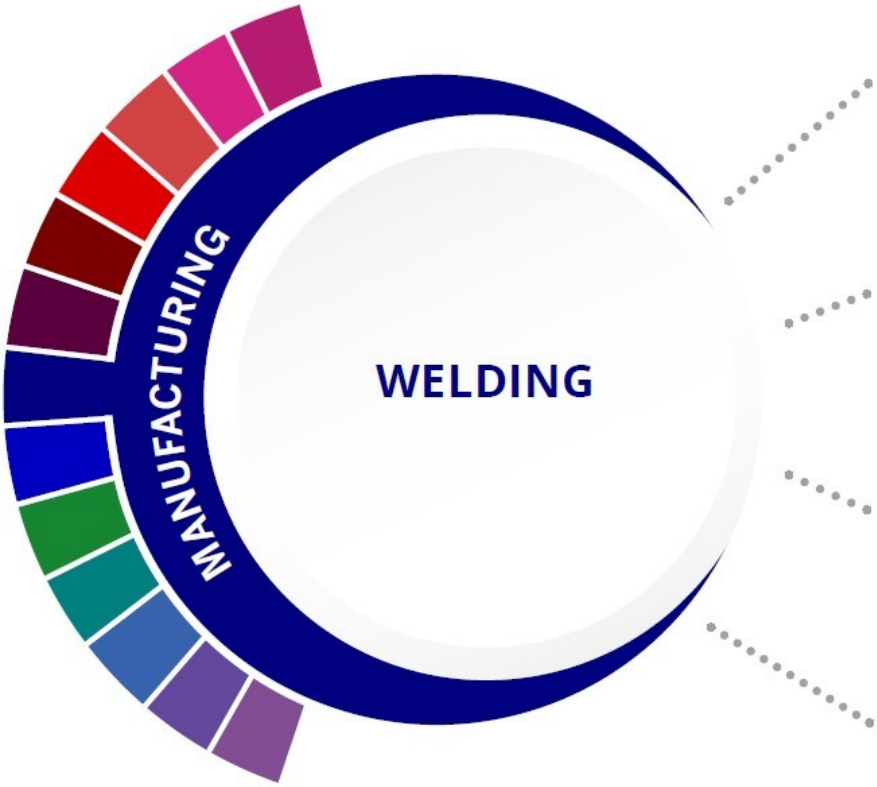
PLANNING AND GOVERNANCE AB (PLANGOV AB)	**GP18702 AB**
Planning and Governance provide the opportunity for students to formulate plans and policies to meet social, economic, and physical needs of the community.	13018700 Grade level: 11
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Public Management and Administration *Offered only at Benbrook*	HS Credit(s): 1 College Hour(s): NA **Tier III**
HONORS PLANNING AND GOVERNANCE AB (PLANGOV AB/H)	**GPH18702 AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13018700 Grade level: 11
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Public Management and Administration A/B *Offered only at Benbrook HS*	HS Credit(s): 1 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN LOCAL, STATE, AND FEDERAL GOVERNMENT/ D AB (PRACLSFG AB)	**GP19002 AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. Students concurrently learn advanced concepts in political science in the classroom setting while applying technical skills pertaining to government and public administration in a direct mentorship. They will work with individuals in professional settings such as government, public management, and administration, national security, municipal planning, and Foreign Service. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13019000 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Planning and Governance *Offered only at Benbrook*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN LOCAL, STATE, AND FEDERAL GOVERNMENT/ D AB (PRACLSFG AB/H)	**GPH19002 AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13019000 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Planning and Governance *Offered only at Benbrook*	HS Credit(s): 2 College Hour(s): NA **Tier II**
BUSINESS LAW AB (BUSLAW AB)	**BA11701AB**
In Business Law, students analyze the social responsibility of business and industry regarding the significant issues relating to the legal environment, business ethics, torts, contracts, negotiable financial instruments, personal property, sales, warranties, and business organizations, concept of agency and employment, and real property. Students apply technical skills to address business applications of contemporary legal issues. They incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions.	13011700 Grade level: 11-12 HS Credit(s): 1
Instructional Material: *Law for Business and Personal Use, 2017,* Cengage Learning Inc. Prerequisite(s): Business Information Management	College Hour(s): NA **Tier III**
HONORS BUSINESS LAW AB (BUSLAW AB/H)	**BAH11701AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13011700 Grade level: 11-12 HS Credit(s): 1
Instructional Material: *Law for Business and Personal Use, 2017,* Cengage Learning Inc. Prerequisite(s): Business Information Management	College Hour(s): NA **Tier II**

For the graduating class of 2024 and beyond only.



Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator:
Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.



	Courses
9th	**Introduction to Welding[4]:** MA32300AB OR MAH3200AB
10th	**Welding I/d:** MA32302AB OR MAH32302AB
11th	**Welding II/d[1,2,3]:** MA32402AB OR MAH32402AB
12th	**Paid Practicum in Manufacturing:** MA33012AB OR MAH33012AB OR **Unpaid Practicum in Manufacturing/d:** MA33002AB OR MAH33002AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: AWS D1.1 - Structural Welding[1]; AWS D9.1 - Sheet Metal[2]; and/or NCCER Welding Level I[3];
- Not Counted Towards Performance Acknowledgment: OSHA 10-Hour Construction Industry[4]

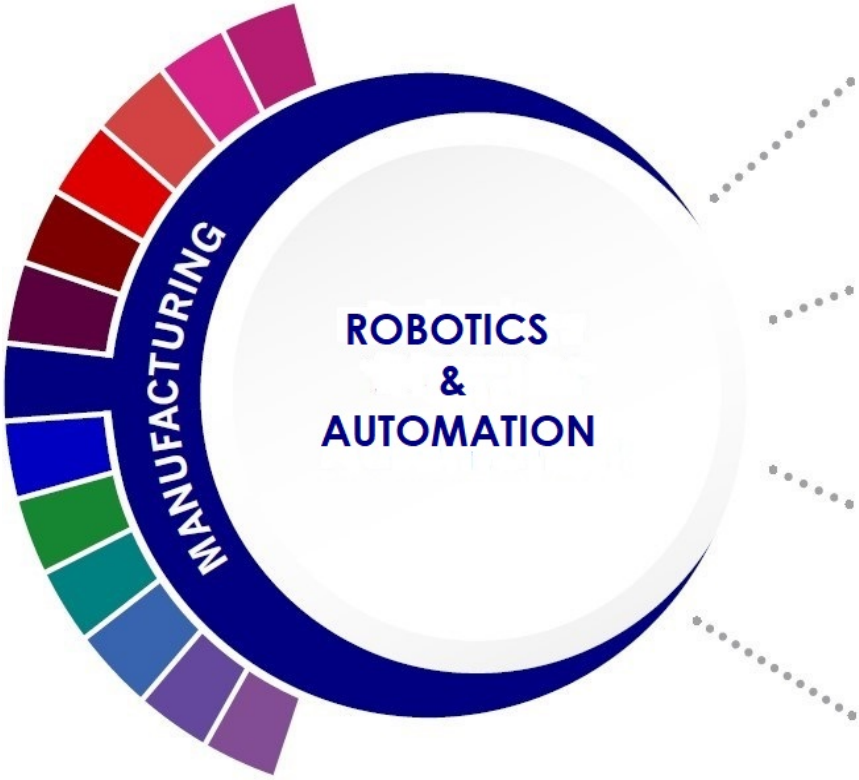
Available At:

- Diamond Hill-Jarvis HS
- South Hills HS
- Southwest HS
- Trimble Technical HS

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

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

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



9th	**Principles of Applied Engineering:** ST36202AB OR STH36202AB
10th	**Robotics I[1]:** ST37002AB OR STH37002AB
11th	**Robotics II[2]:** ST37003AB OR STH37003AB **Programmable Logic Controller I:** MA03689AB OR MAH03689AB
12th	**Paid Practicum in Manufacturing:** MA33012AB OR MAH33012AB OR **Unpaid Practicum in Manufacturing/d:** MA33002AB OR MAH33002AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: FANUC Robot Operator I[2]
- Not Counted Towards Performance Acknowledgment: OSHA 10-Hour General Industry[1]

Available At:

- Trimble Technical HS

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

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

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

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

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

FWISD offers one (1) Career Focus in the Manufacturing Career Cluster.

CAREER FOCUS	***WELDING***
9TH GRADE	Principles of Manufacturing: MA32201 AB OR Honors MAH32201 AB
10TH GRADE	Introduction to Welding: MA32300 AB OR Honors: MAH32300 AB
11TH GRADE	Welding I/d: MA32302 AB OR Honors MAH32302 AB
12TH GRADE	Welding II/d: MA32402 AB OR Honors MAH32402 AB OR Unpaid Practicum in Manufacturing/d: MA33002 AB OR Honors: MAH33002 AB OR Paid Practicum in Manufacturing/Extended: MA33012 AB OR Honors MAH33012 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** AWS D1.1 - Structural Welding, NCCER Welding Level 1, or AWS D9.1 – Sheet Metal **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour Construction Industry Certification
Available At	**Trimble Tech HS**

COURSE DESCRIPTIONS FOR MANUFACTURING CLASSES

INTRODUCTION TO WELDING AB (INTRWELD AB)	MA32300AB
Introduction to Welding will introduce welding technology with an emphasis on basic welding laboratory principles and operating procedures. Students will be introduced to the three basic welding processes. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, laboratory operating procedures, welding power sources, welding career potentials, and introduction to welding codes and standards. Introduction to Welding will provide students with the knowledge, skills, and technologies required for employment in welding industries. Students will develop knowledge and skills related to welding and apply them to personal career development.	13032250 Grade level: 9-10 HS Credit(s): 1
Instructional Material: *NCCER- Welding, Texas Edition 2017 Student Edition,* Pearson Education Prerequisite(s): None *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Tech*	College Hour(s): NA **Tier III**
HONORS INTRODUCTION TO WELDING AB (INTRWELD AB/H)	**MAH32300AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13032250 Grade level: 9 - 10
Instructional Material: *NCCER- Welding, Texas Edition 2017 Student Edition,* Pearson Education Inc. Prerequisite(s): None *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**
WELDING I/D AB (WELD 1AB)	**MA32302AB**
Rapid advances in technology have created new career opportunities and demands in many industries. Welding provides the knowledge, skills, and technologies required for employment in metal technology systems. Students develop knowledge and skills related to this system and apply them to personal career development. This course supports integration of academic and technical knowledge and skills as students apply, and transfer their understanding and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success.	13032300 Grade level: 10 - 11 HS Credit(s): 2
Instructional Material: *NCCER- Welding, Texas Edition 2017 Student Edition,* Pearson Education Inc. Prerequisite(s): Introduction to Welding *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Tech*	College Hour(s): NA **Tier III**
HONORS WELDING I/D AB (WELD 1AB/H)	**MAH32302AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13032300 Grade level: 10 - 11
Instructional Material: *NCCER- Welding, Texas Edition 2017 Student Edition,* Pearson Education Inc. Prerequisite(s): Introduction to Welding *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
WELDING II/D AB (WELD 2AB)	**MA32402AB**
Welding II builds on knowledge and skills developed in Welding I. Students will develop advanced welding concepts and skills as they relate to personal and career development. This course integrates academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.	13032400 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: *NCCER- Welding, Texas Edition 2017,* Pearson Education Inc. Prerequisite(s): Welding I/d *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Tech*	College Hour(s): NA **Tier III**
HONORS WELDING II/D AB (WELD 2AB/H)	**MAH32402AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13032400 Grade level: 11 - 12
Instructional Material: *NCCER- Welding, Texas Edition 2017,* Pearson Education Inc. Prerequisite(s): Welding I/d *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAID PRACTICUM IN MANUFACTURING/EXTENDED AB (EXPRMAN2 AB)	**MA33012AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13033015 Grade level: 12 HS Credit(s): 3

Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Welding II/d *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN MANUFACTURING/EXTENDED AB (EXPRMAN2AB/H)	**MAH33012AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13033015 Grade level: 12
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s) (For Welding): Welding II/d AB Prerequisite(s) (For Manufacturing P-Tech): Previous P-TECH Manufacturing coursework notated on crosswalk *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Technical, and Dunbar (P-Tech)*	HS Credit(s): 3 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN MANUFACTURING AB/D (PRACMANU AB)	**MA33002AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. In the Practicum in Manufacturing, students will apply the knowledge and manufacturing skills learned in their pre-requisite courses that are essential to prepare students for success. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13033000 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Welding II/d *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Tech*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN MANUFACTURING AB/D (PRACMANU AB/H)	**MAH33002AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13033000 Grade level: 12
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s) (For Welding): Welding II/d AB Prerequisite(s) (For Manufacturing P-Tech): Previous P-TECH Manufacturing coursework notated on crosswalk *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Technical, and Dunbar (P-Tech)*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PRINCIPLES OF APPLIED ENGINEERING AB (PRAPPENG AB)	**ST36202AB**
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.	13036200 Grade level: 9 HS Credit(s): 1
Instructional Material: *Principles of Applied Engineering, Texas Edition Reid, et al. 2017*, Pearson Education Prerequisite(s): None *Offered at: Trimble Tech and I.M. Terrell*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF APPLIED ENGINEERING AB (PRAPPENG AB/H)	**STH36202AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13036200 Grade level: 9
Instructional Material: *Principles of Applied Engineering, Texas Edition Reid, et al. 2017*, Pearson Education Prerequisite(s): None *Offered at: Trimble Tech and I.M. Terrell*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ROBOTICS I AB (ROBOT 1AB)	**ST37002AB**
In Robotics I, students will transfer academic skills to component designs in a project-based environment through implementation of the design process. Students will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry.	13037000 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Industrial Robotics, Goodheart-Willcox Co. Prerequisite(s): None *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	College Hour(s): NA **Tier III**
HONORS ROBOTICS I AB (ROBOT 1AB/H)	**STH37002AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037000 Grade level: 10-12
Instructional Material: Industrial Robotics, Goodheart-Willcox Co. Prerequisite(s): None *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	HS Credit(s): 1 College Hour(s): NA **Tier II**

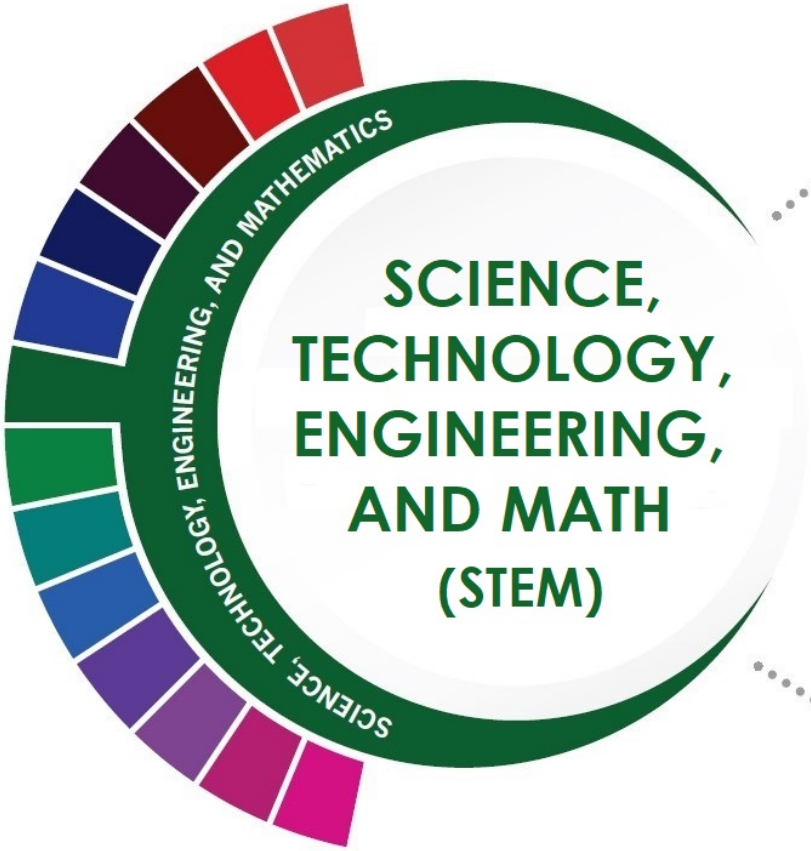
PROGRAMMABLE LOGIC CONTROLLER I	MA03689AB
Programmable Logic Controller I is a course designed to introduce students to the function and operation of Programmable Logic Controllers (PLC) through academic and applied instruction. Students will be introduced to relevant terminology, the components that make up a PLC, how PLC communicates with external components and other concepts relating to the use of PLC's in the manufacturing industry. Students will participate in structured, applied learning exercises taken from existing PLC applications. Students will also learn how to read ladder logic diagrams and ultimately write their first program. This course is recommended for students in grade 10 through 12. The central focus of this course is for students to gain an understanding of how programmable logic controllers work and how they are used in automated industries.	N1303689 Grade level: 10-12 HS Credit(s): 1 College Hour(s): NA **Tier III**
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Robotics I *Offered only at: Trimble Tech*	

HONORS PROGRAMMABLE LOGIC CONTROLLER I	MAH03689AB
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303689 Grade level: 10-12
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Robotics I *Offered only at: Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**

ROBOTICS II AB (ROBOTIC 2AB)	ST37003AB
In Robotics II, students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academic skills to component designs in a project-based environment. Students will build prototypes and use software to test their designs.	13037050 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Industrial Robotics, Goodheart-Willcox Co. Prerequisite(s): Robotics I *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	College Hour(s): NA **Tier III**

HONORS ROBOTICS II AB (ROBOTIC 2AB/H)	STH37003AB
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037050 Grade level: 11-12
Instructional Material: Industrial Robotics, Goodheart-Willcox Co. Prerequisite(s): Robotics I *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	HS Credit(s): 1 College Hour(s): NA **Tier II**

For the graduating class of 2024 and beyond only.



BIOMEDICAL SCIENCE

(Previously Health Science Biomedical Technology)

CYBERSECURITY

ENGINEERING

- STEM Engineering
- PLTW Engineering*

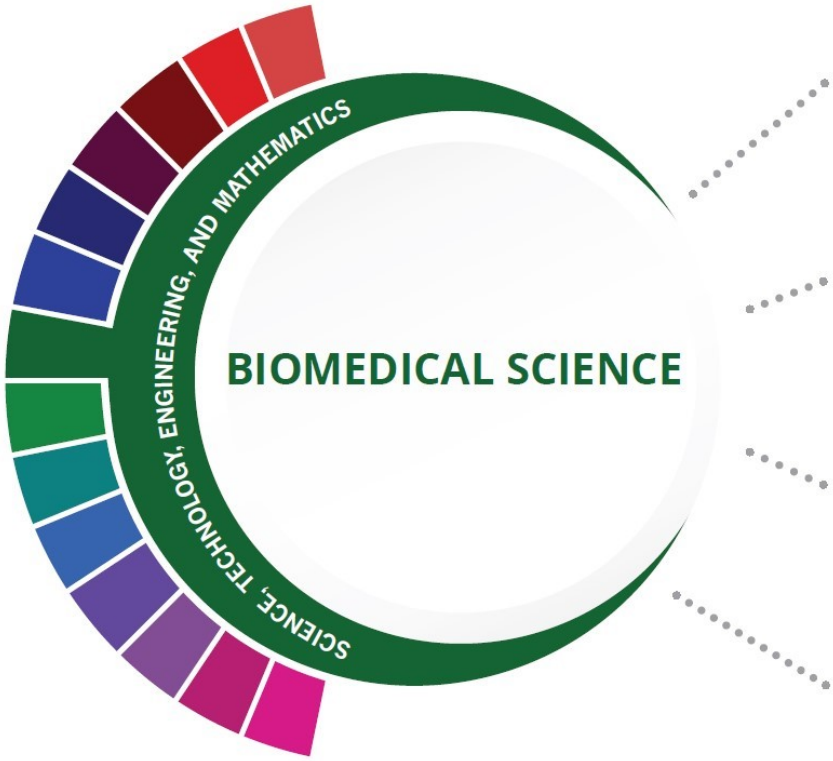
PROGRAMMING AND SOFTWARE DEVELOPMENT

- Tech Apps Computer Science

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator: Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.

**Tier 1 Engineering Program of Study*



	Courses
9th	**Principles of Biomedical Science (PLTW):** HSH2092AB
10th	**Human Body Systems (PLTW):** HSH2093AB
11th	**Medical Microbiology:** HS02071AB OR HSH02071AB OR **Medical Interventions (PLTW)[1,2]:** HSH30209AB
12th	**Pathophysiology:** HS20801AB OR SH20801AB OR **Unpaid Practicum in STEM/d:** STH37402AB OR **Scientific Research and Design:** ST37202AB OR STH37202AB

Enrichment Courses:

- **Anatomy and Physiology:** HS02062AB OR HSH02062AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: N/A
- Not Counted Towards Performance Acknowledgment: OSHA 10-Hour Healthcare Industry[1]; BLS/CPR Certification[2]

Available At:

- Texas Academy of Biomedical Sciences (TABS) HS

The Biomedical Science program of study focuses on the study of biology and medicine in order to introduce students to the knowledge and skills necessary to be successful in the healthcare field, such as researching and diagnosing diseases, pre-existing conditions, or other determinants of health. Students may also practice patient care and communication.

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

Successful completion of the Biomedical Science program of study will fulfill requirements of the Public Service Endorsement or STEM Endorsement, dependent upon courses chosen. Approved Statewide Program of Study - September 2019.

	Courses
9th	**PLTW Computer Science Essentials:** ITH27203AB OR **Foundations of Cybersecurity:** IT27904AB OR ITH27904AB
10th	**AP Computer Science Principles (PLTW):** 2157AB OR WL2157AB OR **AP Computer Science Principles:** 2157AB OR WL2157AB OR **Computer Science I:** 2151AB OR 2141ABH
11th	**AP Computer Science A-Math (PLTW)[1,2]:** WL2142AB OR M2142AB
12th	**Cybersecurity Capstone (PLTW):** ITH27901AB OR **Cybersecurity Capstone:** IT27900AB OR ITH27900AB OR **Honors Unpaid Practicum in Information Technology/d:** ITH27202AB OR **Honors Paid Practicum in Information Technology[3]:** ITH27212AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Microsoft Technology Associate Introduction to Programming Using Python[1]; OR Microsoft Technology Associate Introduction to Programming Using Java[2]
- Not Counted Towards Performance Acknowledgment: OSHA 10-Hour General Industry[3]

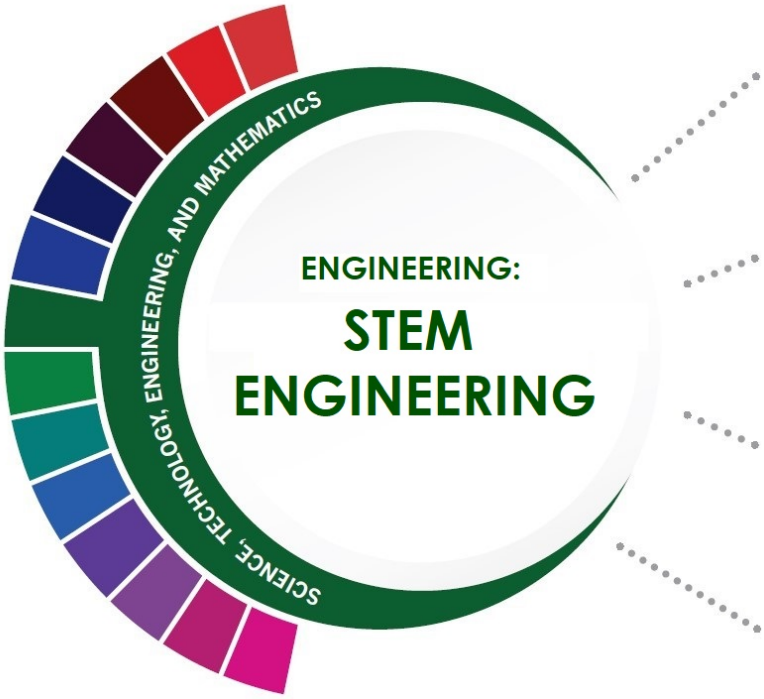
Available At:

- Trimble Technical HS
- World Languages Institute

The Cybersecurity program of study includes the occupations and educational opportunities related to planning, implementing, upgrading, or monitoring security measure for the protection of computer networks and information. This program of study may also include exploration into responding to computer security breaches and virus and administering network security measures.

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

Successful completion of the Cybersecurity program of study will fulfill requirements of the STEM Endorsement. Approved Statewide Program of Study - September 2019



	Courses
9th	**Principles of Applied Engineering:** ST36202AB OR STH36202AB
10th	**Engineering Design and Presentation I:** ST36502AB OR STH36502AB
11th	**Engineering Design and Presentation II/d[1,3]:** ST36602AB OR STH36602AB OR **Honors Engineering Design and Development (PLTW)[1,2]:** STH37492AB
12th	**Engineering Design and Problem Solving:** ST37302AB OR STH37302AB OR **Unpaid Practicum in STEM/d:** STH37402AB OR **Paid Practicum in STEM[3]:** ST37405AB OR STH37405AB

Enrichment Courses:

- **Robotics I[1,3]:** ST37002AB OR STH37002AB
- **Robotics II:** ST37003AB OR STH37003AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Certified SolidWorks Associate[1]; Autodesk Certified User-Inventor[2]
- Not Counted Towards Performance Acknowledgment: OSHA 10-Hour General Industry[3]

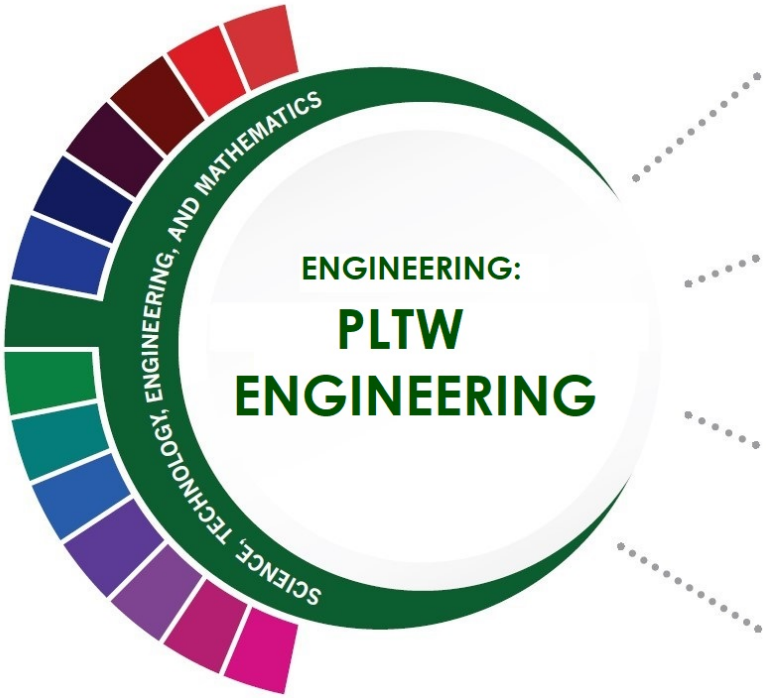
Available At:

- I.M. Terrell Academy HS
- Trimble Technical HS

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

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

Successful completion of the Engineering program of study will fulfill requirements of the STEM Endorsement. Approved Statewide Program of Study - September 2019.



	Courses
9th	**Honors Engineering Essentials (PLTW):** STH03760AB
10th	**Introduction to Engineering Design (PLTW):** STH07422AB
11th	**Engineering Science (PLTW):** STH03742AB OR **Computer Integrated Manufacturing (PLTW)[4]:** STH37482AB OR **Aerospace Engineering (PLTW):** STH37452AB OR **Civil Engineering and Architecture (PLTW):** STH37472AB
12th	**Engineering Design and Problem Solving[1,2]:** STH37302AB OR **Paid Practicum in STEM[3]:** ST37405AB OR STH37405AB

Enrichment Courses:

- **Robotics I[2,3]:** ST37002AB OR STH37002AB
- **Robotics II:** ST37003AB OR STH37003AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Autodesk Certified User-Inventor[1]; Certified SolidWorks Associate[2]; FANUC Robot Operator 1[4]
- Not Counted Towards Performance Acknowledgment: OSHA 10-Hour General Industry[3]

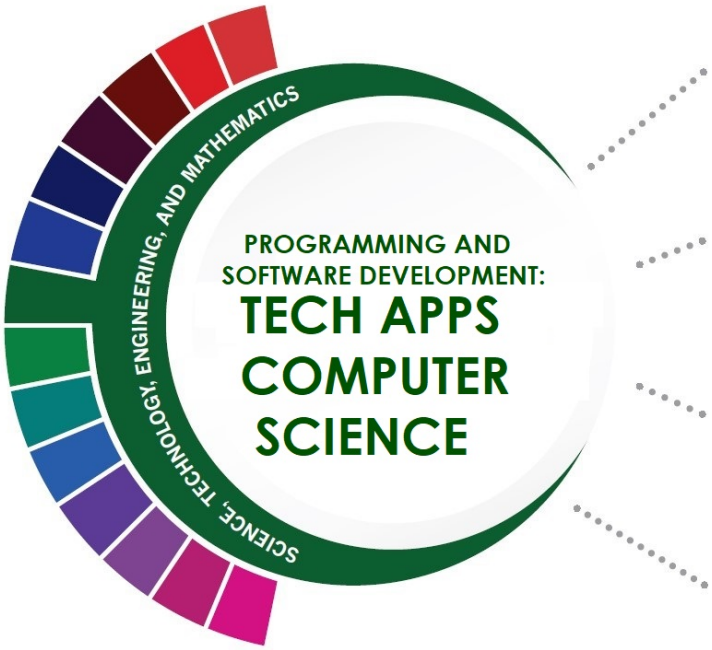
Available At:

- Arlington Heights HS
- Benbrook HS
- Carter-Riverside HS
- Diamond Hill-Jarvis HS
- Dunbar HS
- Eastern Hills HS
- North Side HS
- OD Wyatt HS
- Paschal HS
- Polytechnic HS
- South Hills HS
- Southwest HS
- Western Hills HS
- Young Men's Leadership Academy HS
- Young Women's Leadership Academy HS

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

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

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



	Courses
9th	**Computer Science I:** 2151AB OR 2141ABH
10th	**Computer Science II:** 2153AB OR 2143ABH OR **AP Computer Science Principles:** 2157AB
11th	**AP Computer Science Principles:** 2157AB OR **AP Computer Science A (MATH)[1,2]:** 2142AB OR WL2142AB OR M2142AB
12th	**AP Computer Science A (MATH)[1,2]:** 2142AB OR WL2142AB OR M2142AB OR **Computer Science III:** 2155AB OR 2145AB OR **Independent Study in Technology Applications:** 2144AB OR 2146AB OR 2148AB

Enrichment Courses:

- **Independent Study in Technology Applications:** 2144AB, 2146AB, 2148AB

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Microsoft Technology Associate Introduction to Programming Using Python[1], Microsoft Technology Associate Introduction to Programming Using Java[2]
- Not Counted Towards Performance Acknowledgment: N/A

Available At:

- Arlington Heights HS
- Carter-Riverside HS
- Dunbar HS
- I.M. Terrell Academy HS
- North Side HS
- O.D. Wyatt HS
- Paschal HS
- Polytechnic HS
- South Hills HS
- Trimble Technical HS

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

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

Successful completion of the Programming and Software Development program of study will fulfill requirements of the STEM Endorsement. Approved Statewide Program of Study - September 2019.

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the online version of the course catalog.

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

FWISD offers three (3) Career Focuses in the Science, Technology, Engineering, & Mathematics Career Cluster.

CAREER FOCUS	***ENGINEERING PROJECT LEAD THE WAY (PLTW)***	***ENGINEERING***
9TH GRADE	Honors Introduction to Engineering Design (PLTW): STH07422AB	Principles of Applied Engineering: ST36202AB OR Honors: STH36202AB
10TH GRADE	Honors Engineering Science (PLTW): STH03742AB	Engineering Design and Presentation I: ST36502AB OR Honors: STH36502AB
11TH GRADE	Honors Computer Integrated Manufacturing: STH37482AB OR Honors Civil Engineering and Architecture: STH37472AB OR Honors Aerospace Engineering: STH37452AB OR Robotics I: ST37002AB OR Honors: STH37002AB	Engineering Design and Presentation II/d: ST36602AB OR Honors: STH36602AB AND/OR Robotics I: ST37002AB OR Honors: STH37002AB OR Honors PLTW Engineering Design and Development: *(I.M. Terrell ONLY)* STH37492AB
12TH GRADE	Honors Engineering Design and Development: STH37492AB OR Robotics II: ST37003AB OR Honors: STH37003AB OR Honors Paid Practicum in STEM/Extended: STH37405AB	Robotics II: ST37003AB OR Honors: STH37003AB AND/OR Engineering Design and Problem Solving: ST37302AB OR Honors: STH37302AB OR Unpaid Practicum in STEM/d: ST37402AB OR Honors: STH37402AB OR Paid Practicum in STEM/Extended: ST37405AB OR Honors: STH37405AB
Certification Options	**Counted towards Performance Acknowledgement:** Autodesk Certified User Inventor; Certified Solid Works Associate **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Certification	**Counted towards Performance Acknowledgement:** Certified Solid Works Associate **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Certification
Available At	**Western Hills HS, Diamond Hill- Jarvis HS, Benbrook HS, YMLA, YWLA, Carter-Riverside HS, Dunbar HS, Eastern Hills HS, South Hills HS, O.D. Wyatt HS, Polytechnic HS, Arlington Heights HS, Paschal HS, and North Side HS**	**I.M. Terrell Academy and Trimble Tech HS**

CAREER FOCUS	***PETROLEUM ENGINEERING***
9TH GRADE	Principles of Business, Marketing, and Finance: BA11201AB OR Honors: BAH11201AB *No Longer Accepting Incoming Freshman*
10TH GRADE	Principles of Applied Engineering: ST36202AB OR Honors: STH36202AB
11TH GRADE	Engineering Design and Presentation I: ST36502AB OR Honors: STH36502AB AND/OR Robotics I: ST37002AB OR Honors: STH37002AB
12TH GRADE	Engineering Design and Presentation II/d: ST36602AB OR Honors STH36602AB AND/OR Robotics II: ST37003AB OR Honors: STH37003AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Certified Solid Works Associate **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification
Available At	Offered only at **Southwest HS** *No Longer Accepting Incoming Freshman*

COURSE DESCRIPTIONS FOR STEM CLASSES

HONORS ENGINEERING ESSENTIALS AB (PLTW) (ENGESSP AB/H)	TBD: STH03760AB
In this honors course, students explore the breadth of engineering career opportunities and experiences as they solve engaging and challenging real-world problems like creating a natural relief center system or creating a solution to improve the safety and well-being of local citizens. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303760 Grade Level: 8-9 HS Credit(s): 1
Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): None *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Western Hills, YMLA, YWLA*	College Hour(s): NA **Tier II**
HONORS INTRODUCTION TO ENGINEERING DESIGN AB (PLTW) (IED AB/H)	**STH07422AB**
In this honors course, students use a problem-solving model to improve existing products and invent new ones. They learn how to apply this model to solve problems in and out of the classroom. Using sophisticated three-dimensional modeling software, students communicate the details of the products. Emphasis is placed on analyzing potential solutions and communicating ideas to others. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303742 Grade level: 9- 10 HS Credit(s): 1
Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): Engineering Essentials (PLTW) *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Western Hills, YMLA, YWLA*	College Hour(s): NA **Tier II**
HONORS ENGINEERING SCIENCE (PLTW) AB (ENGSCIEN AB/H)	**STH03742AB**
This honors course helps students understand the field of engineering/engineering technology. Exploring various manufacturing processes help students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about the social and political consequences of technological change. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037500 Grade level: 10 – 11 HS Credit(s): 1
Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): Introduction to Engineering Design (PLTW) *Offered at: Arlington Heights, Benbrook, Dunbar, Eastern Hills, O.D. Wyatt, Paschal, Polytechnic, Southwest, YMLA, YWLA*	College Hour(s): NA **Tier II**
HONORS COMPUTER INTEGRATED MANUFACTURING AB (PLTW) (CIM AB/H)	**STH37482AB**
This is a course of study in the PLTW program. Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. This course illuminates the opportunities related to understanding manufacturing. At the same time, it teaches students about manufacturing processes, product design, robotics, and automation. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303748 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): Introduction to Engineering Design (PLTW) *Offered at: YMLA and Diamond Hill-Jarvis*	College Hour(s): NA **Tier II**
HONORS AEROSPACE ENGINEERING AB (PLTW) (AERO AB/H)	**STH37452AB**
This course propels students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, propulsion system, and rockets. They learn basic orbital mechanics using industry-standard software. They also explore robot systems through projects such as remotely operated vehicles. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303745 Grade level: 11-12 HS Credit(s): 1
Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): Introduction to Engineering Design (PLTW) *Offered at: Carter-Riverside, South Hills, Western Hills*	College Hour(s): NA **Tier II**
HONORS CIVIL ENGINEERING AND ARCHITECTURE AB (PLTW) (CEA AB/H)	**STH37472AB**
This honors course focuses on using long-term projects that involve the development of property sites. As students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of a property. The students may develop the property as a simulation or they may model experiences that civil engineers and architects face. Students work in teams, exploring hands-on activities and projects to learn the characteristics of civil engineering and architecture. Students use 3–D design software to help them design solutions to solve major course projects. Students learn about documenting their project, solving problems, and communicating their solutions to their peers and members of the professional community of civil engineering and architecture. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303747 Grade level: 11-12 HS Credit(s): 1
Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): Introduction to Engineering Design (PLTW) *Offered at: North Side, YWLA*	College Hour(s): NA **Tier II**

HONORS ENGINEERING DESIGN AND DEVELOPMENT AB (PLTW) (EDD AB/H)	STH37492AB
This honors course is an engineering research course in which the students work in teams to research, design, and construct a solution to an open-ended engineering problem. The product development lifecycle and a design process will be used to guide and help the team reach a solution to the problem. The team will present and defend your solution to a panel of outside reviewers at the end of the school year. Engineering Design and Development™ serves as the capstone course within the Project Lead the Way® course sequence and allows students to apply all the skills and knowledge learned in the previous Project Lead the Way, Inc. courses. Inventor, which is a state of the art 3-D design software package from AutoDesk, will be used for students to design solutions to the problem the teams have chosen. This course will also test their time management and team skills, which are a valuable asset for the future. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303749 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): Engineering Design and Presentation I *Offered at: I.M. Terrell*	College Hour(s): NA **Tier II**
HONORS UNPAID PRACTICUM IN STEM/d AB (PRACSTEM AB/H)	**STH37402AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. In addition, students in this honors course will complete a project using the five phases of project management used in the business and industry environment. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037400 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Medical Interventions (PLTW), Medical Microbiology, Engineering Design and Development (PLTW), or Engineering Design and Presentation II/D *Offered only at: I.M. Terrell, TABS, and Trimble Tech*	College Hour(s): NA **Tier II**
PAID PRACTICUM IN STEM/EXTENDED AB (EXPRSTEM1 AB)	**ST37405AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13037405 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Engineering Science (PLTW), Computer Integrated Manufacturing (PLTW), Aerospace Engineering (PLTW), Civil Engineering and Architecture (PLTW), Engineering Design and Development (PLTW), or Engineering Design and Presentation II/D *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN STEM/EXTENDED AB (EXPRSTEM1 AB/H)	**STH37405AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037405 Grade level: 12
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Engineering Science (PLTW), Computer Integrated Manufacturing (PLTW), Aerospace Engineering (PLTW), Civil Engineering and Architecture (PLTW), Engineering Design and Development (PLTW), or Engineering Design and Presentation II/D *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	HS Credit(s): 3 College Hour(s): NA **Tier II**
HONORS PAID PRACTICUM IN STEM AB (PRACSTEM AB/H)	**STH37409AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the practicum learning experiences. In order to receive course credit, this course requires that students make a full year	13037400 Grade level: 12 HS Credit(s): 2

commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for ten (10) hours per week (or average of 20 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Engineering Science (PLTW), Computer Integrated Manufacturing (PLTW), Aerospace Engineering (PLTW), Civil Engineering and Architecture (PLTW), Engineering Design and Development (PLTW), or Engineering Design and Presentation II/D *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	College Hour(s): NA **Tier II**
PRINCIPLES OF APPLIED ENGINEERING AB (PRAPPENG AB)	**ST36202AB**
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.	13036200 Grade level: 9 HS Credit(s): 1
Instructional Material: *Principles of Applied Engineering, Texas Edition Reid, et al. 2017,* Pearson Education Prerequisite(s): None *Offered at: Trimble Tech and I.M. Terrell*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF APPLIED ENGINEERING AB (PRAPPENG AB/H)	**STH36202AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13036200 Grade level: 9
Instructional Material: *Principles of Applied Engineering, Texas Edition Reid, et al. 2017*, Pearson Education Prerequisite(s): None *Offered at: Trimble Tech and I.M. Terrell*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ENGINEERING DESIGN AND PRESENTATION I AB (ENGDSPR AB)	**ST36502AB**
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 applications to complete assignments and projects. 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.	13036500 Grade level: 10 HS Credit(s): 1
Instructional Material: *Exploring Drafting, Walker, et al, 2018*, Goodheart-Willcox Co. Prerequisite(s): Principles of Applied Engineering *Offered at: Trimble Tech and I.M. Terrell*	College Hour(s): NA **Tier III**
HONORS ENGINEERING DESIGN AND PRESENTATION I AB (ENGDSPR AB/H)	**STH36502AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13036500 Grade level: 10
Instructional Material: *Exploring Drafting, Walker, et al, 2018,* Goodheart-Willcox Co. Prerequisite(s): Principles of Applied Engineering *Offered at: Trimble Tech and I.M. Terrell*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ENGINEERING DESIGN AND PRESENTATION II/D AB (ENGDP2 AB)	**ST36602AB**
This double-period course is a continuation of knowledge and skills learned in Engineering Design and Presentation I. 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 applications to complete assignments and projects. Through implementation of the design process, students will transfer advanced academic skills to component designs. Emphasis will be placed on using skills from ideation through prototyping.	13036600 Grade level: 11 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Engineering Design and Presentation I *Offered at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS ENGINEERING DESIGN AND PRESENTATION II/D AB (ENGDP2 AB/H)	**STH36602 AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13036600 Grade level: 11
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Engineering Design and Presentation I *Offered at: Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**

ROBOTICS I AB (ROBOT 1AB)	ST37002AB
In Robotics I, students will transfer academic skills to component designs in a project-based environment through implementation of the design process. Students will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry.	13037000 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Industrial Robotics, Goodheart-Willcox Co. Prerequisite(s): None *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	College Hour(s): NA **Tier III**
HONORS ROBOTICS I AB (ROBOT 1AB/H)	**STH37002AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037000 Grade level: 10-12
Instructional Material: Industrial Robotics, Goodheart-Willcox Co. Prerequisite(s): None *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ENGINEERING DESIGN AND PROBLEM SOLVING AB (ENGDPRS AB)	**ST37302AB**
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. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.	13037300 Grade level: 12 HS Credit(s): 1
Instructional Material: Engineering Fundamentals: Introduction 4th Edition, Cengage; *Project Lead the Way materials furnished by CTE department (for select campuses and programs)* Prerequisite(s): Engineering Design and Presentation II, Computer Integrated Manufacturing (PLTW), Aerospace Engineering (PLTW), Engineering Science (PLTW), or Civil Engineering and Architecture (PLTW) *Course taught by a certified secondary science teacher or any CTE teacher with a baccalaureate degree and 18 semester credit hours in any combination of sciences. 19 TAC Chapter 231.* *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	College Hour(s): NA **Tier III**
HONORS ENGINEERING DESIGN AND PROBLEM SOLVING AB (ENGDPRS AB/H)	**STH37302AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037300 Grade level: 12
Instructional Material: Engineering Fundamentals: Introduction 4th Edition, Cengage; *Project Lead the Way materials furnished by CTE department (for select campuses and programs)* Prerequisite(s): Engineering Design and Presentation II, Computer Integrated Manufacturing (PLTW), Aerospace Engineering (PLTW), Engineering Science (PLTW), or Civil Engineering and Architecture (PLTW) *Course taught by locally certified secondary science teacher or any CTE teacher with a baccalaureate degree and 18 semester credit hours in any combination of sciences. 19 TAC Chapter 231.* *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ROBOTICS II AB (ROBOTIC 2AB)	**ST37003AB**
In Robotics II, students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academic skills to component designs in a project-based environment. Students will build prototypes and use software to test their designs.	13037050 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Industrial Robotics, Goodheart-Willcox Co. Prerequisite(s): Robotics I *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	College Hour(s): NA **Tier III**
HONORS ROBOTICS II AB (ROBOTIC 2AB/H)	**STH37003AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037050 Grade level: 11-12
Instructional Material: Industrial Robotics, Goodheart-Willcox Co. Prerequisite(s): Robotics I *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, YMLA, YWLA*	HS Credit(s): 1 College Hour(s): NA **Tier II**
SCIENTIFIC RESEARCH AND DESIGN AB (SCIRD AB)	**ST37202AB** **ST37212AB (2nd Time)**
The student conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices. These investigations must involve actively obtaining and analyzing data with physical equipment, but may also involve experimentation in a simulated environment as well as field observations that extend beyond the science or CTE classrooms. Research in an area of bio-related technology; communication; construction;	130372## Grade level: 11 – 12 HS Credit(s): 1

energy, power, and transportation; or engineering align with various CTE clusters. Students apply research to problem solving and development of prototypes and working models. Students may repeat the Scientific Research and Design course TEKS with different course content for up to a maximum of three credits. If being taken as their fourth-year science course, DAP students must successfully complete a biology, a chemistry, and a physics course prior to the Scientific Research and Design course or take it concurrently with the third one of these required courses.	
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): To receive 4th year science credit students must have completed three (3) units of science (Biology, Chemistry, Physics) one (1) of which may be taken concurrently *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20* *Offered at: TABS*	College Hour(s): NA **Tier III**
HONORS SCIENTIFIC RESEARCH AND DESIGN AB (SCIRD AB/H)	**STH37202AB** **STH37212AB (2nd Time)**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	130372## Grade level: 11 - 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): To receive 4th year science credit students must have completed three (3) units of science (Biology, Chemistry, and Physics) one (1) of which may be taken concurrently *130372##: 1st Time Taken ##=00, 2nd Time Taken ##=10, 3rd Time Taken ##=20* *Course taught by locally certified gifted teacher* *Offered at: TABS*	HS Credit(s): 1 College Hour(s): NA **Tier II**
HONORS PROJECT-BASED RESEARCH AB (PROBS1 AB/H) *(Available Fall 2023)*	**CPH01500AB**
Students will research a real-world problem and possible solutions throughout this course. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. This course must be cooperatively planned and supervised by the teacher ensuring that the student has guidance and support of a mentor or interdisciplinary team. The district must maintain a written project plan for each student enrolled in the course. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	12701500 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Specific to program focus/pathway and is the previous course in the sequence. *Offered at: All high school campuses*	College Hour(s): NA **Tier II**
HONORS PRINCIPLES OF BIOMEDICAL SCIENCE AB (PLTW) (PRBIOSCI AB/H)	**HSH2092AB**
In this Project Lead the Way course, students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, research processes and bioinformatics. This course is designed to provide an overview of all the courses in the Biomedical Sciences program and lay the scientific foundation for subsequent courses. Students in this honors course will complete a project using the five phases of project management used in the business and industry environment. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1302092 Grade level: 9 HS Credit(s): 1
Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): None *Offered at: TABS*	College Hour(s): NA **Tier II**
HONORS HUMAN BODY SYSTEMS AB (PLTW) (HUMBODSY AB/H)	**HSH2093AB**
In this Project Lead the Way course, students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real-world cases and often play the role of biomedical professionals to solve medical mysteries. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1302093 Grade level: 10 HS Credit(s): 1
Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): Principles of Biomedical Science (PLTW) *Offered at: TABS*	College Hour(s): NA **Tier II**
HONORS MEDICAL INTERVENTIONS AB (PLTW) (MEDINT AB/H)	**HSH30209AB**
Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family. The course is a "How-To" manual for maintaining overall health and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1302094 Grade level: 11 - 12 HS Credit(s): 1

Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): Human Body Systems (PLTW) *Offered at: TABS*	College Hour(s): NA **Tier II**
MEDICAL MICROBIOLOGY AB (MICRO AB)	**HS02071AB**
Students in Medical Microbiology explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. Pathogenic and nonpathogenic organisms will be identified to assist in the understanding of specific diseases, causative agents, and treatment options. Activities will include a variety of lab experiences designed to build microbiology lab skills and techniques. In this course, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving.	13020700 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: Microbiology: An Introduction, 12th Edition, Pearson Prerequisite(s): Biology and Chemistry. *This course may be taught by a certified secondary science teacher or any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of science, 19 TAC Chapter 231.* *Offered at: TABS*	College Hour(s): NA **Tier III**
HONORS MEDICAL MICROBIOLOGY AB (MICRO AB/H)	**HSH02071AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020700 Grade level: 11 - 12
Instructional Material: Microbiology: An Introduction, 12th Edition, Pearson Prerequisite(s): Biology and Chemistry *Course taught by locally certified gifted teacher. This course may be taught by a certified secondary science teacher or any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of sciences, 19 TAC Chapter 231.* *Offered at: TABS*	HS Credit(s): 1 College Hour(s): NA **Tier II**
PATHOPHYSIOLOGY AB (PATHO AB)	**HS20801AB**
In Pathophysiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Pathophysiology study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease. Students will differentiate between normal and abnormal physiology.	13020800 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Human Disease 4th edition; Cengage Learning* Prerequisite(s): Biology and Chemistry; Principles of Biomedical Science (PLTW), *4th year science credit* *Offered at: TABS*	College Hour(s): NA **Tier III**
HONORS PATHOPHYSIOLOGY AB (PATHO AB/H)	**HSH20801AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020800 Grade level: 11 – 12
Instructional Material: *Human Disease 4th edition; Cengage Learning* Prerequisite(s): Biology and Chemistry; Principles of Biomedical Science (PLTW), *4th year science credit.* *Offered at: TABS*	HS Credit(s): 1 College Hour(s): NA **Tier II**
ANATOMY AND PHYSIOLOGY AB (ANATPHYS AB)	**HS02062AB**
In Anatomy and Physiology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.	13020600 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Introduction to Anatomy & Physiology,* Goodheart Willcox Co. Prerequisite(s): Biology and Chemistry *Course may be taught by any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of sciences.*	College Hour(s): NA **Tier III**
HONORS ANATOMY AND PHYSIOLOGY AB (ANATPHYS AB/H)	**HSH02062AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13020600 Grade level: 11 - 12
Instructional Material: *Introduction to Anatomy & Physiology,* Goodheart Willcox Co. Prerequisite(s): Biology and Chemistry *Course may be taught by any CTE teacher certified in Health Science Technology Education or Vocational Health Occupations with a baccalaureate degree and 18 semester credit hours in any combination of sciences. It may also be taught by a certified secondary science teacher. 19 TAC Chapter 231*	HS Credit(s): 1 College Hour(s): NA **Tier II**
FOUNDATIONS OF CYBERSECURITY AB (FODCYBER AB)	**IT27904AB**
In the Foundations of Cybersecurity course, students will develop the knowledge and skills needed to explore fundamental concepts related to the ethics, laws, and operations of cybersecurity. Students will examine trends and operations of cyberattacks, threats, and vulnerabilities. Students will review and explore security policies designed to mitigate risks. The skills obtained in this course prepare students for additional study in cybersecurity. A variety of courses are available to students interested in this field. Foundations of Cybersecurity may serve as an introductory course in this field of study.	03580850 Grade level: 9 HS Credit(s): 1

Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS FOUNDATIONS OF CYBERSECURITY AB (FODCYBER AB/H)	**ITH27904AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	03580850 Grade level: 9
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered at: Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**
COMPUTER SCIENCE I AB (TACS 1AB)	**2151AB** **WL2151AB**
Students develop a solid foundation in computer terminology and programming, binary and hexadecimal number systems, computer ethics (including copyright laws and privacy), and structured programming and programming techniques on personal computers are emphasized. Students will study and write programs utilizing the high-level languages FORTRAN, Pascal, and/ or C++. Students may be awarded one *LOTE credit (WL2151AB) or one elective credit (2151AB) for successful completion of this course.	03580200 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: Windows Programming and Java Programming, CompuScholar Prerequisite(s) (for those pursuing the course as an elective or the Computer Science sequence): None Prerequisite(s) (for those pursuing the Cybersecurity sequence): Foundations of Cybersecurity *Offered at: Arlington Heights, Carter-Riverside, Dunbar, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, and Trimble Tech. Also offered as an elective course at select high schools.*	College Hour(s): NA **Tier III**
HONORS COMPUTER SCIENCE I AB/H (TACS 1AB/H)	**2141AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	03580200 Grade level: 9 - 12
Instructional Material: Windows Programming and Java Programming, CompuScholar Prerequisite(s) (for those pursuing the Computer Science sequence): None Prerequisite(s) (for those pursuing the Cybersecurity sequence): Foundations of Cybersecurity *Offered at: Arlington Heights, Carter-Riverside, Dunbar, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, and Trimble Tech. Also offered as an elective course at select high schools.*	HS Credit(s): 1 College Hour(s): NA **Tier II**
COMPUTER SCIENCE II AB (TACS 2AB)	**2153AB** ***WL2153AB**
Computer Science II will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of computer science through the study of technology operations, systems, and concepts. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts. Students may be awarded one *LOTE credit (WL2143 AB) or one elective credit (2143 AB) for successful completion of this course.	03580300 Grade level: 10 – 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials (Python Programming, CompuScholar) Prerequisite(s): Computer Science I *Offered as an elective course at select high schools.*	College Hour(s): NA **Tier III**
HONORS COMPUTER SCIENCE II AB/H (TACS 2AB/H)	**2143AB** ***WL2143AB**
In addition to the regular course curriculum, students will complete additional projects and activities related to the program of study. Students may be awarded one *LOTE credit (WL2143 AB) or one elective credit (2143 AB) for successful completion of this course.	03580300 Grade level: 10 – 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials (Python Programming, CompuScholar) Prerequisite(s): Computer Science I *Offered as an elective course at select high schools.*	College Hour(s): NA **Tier II**
AP COMPUTER SCIENCE PRINCIPLES AB (APTACS PRIN)	**2157AB** **WL2157AB**
This course introduces students to the foundational ideas of computer science, while providing exposure to computational content, computational thinking skills, creative aspects of the field and their impact on the world. Students will be provided the opportunity to investigate the innovations in other fields of computing while examining the ethical implications of new computing technologies. The course follows the College Board AP® Computer Science Principles Curriculum Framework. Students may be awarded one *LOTE credit (WL2157 AB) or one elective credit (2157 AB) for successful completion of this course.	A3580300 Grade level: 9 - 10 HS Credit(s): 1

Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s) (for those pursuing the course as an elective or the Computer Science sequence): None Prerequisite(s) (for those pursuing the Cybersecurity sequence): Honors PLTW Computer Science Essentials or Foundations of Cybersecurity *Offered at: Arlington Heights, Carter-Riverside, Dunbar, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Trimble Tech, and World Languages Institute. Also offered as an elective course at select high schools.*	College Hour(s): NA **Tier I**
CYBERSECURITY CAPSTONE AB (CYBERCAP AB) *(Available Fall 2023)*	**IT27900AB**
In the Cybersecurity Capstone course, students will develop the knowledge and skills needed to explore advanced concepts related to the ethics, laws, and operations of cybersecurity. Students will examine trends and operations of cyberattacks, threats, and vulnerabilities. Students will develop security policies to mitigate risks. The skills obtained in this course prepare students for additional study toward industry certification. A variety of courses are available to students interested in the cybersecurity field. Cybersecurity Capstone may serve as a culminating course in this field of study.	03580855 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Engineering Applications for Computer Science Principles *Offered at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS CYBERSECURITY CAPSTONE AB (CYBERCAP AB/H) *(Available Fall 2023)*	**ITH27900AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	03580855 Grade level: 12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Engineering Applications for Computer Science Principles *Offered at: Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**
HONORS UNPAID PRACTICUM IN INFORMATION TECHNOLOGY/D (PRACIT1 AB/H)	**ITH27202AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study. See the course description for Unpaid Practicum in Information Technology located in the Career and Technical Education; Information Technology section.	13028000 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Engineering Applications for Computer Science Principles *Offered at: Trimble Tech*	College Hour(s): NA **Tier II**
HONORS PAID PRACTICUM IN INFORMATION TECHNOLOGY/EXTENDED AB (EXPRIT2 AB/H)	**ITH27212AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study. See the course description for Paid Practicum in Information Technology located in the Career and Technical Education; Information Technology section.	13028050 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Engineering Applications for Computer Science Principles OR AP Computer Science A *Offered at: Trimble Tech and World Languages Institute*	College Hour(s): NA **Tier II**
HONORS PLTW COMPUTER SCIENCE ESSENTIALS AB (PRINIT PLTW AB/H)	**ITH27203AB**
Students will experience the major topics, big ideas, and computational thinking practices used by computing professionals to solve problems and create value for others. This course will empower students to develop computational thinking skills while building confidence that prepares them to advance to Computer Science Principles and Computer Science A. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13027200 Grade level: 9 HS Credit(s): 1
Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): None *Offered at: World Languages Institute*	College Hour(s): NA **Tier II**
HONORS PLTW CYBERSECURITY CAPSTONE AB (TACYBCAP AB/H) *(Available Fall 2022)*	**ITH27901AB**
PLTW Cybersecurity gives students a broad exposure to the many aspects of digital and information security, while encouraging socially responsible choices and ethical behavior. It inspires algorithmic thinking, computational thinking, and especially, outside-the-box thinking. Students explore the many educational and career paths available to cybersecurity experts, as well as other careers that comprise the field of information security. The course contains the following units of study: Personal Security, System Security, Network Security, and Applied Cybersecurity. PLTW Cybersecurity is only offered as an honors course. Whether seeking a career in the growing field of cybersecurity or learning to defend their own personal data or a company's data, students in Cybersecurity establish an ethical code of conduct while learning to defend data in today's complex cyberworld. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study	03580855 Grade level: 12 HS Credit(s): 1
Instructional Material: *Project Lead the Way materials furnished by CTE department* Prerequisite(s): AP Computer Science A (PLTW) *Offered only at: World Languages Institute*	College Hour(s): NA **Tier II**

AP COMPUTER SCIENCE A AB (APTACSA 1AB, APTACSAL AB, APTACSAM AB)	**2142AB** ***WL2142AB** ****M2142AB**
AP Computer Science A is designed for qualified students in grades 10 - 12 who wish to complete the equivalent of a college introductory course in computer science. The course will focus on programming methodology, and procedural abstraction. It also includes the study of algorithms, data structures, and data abstraction, but covered in less depth than in the Computer Science III AB course. Students **must** be scheduled into two of the following three course numbers for this course: 2142 AB for an elective credit, M2142 AB for a math credit, and WL2142 AB for a LOTE credit. Students will be awarded two credits for successful completion of this course.	A3580120, A3580120, A3580110 Grade level: 10 - 12 HS Credit(s): 2
Instructional Material: Java Programming, CompuScholar Prerequisite(s) (for those pursuing the Cybersecurity pathway): AP Computer Science Principles Prerequisite(s) (for those pursuing the Computer Science pathway): AP Computer Science Principles *Offered at: Arlington Heights, Carter-Riverside, Dunbar, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Trimble Tech, and World Languages Institute*	College Hour(s): NA **Tier I**
COMPUTER SCIENCE III AB (TACS3AB)	**2155 AB** **WL2155AB**
Computer Science III will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of advanced computer science data structures through the study of technology operations, systems, and concepts. Students may be awarded one *LOTE credit (WL2155 AB) or one elective credit (2155 AB) for successful completion of this course.	03580350 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): AP Computer Science A *Offered at: Arlington Heights, Carter-Riverside, Dunbar, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Trimble Tech, and World Languages Institute*	College Hour(s): NA **Tier III**
HONORS COMPUTER SCIENCE III AB/H (TACS3AB/H)	**2145 AB** **WL2145AB**
In addition to the regular course curriculum, students learn advanced skills in programming languages and structured programming techniques through the use of advanced data structures and the discussion of memory allocation and de-allocation. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study. Students may be awarded one *LOTE credit (WL2145 AB) or one elective credit (2145 AB) for successful completion of this course.	03580350 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): AP Computer Science A *Offered at: Arlington Heights, Carter-Riverside, Dunbar, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Trimble Tech, and World Languages Institute*	College Hour(s): NA **Tier II**
HONORS DISCRETE MATHEMATICS FOR COMPUTER SCIENCE AB (TADISMA AB/H)	**STH80370AB**
Discrete Mathematics for Computer Science provides the tools used in most areas of computer science. Exposure to the mathematical concepts and discrete structures presented in this course is essential in order to provide an adequate foundation for further study. Course topics are divided into six areas: sets, functions, and relations; basic logic; proof techniques; counting basics; graphs and trees; and discrete probability. Mathematical topics are interwoven with computer science applications to enhance the students' understanding of the introduced mathematics. Students will develop the ability to see computational problems from a mathematical perspective. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	03580370 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): AP Computer Science A *Offered at: Arlington Heights, Carter-Riverside, Dunbar, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Trimble Tech, and World Languages Institute*	College Hour(s): NA **Tier II**
HONORS INDEPENDENT STUDY IN TECHNOLOGY (FIRST TIME TAKEN) APPLICATIONS AB/H	**2144AB**
This course is designed for qualified students in grades 10 - 12 who wish to complete the equivalent of a college introductory course in computer science. The course will focus on programming methodology and procedural abstraction. It also includes the study of algorithms, data structures, and data abstraction covered in substantial depth. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	03580900 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Successful completion of AP Computer Science A *Offered at: Arlington Heights, Carter-Riverside, Dunbar, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Trimble Tech, and World Languages Institute*	College Hour(s): NA **Tier I**

HONORS INDEPENDENT STUDY IN TECHNOLOGY (SECOND TIME TAKEN) APPLICATIONS AB/H	2146AB
This course is designed for qualified students in grades 10 - 12 who wish to complete the equivalent of a college introductory course in computer science. The course will focus on programming methodology and procedural abstraction. It also includes the study of algorithms, data structures, and data abstraction covered in substantial depth. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	03581000 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Successful completion of AP Computer Science A *Offered at: Arlington Heights, Carter-Riverside, Dunbar, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Trimble Tech, and World Languages Institute*	College Hour(s): NA **Tier I**
HONORS INDEPENDENT STUDY IN TECHNOLOGY (THIRD TIME TAKEN) APPLICATIONS AB/H	**2148AB**
This course is designed for qualified students in grades 10 - 12 who wish to complete the equivalent of a college introductory course in computer science. The course will focus on programming methodology and procedural abstraction. It also includes the study of algorithms, data structures, and data abstraction covered in substantial depth. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	03581100 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Successful completion of AP Computer Science A *Offered at: Arlington Heights, Carter-Riverside, Dunbar, I.M. Terrell, North Side, O.D. Wyatt, Paschal, Polytechnic, South Hills, Trimble Tech, and World Languages Institute*	College Hour(s): NA **Tier I**

For the graduating class of 2024 and up only.

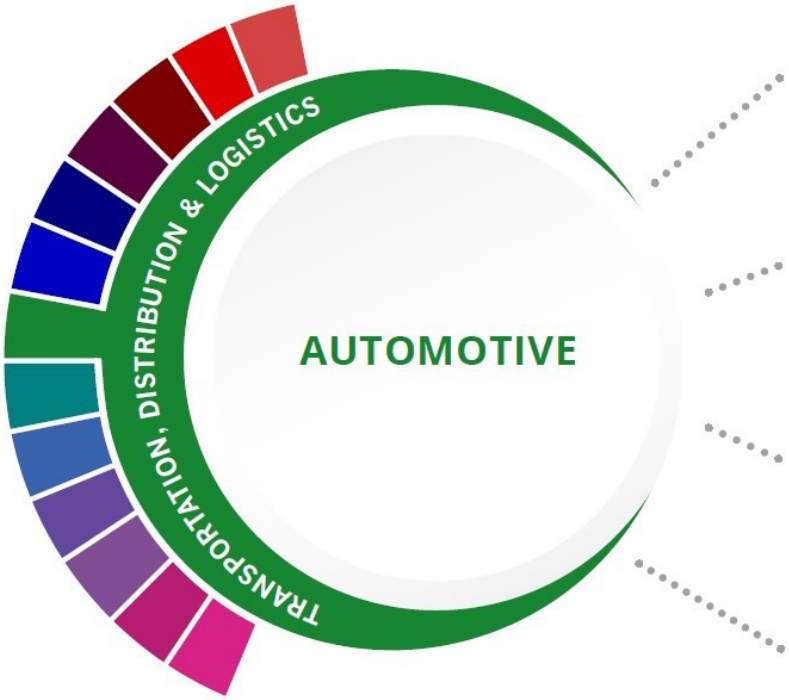
AUTOMOTIVE
(Previously Automotive Technology)

AUTOMOTIVE: COLLISION, REPAIR, AND REFINISHING TECHNOLOGY

AVIATION MAINTENANCE

Local Implementation Considerations:
Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator:
Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.



	Courses
9th	**Principles of Transportation Systems[2]:** TP39201AB OR TPH39201AB
10th	**Automotive Basics[2]:** TP39300AB OR TPH39300AB
11th	**Automotive Technology I/d[1,2]:** TP39602AB OR TPH39602AB OR **Dual Credit Automotive Technology I/d[1,2]:** TPD39602A, TPD39602B *(Only available at OD Wyatt & Polytechnic HS)*
12th	**Automotive Technology II/d[1,2]:** TP39702AB OR TPH39702AB OR **Dual Credit Automotive Technology II/d[1,2]:** TPD39702A, TPD39702B *(Only available at OD Wyatt & Polytechnic HS)* OR **Paid Practicum in Transportation Systems[2]:** TP40412AB OR TPH40412AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Service Excellence (ASE) Entry OR Professional Level[1]
- Not Counted towards Performance Acknowledgment: Safety and Pollution Prevention (S/P2)[2]

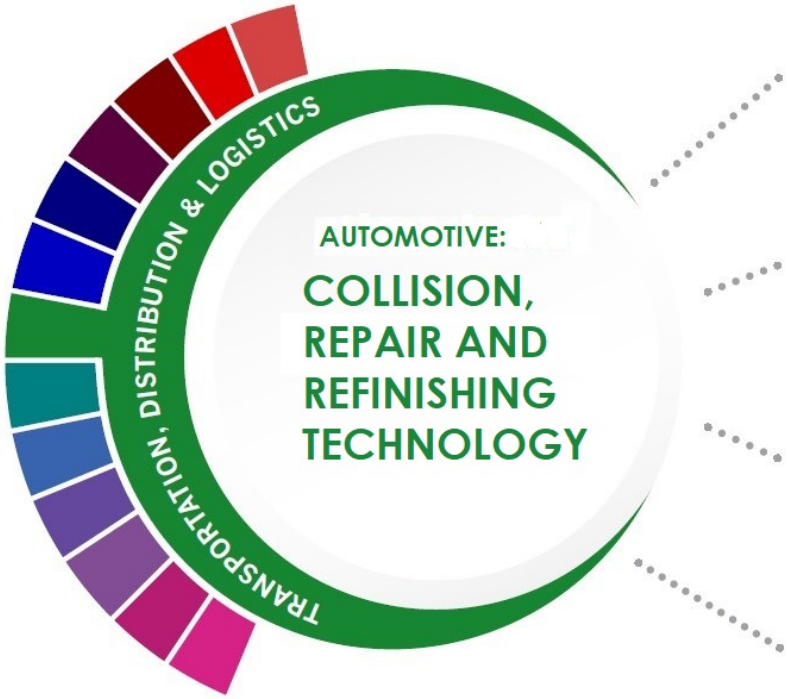
Available At:

- Dunbar HS
- North Side HS
- OD Wyatt HS
- Polytechnic HS
- Trimble Technical HS

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.

The Transportation, Distribution, and Logistics Career Cluster® focuses on careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

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



	Courses
9th	**Basic Collision Repair and Refinishing[2]:** TP39800AB OR TPH39800AB
10th	**Collision Repair/d[2]:** TP39802AB OR TPH39802AB
11th	**Paint and Refinishing/d[1,2,3]:** TP39902AB OR TPH39902AB
12th	**Unpaid Practicum in Transportation Systems/d[2]:** TP40402 AB OR TPH40402 AB OR **Paid Practicum in Transportation Systems[2]:** TP40412 AB OR TPH40412 AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: Service Excellence (ASE) Entry OR Professional Level[1]
- Not Counted towards Performance Acknowledgment: Safety and Pollution Prevention (S/P2)[2], Inter-Industry Conference on Auto Collision Repair (I-CAR) Certification[3]

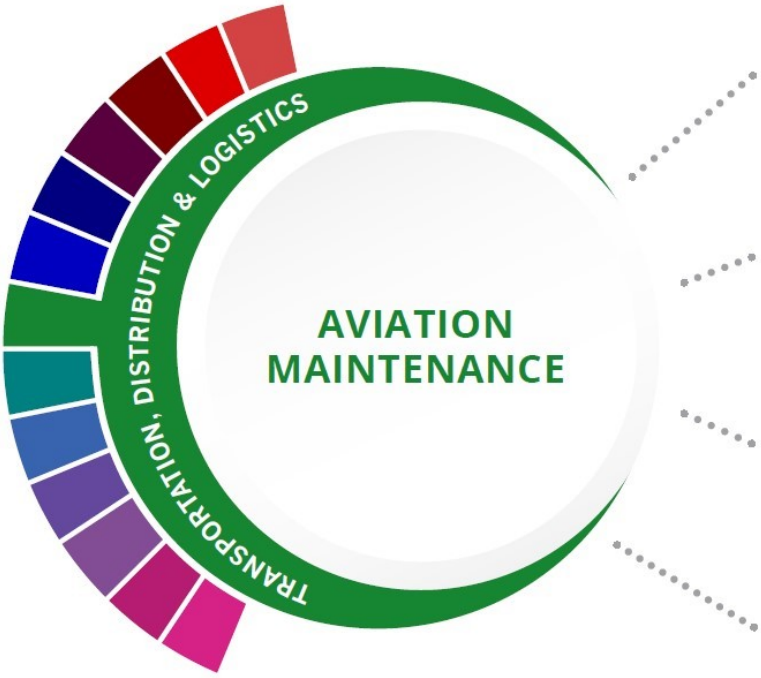
Available At:

- Trimble Technical HS

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.

The Transportation, Distribution, and Logistics Career Cluster® focuses on careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

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



	Courses
9th	**Introduction to Aircraft Technology:** TP39401 AB OR TPH39401 AB
10th	**Occupational Safety and Environmental Technology I[3]:** TP03680 AB OR TPH03680 AB
11th	**Aircraft Airframe Technology/d:** TP39402 AB OR TPH39402 AB
12th	**Aircraft Powerplant Technology/d[1,2]:** TP39502 AB OR TPH39502 AB OR **Unpaid Practicum in Transportation Systems/d:** TP40402 AB OR TPH40402 AB OR **Paid Practicum in Transportation Systems:** TP40412 AB OR TPH40412 AB

Enrichment Courses:

- N/A

Certification Options:

- Industry Certification Opportunities for Performance Acknowledgment: OSHA 30-Hour General Industry Certification[1]
- Not Counted towards Performance Acknowledgment: FAA General Subject Certificate of Completion[2] (Hours toward FAA General Certificate),

Available At:

- Dunbar HS

The Aviation Maintenance program of study introduces students to the occupations and education opportunities related to inspecting aircraft, maintenance procedures, air navigational aids, air traffic controls, and communications equipment to ensure conformance with federal safety regulations.

The Transportation, Distribution, and Logistics Career Cluster® focuses on careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

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

FOR THE GRADUATING CLASS OF 2022 AND 2023

For the graduating class of 2024 and beyond, please look at pathways in the on-line version of the course catalog.

The Transportation, Distribution, and Logistics Career Cluster focuses on planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment, and facility maintenance.

FWISD offers three (3) Career Focuses in the Transportation, Distribution, & Logistics Career Cluster.

CAREER FOCUS	***AUTOMOTIVE TECHNOLOGY***	***COLLISION, REPAIR AND REFINISHING TECHNOLOGY***	***AVIATION TECHNOLOGY***
9TH GRADE	Principles of Transportation Systems Automotive: TP39201 AB OR Honors: TPH39201AB	Principles of Transportation Systems Collision: TP39202 AB OR Honors: TPH39202 AB	Principles of Applied Engineering: ST36202 AB OR Honors: STH36202 AB
10TH GRADE	Automotive Basics: TP39300 AB OR Honors: TPH39300 AB	Basic Collision Repair and Refinishing: TP39800 AB OR Honors: TPH39800 AB	Introduction to Aircraft Technology: TP39401 AB OR Honors: TPH39401 AB
11TH GRADE	Automotive Technology I/d: TP39602 AB OR Honors: TPH39602 AB OR Dual Credit: TPD39602 AB (Polytechnic and OD Wyatt only)	Collision and Repair/d: TP39802 AB OR Honors: TPH39802 AB	Aircraft Technology/d: TP39402 AB OR Honors: TPH39402 AB
12TH GRADE	Automotive Technology II/d: TP39702 AB OR Honors: TPH39702 AB OR Dual Credit: TPD39702 AB (Polytechnic and OD Wyatt only) OR Paid Practicum in Transportation Systems/Extended: TP40412 AB OR Honors: TPH40412 AB	Paint and Refinishing/d: TP39902 AB OR Honors: TPH39902 AB OR Paid Practicum in Transportation Systems/Extended: TP40412 AB OR Honors: TPH40412 AB	Aircraft Powerplant Technology/d: TP39502 AB OR Honors: TPH39502 AB
Certification Options	**Industry Certification Opportunities for Performance Acknowledgement:** Automotive Service Excellence (ASE) **Not Counted towards Performance Acknowledgement:** Safety and Pollution Prevention (S/P2)	**Industry Certification Opportunities for Performance Acknowledgement:** Automotive Service Excellence (ASE) **Not Counted towards Performance Acknowledgement:** Safety and Pollution Prevention (S/P2)	**Industry Certification Opportunities for Performance Acknowledgement:** Hours toward FAA Aviation Maintenance Technician - General Certification **Not Counted towards Performance Acknowledgement:** OSHA 10-Hour General Industry Certification
Available At	**Dunbar HS, North Side HS, Polytechnic HS, Trimble Tech HS, and O. D. Wyatt HS**	**Trimble Tech HS**	**Dunbar HS**

PRINCIPLES OF TRANSPORTATION SYSTEMS: AUTOMOTIVE (PRINTAUTO AB)	TP39201AB
In Principles of Transportation Systems: Automotive, 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. The emphasis will be on the automotive 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.	13039250 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: *Architecture, Construction, Transportation and Manufacturing*, iCEV Prerequisite(s): None *Offered at: Dunbar, North Side, Polytechnic, Trimble Tech, OD Wyatt*	College Hour(s): NA **Tier III**
PRINCIPLES OF TRANSPORTATION SYSTEMS: COLLISION (PRINTCOL AB)	**TP39202AB**
In Principles of Transportation Systems: Collision, 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. The emphasis will be on the collision and refinishing 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.	13039250 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: *Architecture, Construction, Transportation and Manufacturing*, iCEV Prerequisite(s): None *Offered at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PRINCIPLES OF TRANSPORTATION SYSTEMS: AUTOMOTIVE (PRINTAUTO AB/H)	**TPH39201AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13039250 Grade level: 9 - 10
Instructional Material: *Architecture, Construction, Transportation and Manufacturing*, iCEV Prerequisite(s): None *Offered at: Dunbar, North Side, Polytechnic, Trimble Tech, OD Wyatt*	HS Credit(s): 1 College Hour(s): NA **Tier II**
HONORS PRINCIPLES OF TRANSPORTATION SYSTEMS: COLLISION (PRINTCOL AB/H)	**TPH39202AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13039250 Grade level: 9 – 10
Instructional Material: *Architecture, Construction, Transportation and Manufacturing*, iCEV Prerequisite(s): None *Offered at: Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**
INTRODUCTION TO AIRCRAFT TECHNOLOGY AB (INAIRTEC AB)	**TP39401AB**
Introduction to Aircraft Technology is designed to teach the theory of operation of aircraft airframes, power plants, avionics systems and associated maintenance and repair practices. Maintenance and repair practices include knowledge of the function, diagnosis, and service of general curriculum subjects, airframe structures, airframe systems and components, power plant theory and maintenance, and power plant systems and the electrical, electronic, hydraulic, pneumatic, airframe, mechanical, and power plant components of aircrafts. Industry recognized professional licensures, certifications, and registrations are available for students who meet the requirements set forth by the accrediting organization.	13039350 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education for related materials Prerequisite: None *Offered at: Dunbar*	College Hour(s): NA **Tier III**
HONORS INTRODUCTION TO AIRCRAFT TECHNOLOGY AB (INAIRTEC AB/H)	**TPH39401AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13039350 Grade level: 9 - 10
Instructional Material: Contact Career and Technical Education for related materials Prerequisite: None *Offered at: Dunbar*	HS Credit(s): 1 College Hour(s): NA **Tier II**
OCCUPATIONAL SAFETY AND ENVIRONMENTAL TECHNOLOGY AB (OSET1 AB)	**TP03680AB**
This course provides high school students with the opportunity to learn and apply specific in-depth professional and technical skills related to high-wage, high-demand occupations in Aviation Maintenance career cluster. This course prepares students in the high school aviation maintenance sequence for college and career success and provides rigorous and focused instruction. During Occupational Safety & Environmental Technology (OSET) I, students will investigate the field of Occupational Safety and Health Administration and Environmental Technology, which is charged with the tasks of ensuring that business and industry provide a safe workplace, free from hazards and bringing about a reduction in the occurrence of job-related injuries and fatalities	N1303680 Grade level: 10 – 12 HS Credit(s): 1

Instructional Material: Contact Career and Technical Education for related materials Prerequisite: Introduction to Aircraft Technology *Offered at: Dunbar*	College Hour(s): NA **Tier III**
HONORS OCCUPATIONAL SAFETY AND ENVIRONMENTAL TECHNOLOGY AB (OSET1 AB/H)	**TPH03680AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303680 Grade level: 10 - 12
Instructional Material: Contact Career and Technical Education for related materials Prerequisite: Introduction to Aircraft Technology *Offered at: Dunbar*	HS Credit(s): 1 College Hour(s): NA **Tier II**
AIRCRAFT AIRFRAME TECHNOLOGY/D AB (AIRTEC AB)	**TP39402AB**
This course is a double-period technical laboratory course designed to provide training for entry-level employment in the aerospace aviation industry. It teaches the theory of operation of aircraft airframes, power plants, and avionics systems and associated maintenance and repair practices. Aircraft services include knowledge of the function, diagnosis, and service of the electrical, electronic, hydraulic, pneumatic, airframe, mechanical, and power plant components of aircraft. It is a ground school program and instruction emphasizing aircraft design, power plants, flight instruments, navigation, and electronic communication. Also, included is the calculation of flight time, fuel consumption, wind vector, drift, heading, and speed determinants.	13039400 Grade level: 10 - 11 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Introduction to Aircraft Technology *Offered at: Dunbar*	College Hour(s): NA **Tier III**
HONORS AIRCRAFT AIRFRAME TECHNOLOGY/D AB (AIRTECH AB/H)	**TPH3940AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13039400 Grade level: 10 – 11
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Introduction to Aircraft Technology *Offered at: Dunbar*	HS Credit(s): 2 College Hour(s): NA **Tier II**
AIRCRAFT POWERPLANT TECHNOLOGY/D AB (AIRPPTEC AB)	**TP39502AB**
Aircraft Powerplant Technology is designed to teach the theory of operation of aircraft powerplants and associated maintenance and repair practices. Powerplant maintenance and repair practices include knowledge of the theory, function, diagnosis, and service of powerplant, systems, and components of aircraft. Industry-recognized professional licensures, certifications, and registrations are available for students who meet the requirements set forth by the accrediting organization.	13039500 Grade level: 11 – 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Aircraft Technology/D *Offered at: Dunbar*	College Hour(s): NA **Tier III**
HONORS AIRCRAFT POWERPLANT TECHNOLOGY/D AB (AIRPPTEC AB/H)	**TPH39502AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13039500 Grade level: 11 – 12
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Aircraft Technology/D *Offered at: Dunbar*	HS Credit(s): 2 College Hour(s): NA **Tier II**
AUTOMOTIVE BASICS AB (AUTOBASC AB)	**TP39300AB**
Automotive Basics includes knowledge of the basic automotive systems and the theory and principles of the components that make up each system and how to service these systems. Automotive Basics includes applicable safety and environmental rules and regulations. In Automotive Basics, students will gain knowledge and skills in the repair, maintenance, and servicing of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach safety, tool identification, proper tool use, and employability.	13039550 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: *CDX Fundamentals of Automotive Technology,* Jones and Bartlett Learning Prerequisite(s): Principles of Transportation Systems: Automotive *Offered at: Dunbar, North Side, Polytechnic, Trimble Tech, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS AUTOMOTIVE BASICS AB (AUTOBASC AB/H)	**TPH39300AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13039550 Grade level: 10 – 11
Instructional Material: *CDX Fundamentals of Automotive Technology,* Jones and Bartlett Learning Prerequisite(s): Principles of Transportation Systems: Automotive *Offered at: Dunbar, North Side, Polytechnic, Trimble Tech, and OD Wyatt*	HS Credit(s): 1 College Hour(s): NA **Tier II**
AUTOMOTIVE TECHNOLOGY: MAINTENANCE AND LIGHT REPAIR I/D AB (AUTOTEC 1AB)	**TP39602AB**
This double-period course continues to prepare students for entry-level employment in the automotive and diesel technology fields. Students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. Students use National Automotive Technician Education Foundation (NATEF) standards to develop skills in the service and repair of vehicle components: electrical/electronic systems, suspensions and steering. Entrepreneurship, safety, and career opportunities are included. This is an Automotive Service Excellence (ASE) certified program.	13039600 Grade level: 11 - 12 HS Credit(s): 2

Instructional Material: *CDX Fundamentals of Automotive Technology,* Jones and Bartlett Learning Prerequisite(s): Automotive Basics *Offered at: Dunbar, North Side, Polytechnic, Trimble Tech, and OD Wyatt*	College Hour(s): NA **Tier III**
HONORS AUTOMOTIVE TECHNOLOGY: MAINTENANCE AND LIGHT REPAIR I/D AB (AUTOTEC AB/H)	**TPH39602AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13039600 Grade level: 11 – 12
Instructional Material: *CDX Fundamentals of Automotive Technology,* Jones and Bartlett Learning Prerequisite(s): Automotive Basics *Offered at: Dunbar, North Side, Polytechnic, Trimble Tech, and OD Wyatt*	HS Credit(s): 2 College Hour(s): NA **Tier II**
DUAL CREDIT AUTOMOTIVE TECHNOLOGY: MAINTENANCE AND LIGHT REPAIR I/D A (AUTOTEC1A DC) **TCC Course: (AUMT 1405) Introduction to Automotive Technology** **Course offerings may vary each year due to availability*	**TPD39602A**
In this dual credit class, students will be introduced to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, professional responsibilities and basic automotive maintenance. May be taught manufacturer-specific. Operation and repair of drum/disc type brake systems. Topics include brake theory, diagnosis and repair of power, manual, anti-lock brake systems and parking brakes. May be taught with manufacturer-specific instructions.	13039600 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *CDX Fundamentals of Automotive Technology,* Jones and Bartlett Learning TCC Course: Introduction to Automotive Technology (AUMT 1405) FWISD Prerequisite(s): Automotive Basics TCC Prerequisite(s): TSI *Course taught by an approved embedded instructor.* *Offered at: Polytechnic and OD Wyatt*	College Hour(s): 4 **Tier I**
DUAL CREDIT AUTOMOTIVE TECHNOLOGY: MAINTENANCE AND LIGHT REPAIR I/D B (AUTOTEC1B DC) **TCC Course: (AUMT 1407) Automotive Electrical Systems** **Course offerings may vary each year due to availability*	**TPD39602B**
In this dual credit class, students will learn about electrical systems including topics in operational theory, testing, diagnosis, and repair of, charging and starting systems, and electrical accessories. Emphasis on electrical principles, schematic diagrams, and service manuals. May be taught manufacturer specific.	13039600 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *CDX Fundamentals of Automotive Technology,* Jones and Bartlett Learning TCC Course: Automotive Engine Performance Analysis I (AUMT 1407) FWISD Prerequisite(s): Dual Credit Automotive Technology 1/D A TCC Prerequisite(s): TSI, AUMT 1405 *Course taught by an approved embedded instructor.* *Offered at: Polytechnic and OD Wyatt*	College Hour(s): 4 **Tier I**
AUTOMOTIVE TECHNOLOGY: AUTOMOTIVE SERVICE II/D AB (AUTOTEC 2AB)	**TP39702AB**
Students in this double-period laboratory course continue training for entry-level employment in an automotive technology career field. The course includes use of National Automotive Technician Education Foundation (NATEF) standards in the service and repair of the vehicle component of Automotive Engine Performance. Entrepreneurship, safety, and leadership training are included. This is an Automotive Service Excellence (ASE) certified program.	13039700 Grade level: 12 HS Credit(s): 2
Instructional Material: *CDX Fundamentals of Automotive Technology,* Jones and Bartlett Learning Prerequisite(s): Automotive Technology I/D *Offered at: Dunbar, North Side, Polytechnic, Trimble Technical, OD Wyatt*	College Hour(s): NA **Tier III**
HONORS AUTOMOTIVE TECHNOLOGY: AUTOMOTIVE SERVICE II/D AB (AUTOTEC 2AB/H)	**TPH39702AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13039700 Grade level: 12
Instructional Material: *CDX Fundamentals of Automotive Technology,* Jones and Bartlett Learning Prerequisite(s): Automotive Technology I/D *Offered at: Dunbar, North Side, Polytechnic, Trimble Technical, OD Wyatt*	HS Credit(s): 2 College Hour(s): NA **Tier II**
DUAL CREDIT AUTOMOTIVE TECHNOLOGY II: AUTOMOTIVE SERVICE II/D A (AUTOTEC 2A DC) **TCC Course: (AUMT 1410) Automotive Brake Systems** **Course offerings may vary each year due to availability*	**TPD39702A**
In this dual credit class, students will learn about the operation and repair of drum/disc type brake systems. Topics include brake theory, diagnosis and repair of power, manual, anti-lock brake systems and parking brakes. May be taught with manufacturer-specific instructions.	13039700 Grade level: 12 HS Credit(s): 1
Instructional Material: *CDX Fundamentals of Automotive Technology,* Jones and Bartlett Learning TCC Course: Automotive Engine Performance Analysis I (AUMT 1410) FWISD Prerequisite(s): Dual Credit Automotive Technology I/D B TCC Prerequisite(s): TSI, AUMT 1407 *Course taught by an approved embedded instructor.* *Offered at: Polytechnic and OD Wyatt*	College Hour(s): 4 **Tier I**

DUAL CREDIT AUTOMOTIVE TECHNOLOGY II: AUTOMOTIVE SERVICE II/D B (AUTOTEC 2B DC) **TCC Course: (AUMT 2417) Automotive Engine Performance Analysis I** **Course offerings may vary each year due to availability*	**TPD39702B**
In this dual credit class, students will learn about diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems. Includes use of advanced engine performance diagnostic equipment. May be taught manufacturer-specific.	13039700 Grade level: 12 HS Credit(s): 1
Instructional Material: *CDX Fundamentals of Automotive Technology,* Jones and Bartlett Learning TCC Course: Automotive Engine Performance Analysis I (AUMT 2417) FWISD Prerequisite(s): Dual Credit Automotive Technology II/D A TCC Prerequisite(s): TSI, AUMT 1410 *Course taught by an approved embedded instructor.* *Offered at: Polytechnic and OD Wyatt*	College Hour(s): 4 **Tier I**
PAID PRACTICUM IN TRANSPORTATION SYSTEMS AB/EXTENDED (EXPRTRS2 AB)	**TP40412AB**
The practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. The Practicum is designed to give students supervised practical application of knowledge and skills. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	13040465 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Automotive Technology II, Collision Repair Paint and Refinishing, or Aircraft Powerplant Technology *Offered at: Dunbar, North Side, Polytechnic, Trimble Tech, and O.D. Wyatt*	College Hour(s): NA **Tier III**
HONORS PAID PRACTICUM IN TRANSPORTATION SYSTEMS AB/EXTENDED (EXPRTRS1 AB/H)	**TPH40412AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13040465 Grade level: 12
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Automotive Technology II, Collision Repair Paint and Refinishing, or Aircraft Powerplant Technology *Offered at: Dunbar, North Side, Polytechnic, Trimble Tech, and O.D. Wyatt*	HS Credit(s): 3 College Hour(s): NA **Tier II**
UNPAID PRACTICUM IN TRANSPORTATION SYSTEMS AB/D (PRACTDL AB)	**TP40402AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. The Practicum is designed to give students supervised practical application of knowledge and skills. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the paid practicum learning experiences. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school.	13040450 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Automotive Technology II, Collision Repair Paint and Refinishing, or Aircraft Powerplant Technology *Offered at: Dunbar, North Side, Polytechnic, Trimble Tech, and O.D. Wyatt*	College Hour(s): NA **Tier III**
HONORS UNPAID PAID PRACTICUM IN TRANSPORTATION SYSTEMS AB/D (PRACTDL AB/H)	**TPH40402AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13040450 Grade level: 12
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Automotive Technology II, Collision Repair Paint and Refinishing, or Aircraft Powerplant Technology *Offered at: Dunbar, North Side, Polytechnic, Trimble Tech, and O.D. Wyatt*	HS Credit(s): 2 College Hour(s): NA **Tier II**
BASIC COLLISION REPAIR AND REFINISHING AB (BASCOLRR AB)	**TP39800AB**
Basic Collision Repair and Refinishing includes knowledge of the processes, technologies, and materials used in the reconstruction of vehicles. This course is designed to teach the concepts and theory of systems related to automotive collision repair and refinishing.	13039750 Grade level: 9 HS Credit(s): 1
Instructional Material: *Auto Collision Repair and Refinishing, 2nd Edition 2017,* Goodheart-Willcox Co. Prerequisite(s): Principles of Transportation Systems: Collision *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**

HONORS BASIC COLLISION REPAIR AND REFINISHING AB (BASCOLRR AB/H)	TPH39800AB
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13039750 Grade level: 9
Instructional Material: *Auto Collision Repair and Refinishing, 2nd Edition 2017,* Goodheart-Willcox Co. Prerequisite(s): Principles of Transportation Systems: Collision *Offered only at: Trimble Tech*	HS Credit(s): 1 College Hour(s): NA **Tier II**
COLLISION REPAIR/D AB (COLLISR AB)	**TP39802AB**
This double-period pre-employment laboratory course provides job-specific preparation for entry-level employment in automotive collision repair. It includes use of National Automotive Technician Education Foundation (NATEF) industry standards and utilizes I-car materials in STRUCTURAL ANALYSIS and DAMAGE REPAIR. Instruction emphasizes advanced training in frame and body repair; metal, fiberglass, and synthetic materials repair; welding skills; and preparation and application of primers and paint. Entrepreneurship, environmental issues, safety, leadership training, and career-opportunity awareness are emphasized.	13039800 Grade level: 10 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Basic Collision Repair and Refinishing *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS COLLISION REPAIR/D AB (COLLISR AB/H)	**TPH39802AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13039800 Grade level: 10
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Basic Collision Repair and Refinishing *Offered only at: Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**
PAINT AND REFINISHING/D AB (PAINTR AB)	**TP39902AB**
This double-period pre-employment laboratory course continues preparation for entry-level employment in automotive collision repair. It includes use of National Automotive Technician Education Foundation (NATEF) industry standards and utilizes I-car materials in STRUCTURAL ANALYSIS and DAMAGE REPAIR. Instruction emphasizes advanced preparation in metal fiberglass and synthetic materials preparation and application of primers and paint. An INDUSTRY INTERNSHIP is an integral element of the program. Entrepreneurship, environmental issues, safety, leadership training and career opportunity awareness are emphasized.	13039900 Grade level: 11 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Collision Repair/D *Offered only at: Trimble Tech*	College Hour(s): NA **Tier III**
HONORS PAINT AND REFINISHING/D AB (PAINTR AB/H)	**TPH39902AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13039900 Grade level: 11
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Collision Repair/D *Offered only at: Trimble Tech*	HS Credit(s): 2 College Hour(s): NA **Tier II**

Pathways in Technology Early College High School (P-TECH)

Pathways in Technology Early College High Schools (P-TECH) are innovative open-enrollment high schools that allow students least likely to attend college an opportunity to receive both a high school diploma, an associate degree or at least 60 credit hours and industry certifications and credentials. The hallmark of the P-TECH model is its career focus and the provision of work-based education. P-TECH programs:

- Enroll historically underserved students, targeting at-risk and economically disadvantaged
- Provide students grade 9 through 12 the opportunity to complete a course of study that combines high school and post-secondary courses
- Enable students to earn a high school diploma, along with an associate degree, Level 1 or Level 2 certificate, or industry-based certification within six years
- Offer age-appropriate work-based learning opportunity in every grade level
- Allow students to gain work experience through an internship, apprenticeship, or other job training program
- Align to regional workforce needs, guiding students into high-demand, high-wage careers
- Partner with Texas Institutions of Higher Education (IHEs) and regional businesses and industries, giving students access to post-secondary education and workforce training opportunities

Location	P-TECH Academy	Focus	Implemented	Associate's Degree	College Level Certificate(s)	Industry Certification(s)
Paul Laurence Dunbar High School	Manufac-turing	Advanced Composites	2020-2021	Associate of Applied Science (AAS), Robotics and Automation: Composites	Advanced Composite, Level 1	OSHA 30-Hour General Certificate
		CNC Machinist	2020-2021		CNC Machinist, Level 1	OSHA 30-Hour General Certificate
		Mechatronics Technician	2020-2021	Associate of Applied Science (AAS), Robotics and Automation	Mechatronics Technician, Level 1	OSHA 30-Hour General Certificate
Eastern Hills High School	Cyber-security	Cybersecurity	2020-2021	Associate of Applied Science (AAS), Cybersecurity	Cybersecurity Specialist, Level 1 Ethical Hacking, Level 2	Cisco Certified Entry Networking Technician (CCENT); CompTIA IT Fundamentals+; CompTIA Network+; Microsoft Technology Associate Introduction to Programming Using Python; and/or Microsoft Technology Associate Introduction to Programming Using Java
		Programming	2020-2021	Associate of Applied Science (AAS), Programming	Programming 1, Level 1 Programming II, Level 2	Cisco Certified Entry Networking Technician (CCENT); CompTIA IT Fundamentals+; CompTIA Network+; Microsoft Technology Associate Introduction to Programming Using Python; and/or Microsoft Technology Associate Introduction to Programming Using Java
North Side High School	Medical Professions	Medical Professions	2020-2021	Associate of Arts (AA)	Health Science Pre-Professional	Pharmacy Technician (PhT); Dementia Specialist Certificate; Emergency Medical Technician (EMT); Patient Care Technician (PCT); Certified Nursing Assistant (CNA)
Poly-technic High School	Education	Education	2020-2021	Associate of Arts (AA), Teaching	Educational Aide I	Educational Aide I and OSHA 10-Hour General Industry Certification
TCC South Collegiate High School	Energy	Electrical Lineman	2018-2019	Associate of Applied Science (AAS), Electronics Line Technician	Ground Technician, Level 1 Renewable Line Technician, Level 2	Microsoft Office Specialist – Word, PowerPoint, and Excel (Office 365); OSHA 10- Hour General
		Advanced Energy Technician	2018-2019	Associate of Applied Science (AAS), Electronics Technology: Advanced Energy Technician	Renewable Energy Technology, Level 1	Microsoft Office Specialist – Word, PowerPoint, and Excel (Office 365); OSHA 10-Hour General
		Energy Business	2018-2019	Associate of Arts (AA)	Business, Level 1 Business, Level 2	Microsoft Office Specialist – Word, PowerPoint, and Excel (Office 365); OSHA 10- Hour General

**Programs, pathways and courses are subject to change at any time and may vary due to availability.*

Location	P-TECH Academy	Focus	Implemented	Associate's Degree	College Level Certificate(s)	Industry Certification(s)
Carter-Riverside High School	IT/ Networking/ Computer Maintenance	Cloud Technology	2021-2022	Associate of Applied Science (AAS), Convergence Technologies: Cloud Technology	Advanced Convergence Technologies, Level 1 OR Convergence Cloud Technology, Level 1	Comp TIA or Cisco Certifications
Diamond Hill Jarvis High School	Architecture/ Construction Logistics	Architecture	2021-2022	Associate of Applied Science (AAS), Architectural Technology	Architectural CAD Operator, Level 1 OR Architectural Paraprofessional, Level 1 OR Architectural Technology Occupational Skills Award	Autodesk Certified User in AutoCAD
		Construction Management	2021-2022	Associate of Applied Science (AAS), Construction Management Technology	Construction Inspection Technician, Level 1 OR Construction Management Technology, Level 1	NCCER Core Curriculum AND/OR NCCER Construction Technology AND/OR OSHA 10-Hour Construction Industry
		Logistics & Supply Chain Management	2021-2022	Associate of Applied Science (AAS), Logistics and Supply Chain Management	Transportation Management, Level 1 OR Warehouse Management, Level 1	MSSC Certified Logistics Technician
South Hills High School	Software Development, IT and User Experience	Web Applications	2021-2022	Associate of Applied Science (AAS), Information Technology: Web Applications Programming	Web Applications Programming I, Level 1 OR Web Applications Programming II, Level 2	WD Certified Web Design Certification

FOR THE GRADUATING CLASS OF 2024 and beyond

The Manufacturing P-TECH Academy offers three (3) Career Focuses.

Paul Laurence Dunbar High School
Manufacturing P-TECH Academy
Advanced Composites Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
High School	English I or II	English I or II	English II or *III	English II or *III	English *III or *IV	English *III or *IV	English IV* or *English Elective	English IV* or *English Elective
	Algebra I or Geometry	Algebra I or Geometry	Geometry Algebra II	Geometry Algebra II	*Statistics	**Pre-Calculus	*Pre-Calculus	* Calculus I
	AP Human Geography	AP Human Geography	AP World History	AP World History	AP US History	AP US History	Government	Economics
	Biology	Biology	Physics or Chemistry	Physics or Chemistry	Physics or Chemistry	Physics or Chemistry	4th Year Science	4th Year Science
	PS Math	PS Math						
	Spanish I *	Spanish II*						
	Art Appreciation*	Speech *						
	Honors Principles of Manufacturing AB (MAH32201AB)	Honors Principles of Manufacturing AB (MAH32201AB)			Dual Credit Intro to Aircraft Technology AB (TPD39401AB)		Honors Paid or Unpaid Practicum in Manufacturing AB (MAH33002AB OR MAH33012AB) OR Honors Project-Based Research AB (CPH01500AB) OR Career Prep AB (CP01300AB)	Honors Paid or Unpaid Practicum in Manufacturing AB (MAH33002AB OR MAH33012AB) OR Honors Project-Based Research AB (CPH01500AB) OR Career Prep AB (CP01300AB)
College	SPN 1341-3	SPN 1342			**AERM 1315**	PLTC 1303	AERM 1303	AERM 2359
	FAR 1311-3	SPC 1301			AERM 1254	PLTC 1291		
Hrs.					Up to 5	Up to 5	Up to 3	Up to 3
	Degree: ASS, Robotics and Automation: Composites - 60+hours **College Level Certification(s):** Advanced Composite Technology, Level 1 Certification -16 hours **Industry Certification(s):** OSHA 30-Hour General Certificate						Advanced Composite Technology - 16 hours: AERM 1315, AERM1254, AERM 1303, PLTC 1303, PLTC 1291, AERM 2359	

*TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Juniors and seniors that are not TSI met will take AP courses in-lieu of dual credit course.

Paul Laurence Dunbar High School
Manufacturing P-TECH Academy
CNC Machinist Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or *III	English II or *III	English *III or *IV	English *III or *IV	English *IV or *English Elective	English *IV or *English Elective
	Algebra I or Geometry	Algebra I or Geometry	Geometry Algebra II	Geometry Algebra II	Pre-Calculus	Pre-Calculus	4th year Math	4th year Math
	AP Human Geography	AP Human Geography	AP World History	AP World History	AP US History	AP US History	Government	Economics
	Biology	Biology	Physics or Chemistry	Physics or Chemistry	Physics or Chemistry	Physics or Chemistry	4th Year Science	4th Year Science
	PS Math	PS Math						
	Spanish I	Spanish II						
	Art Appreciation	Speech						
	Honors Principles of Manufacturing AB (MAH32201AB)	Honors Principles of Manufacturing AB (MAH32201AB)	Dual Credit Intro to Computer Aided Design and Drafting A (STD03769A) AND Dual Credit Intro to Computer Aided Design and Drafting B (STD03769B)	Dual Credit Intermediate Computer Aided Design and Drafting AB (STD03770AB)	Dual Credit Engineering Technology I A (MAD32900A)	Dual Credit Manufacturing Engineering Technology I B (MAD32900B)	Honors Paid or Unpaid Practicum in Manufacturing AB (MAH33002AB OR MAH33012AB) OR Honors Project-Based Research AB (CPH01500AB) OR Career Prep AB (CP01300AB)	Honors Paid or Unpaid Practicum in Manufacturing AB (MAH33002AB OR MAH33012AB) OR Honors Project-Based Research AB (CPH01500AB) OR Career Prep AB (CP01300AB)
College	SPN 1341-3	SPN 1342-3	**DFTG 1305**					
	FAR 1311-3	SPC 1301-3	**DFTG 1409**	**DFTG 2440**	**MCHN 1338**	**MCHN 2303**	MCHN 2431	MCHN 2434
Hrs.	Up to 6	Up to 6	Up to 7	Up to 4	Up to 3	Up to 3	Up to 4	Up to 4
	Degree: ASS Robotics and Automation Associates Degree - 60+ hours **College Level Certification(s):** CNC Machinist Technology, Level 1 Certification-25 hours **Industry Certification(s):** OSHA 30-Hour General Certificate						CNC Machinist Technology - 25 hours: DFTG1305, MCHN 1338, DFTG 1409, DFTG 2440, MCHN 2303, MCHN 2434, MCHN 2431	

*TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Juniors and seniors that are not TSI met will take AP courses in-lieu of dual credit course.

Paul Laurence Dunbar High School
Manufacturing P-TECH Academy
Mechatronics Technician Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or *III	English II or *III	English *III or *IV	English *III or *IV	English *IV or *English Elective	English *IV or *English Elective
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	*College Algebra	**Pre-Calculus	4th Year Math	4th Year Math
	AP Human Geography	AP Human Geography	AP World History	AP World History	US History	US History	Government	Economics
	Biology	Biology	Physics or Chemistry	Physics or Chemistry	Physics or Chemistry	Physics or Chemistry	4th Year Science	4th Year Science
	PS Math	PS Math	PE	PE				
	Spanish I *	Spanish II *	Health					
	Art Appreciation *	Speech *						
	Honors Principles of Manufacturing AB (MAH32201AB)	Honors Principles of Manufacturing AB (MAH32201AB)	Dual Credit AC/DC Electronics AB (STD36802AB) AND Dual Credit Solid State Electronics A (STD36902A)	Dual Credit Robotics I AB (STD37002AB) AND Dual Credit Solid State Electronics B (STD36902B)	Dual Credit Digital Electronics AB (STD37443AB)	Dual Credit Robotics II AB (STD37003AB)	Dual Credit Basic Fluid Power AB (MAD03683AB) AND Honors Paid or Unpaid Practicum in Manufacturing AB (MAH33002AB OR MAH33012AB) OR Honors Project-Based Research AB (CPH01500AB) OR Career Prep AB (CP01300AB)	Honors Paid or Unpaid Practicum in Manufacturing AB (MAH33002AB OR MAH33012AB) OR Honors Project-Based Research AB (CPH01500AB) OR Career Prep AB (CP01300AB)
College	SPN 1341-3	SPN 1342-3	***CETT 1409**	***RBTC 1351**	*ENGL 1301	*ENGL 1302	*ENGL 2322	*ENGL 2323
	FAR 1311-3	SPC 1301-3	*MATH 1314	*MATH 2412	***CETT 1449**	***RBTC 2445**	*GOVT 23052	*ECON 2301
			***RBTC 1401**	***CETT 1441**	*HIST 1301	*HIST 1302	***HYDR 1345**	*ELMT 2337
			*KINE 1102	*KINE 1164	*CETT 2435	*CETT 1445	*RBTC 1447	*ELPT 2455
Hrs.	Up to 6	Up to 6	Up to 12	Up to 12	Up to 14	Up to 14	Up to 13	Up to 13
	Degree: ASS Robotics and Automation Associates Degree - 60 + hours **College Level Certification(s):** Mechatronics Technician, Level 1 Certification - 30 hours **Industry Certification(s):** OSHA 30-Hour General Certificate						3 hours of dual credit Mathematics 3 hours of dual credit Creative Arts/Language, Philosophy & Culture	

*TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Juniors and seniors that are not TSI met will take AP courses in-lieu of dual credit course.

COURSE DESCRIPTIONS FOR THE MANUFACTURING P-TECH

HONORS PRINCIPLES OF MANUFACTURING AB (PRINMAN AB/H)	**MAH32201AB**
In Principles of Manufacturing, students 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. The study of manufacturing technology allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings in a manufacturing setting. In addition to general academic and technical knowledge and skills, students gain an understanding of career opportunities available in manufacturing and what employers require to gain and maintain employment in these careers. In addition to the regular course curriculum, students in this honors course will complete a project using the five phases of project management used in the business and industry environment.	13032200 Grade level: 9 HS Credit(s): 1
Instructional Material: *Agriculture, Construction & Manufacturing, iCEV* Prerequisite(s): None *Offered only at: Dunbar (for PTECH)*	College Hour(s): NA **Tier II**
HONORS PROJECT-BASED RESEARCH AB (PROBS1 AB/H) *(Available Fall 2023)* **Previously Problems and Solutions*	**CPH01500AB**
Students will research a real-world problem and possible solutions throughout this course. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. This course must be cooperatively planned and supervised by the teacher ensuring that the student has guidance and support of a mentor or interdisciplinary team. The district must maintain a written project plan for each student enrolled in the course.	12701500 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Specific to program focus/pathway and is the previous course in the sequence. *Offered at: All high school campuses*	College Hour(s): NA **Tier II**
CAREER PREPARATION I AB (CAREERP1 AB)	**CP01300AB**
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction, and are employed for ten hours per week (or average of 20 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	12701300 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None	College Hour(s): NA **Tier III**
CAREER PREPARATION II AB (CAREERP2 AB)	**CP01400AB**
The Career Preparation II course is for those students who are taking a Career Preparation course for the second time and continue or have new employment during the duration of the course; working ten hours per week (or average of 20 hours across two weeks). This course provides the same opportunities and requirements as the Career Preparation I course.	12701400 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Career Preparation I AB	College Hour(s): NA **Tier III**
CAREER PREPARATION I/EXTENDED I AB (EXCAREE1 AB)	**CP01302AB**
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I/Extended provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full	12701305 Grade level: 11-12 HS Credit(s): 3

year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction, and are employed for fifteen hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None	College Hour(s): NA **Tier III**
CAREER PREPARATION II/EXTENDED (EXCAREE2 AB)	**CP01402AB**
The Career Preparation I/Extended course is for those students who are taking a Career Preparation course for the second time and continue or have new employment during the duration of the course; working fifteen hours per week (or average of 30 hours across two weeks). This course provides the same opportunities and requirements as the Career Preparation I/Extended course.	12701405 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Career Preparation I	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN MANUFACTURING AB/D (PRACMANU AB/H)	**MAH33002AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the business and industry environment. See the Unpaid Practicum in Manufacturing course description in the Career & Technical Education, Manufacturing section of this document.	13033000 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s) (For Welding): Welding II/d AB Prerequisite(s) (For Manufacturing P-Tech): Previous P-TECH Manufacturing coursework notated on crosswalk *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Technical, and Dunbar (P-TECH)*	College Hour(s): NA **Tier II**
HONORS PAID PRACTICUM IN MANUFACTURING/EXTENDED AB (EXPRMAN2AB/H)	**MAH33012AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the business and industry environment. See the Paid Practicum in Manufacturing course description in the Career & Technical Education, Manufacturing section of this document.	13033015 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s) (For Welding): Welding II/d AB Prerequisite(s) (For Manufacturing P-Tech): Previous P-TECH Manufacturing coursework notated on crosswalk *Offered at: Diamond-Hill Jarvis, South Hills, Southwest, Trimble Technical, and Dunbar (P-TECH)*	College Hour(s): NA **Tier II**
DUAL CREDIT AC/DC ELECTRONICS AB (ACDCELEC AB DC) **TCC Course: (CETT 1409) DC-AC Circuits** **Course offerings may vary each year due to availability*	**STD36802AB**
In this course, students learn the fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchhoff's laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques. Emphasis on circuit simulation using PSpice. Course includes soldering techniques, hand tools, circuit fabrication techniques, troubleshooting techniques and circuit analysis using Mathcad.	13036800 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing TCC Prerequisite(s): MATH 0362 with a minimum grade of C or appropriate TSI Math placement score. *Offered only at: Dunbar (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT SOLID STATE ELECTRONICS A (SOSTELEC A DC) **TCC Course: (RBTC 1401) Programmable Logic Controllers** **Course offerings may vary each year due to availability*	**STD36902A**
In this course, students will learn about programmable logic controllers (PLC). Topics include processor units, USER numbering systems, memory organization, relay type devices, timers, counters, data manipulators, and programming.	13036900 Grade level: 10-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing TCC Prerequisite(s): N/A *Offered only at: Dunbar (P-TECH) and TCC South Collegiate HS (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT SOLID STATE ELECTRONICS B (SOSTELEC B DC) **TCC Course: (CETT 1441) Solid State Circuits** **Course offerings may vary each year due to availability*	**STD36902B**
In this course, students study various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis.	13036900 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing TCC Prerequisite(s): CETT 1409 and MATH 0362 with a minimum grade of C or appropriate TSI Math placement score *Offered only at: Dunbar (P-TECH) and TCC South Collegiate HS (P-TECH)*	HS Credit(s): 0.5 College Hour(s): 4 **Tier I**

DUAL CREDIT DIGITAL ELECTRONICS AB (DIGELC DC AB) **TCC Course: (CETT 1449) Digital Systems** **Course offerings may vary each year due to availability*	**STD37443AB**
In this course, students will learn about electronics covering digital systems. Emphasis on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital to-analog circuits, and large-scale integrated circuits.	13037600 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing TCC Prerequisite(s): MATH 0362 with a minimum grade of C or appropriate TSI Math placement score. *Offered only at: Dunbar (P-TECH) and TCC South Collegiate HS (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT ROBOTICS I AB (ROBOT 1AB DC) **TCC Course: (RBTC 1351) Robotics Mechanisms** **Course offerings may vary each year due to availability*	**STD37002AB**
In this course, students learn the application of principles and the calculation of practical problems involving four bar linkages, cams, gears, and gear trains. Topics include vector quantities, angular displacement, motion concepts, velocities, and motions.	13037000 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): MATH 1332 *Offered only at: Dunbar (P-TECH) and TCC South Collegiate HS (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT BASIC FLUID POWER AB (BASICFP AB DC) **TCC Course: (HYDR 1345) Hydraulics and Pneumatics** **Course offerings may vary each year due to availability*	**MAD03683AB**
In this course, students learn the fundamentals of hydraulics and pneumatics, components of each system, and the operations, maintenance, and analysis of each system.	N1303683 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing TCC Prerequisite(s): NA *Offered only at: Dunbar (P-TECH)*	HS Credit(s): 1 College Hour(s): 3 **Tier I**
DUAL CREDIT ROBOTICS II AB (ROBOTIC 2AB DC) **TCC Course: (RBTC 2445) Robot Application, Set-up, and Testing** **Course offerings may vary each year due to availability*	**STD37003AB**
In this course, students engage in a capstone course that provides the student with laboratory experience in the installation, set-up, and testing of robotic cells. Topics include maintenance.	13037050 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing, Robotics I TCC Prerequisite(s): NA *Offered only at: Dunbar (P-TECH)*	HS Credit(s): 1 College Hour(s): 4 **Tier I**
DUAL CREDIT PROGRAMMABLE LOGIC CONTROLLER II AB (TBD: PROLGCNT2 AB DC) **TCC Course: (ELPT 2445) Programmable Logic Control II** **Courses may change due to availability*	**TBD: STD03690AB**
In this course, students will learn advanced concepts in programmable logic controllers and their applications and interfacing to industrial controls.	N1303690 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: Dunbar (P-TECH)*	HS Credit(s): 1 College Hour(s): 4 Tier I
DUAL CREDIT INTRODUCTION TO COMPUTER AIDED DESIGN AND DRAFTING A (INTRCADD A DC) **TCC Course: (DFTG 1305) Technical Drafting** **Course offerings may vary each year due to availability*	**STD03769A**
In this course, students get an introduction to reading, interpreting, and developing technical drawings, including the principles of drafting and computer-aided design.	N1303769 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing TCC Prerequisite(s): NA *Offered only at: Dunbar (P-TECH)*	HS Credit(s): 0.5 College Hour(s): 3 **Tier I**
DUAL CREDIT INTRODUCTION TO COMPUTER AIDED DESIGN AND DRAFTING B (INTRCADD B DC) **TCC Course: (DFTG 1409) Basic Computer-Aided Drafting** **Course offerings may vary each year due to availability*	**STD03769B**
In this course, students get an introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding	N1303769 Grade level: 10-12

text and dimensions, using layers, coordinate systems, and plot/print to scale.	HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing TCC Prerequisite(s): DFTG 1305 *Offered only at: Dunbar (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT INTERMEDIATE COMPUTER AIDED DESIGN AND DRAFTING AB (INTMCADD AB DC) **TCC Course: (DFTG 2440) Solid Modeling/Design** **Course offerings may vary each year due to availability*	**STD03770AB**
In this course, students learn the development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work.	N1303770 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing TCC Prerequisite(s): None *Offered only at: Dunbar (P-TECH)*	HS Credit(s): 1 College Hour(s): 4 **Tier I**
DUAL CREDIT MANUFACTURING ENGINEERING TECHNOLOGY I A (MANENGT1 A DC) **TCC Course: (MCHN 1338) Basic Machine Shop I** **Course offerings may vary each year due to availability*	**MAD32900A**
In this course, students are introduced to machining fundamentals. The student will use basic machine tools including the lathe, milling machine, drill press, power saw, and bench grinder. Machine terminology, theory, math, part layout, and bench work using common measuring tools is included. Emphasis is placed on shop safety, housekeeping, and preventative maintenance.	13032900 Grade level: 10-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing TCC Prerequisite(s): DFTG 1305 and DFTG 1409 *Offered only at: Dunbar (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT MANUFACTURING ENGINEERING TECHNOLOGY I B (MANENGT1 B DC) **TCC Course: (MCHN 2303) Fundamentals of CNC Machine Controls** **Course offerings may vary each year due to availability*	**MAD32900B**
In this course, students are introduced to programming and operation of Computer Numerical Controlled (CNC) machine shop equipment.	13032900 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing TCC Prerequisite(s): DFTG 1305 and DFTG 1409 *Offered only at: Dunbar (P-TECH)*	HS Credit(s): 0.5 College Hour(s): 3 **Tier I**
DUAL CREDIT INTRODUCTION TO AIRCRAFT TECHNOLOGY AB (INAIRTEC AB DC) **TCC Course: (AERM 1315) Aviation Science** **Course offerings may vary each year due to availability*	**TPD39401AB**
In this course, students learn the fundamentals of mathematics, physics, and drawings as they apply to aircraft principles and operations as required by the Federal Aviation Administration (FAA) for airframe and powerplant mechanics.	13039350 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Principles of Manufacturing TCC Prerequisite(s): NA *Offered only at: Dunbar (P-TECH)*	College Hour(s): 3 **Tier I**

FOR THE GRADUATING CLASS OF 2024 and beyond

The Cybersecurity P-TECH Academy offers two (2) Career Focuses.

Eastern Hills High School
Cybersecurity P-TECH Academy
Cybersecurity Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I	English I	English II	English II	English III	English III	English IV	English IV
	World Geography	World Geography	World History	World History	US History	US History	US Government	Economics
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	Algebra II or Pre-Calculus	Algebra II or Pre-Calculus	Calculus or Pre-Calculus	Calculus or Pre-Calculus
	Biology	Biology	Chemistry	Chemistry	Physics	Physics	Advanced Science	Advanced Science
	Health	PE	Dual Credit Fine Arts	Dual Credit Speech	PE			
	Dual Credit Principles of IT AB (ITD27201AB) AND Dual Credit Computer Maintenance I AB (ITD27302AB)	Dual Credit Foundations of Cybersecurity AB (ITD27904AB) AND Dual Credit Networking AB (ITD27402AB)	Dual Credit Computer Science II AB (TAD2153AB)	Dual Credit Fundamentals of Computer Science AB (TAD2140AB)	Dual Credit Internetworking Technologies 1A (ITD28012A) AND Dual Credit Digital Forensics A (TAD80360A)	Dual Credit Internetwork-ing Technologies 1B (ITD28012B)	Dual Credit Digital Forensics B (TAD80360B)	Dual Credit Cybersecurity Capstone AB (ITD27900AB)
	AVID 1	AVID 1	AVID 2	AVID 2	1 Student Choice	2 Student Choices	2 Student Choices	3 Student Choices
College	**COSC 1301[a]**	**ITSY 1300**	**COSC 1436**	**ITSC 1425[b]**	**ITSY 2400[a]**	**ITSY 2401[a]**	**ITSY 2342[b]**	**ITSY 2459**
	ITSC 1305[a]	**ITNW 1425**			**ITSY 2341[a]**	ITSY 2330[a]	ITSY 2372[b]	
			ARTS 1301[4] or DRAM 1310[4] or MUSI 1310[4]	SPCH 1311[2] or SPCH 1315[2] or SPCH 1321[2]	MATH 1314[3] or MATH 1316[3] or MATH 2412[3] or MATH 2413[3]		MATH 1314[3] or MATH 1316[3] or MATH 2412[3] or MATH 2413[3]	PSYC 2301[5] or ECON 2301[5] or SOCI 1301[5]
					ENGL 1301[1]	ENGL 1302 or ENGL 2311	ENGL 1301[1]	ENGL 1302 or ENGL 2311
Hrs.	Up to 6	Up to 7	Up to 7	Up to 7	Up to 14	Up to 10	Up to 13	Up to 10

Associate Degree: Associate of Applied Science – Cybersecurity (60 hours; Blue, Green, and Purple Highlighted Courses):

[a]: 27 hours of Cybersecurity Specialist (Level I certificate) coursework (COSC 1301 and ITSC 1305 and ITNW 1425 and ITSY 1300 and ISTY 2401 and ITSY 2341 and ITSY 2400 and ITSY 2330)

[b]: 14 hours of Ethical Hacking (Level II coursework) coursework (ITSC 1425 and COSC 1436 and ITSY 2342 and ITSY 2372)

[c]: 4 hours of Capstone coursework (ITSY 2459)

[1]: 3 hours of Composition (ENGL 1301)

[2]: 3 hours of Speech and Communication Skills (SPCH 1311 or SPCH 1315 or SPCH 1321)

[3]: 3 hours of Mathematics (MATH 1314 or MATH 1342 or MATH 2412 or MATH 2413)

[4]: 3 hours of Creative Arts (ARTS 1301 or DRAM 1310 or MUSI 1310)

[5]: 3 hours of Social or Behavioral Science (ECON 2301 or PSYC 2301 or SOCI 1301)

Level 1 Certificate of Completion: Cybersecurity Specialist (27 hours, Blue Highlighted Courses):

[a]: 27 hours of Cybersecurity Specialist coursework (COSC 1301 and ITSC 1305 and ITNW 1425 and ITSY 1300 and ISTY 2401 and ITSY 2341 and ITSY 2400 and ITSY 2330)

Level 2 Certificate of Completion: Ethical Hacking (47 hours, Blue and Green Highlighted Courses):

[a]: 27 hours of Cybersecurity Specialist coursework (COSC 1301 and ITSC 1305 and ITNW 1425 and ITSY 1300 and ISTY 2401 and ITSY 2341 and ITSY 2400 and ITSY 2330)

[b]: 14 hours of Computer Science coursework (ITSC 1425 and COSC 1436 and ITSY 2342 and ITSY 2372)

[1]: 3 hours of Composition (ENGL 1301)

[2]: 3 hours of Speech and Communication Skills (SPCH 1311 or SPCH 1315 or SPCH 1321)

Eastern Hills High School
Cybersecurity P-TECH Academy
Programming Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I	English I	English II	English II	English III	English III	English IV	English IV
	World Geography	World Geography	World History	World History	US History	US History	US Government	Economics
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	Algebra II or Pre-Calculus	Algebra II or Pre-Calculus	Calculus or Pre-Calculus	Calculus or Pre-Calculus
	Biology	Biology	Chemistry	Chemistry	Physics	Physics	Advanced Science	Advanced Science
	Health	PE	Fine Arts	Speech	PE			
	Dual Credit Principles of IT AB (ITD27201AB) AND Dual Credit Computer Maintenance IAB (ITD27302AB)	Dual Credit Foundations of Cybersecurity AB (ITD27904AB) AND Dual Credit Networking AB (ITD27402AB)	Dual Credit Computer Science II AB (TAD2153AB)	Dual Credit Fundamentals of Computer Science AB (TAD2140AB)	Dual Credit Computer Science III AB (TAD2155AB)	Dual Credit Independent Study in Technology Applications AB (TBD: TAD2144AB)		Dual Credit Engineering Applications of Computer Science Principles AB (STD03772AB)
	AVID 1	AVID 1	AVID 2	AVID 2	1 Student Choice	2 Student Choice	3 Student Choice	3 Student Choice
College	**COSC 1301[a]**	**ITSY 1300**	**COSC 1436**	**ITSC 1425[b]**	**COSC 1437[a]**	**COSC-2436[b]**	ITSE-2409[b]	**ITSE-1450[b]**
	ITSC 1305[a]	**ITNW 1425**			ITSE-1479[a]	ITSE-2417[a]		
			ARTS 1301[4] or DRAM 1310[4] or MUSI 1310[4]	SPCH 1311[2] or SPCH 1315[2] or SPCH 1321[2]	MATH 1314[3] or MATH 1316[3] or MATH 2412[3] or MATH 2413[3]		MATH 1314[3] or MATH 1316[3] or MATH 2412[3] or MATH 2413[3]	PSYC 2301[5] or ECON 2301[5] or SOCI 1301[5]
					ENGL 1301[1]	ENGL 1302 or ENGL 2311	ENGL 1301[1]	ENGL 1302 or ENGL 2311
Hrs.	Up to 6	Up to 7	Up to 7	Up to 7	Up to 15	Up to 11	Up to 11	Up to 10

Associate Degree: Associate of Applied Science – Programming (60 hours; Blue, Green, and Purple Highlighted Courses):

[a]: 16 hours of Programming I coursework (COSC 1436 and COSC 1437 and ITSE 2417 and ITSE 1479)

[b]: 29 hours of Programming II coursework (COSC 1301 and ITSC 1305 and ITSC 1425 and ITNW 1425 and ITSY 1300 and ITSE 2409 and COSC 2436 and ITSE 1450)

[1]: 3 hours of Composition (ENGL 1301)

[2]: 3 hours of Speech and Communication Skills (SPCH 1311 or SPCH 1315 or SPCH 1321)

[3]: 3 hours of Mathematics (MATH 1314 or MATH 1342 or MATH 2412 or MATH 2413)

[4]: 3 hours of Creative Arts (ARTS 1301 or DRAM 1310 or MUSI 1310)

[5]: 3 hours of Social or Behavioral Science (ECON 2301 or PSYC 2301 or SOCI 1301)

Level 1 Certificate of Completion: Programming I (16 hours, Blue Highlighted Courses):

[a]: 16 hours of Programming I coursework (COSC 1436 and COSC 1437 and ITSE 2417 and ITSE 1479)

Level 2 Certificate of Completion: Programming II (45 hours, Blue and Green Highlighted Courses):

[a]: 16 hours of Programming I coursework (COSC 1436 and COSC 1437 and ITSE 2417 and ITSE 1479)

[b]: 29 hours of Programming II coursework (COSC 1301 and ITSC 1305 and ITSC 1425 and ITNW 1425 and ITSY 1300 and ITSE 2409 and COSC 2436 and ITSE 1450)

COURSE DESCRIPTIONS FOR THE CYBERSECURITY P-TECH

DUAL CREDIT PRINCIPLES OF INFORMATION TECHNOLOGY AB (PRINIT DC AB) **TCC Course: (COSC 1301) Introduction to Computing +** **Course offerings may vary each year due to availability*	**ITD27201AB**
Students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. Additionally, students will learn an overview of computer systems-hardware, operating systems, the Internet, and application software including word processing, spreadsheets, presentation graphics, and databases. Current topics such as the effect of computers on society, and the history and use of computers in business, educational, and other interdisciplinary settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science.	13027200 Grade level: 9 - 10 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None Corequisites: Dual Credit Computer Maintenance AB TCC Prerequisite(s): None *Course taught by a TCC-approved adjunct instructor* *Offered only at: Diamond Hill Jarvis (P-TECH), Eastern Hills (P-TECH), South Hills (P-TECH), and TCC South Collegiate (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT COMPUTER MAINTENANCE I AB (COMPMTN AB DC) **TCC (ITSC 1305) Introduction to PC Operating Systems** **Course offerings may vary each year due to availability*	**ITD27302AB**
In Computer Maintenance, students will acquire knowledge of computer maintenance and creating appropriate documentation. Students will analyze the social responsibility of business and industry regarding the significant issues relating to the environment, ethics, health, safety, and diversity in society and in the workplace as related to computer maintenance. Students will apply technical skills to address the IT industry and emerging technologies. Additionally, students will be introduced to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. Install, configure, and maintain the operating system, perform basic file management operation; organize and allocate primary and secondary storage; access and control peripheral devices; and run titles.	13027300 Grade level: 10 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None Corequisites: Dual Credit Principles of Information Technology AB TCC Prerequisite(s): None *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT FOUNDATIONS OF CYBERSECURITY AB (FODCYBER AB DC) **TCC Course: (ITSY 1300) Fundamentals of Information Security** **Course offerings may vary each year due to availability*	**ITD27904AB**
Students will develop the knowledge and skills needed to explore fundamental concepts related to the ethics, laws, and operations of cybersecurity. Students will examine trends and operations of cyberattacks, threats, and vulnerabilities. Students will review and explore security policies designed to mitigate risks. The skills obtained in this course prepare students for additional study in cybersecurity. A variety of courses are available to students interested in this field. Foundations of Cybersecurity may serve as an introductory course in this field of study. Additionally, the college course will introduce students to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies and controls is also discussed.	03580850 Grade level: 9 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None Corequisites: Dual Credit Networking AB TCC Prerequisite(s): None *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT NETWORKING AB (NTWRK DC AB) **TCC Course: (ITNW 1425) Fundamentals of Networking Technologies** **Course offerings may vary each year due to availability*	**ITD27402AB**
Students will develop knowledge of the concepts and skills related to data networking technologies and practices in order to apply them to personal or career development. To prepare for success, students will have	

opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Additionally, students receive Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.	13027400 Grade level: 10 – 11 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Dual Credit Computer Maintenance Corequisites: Dual Credit Foundations of Cybersecurity AB TCC Prerequisite(s): ITSC 1305 Introduction to PC Operating Systems *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH) and South Hills (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT COMPUTER SCIENCE II (TACS 2 DC AB) **TCC Course: (COSC 1436) Programming Fundamentals I+** **Course offerings may vary each year due to availability*	**TAD2143AB**
Computer Science I will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of computer science through the study of technology operations, systems, and concepts. Additionally, will be introduced to the fundamental concepts of structured programming and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. This course is included in the Field of Study Curriculum for Computer Science.	03580200 Grade level: 10 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Principles of IT AB TCC Prerequisite(s): COSC 1301 Introduction to Computing + *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH) and South Hills (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT COMPUTER SCIENCE III (TACS 3 DC AB) **TCC Course: (COSC 1437) Programming Fundamentals II +** **Course offerings may vary each year due to availability*	**TAD2155AB**
Students learn advanced skills in programming languages and structured programming techniques through the use of advanced data structures and the discussion of memory allocation and de-allocation. The course offers students the opportunity to explore projects related to individual interests such as business applications, computer graphics, and sound. Additionally, the college course will focus on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. (This course is included in the Field of Study Curriculum for Computer Science.)	03580200 Grade level: 10 - 11 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Algebra I; Dual Credit Computer Science 1AB TCC Prerequisite(s): COSC 1436 Programming Fundamentals I + *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT INDEPENDENT STUDY IN TECHNOLOGY AB (TBD: TAIND AB DC) **TCC Course: (COSC 2436) Programming Fundamentals III** **Course offerings may vary each year due to availability*	**TBD: TAD2144AB**
Computer Science III will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of advanced computer science data structures through the study of technology operations, systems, and concepts. Additionally, the college course will include further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), searching, sorting, recursion, and algorithm analysis. Programs will be implemented in an appropriate object-oriented language. (This course is included in the Field of Study Curriculum for Computer Science.)	03580350 Grade level: 11 - 12 HS Credit(s): 1

Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): DC Computer Science II AB TCC Prerequisite(s): COSC 1437 Programming Fundamentals II + *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT ENGINEERING APPLICATIONS FOR COMPUTER SCIENCE PRINCIPLES (EACSP AB DC) **TCC Course: (ITSE 1450) System Analysis and Design** **Course offerings may vary each year due to availability*	**STD03772AB**
This is a design-based high school course for students who want to expand and deepen their engineering design skills and habits of mind through the purposeful integration and application of computer science (CS) principles and practices. Developed by University of Texas, this hands-on course engages students in authentic, integrated engineering and CS practices in a project-based environment. Additionally, students will be introduced to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools.	N1303772 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Computer Science III TCC Prerequisite: COSC 1436 Programming Fundamentals 1+ *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT FUNDAMENTALS OF COMPUTER SCIENCE AB (TAFCS DC AB) **TCC Course: (ITSC 1425) Personal Computer Hardware** **Course offerings may vary each year due to availability*	**TAD2140AB**
Fundamentals of Computer Science is intended as a first course for those students just beginning the study of computer science. Students will learn about the computing tools that are used every day. Students will foster their creativity and innovation through opportunities to design, implement, and present solutions to real-world problems. Students will collaborate and use computer science concepts to access, analyze, and evaluate information needed to solve problems. Students will learn the problem-solving and reasoning skills that are the foundation of computer science. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of computer science through the study of technology operations and concepts. Additionally, students will learn current personal computer hardware including assembly, diagnosing faulty components, optimizing system performance, installing/connecting peripherals, upgrading, setup, configuration, and troubleshooting.	03580140 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Computer Science I AB TCC Prerequisite(s): None *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH) and South Hills (P-TECH)*	College Hour(s): 4 **Tier I**
HONORS INTERNETWORKING TECHNOLOGIES I AB (INTNET1 AB/H)	**ITH28012AB**
Using a lab setting that corresponds to the work place, students design local and wide-area networks. Students focus on network fundamentals, router theory, router technologies, network design, and network management. Students begin preparation for CISCO industry certification. Students in this honors course will complete a project using the five phases of project management used in the business and industry environment.	N1302803 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: *Contact Career and Technical Education Department for related materials* Prerequisite(s): Networking I AB, excludes P-TECH programs *Teacher must be CISCO certified.* *Offered only at: Carter Riverside and Eastern Hills*	College Hour(s): NA **Tier II**
DUAL CREDIT INTERNETWORKING TECHNOLOGIES I A (INTNET1 A DC) *(Available Fall 2023)* **TCC Course: (ITSY 2400) Operating System Security** **Course offerings may vary each year due to availability*	**ITD28012A**
Using a lab setting that corresponds to the work place, students design local and wide-area networks. Students focus on network fundamentals, router theory, router technologies, network design, and network management. Students begin preparation for CISCO industry certification. Additionally, students will learn how to safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system. Students will identify security threats, monitor network security implementations and use best practices to configure operating systems to industry security standards.	N1302803 Grade level: 11 - 12 HS Credit(s): .5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Foundations of Cybersecurity AB Corequisite: Dual Credit Digital Forensics A TCC Prerequisite(s): ITSY 1300 Fundamentals of Information Security *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH)*	College Hour(s): 4 **Tier I**

DUAL CREDIT INTERNETWORKING TECHNOLOGIES I B (INTNET1 A DC) *(Available Fall 2023)* **TCC Course: (ITSY 2401) Firewalls and Network Security** **Course offerings may vary each year due to availability*	**ITD28012B**
Using a lab setting that corresponds to the work place, students design local and wide-area networks. Students focus on network fundamentals, router theory, router technologies, network design, and network management. Students begin preparation for CISCO industry certification. Additionally, the college course will help students learn to identify elements of firewall design, types of security threats and responses to security attacks. Use Best Practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities.	N1302803 Grade level: 11 - 12 HS Credit(s): .5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Foundations of Cybersecurity AB TCC Prerequisite(s): ITSY 1300 Fundamentals of Information Security *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT DIGITAL FORENSICS A (TADGFR A DC) **TCC Course: (ITSY 2341) Security Management Practices** **Course offerings may vary each year due to availability*	**TAD80360A**
Digital Forensics introduces students to the knowledge and skills of digital forensics providing a survey of the field of digital forensics and incident response. Digital forensics is an evolving discipline concerned with analyzing anomalous activity on computers, networks, programs, and data. As a discipline, it has grown with the emergence of a globally-connected digital society. As computing has become more sophisticated, so too have the abilities of malicious agents to access systems and private information. By evaluating prior incidents, digital forensics professionals have the ability to investigate and craft appropriate responses to disruptions to corporations, governments, and individuals. Whereas cybersecurity takes a proactive approach to information assurance to minimize harm, digital forensics takes a reactive approach to incident response. Additionally, this college course provides in-depth coverage of security management, practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan.	03580360 Grade level: 9-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Foundations of Cybersecurity AB Corequisites: Dual Credit Internetworking Technologies 1A TCC Prerequisite(s): ITSY 1300 Fundamentals of Information Security *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT DIGITAL FORENSICS B (TADGFR B DC) **TCC Course: (ITSY 2342) Incident Response and Handling** **Course offerings may vary each year due to availability*	**TAD80360B**
Digital Forensics introduces students to the knowledge and skills of digital forensics providing a survey of the field of digital forensics and incident response. Digital forensics is an evolving discipline concerned with analyzing anomalous activity on computers, networks, programs, and data. As a discipline, it has grown with the emergence of a globally-connected digital society. As computing has become more sophisticated, so too have the abilities of malicious agents to access systems and private information. By evaluating prior incidents, digital forensics professionals have the ability to investigate and craft appropriate responses to disruptions to corporations, governments, and individuals. Whereas cybersecurity takes a proactive approach to information assurance to minimize harm, digital forensics takes a reactive approach to incident response. Additionally, this college course provides in-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures.	03580360 Grade level: 9-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Internetworking Technologies 1A and Dual Credit Digital Forensics A TCC Prerequisite(s): ITSY 2400 Operating System Security and ITSY 2401 Firewalls and Network Security *Course taught by a TCC-approved adjunct instructor* *Offered only at: Eastern Hills (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT CYBERSECURITY CAPSTONE AB (TACYBCAP AB DC) *(Available Fall 2023)* **TCC Course: (ITSY 2459) Security Assessment and Auditing** **Course offerings may vary each year due to availability*	**ITD27900AB**
In the Cybersecurity Capstone course, students will develop the knowledge and skills needed to explore advanced concepts related to the ethics, laws, and operations of cybersecurity. Students will examine trends and operations of cyberattacks, threats, and vulnerabilities. Students will develop security policies to mitigate risks. The skills obtained in this course prepare students for additional study toward industry certification. A variety of courses are available to students interested in the cybersecurity field. Cybersecurity Capstone may serve as a culminating course in this field of study.	03580855 Grade level: 12 HS Credit(s): 1

Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials | College Hour(s): 4
FWISD Prerequisite(s): Dual Credit Internetworking Technologies IA and Dual Credit Digital Forensics A | **Tier I**
TCC Prerequisite(s): ITSY 2400 Operating System Security and ITSY 2341 Security Management Practices
Course taught by a TCC-approved adjunct instructor
Offered at: Eastern Hills (P-TECH)

Endorsement

FOR THE GRADUATING CLASS OF 2024 and beyond

Opened August 2020 as a Pathways in Technology Early College High School Medical Professions Academy at Northside High School, this program enhances the current high school offerings by working with industry partners to offer work-based experiences, opportunities to earn industry certifications, and offer an opportunity for students to earn an associate degree from Tarrant County College.

The Medical Professions P-TECH Academy offers one (1) Career Focus with multiple specialized certification opportunities.

North Side High School
Medical Professions P-TECH Academy
Medical Professions Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or *III	English II or *III	*English III or IV	English III or IV	*English IV or *English Elective	*English IV or *English Elective
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	Algebra II or *Pre-Calculus	Algebra II, *Pre-Calculus, or	*Pre-Calculus or *Calculus or *Statistics	*Pre-Calculus or *Calculus or *Statistics
	World Geography	World Geography	World History	World History	*US History	*US History	*Government	Economics
	Biology	Biology	*Chemistry	*Chemistry	AP Biology or Physics	AP Biology or Physics	4th Year Science*	4th Year Science*
	AVID or similar	AVID or similar	*Psychology World Language	Dual Credit Patho-physiology AB (HSD20801AB)				
	World Language *PE	*World Language *PE		*Speech, Art	Dual Credit Pharmacology AB (HSD02044AB)			
	Dual Credit Principles of Health Science A (HSD02022A)	Dual Credit Principles of Health Science B (HSD02022B)	Honors Health Science Theory A (HSH02042A)	Health Science Theory B (HSH02042B)	Honors Practicum in Health Science I - General Clinical Skills A (HSH05010A)	Honors Practicum in Health Science I- General Clinical Skills B (HSH05010B)	Honors Practicum in Health Science II: Patient Care Technician AB (HSH3020510AB)	
College	SPAN 1411~	SPAN 1412~	SPCH 1311	PSYC 2301	ENGL 1301	ENGL 1302 or ENGL 2311	ENGL 1301 or ENGL 2322	ENGL 1302 or ENGL 2311, or ENG 2323
	KINE 1164	KINE 1116	SPAN 2311	ARTS 1301	MATH 1314 or 1342	GOVT 2306	GOVT 2305	
	HPRS 1206~	**HPRS 1304~**		**HPRS 2201** ~	HIST 1301	HIST 1302	BIOL 2401 or 1406	BIOL 2402 or 1407
					HPRS 2200 ~	PSYC 2314~		
Hrs.	Up to 7	Up to 6	Up to 9	Up to 3	Up to 12	Up to 12	Up to 10	Up to 7

Degree: Associates Degree: Associate of Arts – 60 + hours
College Level Certification(s): Health Science Pre-Professional
Stackable Industry Certification(s): Pharmacy Technician (PhT), Dementia Specialist Certificate, Emergency Medical Technician (EMT), Patient Care Technician (PCT)

*TSI compliance or TSI waiver will determine if the course is taken for dual credit. ~ elective credits for AA

COURSE DESCRIPTIONS FOR THE MEDICAL PROFESSIONS P-TECH

DUAL CREDIT PRINCIPLES OF HEALTH SCIENCE A: (PRINHLSC A DC) **TCC COURSE: (HPRS 1206) Essentials of Medical Terminology** **Course offerings may vary each year due to availability*	**HSD02022A**
Principles of Health Science provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry. Students learn that to pursue a career in the health science industry, they must be able to reason, think critically, make decisions, solve problems, and communicate effectively. They learn that quality health care depends on the ability to work well with others. Students identify and research employment opportunities, technology, and safety requirements of the different systems within health science field. They apply knowledge and skills needed to pursue a health science career. Students are expected to employ their ethical and legal responsibilities, identify limitations, as well as understand the implications of their actions. This course will also introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. Additionally, this college course focuses on the study of medical terminology, word origin, structure, and application.	13020200 Grade level: 9 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): TSI Compliance in Reading and Writing *Offered only at: North Side*	College Hour(s): 2 **Tier I**
DUAL CREDIT PRINCIPLES OF HEALTH SCIENCE B: (PRINHLSC B DC) **TCC Course: (HPRS 1304) Basic Health Profession Skills** **Course offerings may vary each year due to availability*	**HSD02022B**
Principles of Health Science provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry. Students learn that to pursue a career in the health science industry, they must be able to reason, think critically, make decisions, solve problems, and communicate effectively. They learn that quality health care depends on the ability to work well with others. Students identify and research employment opportunities, technology, and safety requirements of the different systems within health science field. They apply knowledge and skills needed to pursue a health science career. Students are expected to employ their ethical and legal responsibilities, identify limitations, as well as understand the implications of their actions. This course will also introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. Additionally, this college course focuses on concepts that serve as the foundation for health profession courses, including client care and safety issues, basic client monitoring, and health documentation methods.	13020200 Grade level: 9 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): TSI Compliance in Reading and Writing *Offered only at: North Side*	College Hour(s): 3 **Tier I**
HONORS HEALTH SCIENCE THEORY AB (HLTHSCI AB)	**HSH02042AB**
This course allows students to gain the knowledge and skills necessary for employment or continuing education in the health care industry. The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development. In addition to the regular course curriculum, students in this honors course will complete a project using the five phases of project management used in the business and industry environment.	13020400 Grade level: 10 HS Credit(s): 0.5
Instructional Material: DHO Health Science, Updated 8th Edition, Cengage Learning Inc. Prerequisite(s): Dual Credit Principles of Health Science	College Hour(s): NA **Tier II**
DUAL CREDIT PATHOPHYSIOLOGY AB (PATHO AB) **TCC COURSE: (HPRS 2201) Pathophysiology** **Course offerings may vary each year due to availability*	**HSD20801AB**
In Dual Credit Pathophysiology, students will study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries.	13020800 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Biology and Chemistry; Dual Credit Principles of Health Science AB TCC Prerequisite(s): TSI Compliance in Reading and Writing *Offered only at: North Side*	College Hour(s): 2 **Tier III**
DUAL CREDIT PHARMACOLOGY AB (PHARM AB) **TCC Course: (HPRS 2200) Pharmacology for Health Professions**	**HSD02044AB**
This course allows students to study drug classification, actions, therapeutics uses, adverse effects, routes of administrations, and calculation of dosage.	13020950 Grade level:11-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Biology and Chemistry; Dual Credit Principles of Health Science AB Co-Requisite: Practicum in Health Science I: General Clinical Skills *Offered only at: North Side*	HS Credit(s): 1 College Hour(s): 2.0 **Tier I**

HONORS PRACTICUM IN HEALTH SCIENCE I: GENERAL CLINICAL SKILLS/D AB	HSH05010AB
In addition to the regular course curriculum, students in this honors course will complete additional projects and activities related to the program of study. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study. See the Practicum in Health Science I: General Clinical Skills course description in the Career & Technical Education, Health Science Technology section of this document.	13020500 Grade level: 11 HS Credit(s): 2
Instructional Material: Contact Early College High School Department for more information. Prerequisites: Dual Credit Practicum in Health Science I: General Clinical Skills *Offered only at: North Side*	College Hour(s): NA **Tier II**
HONORS PRACTICUM IN HEALTH SCIENCE II: PATIENT CARE TECHNICIAN/D AB (PHSPCT 2AB/H)	**HSH30204AB**
The Practicum is designed to give students practical application of previously studied knowledge and skills. In this double period course, students will gain knowledge and skills to pursue a national Patient Care Technician certification. In this course the student will learn to perform skills like performing phlebotomy and ECG, taking vitals, assisting with activities of daily living, and providing comfort care. The student will gain basic knowledge of medical terms, ethics, legal issues, and anatomy and physiology. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study. See the Practicum in Health Science II: Patient Care Technician course description in the Career & Technical Education, Health Science Technology section of this document.	13020510 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisites: Honors Practicum in Health Science I: General Clinical Skills B *Offered only at: North Side*	College Hour(s): NA **Tier II**

Education P-TECH Academy – Multidisciplinary or Public Service Endorsement

FOR THE GRADUATING CLASS OF 2024 and beyond

Opened August 2020, this program offers individual pathways for students to simultaneously obtain their high school diploma, earn a two-year Associate degree, and gain workplace learning experience. P-TECH provides greater opportunities and priority for students when they enter the workforce after successful completion of the program. P-TECH is a partnership between FWISD, TCC and industry partners
The Teaching P-TECH Academy offers one (1) Career Focus.

Polytechnic High School
Education P-TECH Academy
Education Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or *III	English II or *III	*English III or IV	*English III or IV	*English IV or *English Elective	*English IV or *English Elective
	Algebra I or Geometry or Algebra II	Algebra I or Geometry or Algebra II	Geometry or Algebra II or *Pre-Calculus	Geometry or Algebra II or *Pre-Calculus	Algebra II or *Pre-Calculus or *Statistics	Algebra II or *Pre-Calculus or *Statistics	Pre-Calculus or Calculus	Pre-Calculus or Calculus
	AP Human Geography	AP Human Geography	*US History	*US History	World History	World History	*Economics	*Government
	Biology or Chemistry	Biology or Chemistry	Chemistry or *Earth and Space Science	Chemistry or *Earth and Space Science	3rd Year Science	3rd Year Science	4th Year Science or *Environmental System	4th Year Science or *Environmental Science
	AVID 1	AVID 1	AVID 2	AVID 2	AVID 3	AVID 3	AVID 4	AVID 4
		Health		PE				
			Spanish 1, 2, 3, 4, or 5	Spanish 1, 2, 3, 4, or 5	Spanish 1, 2, 3, 4, or 5	Spanish 1, 2, 3, 4, or 5		
	Honors Principles of Education AB (EDH14201AB)	Honors Principles of Education AB (EDH14201 AB)	PSAT	*Dual Credit Child Development AB (HVD24701AB)			*Dual Credit Practicum in Education & Training A (EDD14502A)	*Dual Credit Practicum in Education & Training B (EDD14502B)
College	KINE 1164		*HIST 1301	*HIST 1302	*ENGL 1301	*ENGL 1302	*ENGL 2327 or *MATH 1350	*ENGL 2328 or *MATH 1351
		SPCH 1311	*GEOL 1401	***TECA 1354**	*TECA 1303	*PHIL 2306		
						*MATH 1314 or MATH 1342	*ECON 2301	*GOV 2305
		ARTS 1301			*PHYS 1415	*BIOL 1408	*BIOL 2306	
					GOVT 2306		***EDUC 1301**	***EDUC 2301**
Hrs.	Up to 1	Up to 6	Up to 7	Up to 6	Up to 13	Up to 13	Up to 12	Up to 9

Associate Degree: Associate of Arts in Teaching
College Level Certification(s): Educational Aide I
Industry Certification(s): Educational Aide I

* TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses.

COURSE DESCRIPTIONS FOR THE EDUCATION P-TECH

HONORS PRINCIPLES OF EDUCATION AND TRAINING AB (PRINEDTR AB/H)	**EDH14201AB**
The course, Principles of Education and Training, is designed to introduce students to the various careers available within the education and training career cluster. Students use self-knowledge and educational and career information to analyze various careers within the education and training career cluster. They will also gain an understanding of the basic knowledge and skills essential to careers within the education and training career cluster. In addition to the regular course curriculum, students in this honors course will complete a project using the five phases of project management used in the business and industry environment.	13014200 Grade level: 9 – 10 HS Credit(s): 1
Instructional Material: *ICEV Family and consumer Sciences Site,* CEV Multimedia Ltd., Prerequisite(s): None *Offered at: Arlington Heights, Benbrook, Carter-Riverside, Diamond Hill-Jarvis, Dunbar, Eastern Hills, North Side, Paschal, Polytechnic, South Hills, Southwest, Trimble Tech, Western Hills, and OD Wyatt*	College Hour(s): NA **Tier II**
DUAL CREDIT CHILD DEVELOPMENT AB (CHILDDEV AB DC) **TCC Course: (TECA 1354) Child Growth and Development** **Course offerings may vary each year due to availability*	**HVD24701AB**
This technical laboratory course addresses knowledge and skills related to child growth and development from prenatal through school-age children. Students are equipped with child development skills necessary to promote the well-being and healthy development of children and to investigate careers related to the care and education of children. Students explore the principles and procedures for promoting the physical, emotional, social, and intellectual development of young children, including those with special needs. Topics include characteristics of quality child care and career options related to the care and education of children. Additionally, this college course is a technical laboratory course that addresses the physical, emotional, social, language, and cognitive factors impacting growth and development of children through adolescence.	13024700 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Honors Principles of Education and Training AB TCC Prerequisite(s): TSI *Offered only at: Polytechnic (P-Tech)*	College Hour(s): 3 **Tier I**
DUAL CREDIT UNPAID PRACTICUM IN EDUCATION AND TRAINING/D A (PRACEDTR A DC) **TCC Course: (EDUC 1301) Introduction to the Teaching Profession** **Course offerings may vary each year due to availability*	**EDD14502A**
This college courses includes the study of the physical, emotional, social, language, and cognitive factors impacting growth and development of children through adolescence. An enriched, integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high-need fields. The course provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations and provides students with support from college and school faculty, preferable in small cohort groups, for the purpose of introduction to analysis of the culture of schooling and classrooms. Course content should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Course must include a minimum of 16 contact hours of field experience in P-12 classrooms. Criminal background check required prior to enrolling. Field experience required.	13014500 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Child Development AB TCC Prerequisite(s): TSI *Course taught by an approved adjunct instructor.* *Offered only at: Polytechnic (P-Tech))*	College Hour(s): 3 **Tier I**
DUAL CREDIT UNPAID PRACTICUM IN EDUCATION AND TRAINING/D B (PRACEDTR B DC) **TCC Course: (EDUC 2301) Introduction to Special Populations** **Course offerings may vary each year due to availability*	**EDD14502B**
This college courses includes an enriched, integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspective of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning. The course provides students with opportunities to participate in early field observations of P-12 special populations and should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Must include a minimum of 15 contact hours of field experience in P-12 classrooms with special populations. Criminal background check required prior to enrolling.	13014500 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Practicum in Education and Training A TCC Prerequisite(s): EDUC 1301 Introduction to the Teaching Profession *Course taught by an approved adjunct instructor.* *Offered only at: Polytechnic (P-Tech)*	College Hour(s): 3 **Tier I**

FOR THE GRADUATING CLASS OF 2022 and beyond

Opened August 2019, this program enhances the current high school offerings by working with industry partners to offer work-based experiences, opportunities to earn industry certifications, and offer an opportunity for students to earn an associate degree from Tarrant County College.

The Energy P-TECH Academy offers three (3) Career Focuses.

Tarrant County College South/FWISD Collegiate High School
Energy P-TECH Academy
Electrical Line Technician Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or *III	English II or *III	*English III or IV	*English III or IV	*English IV or *English Elective	*English IV or *English Elective
	Algebra I or Algebra 2	Algebra I or Algebra 2	Geometry or Algebra II+ Geometry	Geometry or Algebra II+ Geometry	*Statistics	*Pre-Calculus	*Pre-Calculus	* Calculus I
	*AP Human Geography	*AP Human Geography	*AP World History	*AP World History	*AP US History	*AP US History	*Government	*Economics
	Environ-mental Systems	Environ-mental Systems	Biology/ Physics *Chemistry	Biology/ Physics *Chemistry	Physics or *Chemistry	Physics or *Chemistry	4th Year Science	4th Year Science
	Honors Principles of Applied Engineer-ing AB (ST36202 AB)	Honors Principles of Applied Engineer-ing AB (ST36202 AB)	Personal Financial Literacy	Dual Credit Principles of Information Technology AB (ITD27201AB)	Dual Credit Distribution and Logistics for Energy AB (TPD40300AB) AND Dual Credit Applied Mathematics for Technical Professionals AB (CPD0678AB)	Dual Credit Electrical Technology I AB (ARD05602AB)	Dual Credit Construction Technology I AB (ARD00512 AB) OR Honors Project-Based Research A (STH01500A) OR Career Prep A (CP01302A)	Dual Credit HVAC and Refrigeration Technology I (MAD05800AB) OR Honors Project-Based Research B (STH01500B) OR Career Prep B (CP01300B)
College	SPAN 1411 4	SPAN 1412 4	SPCH 1321	KINE 1304	*GOVT 2305	*Behavioral Science	*ENGL 1301	*ENGL 1302 or 2311 3
	KINE (PE) 1	KINE 1164 1	*ARTS	**COSC 1301**	**LNWK 1341**	**HART 1401**	LNWK 1371	*ECON 2301
			LNWK 1301	LNWK 2321	**TECM 1303**	LNWK 2322	LNWK 2324	LNWK 1311
						LNWK 1331	**OSHT 1305**	**HART 2431**
							GEOL 1305	
Hrs.	Up to 5	Up to 5	Up to 10	Up to 10	Up to 11	Up to 10	Up to 15	Up to 16

Degree: AAS Electronics Line Technician - 60 + hours
College Level Certification(s): Ground Technician Level 1 or Renewable Line Technician Level 2
Industry Certification(s): Microsoft Office Specialist – Word, PowerPoint, Excel, and/or Office 365; OSHA 10-hour general

*TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Juniors and seniors that are not TSI met will take AP courses in-lieu of dual credit course.

Tarrant County College South/FWISD Collegiate High School
Energy P-TECH Academy
Advanced Energy Technician Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or *III	English II or *III	*English III or IV	*English III or IV	*English IV or *English Elective	*English IV or *English Elective
	Algebra I or Algebra 2	Algebra I or Algebra 2	Geometry or Algebra II + Geometry	Geometry or Algebra II + Geometry	*Statistics	*Pre-Calculus	*Pre-Calculus	* Calculus I
	AP Human Geography	AP Human Geography	AP World History	AP World History	*AP US History	*AP US History	Government	Economics
	Environmental Systems	Environmental Systems	Biology/ Physics Chemistry Personal Financial Literacy	Biology/ Physics Chemistry	Physics or Chemistry	Physics or Chemistry	4th Year Science	4th Year Science
	Honors Principles of Applied Engineering AB (ST36202AB)	Honors Principles of Applied Engineering AB (ST36202AB)	Dual Credit Solid State Electronics A (STD36902 A)	Dual Credit Robotics I AB (STD37002A)	Dual Credit Digital Electronics AB (STD37443 AB) AND Dual Credit AC/DC Electronics AB (STD36802A B)	Dual Credit Solid State Electronics B (STD36902B)	Honors Project-Based Research AB (STH01500AB) OR Career Prep AB (CP01300AB)	Honors Project-Based Research AB (STH01500B) OR Career Prep AB (CP01300AB)
College	SPAN 1411 4 or SPAN 2311 3	SPAN 1412 4 or SPAN 2312 3	SPCH 1321	KINE 1304	*GOVT 2305	*ECON 2301	*ENGL 1301	*ENGL 1302 or 2311
	KINE (PE) 1	KINE 1164 1	ARTS	**ELMT 1402***		***CETT 1441**	***CETT 1445**	* ELMT 2337
		PTRT 1313	**RBTC 1401**		***CETT 1449**	**WIND 2459**		
				RBTC 1351	**CETT 1409**		*CSIR 1459	***CETT 2435**
Hrs.	Up to 5	Up to 5	Up to 11	Up to 12	Up to 11	Up to 11	Up to 14	Up to 10

Degree: AAS Electronics Technology, Advanced Energy Technician
College Level Certification(s): Renewable Energy Technology Level 1
Industry Certification(s): Microsoft Office Specialist – Word, PowerPoint, Excel, and/or Office 365; OSHA 10-hour general

*TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Juniors and seniors that are not TSI met will take AP courses in-lieu of dual credit course.

Tarrant County College South/FWISD Collegiate High School
Energy P-TECH Academy
Energy Business Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or *III	English II or III	English III or IV	English III or IV	English IV or English Elective	English IV or *English Elective
	Algebra I or Algebra 2	Algebra I or Algebra 2	Geometry and/or Algebra II	Geometry and/or Algebra II	*Statistics	*Pre-Calculus	*Pre-Calculus	* Calculus I
	AP Human Geography	AP Human Geography	AP World History	AP World History	*AP US History	* AP US History	Government	Economics
	Environ-mental Systems	Environ-mental Systems	Biology Personal Financial Literacy	Biology	Physics or Chemistry	Physics or Chemistry	4th Year Science	4th Year Science
	Honors Principles of Applied Engineer-ing AB (ST36202 AB)	Honors Principles of Applied Engineering AB (ST36202AB)	Dual Credit Business Management AB (BAD12102 AB)	Dual Credit Business English AB (BAD11600 AB)	Dual Credit Advanced Marketing AB (MKD34700 AB) AND Dual Credit Accounting 1A (FND16612A)	Dual Credit Accounting 1B (FND16612 B)	Dual Credit Business Law AB (BAD11701 AB) AND/OR Honors Practicum in Business Management AB (BAH12202 AB) OR Honors Project-Based Research AB (STH01500AB) OR Career Prep AB (CP01300AB)	Honors Practicum in Business Management AB (BAH12202 AB) OR Honors Project-Based Research AB (STH01500AB) OR Career Prep AB (CP01300AB)
College	KINE (PE) 1	KINE 1164	KINE 1304	SPCH 1321	*ENGL 1301	*ENGL 1302	*ENGL 1301 or 2322 or 2327	*ENGL 1302 or 2311 or 2323 or 2328
	SPAN 1411 or SPAN 2311	SPAN 1412 or SPAN 2312	ARTS	Language/ Culture	*MATH 1314 or 1342	*MATH 2412	*MATH 1314 or 2413 or 1342	*MATH 2412 or 2414
			BUSI 1301	**BMGT 1305**	*HIST 1301	*HIST 1302	*ECON 2301	*ECON 2302
					*GOVT 2306	*GOVT 2305	**BUSI 2301**	
					MRKG 1311 **ACCT 2301**	**ACCT 2302**	*BIOL 1406 or *PHYS 1401 or *GEOL 1401	*BIOL 1407 or *PHYS 1402 or *GEOL 1403
Hrs.	Up to 5	Up to 5	Up to 10	Up to 10	Up to 15	Up to 16	Up to 16	Up to 16
	Degree: Associates of Arts - 60 + hours **College Level Certification(s):** Business Certification Level 1 **Industry Certification(s):** Microsoft Office Specialist – Word, PowerPoint, Excel, and/or Office 365; OSHA 10-hour general						Business Level 2 certification additional courses: BMGT 1327, BMGT 1341 & BCIS 1305 + 6 hours of electives	

*TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Juniors and seniors that are not TSI met will take AP courses in-lieu of dual credit course.

COURSE DESCRIPTIONS FOR THE ENERGY P-TECH

HONORS PRINCIPLES OF APPLIED ENGINEERING AB (PRAPPENG AB/H)	**STH36202AB**
In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13036200 Grade level: 9
Instructional Material: *Principles of Applied Engineering, Texas Edition Reid, et al. 2017*, Pearson Education Prerequisite(s): None *Offered only at: Trimble Tech and I.M. Terrell*	HS Credit(s): 1 College Hour(s): NA **Tier II**
HONORS PROJECT-BASED RESEARCH IN STEM AB (PROBS1 ST AB/H) **Previously Problems and Solutions STEM*	**STH01500AB**
Honors Project Based Research is a course student will research a real-world problem. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. This course must be cooperatively planned and supervised by the teacher ensuring that the student has guidance and support of a mentor or interdisciplinary team. The district must maintain a written project plan for each student enrolled in the course.	12701500 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): TBD *Offered only at: Dunbar and TCC South Collegiate HS*	College Hour(s): NA **Tier II**
HONORS UNPAID PRACTICUM IN BUSINESS MANAGEMENT/d AB (PRACBM AB)	**BAH12202AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study This course is designed to give students supervised practical application of previously studied knowledge and skill. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Students will build a professional portfolio demonstrating skills in Business Management.	13012200 Grade level: 11-12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisites: 2 credits from a combination of Business courses *Offered at: TCC South Collegiate HS*	College Hour(s): NA **Tier III**
CAREER PREPARATION I AB (CAREERP1 AB)	**CP01300AB**
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction, and are employed for ten hours per week (or average of 20 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	12701300 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None	College Hour(s): NA **Tier III**

CAREER PREPARATION II AB (CAREERP2 AB)	**CP01400AB**
The Career Preparation II course is for those students who are taking a Career Preparation course for the second time and continue or have new employment during the duration of the course; working ten hours per week (or average of 20 hours across two weeks). This course provides the same opportunities and requirements as the Career Preparation I course.	12701400 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None	College Hour(s): NA **Tier III**
CAREER PREPARATION I/EXTENDED I AB (EXCAREE1 AB)	**CP01302AB**
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I/Extended provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction, and are employed for fifteen hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	12701305 Grade level: 11-12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): 2 credits from a combination of Business courses *Offered at: TCC South Collegiate HS and Paschal*	College Hour(s): NA **Tier II**
DUAL CREDIT BUSINESS LAW (BUSLAW AB DC) **TCC COURSE: BUSINESS LAW (BUS 2301)** **Course offerings may vary each year due to availability*	**BAD11701AB**
This course provides the student with foundational information about the U.S. legal system and dispute resolution, and their impact on business. The major content areas will include general principles of law, the relationship of business and the U.S. Constitution, state and federal legal systems, the relationship between law and ethics, contracts, sales, torts, agency law, intellectual property, and business law in the global context.	13011700 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered only at: TCC South Collegiate HS (P-Tech) and Diamond Hill Jarvis (P-Tech)*	College Hour(s): 3 **Tier I**
DUAL CREDIT BUSINESS MANAGEMENT AB (BUSMGT AB DC) **TCC COURSE: Business Principles (BUSI 1301)** **Course offerings may vary each year due to availability*	**BAD12102AB**
This course provides a survey of economic systems, forms of business ownership, and considerations for running a business. Students will learn various aspects of business, management, and leadership functions; organizational considerations; and decision-making process. Financial topics are introduced, including accounting, money and banking, and securities markets. Also included are discussions of business challenges in the legal and regulatory environment, business ethics, social responsibility, and International business.	12701500 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered only at: TCC South Collegiate HS (P-Tech)*	College Hour(s): 3 **Tier I**
DUAL CREDIT BUSINESS ENGLISH AB (BUSENGL AB DC) **TCC COURSE: Communication in Management (BSMGT 1305)** **Course offerings may vary each year due to availability*	**BAD11600AB**
In this course, students will focus on the basic theory and processes of communication skills necessary for the management of an organization's workforce.	13011600 Grade level: 10-12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered only at: TCC South Collegiate HS (P-Tech)*	HS Credit(s): 1 College Hour(s): 3 **Tier I**
DUAL CREDIT ACCOUNTING IA (ACCOUNT1 A DC) **TCC Course: Principles of Financial Accounting: (ACCT 2301)** **Course offerings may vary each year due to availability*	**FND16612A**
This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions.	13016600 Grade level: 11 - 12 HS Credit(s): 0.5

Instructional Material: TCC Course: Principles of Financial Accounting (ACCT 2301) TCC Prerequisite(s): TSI compliant in Math TCC Recommended Co-requisites: MATH 1324 *Course taught by an approved adjunct instructor.* *Offered only at: Marine Creek and TCC South Collegiate HS (P-Tech)*	College Hour(s): 3 **Tier I**
DUAL CREDIT ACCOUNTING IB (ACCOUNT1B DC) **TCC Course: Principles of Managerial Accounting: (ACCT 2302)** **Course offerings may vary each year due to availability*	**FND16612B**
This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation.	13016600 Grade level: 11 - 12 HS Credit(s): 0.5
Instructional Material: TCC Course: Principles of Managerial Accounting (ACCT 2302) TCC Prerequisite(s): ACCT-2301 *Course taught by an approved adjunct instructor.* *Offered only at: Marine Creek and TCC South Collegiate HS (P-Tech)*	College Hour(s): 3 **Tier I**
DUAL CREDIT ROBOTICS I AB (ROBOT IAB DC) **TCC Course: Robotics Mechanisms (RBTC 1351)** **Course offerings may vary each year due to availability*	**STD37002AB**
In this course, students learn the application of principles and the calculation of practical problems involving four bar linkages, cams, gears, and gear trains. Topics include vector quantities, angular displacement, motion concepts, velocities, and motions.	13037000 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): MATH 1332 *Offered only at: Dunbar (P-Tech) and TCC South Collegiate HS (P-Tech)*	College Hour(s): 3 **Tier I**
DUAL CREDIT AC/DC ELECTRONICS AB (ACDCELEC DC AB) **TCC Course: DC-AC Circuits (CETT 1409)** **Course offerings may vary each year due to availability*	**STD36802AB**
In this course, students learn the fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchhoff's laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques. Emphasis on circuit simulation using PSpice. Course includes soldering techniques, hand tools, circuit fabrication techniques, troubleshooting techniques and circuit analysis using Mathcad.	13036800 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): MATH 0362 with a minimum grade of C or appropriate TSI Math placement score. *Offered only at: TCC South Collegiate HS (P-Tech)*	College Hour(s): 4 **Tier I**
DUAL CREDIT SOLID STATE ELECTRONICS A (SOSTELEC A DC) **TCC Course: Programmable Logic Controllers (RBTC 1401)** **Course offerings may vary each year due to availability*	**STD36902A**
In this course, students will learn about programmable logic controllers (PLC). Topics include processor units, numbering systems, memory organization, relay type devices, timers, counters, data manipulators, and programming.	13036900 Grade level: 10-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: Dunbar HS (P-Tech) and TCC South Collegiate HS (P-Tech)*	College Hour(s): 4 **Tier I**
DUAL CREDIT SOLID STATE ELECTRONICS B (SOSTELEC B DC) **TCC Course: Solid State Circuits (CETT 1441)** **Course offerings may vary each year due to availability*	**STD36902B**
In this course, students study various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis.	13036900 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): CETT 1409 and MATH 0362 with a minimum grade of C or appropriate TSI Math placement score *Offered only at: Dunbar HS (P-Tech) and TCC South Collegiate HS (P-Tech)*	HS Credit(s): 0.5 College Hour(s): 4 **Tier I**

DUAL CREDIT DIGITAL ELECTRONICS AB (DIGELC AB DC) **TCC Course: Digital Systems (CETT 1449)** **Course offerings may vary each year due to availability*	**STD37443AB**
In this course, students will learn about electronics covering digital systems. Emphasis on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital to-analog circuits, and large-scale integrated circuits.	13037600 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): MATH 0362 with a minimum grade of C or appropriate TSI Math placement score. *Offered only at: Dunbar (P-Tech) and TCC South Collegiate HS (P-Tech)*	College Hour(s): 4 **Tier I**
DUAL CREDIT APPLIED MATHEMATICS FOR TECHNICAL PROFESSIONALS AB (APMTHTP AB DC) TCC Course: TECHNICAL CALCULATIONS (TECM 1303) **Course offerings may vary each year due to availability*	**CPD0678AB**
In this course, students will learn specific mathematical calculations required by business, industry and the health occupations.	12701410 Grade level: 11 - 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): MATH 0362 with a minimum grade of C or appropriate TSI Math placement score. *Offered only at: TCC South Collegiate HS (P-Tech)*	HS Credit(s): 1 College Hour(s): 3 **Tier I**
DUAL CREDIT PRINCIPLES OF INFORMATION TECHNOLOGY AB (PRINIT DC AB) **TCC Course: INTRODUCTION TO COMPUTING (COSC 1301)** **Course offerings may vary each year due to availability*	**ITD27201AB**
In this course, students will learn the overview of computer systems - hardware, operating systems, the internet, and application software including word processing, spreadsheets, presentation graphics, and databases. Current topics such as the effect of computers on society, and the history and use of computers in business, educational, and other interdisciplinary settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science.	13027200 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: Diamond Hill Jarvis (P-Tech), Eastern Hills (P-Tech), South Hills (P-Tech), and TCC South Collegiate HS (P-Tech)*	College Hour(s): 3 **Tier I**
DUAL CREDIT DISTRIBUTION AND LOGISTICS FOR ENERGY AB (DISTLGSE AB DC) **TCC Course: DISTRIBUTIONS OPERATIONS (LMWK 1341)** **Course offerings may vary each year due to availability*	**TPD40300AB**
This course will focus on the study of the theoretical and practical operation of electric utility distribution systems. Topics include customer service voltages, capacitors, and coordination of protection equipment.	13040300 Grade level: 11 - 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: TCC South Collegiate HS (P-Tech)*	HS Credit(s): 1 College Hour(s): 3 **Tier I**
DUAL CREDIT CONSTRUCTION TECHNOLOGY I AB/d (CONSTECH AB DC) **TCC Course: REGULATION-CONSTRUCTION INDUSTRY (OSHT 1305)** **Course offerings may vary each year due to availability*	**ARD00512AB**
In this double blocked course, students will study Occupational Safety and Health Administration (OSHA) regulations pertinent to the construction industry.	13005100 Grade level: 11 - 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: TCC South Collegiate HS (P-Tech)*	HS Credit(s): 2 College Hour(s): 3 **Tier I**
DUAL CREDIT ELECTRICAL TECHNOLOGY I AB (ELECTEC AB DC) **TCC COURSE: BASIC ELECTRICITY FOR HVAC (HART 1401)** **Course offerings may vary each year due to availability*	**ARD05602AB**
In this course, students will learn principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation.	13005600 Grade level: 11 - 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None	HS Credit(s): 1 College Hour(s): 4 **Tier I**

TCC Prerequisite(s): None *Offered only at: TCC South Collegiate HS (P-Tech)*	
DUAL CREDIT ADVANCED MARKETING (ADVMKTG AB DC) **TCC COURSE: PRINCIPLES OF MARKETING (MRKG 1311)** **Course offerings may vary each year due to availability*	**MKD34700AB**
In this course, students will gain an introduction to the marketing mix functions and processes. The course topics include: identification of consumer and organizational needs and explanation of environmental issues.	13034700 Grade level: 11 - 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Dual Credit Business Management TCC Prerequisite(s): BUSI 1301 and BMGT 1305 *Offered only at: TCC South Collegiate HS (P-Tech)*	HS Credit(s): 1 College Hour(s): 3 **Tier I**
DUAL CREDIT HEATING, VENTILATION, AIR CONDITIONG I AB (HVACREF1 AB DC) **TCC COURSE: ADVANCED ELECTRICITY FOR HVAC (HART 2431)** **Course offerings may vary each year due to availability*	**MAD05800AB**
In this course, students will learn theory and practical application in the maintenance of commercial refrigeration; medium, and low temperature applications and ice machines.	13005800 Grade level: 11 – 12
Instructional Material: Contact the Office Innovation, Early College Programs Department for related materials. Prerequisites: Foundations of Energy and TCC course: HART 1401 TCC Prerequisites: None. *Offered only at: TCC South Collegiate HS (P-Tech)*	HS Credit(s): 1 College Hour(s): 4 **Tier I**

IT/Networking/Computer Maintenance P-TECH Academy –
Business & Industry Endorsement

Opened August 2021, this program enhances the current high school offerings by working with industry partners to offer work-based experiences, opportunities to earn industry certifications, and offer an opportunity for students to earn an associate degree from Tarrant County College.

FOR THE GRADUATING CLASS OF 2025 and beyond

The IT/Networking/Computer Maintenance P-TECH Academy offers one (1) Career Focus.

Carter-Riverside High School
IT/Networking/Computer Maintenance P-TECH Academy
Convergence Cloud Technology Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I	English I	English II	English II	English III	English III	English IV	English IV
	World Geography	World Geography	World History	World History	US History	US History	Dual Credit US Government*	Economics
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	Algebra II or Pre-Calculus	Algebra II or Pre-Calculus	Calculus or Pre-Calculus	Calculus or Pre-Calculus
	Biology	Biology	Chemistry/ IPC/ Physics	Chemistry /IPC/ Physics	3rd Science	3rd Science	4th Science	4th Science
	Dual Credit Fine Arts	Dual Credit Speech	Health					
	PE	PE						
	World Language	World Language	World Language	World Language				
	Dual Credit Principles of Emerging Information Technology A (ITD27211A)	Dual Credit Principles of Emerging Information Technology B (ITD27211B)	Dual Credit Networking for Cloud Systems A (ITD27403A) AND Dual Credit Project-Based Research for IT A (CPD01501A)	Dual Credit Networking for Cloud Systems B (ITD27403B) AND Dual Credit Project-Based Research for IT B (CPD01501B)	Dual Credit Internetworking Technologies for Cloud Systems IA (ITD28013A) AND/OR Dual Credit Internetworking for Cloud Systems II A (ITD28023A)	Dual Credit Internetworking Technologies for Cloud Systems IB (ITD28013B) AND/OR Dual Credit Internetworking for Cloud Systems II B (ITD28023 B)	Dual Credit Unpaid Practicum in Emerging Information Technologies A (ITD28000A) AND/OR Dual Credit Independent Study in Emerging Technologies I A (ITD81500A)	Dual Credit Unpaid Practicum in Emerging Information Technologies B (ITD28000B) AND/OR Dual Credit Independent Study in Emerging Technologies I B (ITD81500B)
College	**CMPT 1351**	**ITNW 1425**	**ITNW 1408**	**ITNW 1454**	**ITCC 1414**	**ITCC 1440**	**ITCC 2412**	**ITCC 2413**
	Art 1301	**SPCH 1321**	**ITNW 1313**	**ITNW 1372**	**ITSY 1342**	**ITSC 1316**	**ITSC 2325**	**ITCC 2341**
					MUST TAKE ONE: DC MATH	MUST TAKE ONE: DC MATH	MUST TAKE ONE: DC MATH	MUST TAKE ONE: DC MATH
					ENGL 1301	ENGL 1302 or 2311	ENGL 1301	ENGL 1302, 2311, or 1301
						GOVT 2305	GOVT 2305	
Hrs.	Up to 6	Up to 7	Up to 7	Up to 7	Up to 13	Up to 10	Up to 16	Up to 14

Degree: AAS, Convergence Technologies: Cloud Technology - 60 + hours
College Level Certification(s): Advanced Convergence Technologies, Level 1; Convergence Cloud Technology, Level 1 – 19-32 hrs; or Convergence Technologies Occupational Skills Award – 10 hrs.
Industry Certification(s): Comp TIA or Cisco Certifications

To complete an AA degree, students have the option of completing dual credit core courses. *TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Students that are not TSI met will take AP courses in-lieu of dual credit course.

COURSE DESCRIPTIONS FOR THE IT/NETWORKING/COMPUTER MAINTENANCE P-TECH

DUAL CREDIT UNPAID PRACTICUM IN EMERGING INFORMATION TECHNOLOGY A/D (PRACITET1 A DC) **TCC Course: CCNA 3: Scaling Networks (ITCC2412)**	**ITD28000A**
In this course, students will explore scaling. Scaling Networks (ScaN) covers the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches using advanced protocols.	13028000 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education for related materials FWISD Prerequisite(s): Dual Credit Cloud Internetworking II B TCC Prerequisite(s): ITC1440, ITCC 1414, ITSY 1342, and ITSC1316 *Offered at: Carter-Riverside HS (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT UNPAID PRACTICUM IN EMERGING INFORMATION TECHNOLOGY B/D (PRACITET1 B DC) **TCC Course: CCNA 4: Connecting Networks (ITCC 2413)**	**ITD28000B**
In this course, students will cover WAN technologies. WAN technologies and network services required by converged applications in a complex network; enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements.	13028000 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education for related materials FWISD Prerequisite(s): Dual Credit Unpaid Practicum in Information Technology A TCC Prerequisite(s): ITCC 2412 *Offered at: Carter-Riverside HS (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT PRINCIPLES OF EMERGING INFORMATION TECHNOLOGY A (PRINET DC A) **TCC Course: (CMPT 1351) IT Essentials: PC Hardware and Software** **Course offerings may vary each year due to availability*	**ITD27211A**
Students will be introduced to the computer hardware and software skills needed to help meet the growing demand for entry-level information and communication technology (ICT) professionals. The curriculum covers the fundamentals of PC technology, networking, and security, and also provides an introduction to advanced concepts addressed by CISCO, CCENT, CCNA, and COMPTIA certifications. Hands-on labs and Virtual Laptop and Virtual Desktop learning tools help students develop critical thinking and complex problem-solving skills. Cisco Packet Tracer simulation-based learning activities promote the exploration of network and networking security concepts and allow students to experiment with network behavior.	13027200 Grade level: 9-10 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): None *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside HS (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT PRINCIPLES OF EMERGING INFORMATION TECHNOLOGY B (PRINET DC B) **TCC Course: (ITNW 1425) Fundamentals of Networking Technologies** **Course offerings may vary each year due to availability*	**ITD27211 B**
Students will receive instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.	13027200 Grade level: 9-10
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Principles of Emerging Information Technologies A TCC Prerequisite(s): CMPT 1351 *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside HS (P-TECH)*	HS Credit(s): 0.5 College Hour(s): 4 **Tier I**
DUAL CREDIT NETWORKING FOR CLOUD SYSTEMS A (NTWRKC DC A) **TCC Course: (ITNW 1408) Implementing and Supporting Client Operating Systems** **Course offerings may vary each year due to availability*	**ITD27403A**
Students will learn the fundamentals of managing and configuring network clients. Skills development in the management of client as desktop operating systems.	13027400 Grade level: 10-11
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Principles of Emerging Information Technologies B TCC Prerequisite(s): ITNW1425 *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside HS (P-TECH)*	HS Credit(s): 0.5 College Hour(s): 4 **Tier I**

DUAL CREDIT NETWORKING FOR CLOUD SYSTEMS B (NTWRKC DC B) **TCC Course: (ITNW 1454) Implementing and Supporting Servers** **Course offerings may vary each year due to availability*	**ITD27403B**
Students will implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment.	13027400 Grade level: 10-11
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Networking for Cloud Systems A TCC Recommended Prerequisite(s): ITNW 1408 *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside (P-TECH)*	HS Credit(s): 0.5 College Hour(s): 4 **Tier I**
DUAL CREDIT PROJECT-BASED RESEARCH FOR IT (PROBSIT1 A/D) **TCC Course: (ITNW 1313) Computer Virtualization** **Course offerings may vary each year due to availability*	**CPD01501A**
Students will learn the fundamentals of managing and configuring network clients. Skills development in the management of client as desktop operating systems.	12701500 Grade level: 10-11
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Networking for Cloud Systems B TCC Prerequisite(s): ITNW1454 *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside HS (P-TECH)*	HS Credit(s): 0.5 College Hour(s): 3 **Tier I**
DUAL CREDIT PROJECT-BASED RESEARCH FOR IT (PROBSIT1 B/D) **TCC Course: (ITNW 1372) VMware, vSphere: Install, Configure, and Manage** **Course offerings may vary each year due to availability*	**CPD01501B**
Students will explore installation, configuration, and management of VMware, VSphere, ESXI, and VCenter Server.	12701500
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Networking for Cloud Systems B TCC Prerequisite(s): ITNW1454 and INTW 1425 *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside HS (P-TECH)*	Grade level: 10-11 HS Credit(s): 0.5 College Hour(s): 3 **Tier I**
DUAL CREDIT INTERNETWORKING TECHNOLOGIES FOR CLOUD SYSTEMS I A (INTNETC1 DC A) **TCC Course: (ITCC 1414) CCNA 1: Introduction to Networks** **Course offerings may vary each year due to availability*	**ITD28013A**
Students will be introduced to networking architecture, structure, and functions; introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum.	N1302803 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): None *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside (P-TECH)*	HS Credit(s): 0.5 College Hour(s): 4 **Tier I**
DUAL CREDIT INTERNETWORKING TECHNOLOGIES FOR CLOUD SYSTEMS I B (INTNETC1 DC B) **TCC Course: (ITCC 1440) CCNA 2: Routing/Switching Essentials** **Course offerings may vary each year due to availability*	**ITD28013B**
Students will learn about architecture, components, and basic operation of routers and explains the basic principles of routing and routing protocols. It also provides an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks. Licensing/Certification Agency: Cisco.	N1302803 Grade level: 10-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Internetworking for Cloud Systems IA TCC Prerequisite(s): ITCC1414 *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT INDEPENDENT STUDY IN EMERGING TECHNOLOGIES I A (TAINDET1 A DC) **TCC Course: (ITSY 2325) Advanced Linux** **Course offerings may vary each year due to availability*	**ITD81500A**
Students will receive instruction in advance open-source Linux operating system. Students will develop directory services for clients, support users remotely, and install and configure network services.	03581500 Grade level: 11-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Internetworking for Cloud Systems II B TCC Prerequisite(s): ITSC 1316 *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside (P-TECH)*	HS Credit(s): 0.5 College Hour(s): 3 **Tier I**

DUAL CREDIT INDEPENDENT STUDY IN EMERGING TECHNOLOGIES I B (TAINDETI B DC) **TCC Course: (ITCC 2341) CCNA Security** **Course offerings may vary each year due to availability*	**ITD81500B**
Students will receive instruction in WAN technologies and network services required by converged applications in a complex network; enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements.	03581500 Grade level: 11-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Independent Studies in Emerging Technologies 1A TCC Prerequisite(s): ITCC 2412 *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT INTERNETWORKING TECHNOLOGIES FOR CLOUD SYSTEMS II A (INTNETC2 DC A) **TCC Course: (ITSY 1342) Information Tech Security** **Course offerings may vary each year due to availability*	**ITD28023A**
Students will receive instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses.	N1302804 Grade level: 11-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): ITCC 1440 *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside (P-TECH)*	HS Credit(s): 0.5 College Hour(s): 4 **Tier I**
DUAL CREDIT INTERNETWORKING TECHNOLOGIES FOR CLOUD SYSTEMS II B (INTNETC2 DC B) **TCC Course: (ITSC 1316) Linux Installation and Configuration** **Course offerings may vary each year due to availability*	**ITD28023B**
Students will receive an introduction to Linux operating system. Course topics include: Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux.	N1302804 Grade level: 11-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): ITCC 2412 *Course taught by a TCC-approved adjunct instructor* *Offered at: Carter-Riverside (P-TECH)*	College Hour(s): 4 **Tier I**

Architecture/Construction Logistics P-TECH Academy –
Business & Industry Endorsement

FOR THE GRADUATING CLASS OF 2025 and beyond

Opened August 2021, this program enhances the current high school offerings by working with industry partners to offer work-based experiences, opportunities to earn industry certifications, and offer an opportunity for students to earn an associate degree from Tarrant County College.

The Architecture/Construction & Logistics P-TECH Academy offers three (3) Career Focuses.

Diamond Hill-Jarvis High School
Architecture/Construction Logistics P-TECH Academy
Architecture Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
High School	English I or II	English I or II	English II or *III	English II or *III	*English III or IV	*English III or IV	*English IV	*English IV
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	Algebra II or *Pre-Calculus	Algebra II or *Pre-Calculus	*Pre-Calculus, *Calculus or *Statistics	*Pre-Calculus, *Calculus or *Statistics if needed
	World Geography	World Geography	*AP World History	*AP World History	*AP US History	*AP US History	*Econ. or Dual Credit Govt.	
	Biology	Biology	Chemistry	Chemistry	Physics	Physics	4th Year Science	4th Year Science
	Health	Dual Credit Speech *	Dual Credit Fine Arts *			*Econ. or Dual Credit Govt.		
	World Language	World Language	World Language	World Language	Possible Elective	Possible Elective		
	PE	PE						
	Dual Credit Principles of Architecture A[1] (ARD04200 A)	Dual Credit Principles of Architecture B[1] (ARD04200 B)	Dual Credit Architectural Design I A[1] (ARD04602A)	Dual Credit Architectural Design II/d A[1] (ARD04702A)	Dual Credit Computer Aided Drafting for Architecture A[1] (ARD00429A)	Dual Credit Construction Management for Architecture I/d A[1] (ARD04903A)	Dual Credit Unpaid Practicum in Architectural Design/d I A[1] (ARD04802A)	Dual Credit Unpaid Practicum in Architectural Design/d II AB[1] (ARD04810AB)
		Dual Credit Professional Communi-cation T[2] (AVD09901 T)	Dual Credit Architectural Design IB[2] (ARD04602B)	Dual Credit Principles of Construction for Architecture A[2] (ARD04202A)	Dual Credit Computer Aided Drafting for Architecture B[2] (ARD00429B)	Dual Credit Construction Management for Architecture I/d B[2] (ARD04903B)	Dual Credit Unpaid Practicum in Architectural Design/d I B[2] (ARD04802B)	
				Dual Credit Principles of Construction for Architecture B[3] (ARD04202B)	Dual Credit Architectural Design II/d B[3] (ARD04702B)			
College	**ARCH 1315**[1]	**ARCH 1311**[1]	ARTS 1301**	**ARCH 1304**[1]	**ARCH 1307**[1]	**ARCH 2301**[1]	ENG 1301**	ENGL 1302
		SPCH 1321[2]**	**ARCH 2312**[1]	**ARCE 1342**[2]	**ARCH 1308**[2]	**SRVY 1301**[2]	MATH 1314**	MATH 2412
			ARCH 1303[2]	**ARCE 2352**[3]	**ARCH 1301**[3]	GOVT 2305	**ARCH 1302**[1]	**ARCT 2367**[1]*** **ARCT 2367**[1]
							ARCH 2302[2]	
Hrs.	Up to 3	Up to 6	Up to 9	Up to 9	Up to 9	Up to 9	Up to 12	Up to 10

Degree: AAS, Architectural Technology - 60 hours
College Level Certification(s): Architectural CAD Operator, Level 1; Architectural Paraprofessional, Level 1 – 18-30 hours; or Architectural Technology Occupational Skills Award – 10 hours.
Industry Certification(s): Autodesk Certified User in AutoCAD

*TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Students that are not TSI met will take AP courses in-lieu of dual credit course. The COLLEGE DISTRICT and SCHOOL DISTRICT will utilize the crosswalk to collaborate strategic course offerings for students participating in the dual credit program towards college degree completion through the term of the agreement. Career and Technical Education (CTE) program requirements will be provided for CTE course offerings. **Required for AAS *** 16 weeks with industry partner

Diamond Hill-Jarvis High School
Architecture/Construction Logistics P-TECH Academy
Construction Management Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or *III	English II or *III	*English III or IV	*English III or IV	*English IV	*English IV
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	Algebra II or *Pre-Calculus	Algebra II or *Pre-Calculus	*Pre-Calculus or *Calculus or *Statistics	* Pre-Calculus or *Calculus or *Statistics if needed
	World Geography	World Geography	*AP World History	*AP World History	*AP US History	*AP US History	Government or *Economics DC if needed	
	Biology	Biology	Chemistry	Chemistry	Physics	Physics	4th Year Science	4th Year Science
	Health	Dual Credit Speech *	Dual Credit Fine Arts *			*HS Government or DC Economics		
	World Language	World Language	World Language	World Language				
	PE	PE						
CTE	Dual Credit Principles of Construction Management A[1] (ARD04203A)	Dual Credit Professional Communication T[1] (AVD09901T) AND Dual Credit Principles of Construction Management B[2] (ARD04203B)	Dual Credit Construction Technology for Management I/d A[1] (ARD00513A) AND Dual Credit Construction Technology for Management I/d B[2] (ARD00513B)	Dual Credit Computer Aided Drafting for Construction Management AB[1] (TBD: ARD00439AB) AND Dual Credit Construction Technology II/d AB[2] (ARD05202AB)	Dual Credit Construction Management for Construction I/d A[1] (ARD04904A) AND Dual Credit Construction Management for Construction I/d B[2] (ARD04904B) AND Dual Credit Business Management for Construction A[3] (BAD12103A)	Dual Credit Business Management for Construction B[1] (BAD12103B) AND Dual Credit Principles of Information Technology AB[2] (ITD27201AB)	Dual Credit Unpaid Practicum in Construction Management I/d A[1] (ARD06202A)	Dual Credit Unpaid Practicum in Construction Management I/d B[1] (ARD06202B)
College	**CNBT 1110**[1]	**SPCH 1321**[1]**	ARTS 1301**	**ARCH 1315**[1]	**SRVY 1301**[1]	**CNBT 1327**	ENG 1301	ENGL 1302 4th year 2nd semester HS
		CNBT 1300[2]	**CNBT 1302**[1]	**CNBT 1342**[2]	**CNBT 1346**[2]	**BMGT 1327**[1]	MATH 1314	MATH 2412 Needed for .5 High School Credit
			CNBT 1311[2]	**CNBT 1316**[2]	GEOL 1305**	ECON 2301**	**CNBT 2337**[1]	**CNBT 2266**[1] Requires 16 hours a week with Industry Partner
					CNBT 2342[3]	**COSC 1301**[2]	**CNBT 2335**[1]	
Hrs.	Up to 3	Up to 6	Up to 9	Up to 9	Up to 12	Up to 12	Up to 12	Up to 10

Degree: AAS, Construction Management Technology - 60 hours
College Level Certification(s): Construction Inspection Technician, Level 1; Construction Management Technology, Level 1 – 19-25 hours
Industry Certification(s): NCCER Core Curriculum, NCCER Construction Technology, and/or OSHA 10-Hour Construction Industry

*TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Students that are not TSI met will take AP courses in-lieu of dual credit course. The COLLEGE DISTRICT and SCHOOL DISTRICT will utilize the crosswalk to collaborate strategic course offerings for students participating in the dual credit program towards college degree completion through the term of the agreement. Career and Technical Education (CTE) program requirements will be provided for CTE course offerings. **Required for AAS

Diamond Hill-Jarvis High School
Architecture/Construction Logistics P-TECH Academy
Logistics and Supply Chain Management Crosswalk

	9th Grade		10th Grade		11th Grade		12th Grade	
	Fall	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or *III	English II or *III	*English III or IV	*English III or IV	*English IV	*English IV
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	Algebra II or *Pre-Calculus	Algebra II or *Pre-Calculus	*Pre-Calculus or *Calculus or *Statistics	* Pre-Calculus or *Calculus or *Statistics if needed
	World Geography	World Geography	*AP World History	*AP World History	*AP US History	*AP US History	*DC Economics or HS Government	
	Biology	Biology	Chemistry	Chemistry	Physics	Physics	4th Year Science	4th Year Science
	Health	Dual Credit Speech *	Dual Credit Fine Arts *			*DC Economics or HS Government		
	World Language	World Language	World Language	World Language				
	PE	PE						
CTE	Dual Credit Business Information Management I AB[1] (BAD11412AB)	Dual Credit Professional Communication T[1] (AVD09901T)	Dual Credit Management of Transportation Systems AB[1] (TPD40200AB)	Dual Credit Distribution and Logistics B[1] (TPD40301B)	Dual Credit Business Management for Logistics AB[12] (BAD12104AB)	Dual Credit Advanced Marketing AB[1] (MKD34700AB)	Dual Credit Unpaid Practicum in Distribution and Logistics A[1] (TPD40470A)	Dual Credit Unpaid Practicum in Distribution and Logistics B[1] (TPD40470B)
		Dual Credit Distribution and Logistics A[2] (TPD40301A)		Dual Credit Concepts of Distribution and Logistics Technology AB[2] (TPD03800AB)	Dual Credit Business Law AB[3] (BAD11701AB)	Dual Credit Accounting IA[2] (FND16612AB)		
College	**BCIS 1305**[1]	**SPCH 1321**[1] Required for AAS	ARTS 1301 Required for AAS	**LMGT 1325**[1]	**BMGT 1301**[1]	**MRKG 1311**[1]	ENG 1301 Need 3 Hours for AAS	ENGL 1302 Not Required needed for 4th year second semester HS
		LMGT 1319[2]	**LMGT 1323**[1]	**IBUS 1301**[2]	**BMGT 1313**[2]	**ACCT 2301**[2]	MATH 1314 Need 3 Hours for AAS CAN USE STATS! College Algebra	MATH 2412 Need .5 Credit for High School so not needed unless they take MATH 1314
			LMGT 2334[1]	**IBUS 1302**[2]	**BUSI 2301**[3]	ECON 2301 Required for AAS	**BMGT 1331**[1]	**LMGT 2388**[1] Requires 16 hours a week with Industry Partner
							BMGT 2331[1]	
Hrs.	Up to 3	Up to 6	Up to 9	Up to 9	Up to 9	Up to 9	Up to 12	Up to 10

Degree: AAS, Logistics and Supply Chain Management - 60 hours
College Level Certification(s): Transportation Management, Level 1, or Warehouse Management, Level 1
Industry Certification(s): MSSC Certified Logistics Technician

*TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Students that are not TSI met will take AP courses in-lieu of dual credit course. The COLLEGE DISTRICT and SCHOOL DISTRICT will utilize the crosswalk to collaborate strategic course offerings for students participating in the dual credit program towards college degree completion through the term of the agreement. Career and Technical Education (CTE) program requirements will be provided for CTE course offerings.

COURSE DESCRIPTIONS FOR ARCHITECTURE/CONSTRUCTION & LOGISTICS P-TECH

DUAL CREDIT PRINCIPLES OF ARCHITECTURE A (PRINARC DC A) **TCC (ARCH 1315) Architectural Computer Graphics** **Course offerings may vary each year due to availability*	**ARD04200A**
Students learn the effective use of representational media, computer aided design, and digital media to engage formal, organizational, and environmental principles. Emphasis on the appropriate media to inform two-dimensional and three-dimensional design based upon the conventions of architectural graphic communication. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1 Professional Communication Skills and A.4 Architecture Design Skills	13004210 Grade level: 9 – 10 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): None TCC Prerequisite(s): None *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT PRINCIPLES OF ARCHITECTURE B (PRINARC DC B) **TCC (ARCH 1311) Introduction to Architecture** **Course offerings may vary each year due to availability*	**ARD04200B**
Students are introduced to architecture that explores the practices, principles, and wider context of architecture and design. Focuses on the role of architecture in society, culture, and the broader physical context of the built environment. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.8 Cultural Diversity and Social Equity and D.1 Stakeholder Roles in Architecture	13004210 Grade level: 9 – 10 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Principles of Architecture A TCC Prerequisite(s): ARCH 1315 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT ARCHITECTURAL DESIGN I A (ARCHDSN 1 DC A) **TCC (ARCH 2312) Architectural Technology** **Course offerings may vary each year due to availability*	**ARD04602A**
Students are introduced to materials and methods in the design and construction of buildings. Course will include a survey of buildings that conserve energy, water, and human resources; sustainable design and construction. The course will illustrate the connection of the previously mentioned topics, when applicable, to the digital age and the Internet of Things (IoT) which are reshaping our built environment. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: B.7 Building Envelope Systems and Assemblies and B.8 Building Materials and Assemblies.	13004600 Grade level: 10 – 12 HS Credit: 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Principles of Architecture B, Algebra I, and English I TCC Prerequisite(s): ARCH 1311 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT ARCHITECTURAL DESIGN I B (ARCHDSN 1 DC B) **TCC (ARCH 1303) Architectural Design I - Residential** **Course offerings may vary each year due to availability*	**ARD04602B**
Students will receive an introductory studio providing foundation in the conceptual, perceptual, and manual skills necessary for two-dimensional and three-dimensional design. Architectural drawing procedures and practices for residential and/or light frame construction. Construction practices and techniques with emphasis on residential construction methods. Office procedures for coordinating CAD drawings in the office. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1 Professional Communication Skills. A.2 Design Thinking Skills, A.4 Architectural Design Skills, and A.5 Ordering Systems.	13004600 Grade level: 10 – 12 HS Credit: 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Architectural Design IA, Algebra I, and English TCC Prerequisite(s): ARCH 2312 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT ARCHITECTURAL DESIGN II/d A (ARCHDSN 2 DC A) **TCC (ARCH 1304) Architectural Design II - Commercial** **Course offerings may vary each year due to availability*	**ARD04702A**
Students will engage in creative problem solving and presentation of principles, concepts and ideas as applied to introductory architectural projects. Architectural drafting procedures, practices and symbols including the preparation of detailed working drawings for commercial building, with emphasis on commercial construction methods. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1 Professional Communication Skills, A.2 Design Thinking Skills, A.4 Architectural Design Skills, and A.5 Ordering Systems	13004700 Grade level: 10 - 12 HS Credit(s): 1

Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): None TCC Prerequisite(s): ARCH 1303 and ARCH 1315 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT ARCHITECTURAL DESIGN II/d B (ARCHDSN 2 DC B) **TCC (ARCH 1301) Architectural History I** **Course offerings may vary each year due to availability*	**ARD04702B**
Students will begin with part one of a survey of the history of world architecture from pre-history to the present. This course focuses on the period from pre-history up to at least the 14th Century. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.7 History and Global Culture	13004700 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): None TCC Prerequisite(s): None *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT PRINCIPLES OF CONSTRUCTION FOR ARCHITECTURE A (PRINCONA A DC) **TCC (ARCE 1342) Codes, Specifications, and Contract** **Course offerings may vary each year due to availability*	**ARD04202A**
Students will study ordinances, codes, and legal documents as they relate to specifications and drawing. Discussion of owner-architect-contractor responsibilities, duties, and legal relationships. Preparation of drawing for mechanical, electrical, and plumbing (MEP) systems with emphasis on applicable building and energy codes, product references, and specifications for construction.	13004220 Grade level: 10-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): None TCC Prerequisite(s): ARCH 2312 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT PRINCIPLES OF CONSTRUCTION FOR ARCHITECTURE B (PRINCONA B DC) **(ARCE 2352) Mechanical, Electrical, and Plumbing (MEP) Systems** **Course offerings may vary each year due to availability*	**ARD04202B**
Students will study ordinances, codes, and legal documents as they relate to specifications and drawing. Discussion of owner-architect-contractor responsibilities, duties, and legal relationships. Preparation of drawing for mechanical, electrical, and plumbing (MEP) systems with emphasis on applicable building and energy codes, product references, and specifications for construction. Course will include a survey of buildings that conserve energy, water, and human resources; sustainable design and construction. The course will illustrate the connection of the previously mentioned topics, when applicable, to the digital age and the Internet of Things (IoT) which are reshaping our built environment.	13004220 Grade level: 10-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): None TCC Prerequisite(s): ARCE 1342 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT PRINCIPLES OF CONSTRUCTION MANAGEMENT A (PRINCONM A DC) **(CNBT 1110) Basic Construction Safety** **Course offerings may vary each year due to availability*	**ARD04203A**
Students will learn about basic job site construction safety in residential, commercial, and industrial construction.	13004220
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): None TCC Prerequisite(s): None *Offered at: Diamond Hill-Jarvis (P-TECH)*	Grade level: 9 HS Credit(s): 0.5 College Hour(s): 1.0 **Tier I**
DUAL CREDIT PRINCIPLES OF CONSTRUCTION MANAGEMENT I B (PRINCONM B DC) **(CNBT 1300) Residential and Light Commercial Blueprint Reading** **Course offerings may vary each year due to availability*	**ARD04203B**
Students will receive an introduction to construction drawings with a focus on residential and light commercial construction.	13004220 Grade level: 9-10
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): None TCC Prerequisite(s): None *Offered at: Diamond Hill-Jarvis (P-TECH)*	HS Credit(s): 0.5 College Hour(s): 3.0 **Tier I**
DUAL CREDIT PROFESSIONAL COMMUNICATIONS (PROFCOMM T) **(SPCH 1321) Business and Professional Communication** **Course offerings may vary each year due to availability*	**AVD09902T**
Students will study application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams, and technologically mediated formats.	13009900 Grade level: 9 HS Credit(s): 0.5

Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): None TCC Prerequisite(s): TSI Reading and Math *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3.0 **Tier I**
DUAL CREDIT CONSTRUCTION TECHNOLOGY II I/d AB (CONSTECH2 A DC) **(CNBT 1316) Construction Technology I & (CNBT 1342) Building Codes and Inspections** **Course offerings may vary each year due to availability*	**ARD05202AB**
Students will learn about site preparation foundations, form work, safety, tools, and equipment. form work, safety, tools, and equipment. Additionally, students will understand building codes and standards applicable to building construction and inspection processes. Study of ordinances, codes, and legal documents as they relate to specifications, drawings, and building construction. An overview of legal contracts in the construction industry.	13005200 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Principles of Construction Management B TCC Prerequisite(s): CNBT 1300 *Offered at: Diamond Hill-Jarvis (P-TECH)*	HS Credit(s): 2.0 College Hour(s): 6.0 **Tier I**
DUAL CREDIT CONSTRUCTION TECHNOLOGY FOR MANAGEMENT I/d A (CONSTECHM DC A) **(CNBT 1302) Mechanical, Electrical and Plumbing Systems in Construction I** **Course offerings may vary each year due to availability*	**ARD00513A**
Students will learn about the basic mechanical, electrical, and plumbing components in construction and their relationship to the residential and light commercial buildings.	13004220 Grade level: 10
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Principles of Construction Management B TCC Prerequisite(s): CNBT 1300 *Offered at: Diamond Hill-Jarvis (P-TECH)*	HS Credit(s): 1.0 College Hour(s): 3.0 **Tier I**
DUAL CREDIT CONSTRUCTION TECHNOLOGY FOR MANAGEMENT I/d B (CONSTECHM DC B) **(CNBT 1311) Construction Methods and Material I** **Course offerings may vary each year due to availability*	**ARD00513B**
Students will receive an introduction to construction materials and methods and their applications.	13004220
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Principles of Construction Management B TCC Prerequisite(s): CNBT 1300 *Offered at: Diamond Hill-Jarvis (P-TECH)*	Grade level: 10 HS Credit(s): 1.0 College Hour(s): 3.0 **Tier I**
DUAL CREDIT COMPUTER AIDED DRAFTING FOR ARCHITECTURE I/d A (CADAR A DC) **TCC (ARCH 1307) Architectural Graphics I** **Course offerings may vary each year due to availability*	**ARD00429A**
Students are introduced to basic drawing methods and tools. Exploration of techniques available for the design process with emphasis on two-dimensional and three-dimensional composition. Presentation of advance architectural topics with application in computer-aided environment utilizing three-dimensional objects or spaces.	N1300429 Grade level: 11-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): None TCC Prerequisite(s): ARCE 2352 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT COMPUTER AIDED DRAFTING FOR ARCHITECTURE I/d B (CADAR B DC) **TCC (ARCH 1308) Architectural Graphics II** **Course offerings may vary each year due to availability*	**ARD00429B**
This is a continuation of the study, methodology, and production of architectural drawings. Exploration of techniques available for the design process with emphasis on three-dimensional composition both analog and digital. These techniques will be implemented through the use and instruction of Building Information Management System software. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1 Professional Communication Skills and A.5 Ordering Systems	N1300429 Grade level: 11-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): None TCC Prerequisite(s): ARCH 1307 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT COMPUTER AIDED DRAFTING FOR CONSTRUCTION MANAGEMENT I/d AB (CADARC AB DC) **TCC (ARCH 1315) Architectural Computer Graphics** **Course offerings may vary each year due to availability*	**ARD00439AB**
In this course, students will learn the effective use of representational media, computer aided design, and digital media to engage formal, organizational, and environmental principles. Emphasis on the appropriate media to	N1300429 Grade level: 11-12

inform two-dimensional and three-dimensional design based upon the conventions of architectural graphic communication. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1 Professional Communication Skills and A.4 Architecture Design Skills.	HS Credit(s): 1.0
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): None TCC Prerequisite(s): ARCH 1307 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT CONSTRUCTION MANAGEMENT FOR ACHITECTURE I/d A (CONSMGTAR1 DC A) **TCC (ARCH 2301) Architectural Freehand Drawing I** **Course offerings may vary each year due to availability*	**ARD04903A**
Students will develop freehand drawing skills in architecture. Methods and skills, including emphasis on principles of light, shade, scale, proportion, line, and tonal quality for exploring and developing conceptual ideas and for clear graphic presentations.	13004900 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Architectural Design II/d B TCC Prerequisite(s): ARCH 1301 and ARCH 1308 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT CONSTRUCTION MANAGEMENT FOR ACHITECTURE I/D B (CONSMGTAR1 DC B) **TCC (SRVY 1301) Introduction to Surveying** **Course offerings may vary each year due to availability*	**ARD04903B**
Students will receive an overview of the surveying profession. The history of surveying and its impact on the world. Review of the mathematics used in surveying. Introduction to basic surveying equipment with emphasis on measurements. Instruction on surveying procedures and the limitation of errors. Calculation to determine precision and error of closure. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1 Professional Communication Skills and A.4 Architectural Design Skills.	13004900 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Construction Management I/D A TCC Prerequisite(s): ARCH 2301 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT CONSTRUCTION MANAGEMENT FOR CONSTRUCTION I/d A (CONSMGTCN 1 DC A) **TCC (SRVY 1301) Introduction to Surveying** **Course offerings may vary each year due to availability*	**ARD04904A**
Students will obtain and overview of the surveying profession, such as basic surveying equipment with emphasis on measurements, surveying procedures and the limitation of errors, and calculations to determine precision and error of closure.	13004900 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Construction Technology II/d B TCC Prerequisite(s): CNBT 1344 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT CONSTRUCTION MANAGEMENT FOR CONSTRUCTION I/d B (CONSMGTCN 1 DC B) **TCC (CNBT 1346) Construction Estimating I** **Course offerings may vary each year due to availability*	**ARD04904B**
Students will explore fundamentals of estimating materials, equipment, and labor costs in construction.	13004900
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Construction Management for Construction II/d B TCC Prerequisite(s): SRVY 1301 *Offered at: Diamond Hill-Jarvis (P-TECH)*	Grade level: 11-12 HS Credit(s): 1 College Hour(s): 3 **Tier I**
DUAL CREDIT BUSINESS MANAGEMENT FOR CONSTRUCTION I/d A (BUSMGTC DC A) **TCC (CNBT 2342) Construction Management I** **Course offerings may vary each year due to availability*	**BAD12103A**
Students will explore the construction industry and management skills on the job site. Topics include written and oral communications, leadership and motivation, problem solving, and decision making. The course also deals with the concepts and principles in estimating, planning, scheduling, controlling and construction ethics.	13012100 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Construction Management for Construction II/d B TCC Prerequisite(s): SRVY 1301 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**

DUAL CREDIT BUSINESS MANAGEMENT FOR CONSTRUCTION I/d B (BUSMGTC DC B) **TCC (BMGT 1327) Principles of Management** **Course offerings may vary each year due to availability*	**BAD12103B**
Students will explore the construction industry and management skills on the job site. Topics include written and oral communications, leadership and motivation, problem solving, and decision making. The course also deals with the concepts and principles in estimating, planning, scheduling, controlling and construction ethics.	13012100 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials FWISD Prerequisite(s): Dual Credit Business Management for Construction I/d A TCC Prerequisite(s): CNBT 2342 *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT UNPAID PRACTICUM IN ARCHITECTURAL DESIGN/d I A (PRACADSN A DC) **TCC (ARCH 1302) Architectural History II** **Course offerings may vary each year due to availability*	**ARD04802A**
Students engage in part two of a survey of the history of world architecture from pre-history to the present. This course focuses on the period of neo-classicism up to the modern era. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.7 History and Global Culture.	13004800 Grade level: 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Architectural Design II TCC Prerequisite(s): ARCH 2301 *Course taught by a TCC-approved adjunct instructor* *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT UNPAID PRACTICUM IN ARCHITECTURAL DESIGN/d I B (PRACADSN B DC) **TCC (ARCH 2302) Architecture Freehand Drawing II** **Course offerings may vary each year due to availability*	**ARD04802B**
This course develops advanced freehand design drawing skills in architecture. Emphasis is on using freehand techniques in visual thinking and analysis. Development of conceptual ideas for clear graphic presentations. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1 Professional Communication Skills and A.4 Architecture Design Skills	13004800 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): ARCH 2301 *Course taught by a TCC-approved adjunct instructor* *Offered at: Diamond Hill-Jarvis (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT UNPAID PRACTICUM IN ARCHITECTURAL DESIGN/d II AB (PRACADSN2 AB DC) **TCC (ARCT 2367) Practicum in Architectural Engineering Technology/Technician (Capstone)** **Course offerings may vary each year due to availability*	**ARD04810AB**
Students will engage in practical, general workplace training supported by an individualized learning plan developed by the employer, College and student. This experience may be paid or non-paid.	13004810 Grade level: 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Unpaid Practicum in Architectural Design/d AB (first time taken) TCC Prerequisite(s): Consent of TCC Department Chairperson *Course taught by a TCC-approved adjunct instructor* *Offered at: Diamond Hill-Jarvis (P-TECH)*	HS Credit(s): 2 College Hour(s): 3 **Tier I**
DUAL CREDIT PRINCIPLES OF INFORMATION TECHNOLOGY AB (PRINIT DC AB) **TCC Course: (COSC 1301) Introduction to Computing +** **Course offerings may vary each year due to availability*	**ITD27201AB**
Students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. Additionally, students will learn an overview of computer systems-hardware, operating systems, the Internet, and application software including word processing, spreadsheets, presentation graphics, and databases. Current topics such as the effect of computers on society, and the history and use of computers in business, educational, and other interdisciplinary settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science.	13027200 Grade level: 9 - 11 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None Corequisites: None TCC Prerequisite(s): None *Course taught by a TCC-approved adjunct instructor* *Offered only at: Diamond-Hills Jarvis HS (P-TECH), Eastern Hills (P-TECH), South Hills (P-TECH), and TCC South Collegiate HS (P-TECH)*	College Hour(s): 3 **Tier I**

DUAL CREDIT UNPAID PRACTICUM IN CONSTRUCTION MANAGEMENT I/d A (PRACCONS A DC) **TCC Course: (CNBT 2337) Construction Estimating II & (CNBT 2335) Computer-Aided Construction** **Course offerings may vary each year due to availability*	**ARD06202A**
Students will explore advanced estimating concepts using computer software for construction and crafts and learn how advanced construction scheduling utilizing computer scheduling software to perform various scheduling procedures.	13006200 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Principles of Information Technology AB Corequisites: None TCC Prerequisite(s): CNBT 1346 *Course taught by a TCC-approved adjunct instructor* *Offered only at: Diamond-Hills Jarvis HS (P-TECH)*	College Hour(s): 6 **Tier I**
DUAL CREDIT UNPAID PRACTICUM IN CONSTRUCTION MANAGEMENT I/d B (PRACCONS B DC) **TCC Course: (CNBT 2266) Practicum in Construction/Engineering Technician** **Course offerings may vary each year due to availability*	**ARD06202 B**
Students will apply practical, general workplace training supported by an individualized learning plan developed by the employer, College, and student. This is a capstone course.	13006200 Grade level: 11 - 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Practicum in Construction Management I/d A Corequisites: None TCC Prerequisite(s): CNBT 2337 and CNBT 2335 *Course taught by a TCC-approved adjunct instructor* *Offered only at: Diamond-Hills Jarvis HS (P-TECH)*	HS Credit(s): 1 College Hour(s): 3 **Tier I**
DUAL CREDIT BUSINESS INFORMATION MANAGEMENT I AB (BUSIM1 AB DC) **TCC COURSE: (BCIS 1305) Business Computer Applications** **Courses may change due to availability*	**BAD11412AB**
Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets databases, presentation graphics, and business-oriented utilization of the Internet.	13011400 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: TCC Course: Business Computer Applications (BCIS 1305) FWISD Prerequisite(s): None TCC Prerequisite(s): TSI *Offered only at: Diamond-Hills Jarvis HS (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT DISTRIBUTION AND LOGISITICS A (DISTLGS A DC) **TCC COURSE: (LMGT 1319) Introduction to Business Logistics** **Courses may change due to availability*	**TPD40301A**
Emphasis on physical distribution and total supply chain management. Includes warehouse operations management, hardware and software operations, bar codes, organizational effectiveness, just-in-time manufacturing and continuous replenishment, and third party.	13040300 Grade level: 9 - 12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): TSI *Offered only at: Diamond-Hills Jarvis HS (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT DISTRIBUTION AND LOGISITICS B (DISTLGS B DC) **TCC COURSE: (LMGT 1325) Warehouse and Distribution System Management** **Courses may change due to availability*	**TPD40301B**
This course will focus on physical distribution and total supply chain management. Includes warehouse operations management, hardware and software operations, bar codes, organizational effectiveness, just-in-time manufacturing and continuous replenishment, and third party.	13040300 Grade level: 9 - 12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Distribution and Logistics A TCC Prerequisite(s): TSI and LMGT 1319 *Offered only at: Diamond-Hills Jarvis HS (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT MANAGEMENT OF TRANSPORTATION SYSTEMS AB (MNGTRSY AB DC) **TCC COURSE: (LMGT 1323) Domestic and International Transportation Management & (LMGT 1323)** **Courses may change due to availability*	**TPD40200AB**
This course will focus on physical distribution and total supply chain management. Includes warehouse operations management, hardware and software operations, bar codes, organizational effectiveness, just-in-time manufacturing and continuous replenishment, and third party.	13040200 Grade level: 9 - 12 HS Credit(s): 1

Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Distribution and Logistics A TCC Prerequisite(s): TSI and LMGT 1319 *Offered only at: Diamond-Hills Jarvis HS (P-TECH)*	College Hour(s): 6 **Tier I**
DUAL CREDIT CONCEPTS OF DISTRIBUTION AND LOGISTICS TECHNOLOGY AB (DISTLOG AB DC) **TCC COURSE: (IBUS 1301) Principles of Exports & (IBUS 1302) Principles of Imports** **Courses may change due to availability*	**TPD03800AB**
This course will focus on import and export management processes and procedures. Import topics include the preparation and understanding of import documents such as customs invoices, packing lists, and commercial invoices. Export topics include governmental controls and compliance, licensing of products, documentation, commercial invoices, and transportation. Emphasizes human and public relations, management of personnel, finance, and accounting procedures.	N1303800
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): Dual Credit Distribution and Logistics A TCC Prerequisite(s): TSI and LMGT 1325 *Offered only at: Diamond-Hills Jarvis HS (P-TECH)*	Grade level: 10 - 12 HS Credit(s): 1 College Hour(s): 6 **Tier I**
DUAL CREDIT BUSINESS LAW (BUSLAW AB DC) **TCC COURSE: BUSINESS LAW (BUS 2301)** **Course offerings may vary each year due to availability*	**BAD11701AB**
This course provides the student with foundational information about the U.S. legal system and dispute resolution, and their impact on business. The major content areas will include general principles of law, the relationship of business and the U.S. Constitution, state and federal legal systems, the relationship between law and ethics, contracts, sales, torts, agency law, intellectual property, and business law in the global context.	13011700 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered only at: TCC South Collegiate HS (P-TECH) and Diamond-Hills Jarvis HS (P- TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT ADVANCED MARKETING AB **TCC COURSE: PRINCIPLES OF MARKETING (MRKG 1311)** **Course offerings may vary each year due to availability*	**MKD34700AB**
In this course, students will gain an introduction to the marketing mix functions and processes. The course topics include: identification of consumer and organizational needs and explanation of environmental issues.	13034700 Grade level: 11 - 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Dual Credit Business Management TCC Prerequisite(s): BMGTI 1301 and BMGT 1313 *Offered only at: Diamond-Hills Jarvis HS (P-TECH)*	HS Credit(s): 1 College Hour(s): 3 **Tier I**
DUAL CREDIT BUSINESS MANAGEMENT FOR LOGISTICS AB (BUSMGTL AB DC) **TCC COURSE: (BMGT 1301) Supervision and (BMGT 1313) Principles of Purchasing** **Course offerings may vary each year due to availability*	**BAD12104AB**
In this course, students will understand the role of the supervisor. Topics explored includes: managerial functions as applied to leadership, counseling, motivation, and human relations skills. Additionally, students will learn about the purchasing process as it relates to such topics as inventory control, price determination, vendor selection, supply chain management, negotiation techniques, and ethical issues in purchasing.	13012100 Grade level: 11 – 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Dual Credit Business Management TCC Prerequisite(s): BMGTI 1301 and BMGT 1313 *Offered only at: Diamond-Hills Jarvis HS (P-TECH)*	College Hour(s): 6 **Tier I**
DUAL CREDIT UNPAID PRACTICUM IN DISTRIBUTION & LOGISITICS A (PRACDLG1 A DC) **TCC COURSE: (BMGT 1331) Production and (BMGT 2331) Principles of Quality Management** **Course offerings may vary each year due to availability*	**TPD40470A**
In this course, students will understand the fundamentals of techniques used in the practice of production and operations management. Course topics includes location, design, and resource allocation.	13040470 Grade level: 11 - 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Dual Credit Business Management TCC Prerequisite(s): MRKG 1311 and ACCT 2301 *Offered only at: Diamond-Hills Jarvis HS (P-TECH)*	HS Credit(s): 1 College Hour(s): 6 **Tier I**

DUAL CREDIT UNPAID PRACTICUM IN DISTRIBUTION & LOGISITICS B (PRACDLG1 B DC) **TCC COURSE: (LMGT 2388) Internship: Logistics and Materials** **Course offerings may vary each year due to availability*	**TPD40470B**
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the College and the employer.	13040470 Grade level: 11 - 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): Dual Credit Business Management TCC Prerequisite(s): LMGT 2334 *Offered only at: Diamond-Hills Jarvis HS (P-TECH)*	HS Credit(s): 1 College Hour(s): 3 **Tier I**

Software Development, IT and User Experience P-TECH –
Business & Industry Endorsement

FOR THE GRADUATING CLASS OF 2025 and beyond

Opened August 2021, this program enhances the current high school offerings by working with industry partners to offer work-based experiences, opportunities to earn industry certifications, and offer an opportunity for students to earn an associate degree from Tarrant County College.

The Software Development, IT and User Experience P-TECH Academy offers one (1) Career Focus.

South Hills High School
Software Development, IT and User Experience P-TECH Academy
Web Applications Crosswalk

	9th Grade		10th Grade		11th Grade		12th Grade	
	Fall	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or *III	English II or *III	*English III or IV OR Rhet. 1301	*English III or IV OR Rhet 1301	AP Lit	AP Lit
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	Algebra II or *Pre-Calculus	Algebra II or *Pre-Calculus	*Pre-Calculus or *Calculus	* Pre-Calculus or *Calculus
	World Geography AP Human Geo	World Geography AP Human Geo	*AP World History	*AP World History	*AP US History	*AP US History	Government	Econ
	Biology Pre-AP Bio.	Biology Pre-AP Bio.	Chemistry	Chemistry	Physics or Chem II	Physics OR Chem II	4th Year Science	4th Year Science
	World Language	World Language	World Language	World Language				
	*Dual Credit Fine Arts	*Dual Credit Speech	Health	Elective	Possible Elective	Possible Elective		
	PE	PE						
	Dual Credit Principles of Information Technology AB[1] (ITD27201AB)	Dual Credit Computer Science I AB[1] (TAD2151AB)	Dual Credit Fundamentals of Computer Science AB[1] (TAD2140AB) AND Dual Credit Computer Science II AB[2] (TAD2153AB)	Dual Credit Web Communications T[1] (ITD80810T) AND Dual Credit Mobile Application Development AB[2] (TAD80390AB)	Dual Credit Foundations of Cybersecurity AB[1] (ITD27904AB) AND Dual Credit Networking AB[2] (ITD27402AB)		Dual Credit Web Design AB[1] (TAD7728AB) AND Honors Paid or Unpaid Practicum in Information Technology AB (ITH27212AB); (ITH27202AB) OR Honors Paid or Unpaid Practicum in STEM AB (STH37405AB); (STH37402AB) Honors Project-Based Research AB (CPH01500AB) OR Career Prep AB (CP01302AB)	Honors Paid or Unpaid Practicum in Information Technology AB (ITH27212AB); (ITH27202AB) OR Honors Paid or Unpaid Practicum in STEM AB (STH37405AB); (STH37402AB) Honors Project-Based Research AB (or CPH01500AB) OR Career Prep AB (CP01302AB)
College	ARTS 1301**	SPEECH 1321**	**ITSC 1425[1]**	**ITSE 1411[1]**			ENGL 1301**	ENGL 1302
	COSC 1301[1]*	**ITSC 1305[1]***	**COSC 1436[2]***	**ITSE 1473[2]**	**ITSY 1300[1]***	ITSE 2417*	MATH 1314**	MATH 2412
					ITNW 1425[2]*	Behavioral Sci**	**ITSE 2402[1]***	INEW 2434
							ITSE 2409*	
Hrs.	Up to 6	Up to 6	Up to 11	Up to 11	Up to 10	Up to 10	Up to 14	Up to 11

Degree: ASS, Information Technology: Web Applications Programming - 60+hours
College Level Certification(s): Web Applications Programming I, Level 1 (22 hrs) or Web Applications Programming II, Level 2 (31 hrs)
Industry Certification(s): WD Certified Web Design Certification

*TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Students that are not TSI met will take AP courses in-lieu of dual credit course. The COLLEGE DISTRICT and SCHOOL DISTRICT will utilize Attachment A to collaborate strategic course offerings for students participating in the dual credit program towards college degree completion through the term of the agreement. Career and Technical Education (CTE) program requirements will be provided for CTE course offerings. ** Need for AAS

COURSE DESCRIPTIONS FOR THE SOFTWARE DEVELOPMENT, IT AND USER EXPERIENCE P-TECH

HONORS PROJECT-BASED RESEARCH AB (PROBS1 AB/H) (Available Fall 2023) *Previously Problems and Solutions	**CPH01500AB**
Students will research a real-world problem and possible solutions throughout this course. Students develop a project on a topic related to career interests, use scientific methods of investigation to conduct in-depth research, are matched with a mentor from the business or professional community, compile findings, and present their findings to an audience that includes experts in the field. This course must be cooperatively planned and supervised by the teacher ensuring that the student has guidance and support of a mentor or interdisciplinary team. The district must maintain a written project plan for each student enrolled in the course.	12701500 Grade level: 11-12 HS Credit(s): 1
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Specific to program focus/pathway and is the previous course in the sequence. *Offered at: All high school campuses*	College Hour(s): NA **Tier II**
CAREER PREPARATION I AB (CAREERP1 AB)	**CP01300AB**
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction and are employed for ten hours per week (or average of 20 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	12701300 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
CAREER PREPARATION II AB (CAREERP2 AB)	**CP01400AB**
The Career Preparation II course is for those students who are taking a Career Preparation course for the second time and continue or have new employment during the duration of the course; working ten hours per week (or average of 20 hours across two weeks). This course provides the same opportunities and requirements as the Career Preparation I course.	12701400 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Career Preparation I AB *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
CAREER PREPARATION I/EXTENDED I AB (EXCAREE1 AB)	**CP01302AB**
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I/Extended provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction, and are employed for fifteen hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	12701305 Grade level: 11-12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
CAREER PREPARATION II/EXTENDED (EXCAREE2 AB)	**CP01402AB**
The Career Preparation I/Extended course is for those students who are taking a Career Preparation course for the second time and continue or have new employment during the duration of the course; working fifteen hours per week (or average of 30 hours across two weeks). This course provides the same opportunities and requirements as the Career Preparation I/Extended course.	12701405 Grade level: 12 HS Credit(s): 3

Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Career Preparation I *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN INFORMATION TECHNOLOGY AB/D (PRACIT1 AB/H)	**ITH27202AB**
In addition to the regular course curriculum, students in this double period honors course will complete a project using the five phases of project management used in the business and industry environment. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the business and industry environment. See the Unpaid Practicum in Information Technology course description in the Career & Technical Education, Information Technology section of this document.	13028000 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Previous P-TECH Software Development, IT and User Experience coursework *Offered at: South Hills (P-TECH)*	College Hour(s): NA **Tier II**
HONORS PAID PRACTICUM IN INFORMATION TECHNOLOGY AB/EXTENDED AB (EXPRIT2 AB/H)	**ITH27212AB**
In addition to the regular course curriculum, students in this honors course will complete a project using the five phases of project management used in the business and industry environment. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the business and industry environment. See the Unpaid Practicum in Information Technology course description in the Career & Technical Education, Information Technology section of this document.	13028050 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Previous P-TECH Software Development, IT and User Experience coursework *Offered at: South Hills (P-TECH)*	College Hour(s): NA **Tier II**
HONORS UNPAID PRACTICUM IN STEM AB/D (PRACSTEM AB/H)	**STH37402AB**
In addition to the regular course curriculum, students in this double period honors course will complete a project using the five phases of project management used in the business and industry environment. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the business and industry environment. See the Unpaid Practicum in STEM course description in the Career & Technical Education, STEM section of this document.	13037400 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Previous P-TECH Software Development, IT and User Experience coursework *Offered at: South Hills (P-TECH)*	College Hour(s): NA **Tier II**
HONORS PAID PRACTICUM IN STEM/EXTENDED AB (EXPRSTEM1 AB/H)	**STH37405AB**
In addition to the regular course curriculum, students in this honors course will complete a project using the five phases of project management used in the business and industry environment. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the business and industry environment. See the Unpaid Practicum in STEM course description in the Career & Technical Education, STEM section of this document.	13037405 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education for related materials Prerequisite(s): Previous P-TECH Software Development, IT and User Experience coursework *Offered at: South Hills (P-TECH)*	College Hour(s): NA **Tier II**
DUAL CREDIT PRINCIPLES OF INFORMATION TECHNOLOGY AB (PRINIT DC AB) **TCC Course: (COSC 1301) Introduction to Computing +** **Course offerings may vary each year due to availability*	**ITD27201AB**
Students will gain an overview of computer systems-hardware, operating systems, the Internet, and application software including word processing, spreadsheets, presentation graphics, and databases. Current topics such as the effect of computers on society, and the history and use of computers in business, educational, and other interdisciplinary settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science.	13027200 Grade level: 9 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): None *Course taught by a TCC-approved adjunct instructor* *Offered at: Diamond Hill Jarvis (P-TECH), Eastern Hills (P-TECH), South Hills (P-TECH), South Hills (P-TECH), and TCC South Collegiate HS (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT COMPUTER SCIENCE I AB (TACS 1 DC AB) **TCC (ITSC 1305) Introduction to PC Operating Systems** **Course offerings may vary each year due to availability*	**TAD2151AB**
Students will be introduced to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities.	03580200 Grade level: 9
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): None *Course taught by a TCC-approved adjunct instructor* *Offered at: South Hills (P-TECH)*	HS Credit(s): 1 College Hour(s): 3 **Tier I**

DUAL CREDIT FUNDAMENTALS OF COMPUTER SCIENCE AB (TAFCS DC AB) **TCC Course: (ITSC 1425) Personal Computer Hardware** **Course offerings may vary each year due to availability*	**TAD2140AB**
Students will gain an understanding of current personal computer hardware including assembly, upgrading, setup, configuration, and troubleshooting.	03580140 Grade level: 10 - 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): None *Course taught by a TCC-approved adjunct instructor* *Offered at: Eastern Hills (P-TECH) and South Hills (P-TECH)*	HS Credit(s): 1 College Hour(s): 4 **Tier I**
DUAL CREDIT COMPUTER SCIENCE II AB (TACS 2 DC AB) **TCC Course: (COSC 1436) Programming Fundamentals I** **Course offerings may vary each year due to availability*	**TAD2153AB**
This course introduces the fundamental concepts of structured programming and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. This course is included in the Field of Study Curriculum for Computer Science.	03580300 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): COSC 1301 *Course taught by a TCC-approved adjunct instructor* *Offered at: South Hills (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT WEB COMMUNICATIONS T (TAWEBCM T DC) **TCC Course: (ITSE 1411) Beginning Web Programming** **Course offerings may vary each year due to availability*	**ITD80810T**
Students will develop skills in web page programming including mark-up and scripting languages.	03580810
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): COSC 1301 *Course taught by a TCC-approved adjunct instructor* *Offered at: South Hills (P-TECH)*	Grade level: 10 - 12 HS Credit(s): 0.5 College Hour(s): 4 **Tier I**
DUAL CREDIT MOBILE APPLICATION DEVELOPMENT AB (TAMBAD AB DC) **TCC Course: (ITSE 1473) Mobile Application Development** **Course offerings may vary each year due to availability*	**TAD80390AB**
Students will gain an overview of different mobile platforms and their development environments. Design, write, and test small interactive programs for mobile platforms using current development software products. Major topics are discussion of the design process, develop applications and publish applications.	03580390 Grade level: 10 - 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): COSC 1436 *Course taught by a TCC-approved adjunct instructor* *Offered at: South Hills (P-TECH)*	College Hour(s): 4 **Tier I**
DUAL CREDIT FOUNDATIONS OF CYBERSECURITY AB (FODCYBER DC AB) **TCC Course: (ITSY 1300) Fundamentals of Information Security** **Course offerings may vary each year due to availability*	**ITD27904AB**
Students will be introduced to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies and controls is also discussed.	03580850 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): None *Course taught by a TCC-approved adjunct instructor* *Offered at: South Hills (P-TECH)*	College Hour(s): 3 **Tier I**
DUAL CREDIT NETWORKING AB (NTWRK DC AB) **TCC Course: (ITNW 1425) Fundamentals of Networking Technologies** **Course offerings may vary each year due to availability*	**ITD27402AB**
Students will receive instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.	13027400 Grade level: 10 – 12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): ITSC 1305 *Course taught by a TCC-approved adjunct instructor* *Offered at: Eastern Hills (P-TECH) and South Hills (P-TECH)*	HS Credit(s): 1 College Hour(s): 4 **Tier I**

DUAL CREDIT WEB DESIGN AB (TAWEBDN AB DC) **TCC Course: (ITSE 2402) Intermediate Web Programming** **Course offerings may vary each year due to availability*	**TAD7728AB**
Students will develop skills in server-side and client-side techniques for Web development.	03580820
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. FWISD Prerequisite(s): None TCC Prerequisite(s): ITSE 1411 *Course taught by a TCC-approved adjunct instructor* *Offered at: South Hills (P-TECH)*	Grade level: 10 - 12 HS Credit(s): 1 College Hour(s): 4 **Tier I**

Texas Science, Technology, Engineering, and Mathematics Initiative (T-STEM)

Texas Science, Technology, Engineering and Mathematics (T-STEM) Academies are open-enrollment secondary schools focusing on improving instruction and academic performance in science and mathematics-related subjects and increasing the number of students who study and enter STEM careers. T-STEM programs:

- Enroll historically underserved students, targeting at-risk and economically disadvantaged
- Provide dual credit at no cost to students
- Improve STEM instruction and the academic performance of students
- Engage students and expose them to innovation and problem-solving in real-world contexts
- Offer rigorous instruction and accelerated courses
- Provide academic and social support services to help students succeed
- Increase college readiness
- Align to regional workforce needs, guiding students into high-demand, high-wage careers
- Partner with Texas institutions of higher education (IHEs) to reduce barriers to college access

Location	Focus	Implemented	Associate's Degree	College Level Certificate(s)	Industry Certification(s)
Young Men's Leadership Academy	Robotics and Automation	2021-2022	Robotics and Automation	Mechatronics Technician, Level 1	Certified SolidWorks Associate or Autodesk Inventor
	Business	2021-2022	Business	Business Certification, Level 1	Microsoft Office Specialist – Word or Microsoft Office Specialist – Excel
I.M. Terrell Academy	Robotics and Automation	2021-2022	Robotics and Automation	Mechatronics Technician, Level 1	Certified SolidWorks Associate or Autodesk Inventor

FOR THE GRADUATING CLASS OF 2026 and Beyond

Young Men's Leadership Academy Robotics and Automation Crosswalk								
Gr.	**9th Grade**		**10th Grade**		**11th Grade**		**12th Grade**	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or III	English II or III	English III* or IV	English III or IV^	English IV or English Elective	English IV or English Elective
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	College Algebra*	Pre-Calculus^	4th Year Math	4th Year Math
	AP or Honors Geography	AP or Honors Geography	AP or Honors World History	AP or Honors World History	US History	US History	Government*	Economics^
	Biology	Biology	Physics or Chemistry	Physics or Chemistry	Physics or AP or Honors Chemistry	Physics or AP or Honors Chemistry	4th Year Science	4th Year Science
	PE	PE	Health		CIM AB (STH37482AB)	CIM AB (STH37482AB)	Practicum in STEM AB (STH37405AB)	Practicum in STEM AB (STH37405AB)
	IED AB (STH07422AB)	IED AB (STH07422AB)	Engineering Science AB (STH37482AB)	Engineering Science AB (STH37482AB)	Digital Electronics AB* Double-Block (STD37443AB)	Programmable Logic Controller II AB* Double-Block (TBD: STD03690AB)	Basic Fluid Power AB* (MAD03683AB)	Robotics II AB* Double-Block (STD37003AB)
	Art Appreciation*	Speech*	Robotics I AB* (STD37002AB)	Solid State Electronics A* Double-Block (STD36902A)	No Articulation for CETT 1445* Double-Block	No Articulation for CETT 2435* Double-Block	No Articulation for RBTC 1447* Double-Block	No Articulation for ELMT 2337*
	Spanish I^	Spanish II^	AC/DC Electronics AB* Double-block (STD36802AB)	Solid State Electronics B* Double-Block (STD36902B)				
DC	**ARTS 1301**	**SPCH 1321**	**RBTC 1351**	**RBTC 1401**	**CETT 1449**	**ELPT 2455**	**HYDR 1345**	**RBTC 2445**
	^SPAN 1411	^SPAN 1412	**CETT 1409**	**CETT 1441**	**CETT 1445**	**CETT 2435**	**RBTC 1447**	**ELMT 2337**
					ENGL 1301	^ENGL 1302	**GOVT 2305**	^ECON 2301
					MATH 1314	^MATH 2412		
Hrs	Up to 7	Up to 7	Up to 7	Up to 8	Up to 14	Up to 15	Up to 10	Up to 10

Degree: Associate of Applied Science in Robotics and Automation: 60+hours
College Level Certification: Mechatronics Technician, Level 1 Certification: 30 hours
Industry Certification(s): Certified SolidWorks Associate or Autodesk Inventor

TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Juniors and seniors that are not TSI met will take AP courses in lieu of a dual credit course.
*Required Dual Credit course to meet Associate Degree requirements
^Optional Dual Credit course
Students who complete Principles of Applied Engineering, AC/DC Electronics, Solid State Electronics, and Digital Electronics will have met requirements for the Renewable Energy Program of Study for a STEM Endorsement. This is capped with a Practicum in STEM.

Young Men's Leadership Academy T-STEM –
Business and Industry Endorsement

FOR THE GRADUATING CLASS OF 2026 and Beyond

Young Men's Leadership Academy
Business Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or III	English II or III	English III* or IV OnRamps	English III or IV OnRamps*	English IV or English Elective	English IV or English Elective
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	Algebra II or Pre-Calculus	Algebra II or Pre-Calculus	AP Calculus AB or BC	AP Calculus AB or BC
	AP or Honors Geography	AP or Honors Geography	AP or Honors World History	AP or Honors World History	US History*	US History*	Economics*	Economics*
	Biology	Biology	AP or Honors Chemistry	AP or Honors Chemistry	OnRamps Physics or Anat. & Phys.	OnRamps Physics or Anat. & Phys.	4th Year Science*	4th Year Science
	Art Appreciation*	Speech*	PE*	No Articulation for MATH 1324*	Special Topics in Social Studies: Texas Government T*	United States Government T*	Practicum in Business Management AB /Career Prep AB (BAH12202AB or CP01300AB)	Practicum in Business Management AB /Career Prep AB (BAH12202AB or CP01300AB)
	Spanish I*	Spanish II*	Business Information Management I AB* (BAD11412AB)	Advanced Marketing AB^ (MKD34700AB)	Accounting I A* (FND16612A)	Accounting I B* (FND16612B)	No Articulation for BUSI 2305*	Business Law AB^ (BAD11701AB)
		Business Management AB* (BAD12102AB)						
DC	**ARTS 1301**	**SPCH 1321**	**KINE 1164**	**MATH 1324**	**ACCT 2301**	**ACCT 2302**	**BUSI 2305**	^BUSI 2301
	^SPAN 1411	^SPAN 1412	**BCIS 1305**	^MRKG 1311	**ENGL 1301**	**ENGL 1302**	**ECON 2301**	**ECON 2302**
		BUSI 1301			**HIST 1301**	**HIST 1302**	**BIOL 1406 or PHYS 1401 or GEOL 1401**	
					GOVT 2306	**GOVT 2305**		
Hrs	Up to 7	Up to 10	Up to 4	Up to 6	Up to 12	Up to 12	Up to 10	Up to 6

Degree: Associate of Arts in Business: 60+hours
College Level Certification: Business Certification, Level 1: 24 hours
Industry Certification(s): Microsoft Office Specialist–Word or Microsoft Office Specialist–Excel

Additional requirements:
3 hours of Dual Credit Creative Arts/Language, Philosophy & Culture and 4 hours of Life and Physical Science

TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Juniors and seniors that are not TSI met will take AP courses in lieu of a dual credit course.
*Required Dual Credit course to meet Associate Degree requirements
^Optional Dual Credit course
Business Level 2 certification additional courses: BMGT 1327, BMGT 1341 & BCIS 1305 + 6 hours of electives
Students who complete Business Information Management, Business Management, Business Law, and Practicum in Business Management/Entrepreneurship will have met requirements for the Business Management Program of Study for a Business and Industry Endorsement.

COURSE DESCRIPTIONS FOR T-STEM AT YMLA

CAREER PREPARATION I AB (CAREERP1 AB)	**CP01300AB**
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction and are employed for ten hours per week (or average of 20 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	12701300 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
CAREER PREPARATION II AB (CAREERP2 AB)	**CP01400AB**
The Career Preparation II course is for those students who are taking a Career Preparation course for the second time and continue or have new employment during the duration of the course; working ten hours per week (or average of 20 hours across two weeks). This course provides the same opportunities and requirements as the Career Preparation I course.	12701400 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Career Preparation I AB *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
CAREER PREPARATION I/EXTENDED I AB (EXCAREE1 AB)	**CP01302AB**
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I/Extended provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction, and are employed for fifteen hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	12701305 Grade level: 11-12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
CAREER PREPARATION II/EXTENDED (EXCAREE2 AB)	**CP01402AB**
The Career Preparation I/Extended course is for those students who are taking a Career Preparation course for the second time and continue or have new employment during the duration of the course; working fifteen hours per week (or average of 30 hours across two weeks). This course provides the same opportunities and requirements as the Career Preparation I/Extended course.	12701405 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Career Preparation I *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN STEM/d AB (PRACSTEM AB/H)	**STH37402AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. In addition, students in this honors course will complete a project using the five phases of project management used in the business and industry environment. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional	13037400 Grade level: 12 HS Credit(s): 2

capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.

Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Two credits from a combination of STEM courses *Offered only at: YMLA*	College Hour(s): NA Tier II

HONORS PAID PRACTICUM IN STEM/EXTENDED AB (EXPRSTEM1 AB/H)	**STH37405AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037405 Grade level: 12
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Two credits from a combination of STEM courses *Offered only at: YMLA*	HS Credit(s): 3 College Hour(s): NA Tier II

HONORS PAID PRACTICUM IN STEM AB (PRACSTEM AB/H)	**STH37409AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for ten (10) hours per week (or average of 20 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037400 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Two credits from a combination of STEM courses *Offered only at: YMLA*	College Hour(s): NA Tier II

HONORS UNPAID PRACTICUM IN BUSINESS MANAGEMENT AB (PRACBM AB/H)	**BAH12202AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within the designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. Students will build a professional portfolio demonstrating skills in Business Management. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13012200 Grade level: 11-12
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Two credits from a combination of Business courses *Offered at: YMLA*	HS Credit(s): 2 College Hour(s): NA Tier II

HONORS INTRODUCTION TO ENGINEERING DESIGN AB (PLTW) (IED AB/H)	**STH07422AB**
In this honors course, students use a problem-solving model to improve existing products and invent new ones. They learn how to apply this model to solve problems in and out of the classroom. Using sophisticated three-dimensional modeling software, students communicate the details of the products. Emphasis is placed on	N1303742 Grade level: 9- 10 HS Credit(s): 1

analyzing potential solutions and communicating ideas to others. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	
Instructional Material: Project Lead the Way materials furnished by CTE department Prerequisite(s): Engineering Essentials (PLTW) *Offered at: YMLA*	College Hour(s): NA Tier II
HONORS ENGINEERING SCIENCE (PLTW) AB (ENGSCIEN AB/H)	**STH03742AB**
This honors course helps students understand the field of engineering/engineering technology. Exploring various manufacturing processes help students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about the social and political consequences of technological change. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037500 Grade level: 10 – 11 HS Credit(s): 1
Instructional Material: Project Lead the Way materials furnished by CTE department Prerequisite(s): Introduction to Engineering Design (PLTW) *Offered at: YMLA*	College Hour(s): NA Tier II
HONORS COMPUTER INTEGRATED MANUFACTURING AB (PLTW) (CIM AB/H)	**STH37482AB**
This is a course of study in the PLTW program. Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. This course illuminates the opportunities related to understanding manufacturing. At the same time, it teaches students about manufacturing processes, product design, robotics, and automation. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	N1303748 Grade level: 11 - 12 HS Credit(s): 1
Instructional Material: Project Lead the Way materials furnished by CTE department Prerequisite(s): Engineering Science (PLTW) *Offered at: YMLA*	College Hour(s): NA Tier II
DUAL CREDIT ROBOTICS I AB (ROBOT 1AB DC) **TCC Course: (RBTC 1351) Robotics Mechanisms** **Course offerings may vary each year due to availability*	**STD37002AB**
In this course, students learn the application of principles and the calculation of practical problems involving four bar linkages, cams, gears, and gear trains. Topics include vector quantities, angular displacement, motion concepts, velocities, and motions.	13037000 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): MATH 1332 *Offered only at: YMLA*	College Hour(s): 3 Tier I
DUAL CREDIT AC/DC ELECTRONICS AB (ACDCELEC AB DC) **TCC Course: (CETT 1409) DC-AC Circuits** **Course offerings may vary each year due to availability*	**STD36802AB**
In this course, students learn the fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchhoff's laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques. Emphasis on circuit simulation using PSpice. Course includes soldering techniques, hand tools, circuit fabrication techniques, troubleshooting techniques and circuit analysis using Mathcad.	13036800 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): TSI Met in Algebraic Math pathway *Offered only at: YMLA*	College Hour(s): 4 Tier I
DUAL CREDIT SOLID STATE ELECTRONICS A (SOSTELEC A DC) **TCC Course: (RBTC 1401) Programmable Logic Controllers** **Course offerings may vary each year due to availability*	**STD36902A**
In this course, students will learn about programmable logic controllers (PLC). Topics include processor units, USER numbering systems, memory organization, relay type devices, timers, counters, data manipulators, and programming.	13036900 Grade level: 10-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: YMLA*	College Hour(s): 4 Tier I
DUAL CREDIT SOLID STATE ELECTRONICS B (SOSTELEC B DC) **TCC Course: (CETT 1441) Solid State Circuits** **Course offerings may vary each year due to availability*	**STD36902B**
In this course, students study various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis.	13036900 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): Solid State Electronics A TCC Prerequisite(s): CETT 1409 and TSI Met in Algebraic Math pathway *Offered only at: YMLA*	HS Credit(s): 0.5 College Hour(s): 4 Tier I

DUAL CREDIT DIGITAL ELECTRONICS AB (DIGELC DC AB) **TCC Course: (CETT 1449) Digital Systems** **Course offerings may vary each year due to availability*	**STD37443AB**
In this course, students will learn about electronics covering digital systems. Emphasis on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital to-analog circuits, and large-scale integrated circuits.	13037600 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): TSI Met in Algebraic Math pathway *Offered only at: YMLA*	College Hour(s): 4 Tier I
DUAL CREDIT PROGRAMMABLE LOGIC CONTROLLER II AB (TBD: PROLGCNT2 AB DC) **TCC Course: (ELPT 2445) Programmable Logic Control II** **Course offerings may vary each year due to availability*	**TBD: STD03690AB**
In this course, students will learn advanced concepts in programmable logic controllers and their applications and interfacing to industrial controls.	N1303690 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: YMLA*	HS Credit(s): 1 College Hour(s): 4 Tier I
DUAL CREDIT BASIC FLUID POWER AB (BASICFP AB DC) **TCC Course: (HYDR 1345) Hydraulics and Pneumatics** **Course offerings may vary each year due to availability*	**MAD03683AB**
In this course, students learn the fundamentals of hydraulics and pneumatics, components of each system, and the operations, maintenance, and analysis of each system.	N1303683 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: YMLA*	HS Credit(s): 1 College Hour(s): 3 Tier I
DUAL CREDIT ROBOTICS II AB (ROBOTIC 2AB DC) **TCC Course: (RBTC 2445) Robot Application, Set-up, and Testing** **Course offerings may vary each year due to availability*	**STD37003AB**
In this course, students engage in a capstone course that provides the student with laboratory experience in the installation, set-up, and testing of robotic cells. Topics include maintenance.	13037050 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): Robotics II TCC Prerequisite(s): None *Offered only at: YMLA*	HS Credit(s): 1 College Hour(s): 4 Tier I
DUAL CREDIT BUSINESS MANAGEMENT AB (BUSMGT AB DC) **TCC COURSE: (BUSI 1301) Business Principles** **Course offerings may vary each year due to availability*	**BAD12102AB**
This course provides a survey of economic systems, forms of business ownership, and considerations for running a business. Students will learn various aspects of business, management, and leadership functions; organizational considerations; and decision-making process. Financial topics are introduced, including accounting, money and banking, and securities markets. Also included are discussions of business challenges in the legal and regulatory environment, business ethics, social responsibility, and International business.	12701500 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: YMLA*	College Hour(s): 3 Tier I
DUAL CREDIT BUSINESS INFORMATION MANAGEMENT I AB (BUSIM1 AB DC) **TCC COURSE: Business Computer Applications (BCIS 1305)** **Courses may change due to availability*	**BAD11412AB**
Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets databases, presentation graphics, and business-oriented utilization of the Internet.	13011400 Grade level: 9 - 12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): TSI *Offered only at: YMLA*	College Hour(s): 3 Tier I
DUAL CREDIT ADVANCED MARKETING AB (ADVMKT AB DC) **TCC COURSE: Principles of Marketing (MRKG 1311)** **Courses may change due to availability*	**MKD34700AB**
Students will study marketing mix functions and process, including identification of consumer and organizational needs and explanation of environmental issues.	13034700 Grade level: 10 - 12

Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: YMLA*	HS Credit(s): 2 College Hour(s): 3 Tier I
DUAL CREDIT ACCOUNTING IA (ACCOUNT1 A DC) **TCC Course: Principles of Financial Accounting: (ACCT 2301)** **Courses may change due to availability*	**FND16612A**
This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholders' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company. Students will be exposed to International Financial Reporting Standards (IFRS).	13016600 Grade level: 11 - 12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): TSI compliant in Math TCC Recommended Co-requisites: MATH 1324 *Offered only at: YMLA*	College Hour(s): 3 **Tier I**
DUAL CREDIT ACCOUNTING IB (ACCOUNT1B DC) **TCC Course: Principles of Managerial Accounting: (ACCT 2302)** **Courses may change due to availability*	**FND16612B**
This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation.	13016600 Grade level: 11 - 12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): ACCT-2301 *Offered only at: YMLA*	College Hour(s): 3 **Tier I**
DUAL CREDIT BUSINESS LAW (BUSLAW AB DC) **TCC COURSE: BUSINESS LAW (BUS 2301)** **Course offerings may vary each year due to availability*	**BAD11701AB**
This course provides the student with foundational information about the U.S. legal system and dispute resolution, and their impact on business. The major content areas will include general principles of law, the relationship of business and the U.S. Constitution, state and federal legal systems, the relationship between law and ethics, contracts, sales, torts, agency law, intellectual property, and business law in the global context.	13011700 Grade level: 11 - 12 HS Credit(s): 1 College Hour(s): 3
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials. Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: YMLA*	**Tier I**

FOR THE GRADUATING CLASS OF 2026 and Beyond

Young Men's Leadership Academy
Robotics and Automation Crosswalk

Gr.	9th Grade		10th Grade		11th Grade		12th Grade	
Sem.	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**	**Fall**	**Spring**
High School	English I or II	English I or II	English II or III	English II or III	English III* or IV	English III or IV^	English IV or English Elective	English IV or English Elective
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	College Algebra*	Pre-Calculus^	4th Year Math	4th Year Math
	Special Topics Adv. W. History	Special Topics Adv. W. History	World History	World History	US History	US History	Government*	Economics^
	IPC	IPC	OnRamps Physics or Chemistry	OnRamps Physics or Chemistry	AP Biology	AP Biology	4th Year Science	4th Year Science
	PE	PE	Health	Solid State Electronics A* (STD36902A)	Digital Electronics AB* (STD37443AB)	Programmable Logic Controller II AB* (TBD: STD03690AB)	Practicum in STEM AB (STH37405AB)	Practicum in STEM AB (STH37405AB)
	Principles of Applied Engineering AB (STH36202AB)	Principles of Applied Engineering AB (STH36202AB)	Robotics I AB* (STD37002AB)	Solid State Electronics A* Double-Block (STD36902A)	Digital Electronics AB* Double-Block (STD37443AB)	Programmable Logic Controller II AB* Double-Block (TBD: STD03690AB)	Basic Fluid Power AB* (MAD03683AB)	Robotics II AB* (STD37003AB)
	Speech*	Art Appreciation*	AC/DC Electronics AB* (STD36802AB)	Solid State Electronics B* (STD36902B)	No Articulation for CETT 1445*	No Articulation for CETT 2435*	No Articulation for RBTC 1447*	Robotics II AB* Double-Block (STD37003AB)
	Spanish I^	Spanish II^	AC/DC Electronics AB* Double-block (STD36802AB)	Solid State Electronics B* Double-Block (STD36902B)	No Articulation for CETT 1445* Double-Block	No Articulation for CETT 2435* Double-Block	No Articulation for RBTC 1447* Double-Block	No Articulation for ELMT 2337*
DC	**SPCH 1321**	**ARTS 1301**	**RBTC 1351**	**RBTC 1401**	**CETT 1449**	**ELPT 2455**	**HYDR 1345**	**RBTC 2445**
	^SPAN 1411	^SPAN 1412	**CETT 1409**	**CETT 1441**	**CETT 1445**	**CETT 2435**	**RBTC 1447**	**ELMT 2337**
					ENGL 1301	^ENGL 1302	**GOVT 2305**	^ECON 2301
					MATH 1314	^MATH 2412		
Hrs	Up to 7	Up to 7	Up to 7	Up to 8	Up to 14	Up to 15	Up to 10	Up to 10

Degree: Associate of Applied Science in Robotics and Automation: 60+hours
College Level Certification: Mechatronics Technician, Level 1 Certification: 30 hours
Industry Certification(s): Certified SolidWorks Associate or Autodesk Inventor

TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Juniors and seniors that are not TSI met will take AP courses in lieu of a dual credit course.
*Required Dual Credit course to meet Associate Degree requirements
^Optional Dual Credit course
Students who complete Principles of Applied Engineering, AC/DC Electronics, Solid State Electronics, and Digital Electronics will have met requirements for the Renewable Energy Program of Study for a STEM Endorsement. This is capped with a Practicum in STEM.

COURSE DESCRIPTIONS FOR T-STEM AT I.M. TERRELL ACADEMY

CAREER PREPARATION I AB (CAREERP1 AB)	**CP01300AB**
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction and are employed for ten hours per week (or average of 20 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	12701300 Grade level: 11 - 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
CAREER PREPARATION II AB (CAREERP2 AB)	**CP01400AB**
The Career Preparation II course is for those students who are taking a Career Preparation course for the second time and continue or have new employment during the duration of the course; working ten hours per week (or average of 20 hours across two weeks). This course provides the same opportunities and requirements as the Career Preparation I course.	12701400 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Career Preparation I AB *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
CAREER PREPARATION I/EXTENDED I AB (EXCAREE1 AB)	**CP01302AB**
This course is a paid capstone experience for students who have found employment for the school year. Career Preparation I/Extended provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with paid business and industry employment experiences. It supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any paid learning experience course. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, are scheduled for 1 (one) class period of instruction, and are employed for fifteen hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan.	12701305 Grade level: 11-12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): None *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
CAREER PREPARATION II/EXTENDED (EXCAREE2 AB)	**CP01402AB**
The Career Preparation I/Extended course is for those students who are taking a Career Preparation course for the second time and continue or have new employment during the duration of the course; working fifteen hours per week (or average of 30 hours across two weeks). This course provides the same opportunities and requirements as the Career Preparation I/Extended course.	12701405 Grade level: 12 HS Credit(s): 3
Instructional Material: Contact Career and Technical Education Department for related materials Prerequisite(s): Career Preparation I *Offered at: All high school campuses*	College Hour(s): NA **Tier III**
HONORS UNPAID PRACTICUM IN STEM/d AB (PRACSTEM AB/H)	**STH37402AB**
This practicum course is an unpaid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. In addition, students in this honors course will complete a project using the five phases of project management used in the business and industry environment. Practicum capstone experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent study, assistantships, mentorships, or laboratories. The various in-class capstone experiences include students working in a simulated environment, running an enterprise, or be involved in program-specific local projects the school has approved for this class. Additional	13037400 Grade level: 12 HS Credit(s): 2

capstone experiences also include students being selected to be a part of a work-based experience or industry training off-site, outside of school. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.

Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Two credits from a combination of STEM courses *Offered only at: I.M. Terrell*	College Hour(s): NA Tier II
HONORS PAID PRACTICUM IN STEM/EXTENDED AB (EXPRSTEM1 AB/H)	**STH37405AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for fifteen (15) hours per week (or average of 30 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037405 Grade level: 12
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Two credits from a combination of STEM courses *Offered only at: I.M. Terrell*	HS Credit(s): 3 College Hour(s): NA Tier II
HONORS PAID PRACTICUM IN STEM AB (PRACSTEM AB/H)	**STH37409AB**
This practicum course is a paid capstone experience for students participating in a coherent sequence of career and technical education courses within their designated program of study. This course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. A student must be a minimum age of 16 and hold valid work documentation, such as a Social Security card, to enroll in any of the practicum learning experiences. In order to receive course credit, this course requires that students make a full year commitment to this course and their employment, must have related classroom instruction that averages one class period per week during the school year, are employed for ten (10) hours per week (or average of 20 hours across two weeks) at an approved site within ten days of the beginning of the course. Work hours can be included during the school day or outside of school hours. If work hours are during the school day, students can be scheduled for work release (noncredit) periods to work as long as work release does not jeopardize students' projected graduation plan. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13037400 Grade level: 12 HS Credit(s): 2
Instructional Material: Contact Career and Technical Education Director for related materials Prerequisite(s): Two credits from a combination of STEM courses *Offered only at: I.M. Terrell*	College Hour(s): NA Tier II
HONORS PRINCIPLES OF APPLIED ENGINEERING AB (PRAPPENG AB/H)	**STH36202AB**
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. In addition to the regular course curriculum, students in the honors course will complete additional projects and activities related to the program of study.	13036200 Grade level: 9
Instructional Material: Principles of Applied Engineering, Texas Edition Reid, et al. 2017, Pearson Education Prerequisite(s): None *Offered only at: I.M. Terrell*	HS Credit(s): 1 College Hour(s): NA Tier II
DUAL CREDIT ROBOTICS I AB (ROBOT 1AB DC) **TCC Course: (RBTC 1351) Robotics Mechanisms** **Courses may change due to availability*	**STD37002AB**
In this course, students learn the application of principles and the calculation of practical problems involving four bar linkages, cams, gears, and gear trains. Topics include vector quantities, angular displacement, motion concepts, velocities, and motions.	13037000 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): MATH 1332 *Offered only at: I.M. Terrell*	College Hour(s): 3 Tier I
DUAL CREDIT AC/DC ELECTRONICS AB (ACDCELEC AB DC) **TCC Course: (CETT 1409) DC-AC Circuits** **Courses may change due to availability*	**STD36802AB**
In this course, students learn the fundamentals of DC circuits and AC circuits operation including Ohm's law,	13036800

Kirchhoff's laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques. Emphasis on circuit simulation using PSpice. Course includes soldering techniques, hand tools, circuit fabrication techniques, troubleshooting techniques and circuit analysis using Mathcad.	Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): TSI Met in Algebraic Math pathway *Offered only at: I.M. Terrell*	College Hour(s): 4 Tier I
DUAL CREDIT SOLID STATE ELECTRONICS A (SOSTELEC A DC) **TCC Course: (RBTC 1401) Programmable Logic Controllers** **Courses may change due to availability*	**STD36902A**
In this course, students will learn about programmable logic controllers (PLC). Topics include processor units, USER numbering systems, memory organization, relay type devices, timers, counters, data manipulators, and programming.	13036900 Grade level: 10-12 HS Credit(s): 0.5
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: I.M. Terrell*	College Hour(s): 4 Tier I
DUAL CREDIT SOLID STATE ELECTRONICS B (SOSTELEC B DC) **TCC Course: (CETT 1441) Solid State Circuits** **Courses may change due to availability*	**STD36902B**
In this course, students study various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis.	13036900 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): Solid State Electronics A TCC Prerequisite(s): CETT 1409 and TSI Met in Algebraic Math pathway *Offered only at: I.M. Terrell*	HS Credit(s): 0.5 College Hour(s): 4 Tier I
DUAL CREDIT DIGITAL ELECTRONICS AB (DIGELC DC AB) **TCC Course: (CETT 1449) Digital Systems** **Courses may change due to availability*	**STD37443AB**
In this course, students will learn about electronics covering digital systems. Emphasis on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital to-analog circuits, and large-scale integrated circuits.	13037600 Grade level: 10-12 HS Credit(s): 1
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): TSI Met in Algebraic Math pathway *Offered only at: I.M. Terrell*	College Hour(s): 4 Tier I
DUAL CREDIT PROGRAMMABLE LOGIC CONTROLLER II AB (TBD: PROLGCNT2 AB DC) **TCC Course: (ELPT 2445) Programmable Logic Control II** **Courses may change due to availability*	**TBD: STD03690AB**
In this course, students will learn advanced concepts in programmable logic controllers and their applications and interfacing to industrial controls.	N1303690 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: I.M. Terrell*	HS Credit(s): 1 College Hour(s): 4 Tier I
DUAL CREDIT BASIC FLUID POWER AB (BASICFP AB DC) **TCC Course: (HYDR 1345) Hydraulics and Pneumatics** **Courses may change due to availability*	**MAD03683AB**
In this course, students learn the fundamentals of hydraulics and pneumatics, components of each system, and the operations, maintenance, and analysis of each system.	N1303683 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): None TCC Prerequisite(s): None *Offered only at: I.M. Terrell*	HS Credit(s): 1 College Hour(s): 3 Tier I
DUAL CREDIT ROBOTICS II AB (ROBOTIC 2AB DC) **TCC Course: (RBTC 2445) Robot Application, Set-up, and Testing** **Courses may change due to availability*	**STD37003AB**
In this course, students engage in a capstone course that provides the student with laboratory experience in the installation, set-up, and testing of robotic cells. Topics include maintenance.	13037050 Grade level: 10-12
Instructional Material: Contact the Office of Innovation, Early College Programs Department for related materials Prerequisite(s): Robotics II TCC Prerequisite(s): None *Offered only at: I.M. Terrell*	HS Credit(s): 1 College Hour(s): 4 Tier I

Other High School Electives & Late Arrival, Early Dismissal and Enrichment Codes

Additional electives can be found in the individual department sections.

See the Career & Technical Education (CTE) section for further information about CTE and Technology Applications elective courses that can be taken independently or as part of a Programs of Study pathway.

Other Electives - Local Credit Only

OFFICE ASSISTANT I AB (OFFASST1 AB)	**2525 AB**
Course offers students experiences in correct procedures for handling office situations. Provides opportunity for students to learn and practice skills and procedures necessary for greeting visitors, answering the telephone, business, ethics, and filing. This course does not provide any credits that count toward graduation.	NA Grade level: 11 - 12 HS Credit(s): 0
Instructional Material: NA Prerequisites: None *Local credit only*	College Hour(s): NA **Tier III**
STUDENT ASSISTANT SERVICES I AB (STUASST1 AB)	**2535 AB**
Provides one period per day when students work as teacher assistants. This course does not provide any credits that count toward graduation.	NA Grade level: 11 - 12
Instructional Material: NA Prerequisites: None *Local credit only*	HS Credit(s): 0 College Hour(s): NA **Tier III**

Late Arrival / Early Dismissal / Enrichment Codes

Completion of these courses **does not** earn state or local credit and they **are not** listed on the student's transcript.

Late Arrival Codes

0531A	Late Arrival 1A
0531B	Late Arrival 1B
0531AB	Late Arrival 1AB
0535A	Late Arrival 5A
0535B	Late Arrival 5B
0535AB	Late Arrival 5AB
0536A	Late Arrival 6A
0536B	Late Arrival 6B
0536AB	Late Arrival 6AB

High School Enrichment Codes

0589A	HS Enrich A
0589B	HS Enrich B
0589AB	HS Enrich AB

Early Dismissal Codes

0534A	Early Dismissal 4A
0534B	Early Dismissal 4B
0534AB	Early Dismissal 4AB
05355A	Early Dismissal 5A
05355B	Early Dismissal 5B
05355AB	Early Dismissal 5AB
0557A	Early Dismissal 7A
0557B	Early Dismissal 7B
0557AB	Early Dismissal 7AB
0558A	Early Dismissal 8A
0558B	Early Dismissal 8B
0558AB	Early Dismissal 8AB
0559A	Early Dismissal 9A
0559B	Early Dismissal 9B
0599AB	Early Dismissal 9AB
0560A	Early Dismissal 10A
0560B	Early Dismissal 10B
0560AB	Early Dismissal 10AB

Fort Worth Independent School District

School Directory - *Updated December 1, 2021*

Dr. Kent Scribner, Superintendent

100 N. University Dr., Fort Worth, Texas 76107-1360

Phone: 817-814-2000

Grades Served	Secondary Schools	No.#	Phone	Address		Zip	Principal	
6-8	Applied Learning Academy	055	815-5500	3908	McCart Ave	76110	Alice	Buckley
9-12	Arlington Heights	002	815-1000	4501	W. Freeway	76107	Sarah	Weeks
6-11	Benbrook Middle/High	071	815-7100	201	Overcrest Dr.	76126	Richard	Penland
9-12	Carter-Riverside, Amon	001	814-9000	3301	Yucca	76111	Victor	Alfaro
K-8	Como Montessori	063	815-7200	4001	Littlepage	76107	Daniel	McAlister
K-8	Daggett Montessori	194	814-6300	801	W. Jessamine	76110	Victorius	Eugenio
6-8	Daggett, E.M.	042	814-5200	1108	Carlock	76110	Tracy	Smith
9-12	Diamond Hill-Jarvis	004	815-0000	1411	Maydell	76106	James	Garcia
9-12	Dunbar, Paul Laurence	005	815-3000	5700	Ramey	76112	Justin	Edwards
9-12	Eastern Hills	006	815-4000	5701	Shelton	76112	Katrina	Smith
6-8	Elder, J.P.	044	814-4100	709	N.W. 21st	76164	David	Trimble
7-8	Forest Oak LA	045	815-8200	3221	Pecos	76119	Seretha	Lofton
6	Forest Oak 6th Grade LA	064	815-8400	4801	Eastline	76119	Seretha	Lofton
9-12	I.M. Terrell Academy for STEM & VPA	087	815-2100	1411	I.M. Terrell Circle	76102	Baldwin	Brown
6-9	International Newcomer Academy	062	815-5600	3813	Valentine	76107	Angelia	Ross
6-8	Jacquet, J.M. LA	059	815-3500	2501	Stalcup Rd.	76119	Lakeisha	Sasser
6-8	James, William	048	814-0200	1101	Nashville	76105	Melissa	Rincon
6-8	Kirkpatrick, M.L	049	814-4200	3201	Refugio	76106	Jeffrey	Bartolotta
6-8	Leonard	061	815-6200	8900	Chapin Rd	76116	Sara	Gillaspie
9-12	Marine Creek Collegiate	085	515-7784	4801	Marine Creek Pkwy	76179	Thomas	Fraire
6-8	McClung, Jean	070	815-5300	3000	Forest Ave	76112	Tremayna	Thomas
6	McLean 6th Grade Center	069	814-5700	3201	South Hills	76109	Karen	Brown
6-8	McLean, W.P.	050	814-5300	3816	Stadium	76109	Barbara	Ozuna
6-8	Meacham, W.A.	051	815-0200	3600	Weber	76106	Carlos	Mendoza
6-8	Meadowbrook	052	815-4300	2001	Ederville	76103	Kristin	Foreman
9-12	Metro Opportunity (HS)	019	814-6700	2801	Patino Rd	76107	Aundra	Bohanon
6-8	Middle Level Learning Center	018	814-6800	2801	Patino Rd	76107	Aundra	Bohanon
6-8	Monnig, William	053	815-1200	3136	Bigham	76116	Kellye	Kirkpatrick
6-8	Morningside	054	815-8300	2751	Mississippi	76104	Monica	Garrett
9-12	North Side	008	814-4000	2211	McKinley	76164	Antonio	Martinez
9-12	Paschal, R.L.	010	814-5000	3001	Forest Park	76110	Troy	Langston
9-12	Polytechnic	009	814-0000	1300	Conner	76105	Nick	Torrez
6-8	Riverside	056	814-9200	1600	Bolton	76111	Ryan	Catala
7-8	Rosemont	057	814-7200	1501	W. Seminary	76115	Xavier	Sanchez
9-12	South Hills	003	814-7000	6101	McCart	76133	Rodrigo	Durbin
9-12	Southwest	014	814-8000	4100	Altamesa	76133	John	Engel
6-8	Stripling, W.C.	058	815-1300	2100	Clover Lane	76107	Amy	Chritian
9-12	Success	021	815-2700	4100	Altamesa	76133	Ingrid	Williams
9-10	TCC South-FWISD Collegiate	086	515-4402	5301	Campus Dr	76119	Quanda	Collins
9-12	Trimble Technical, Green B.	011	815-2500	1003	W. Cannon	76104	Omar	Ramos
9-12	TX Academy of Biomedical Sciences	082	515-1660	300	Trinity Campus Dr	76102	Jack	Henson
7-8	Wedgwood	060	814-8200	3909	Wilkie Way	76133	Robert	Burrell
6	Wedgwood 6th Grade Center	043	814-8300	4212	Belden	76132	Cheryl	Johnson
9-12	Western Hills	015	815-6000	3600	Boston, Benbrook	76116	Keri	Flores
6-12	World Languages Institute	084	815-2200	4921	Benbrook Hwy	76116	Marie-Lise	Mosbeaux
9-12	Wyatt, O.D.	016	815-8000	2400	E. Seminary	76119	Howard	Robinson
6-12	Young Men's Leadership Academy	083	815-3400	5100	Willie	76105	Rodney	White
6-12	Young Women's Leadership Academy	081	815-2400	401	E. 8th St	76102	Tamara	Albury

HIGH SCHOOL COURSE CATALOG

Quick Page Reference

General Information

4 High School General Information

17 Grading Guidelines

25 Foundation Graduation Plans

Course Descriptions

33 Academic Preparatory Programs

35 English Language Arts & Reading

56 Mathematics

66 Science

85 Social Studies

98 Fine, Visual & Performing Arts

138 World Languages

152 Health & Physical Education

166 JROTC

170 Career & Technical Education

327 P-TECH

376 T-STEM

388 Other Electives