East Central High School

Course Selection Guide

Published Fall 2022

For School Year 2022-2023

Dear ECHS Student: Use this guide to assist you in making course selection decisions for the 2022-2023 school year and in planning your graduation program. Please share this publication with your parents/guardians so that they may also be involved in your course selection experience. See a counselor or an academic dean for additional questions regarding course selection. Also, your classroom teachers serve as an excellent resource for advising you on suggested courses for next year in their content areas.

You will find a current graduation requirement chart (Foundation Plan and Foundation Plan with Endorsements). We have also included course descriptions for each department.

Nov.2021-Dec. 2021: (9^{th}-11^{th}) Graduation requirements presented by counselors and choice slips distributed through various classes.
Dec. 2021 – Jan. 2022: (9^{th}-11^{th}) Register for courses on-line in various classes.
Jan. 2022 – Feb. 2022: 8^{th} grade classroom presentations and on-line registration.
Late Spring Semester: Student course requests will be mailed home. Any changes must be submitted to the high school counseling center by June 4th.
Questions? Contact the ECHS Counseling Center at (210) 634-7100.

The East Central Independent School District does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. East Central ISD provides a free, appropriate public education consisting of regular and special education and related aids and services in CTE programs that are designed to meet individual educational needs of disabled persons as adequately as the needs of non-disabled persons.

STATE GRADUATION PLANS FOR THE CLASS OF 2018 & Beyond

Foundation Program	Foundation Program with Endorsement
4 Credits English English 1, English 2, English 3, Advanced English Class	**4 Credits English** English 1, English 2, English 3, Advanced English Class
3 Credits Math Algebra 1, Geometry, Advanced Math Class	**4 Credits Math** Algebra 1, Geometry, Advanced Math Class, 2nd Advanced Math Class
3 Credits Science Biology, IPC or Advanced Science Class, Advanced Science Class	**4 Credits Science** Biology, IPC or Advanced Science Class, Advanced Science Class, Additional Advanced Science Class
3 Credits Social Studies W. History or W. Geography or Combo, US History, Government, Economics	**3 Credits Social Studies** W. History or W. Geography or Combo, US History, Government, Economics
2 Credits Languages other than English (LOTE) 2 Credits in same LOTE or 2 computer science	2 Credits Languages other than English 2 Credits in same LOTE or 2 computer science
1 Credit Physical Education	1 Credit Physical Education
1 Credit Fine Arts	1 Credit Fine Arts
5 Credits Electives	7 Credits Electives
Total=22 Credits	Total=26 Credits
(The Foundation Program is available after the sophomore year and only with parent permission and a meeting with the guidance counselor.)	(Distinguished Level of Achievement requires an Endorsement and Algebra 2.)

Endorsements

With the new graduation requirements approved by House Bill 5 and the Texas State Board of Education, students have more choices in course work that lead to a high school diploma. All students MUST select an Endorsement area prior to entering their 9th grade year. In ECISD, this will be accomplished during their course selection period taking place in January to February during their 8th grade year. Over the course of a student's high school career, they can elect to change Endorsements or add Endorsement areas after the junior year. There are five Endorsement areas from which students may choose. They are:

- Arts & Humanities
- Business and Industry
- Multidisciplinary Studies
- Public Services
- S.T.E.M. (Science, Technology, Engineering and Mathematics)

The pages that follow are course programs of study in which students may choose to earn an Endorsement. Pathways may change as the State of Texas makes annual revisions to courses and course standards.

ENDORSEMENT COURSE SEQUENCES

Select the endorsement in which you are interested. The coherent course sequence you need to follow is listed by grade level. You must meet prerequisites before enrolling in a course (listed in course description). **Unless otherwise listed, you will need to complete four credits within the Endorsement sequence.**

MULTIDISCIPLINARY

To earn a Multidisciplinary Endorsement, a student must complete a sequence of courses listed below.

Area of Interest	9th Grade	10th Grade	11th Grade	12th Grade
Advanced Elective Measures	A student must successfully complete a minimum of 4 advanced elective credits (beyond Level 1) from more than 1 Endorsement area – designated in **BOLD.**			
Advanced Placements AP/ Dual Credit	You must successfully complete the Foundation curriculum **INCLUDING** 4 AP and/or Dual Credit credits from English, math, science, social studies, languages other than English OR Fine Arts.			
4X4 Core Courses	You must successfully complete the Foundation curriculum **INCLUDING** four credits in each of the four core content areas (must include Chemistry OR Physics and English 4 - ***College Prep English does NOT qualify*)**.			

STEM ENDORSEMENT

(Science, Technology, Engineering, and Math)

To complete a STEM Endorsement, students must complete Algebra 2, Chemistry, and Physics, and a coherent sequence of courses listed below.

Program of Study	Level 1 Courses	Level 2 Courses	Level 3 Courses	Level 4 Courses
Engineering	7515: Principles of Applied Engineering (1)	7586: Manufacturing Engineering Technology (1)	**7524: Engineering Design & Presentation I (1)**	**7525: Engineering Design & Presentation II (2)**
Cyber Security	7520: Foundations of Cybersecurity (1)	6900: AP Computer Science Principles (1)	**7517: Networking (1)**	**7518: Cybersecurity Capstone (1)**
Programming and Software Development	6898: Fundamentals of Computer Science (1)	6900: AP Computer Science Principles (1)	6899: **AP Computer Science A (1)**	**7671: Practicum in IT (2)**
Advanced Math	Beyond Algebra I and Geometry, you must complete three credits in Mathematics by successfully completing Algebra II and two additional mathematics courses for which Algebra II is a prerequisite: Pre-Calculus (1) AP Calculus AB (1) Engineering Mathematics (1) AP Computer Science (1) Advanced Quantitative Reasoning (1) AP Statistics (1) AP Calculus BC (1)			

Advanced Science	You must complete Biology, Chemistry, Physics, and two additional science credits from the courses listed below. Many of these courses are offered at a regular and advanced level. Check prerequisites. AP Chemistry (1) Aquatic Science (1) AP Physics C (1) AP Biology (1) AP Environmental Science (1) Engineer Your World (1) Anatomy & Physiology (CTE) (1) Environmental Systems (1) Medical Microbiology (CTE) (1) Pathophysiology (CTE) (1) Food Science (CTE) (1) Forensic Science (CTE) (1) Advanced Animal Science (CTE) (1)

BUSINESS AND INDUSTRY ENDORSEMENT (B&I)

To earn a Business and Industry Endorsement, a student must complete a coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced (bolded) CTE course, unless otherwise denoted within the sequence.

Program of Study	Level 1 Courses	Level 2 Courses	Level 3 Courses	Level 4 Courses
Journalism & Communication	You must successfully complete **FOUR** English elective credits, three of which must come from one of the following course areas: **Advanced Journalism Newspaper, Advanced Journalism Yearbook, Public Speaking, or Debate**			

AGRICULTURE, FOOD, and NATURAL RESOURCES CLUSTER (B&I)

Agri-Business	7211: Principles of Agricultural, Food, & Natural Resources (1)	7251: Professional Stds. & Communication (Ag Leadership I (1)	7253: Ag Leadership, Research, & Communication (Ag Leadership II (1)	**7252: Ag Business & Mktg. (Ag Leadership and Development III) (1)**
Animal Science	7211: Principles of Agricultural, Food, & Natural Resources (1)	7255: Small Animal Mgmt. (.5) & 7237: Equine Science (.5)	**7236: Livestock Production (1)**	**7215: Veterinary Medical Applications with Lab (2) Or 7258: Advanced Animal Science (1)** **7271: Practicum in Agriculture, Food, and Natural Resources (2)**
Applied Agricultural Engineering	7211: Principles of Agricultural, Food, & Natural Resources (1)	7239: Agricultural Mechanics and Metal Technologies (1)	**7235: Agricultural Structures and Design with Lab (2)**	**7233: Agricultural Equipment Design and Fabrication with Lab (2)**
Plant Science	7211: Principles of Agricultural, Food, & Natural Resources (1)	7223: Horticultural Science (1)	7221: Floral Design (1)	**7222: Advanced Floral Design (1)**

ARCHITECHTURE & CONSTRUCTION CLUSTER (B&I)				
Architectural Design	7512: Principles of Architecture (1)	7521: Architectural Design I (1)	**7522: Architectural Design II (2)**	**7530: Practicum in Architectural Design (2)**
Construction Management and Inspection	7513: Principles of Construction (1)	7501: Construction Management I (2)	**7507: Construction Management II (2)**	**7502: Practicum in Construction Management (2)**

ARTS, A/V TECHNOLOGY & COMMUNICATIONS CLUSTER (B&I)				
Design and Multimedia Arts – Animation	-7721:Principles of Arts, A/V Technology, & Communication (1)	7532: Animation I (1)	**7999: Animation II (2)**	**7535: Practicum in Animation (2)**
Design and Multimedia Arts - Fashion Design	7721: Principles of Arts, A/V Technology, & Communication (1)	7122: Fashion Design I (1)	**7996: Fashion Design II (2)**	**7125: Practicum in Fashion Design (2)**
Design and Multimedia Arts - Graphic Design	7721: Principles of Arts, A/V Technology, & Communication (1)	7531: Graphic Design and Illustration I (1)	**7997: Graphic Design I and Illustration I (2)**	**7534: Practicum in Graphic Design and Illustration (2)**
Design and Multimedia Arts - Video Game Design	7721: Principles of Arts, A/V Tech, & Communication (1)	6817: Video Game Design (1)	**6818: Video Game Programming (1)**	**6820: Advanced Video Game Programming (1)**
Digital Communications	7721: Principles of Arts, A/V Tech, & Communication (1)	7722: Audio Video Production I (1)	**7998: Audio Video Prod. II (2)**	**7724: Practicum in A/V Production (2)**
BUSINESS MARKETING, & FINANCE CLUSTER (B&I)				
Accounting & Financial Services	6613: Principles of Business, Marketing, & Finance (1)	**6721: Accounting I (1)**	**6722: Accounting II (1)**	**7300: Practicum in Business Mgmt. (2)**
Business Management	6613: Principles of Business, Marketing, & Finance (1)	**7313: Business Management (1)**	**7312: Business Law (1)**	**7300: Practicum in Business Mgmt. (2)**

HOSPITALITY AND TOURISM CLUSTER (B&I)				
Culinary Arts	7566: Introduction to Culinary Arts (1)	**7563: Culinary Arts 1**	**7567: Advanced Culinary Arts (2)**	**7565: Practicum in Culinary Arts (2)** **3610: Food Science (1)**
MANUFACTURING CLUSTER (B&I)				
Welding	7231: Introduction to Welding (1)	7234: Welding I (2)	**7832: Welding II- Dual Credit (2)**	**7835: Practicum in Manufacturing (2)**
Advanced Manufacturing and Machinery Mechanics	7515: Principles of Applied Engineering	7510: Robotics I (1)	**- Robotics II (1)**	**7835: Practicum in Manufacturing (2)**

Alamo Academies Business and Industry Endorsement Programs of Study
ALL Alamo Academy programs are Off Campus and ONLY available during the Junior and Senior year

Alamo Area Aerospace Academy (Aviation Maintenance)	-Occupational Safety and Environmental Technology - Aircraft Airframe Technology **Both courses only offered at Alamo Academies offsite**	**-Practicum in Transportation Systems** **Course only offered at Alamo Academies offsite**
Heavy Equipment Academy (Diesel and Heavy Equipment)	- Occupational Safety and Environmental Technology - Diesel Equipment Technology I **Both courses only offered at Alamo Academies offsite**	**-Diesel Equipment Technology II with Lab** **Course only offered at Alamo Academies offsite**
Advanced Technology and Manufacturing Academy	- Occupational Safety and Environmental Technology - Metal Fabrication and Machining	**-Precision Metal Manufacturing** **-Practicum in Manufacturing** **- Courses only offered at Alamo Academies offsite**

PUBLIC SERVICES ENDORSEMENT (PS)

To earn a Public Service Endorsement, a student must complete a coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced (bolded) CTE course, unless otherwise denoted within a sequence.

Program of Study	Level 1 Courses	Level 2 Courses	Level 3 Courses	Level 4 Courses
HEALTH SCIENCE CLUSTER (PS)				
Nursing (CNA)	7401: Principles of Health Science (1)	7035: Science of Nursing (1)	7030: Clinical Ethics (1)	3522: Pathophysiology (1) 7411: Practicum in Health Science-CNA

Therapeutic Healthcare – Certified Medical Assistant (CMA)	7401: Principles of Health Science (1)	7421: Medical Terminology (1)	7402: Health Science Theory (1) or 3520: Medical Microbiology (1)	**7505: Practicum in Health Science – CMA (2)**
Therapeutic Healthcare – Pharmacy Technician	7401: Principles of Health Science (1)	7421: Medical Terminology (1) 7402: Health Science Theory (1)	3518: Anatomy & Physiology 7405: Pharmacology (1)	**7407: Practicum in Health Science – Pharmacy Technician (2)**
ARMY JROTC				
JROTC	- JROTC 1	- JROTC 2	- JROTC 3	- JROTC 4
EDUCATION & TRAINING CLUSTER (PS)				
Education & Training	7151: Principles of Education and Training (1)	6680: Communication and Technology in Education	**7174: Instructional Practices (Teacher Prep I) (2)**	**7175: Practicum in Education & Training (Teacher Prep II) (2)**
Early Learning	7151: Principles of Education and Training (1)	7168: Child Development Associate Foundations (1)	**7163: Child Guidance (2)**	**7345: Practicum in Human Services (2)**
LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY (PS)				
Law Enforcement	7555: Principles of Law, Public Safety, Corrections, & Security (1)	7557: Law Enforcement I (1)	**7559: Law Enforcement II 7560: Correctional Services**	**3612: Forensic Science (1) or or 7552: Practicum in Law Enforcement (2)**
Emergency Services	7555: Principles of Law, Public Safety, Corrections, & Security (1)	7539: Disaster Response (1)	7540: Fire Science 1 (2)	**7541: Firefighter Science 2 (2) and 7408: EMT Basic 2 (2)**
Alamo Academies Public Service Endorsement Programs of Study ALL Alamo Academy programs are Off Campus and ONLY available during the Junior and Senior year				
Health Professions Academy	- Principles of Health Science (1)	- Health Science Theory (1)	**- Anatomy and Physiology and English 3 (1)**	**- Pathophysiology (1) or - Medical Microbiology (1)**

ARTS AND HUMANITIES

To earn an Arts and Humanities Endorsement, a student must complete a sequence of courses as listed below

Area of Interest	9th Grade	10th Grade	11th Grade	12th Grade
Social Studies	- World Geography (1) - World Geography Pre-AP (1) - Human Geography (1)	- World History (1) - AP World History (1)	- Mexican American Studies (1) -African American Studies (1) - Psychology (.5) - AP Psychology (1) - Sociology (.5) - US History (1) - AP US History (1) - US History – Dual Credit (1)	-Mexican American Studies (1) -African American Studies (1) - Psychology (.5) - AP Psychology (1) - Sociology (.5) - US Government (.5) - AP US Government (.5) - Economics (.5) - AP Economics (.5)
	You must successfully complete **5 credits of social studies** courses. These courses may be at the regular, honors, AP, or Dual Credit level. **US History must be taken during the junior year and US Government and Economics must be taken during the senior year.**			
Fine Arts	Students must complete **4 levels** of Fine Arts from one or two categories or disciplines.			
Languages Other Than English (LOTE)	Students must complete **4 levels** of the same language, or two levels of the same language in two different languages for 4 total credits. Students may also complete **4 levels** of American Sign Language.			

English Language Arts Courses ECHS

Graduation Requirements: Students must complete 4 credits of English

ELA Courses	Prerequisites Requirements
1111 English 1 1191 English 1 Honors 1091 English 1 Honors Colloquium	None
	Colloquium required to pair with Colloquium AP Human Geography
1001 ESOL I 1002 ESOL II	This is a restricted course
1222 English II 1282 English II Honors 1092 English II Honors Colloquium	English I, English I Honors, or English I Honors Colloquium
	Colloquium required to pair with corresponding Colloquium History course
1333 English III 1399 AP English III 1095 AP English III Colloquium 1335 English III Dual Credit	English II, English II Honors, or English II Honors Colloquium
	Colloquium required to pair with corresponding Colloquium History course
	Dual Credit English III: ***Approved Dual Credit Application, Qualifying Exam Scores on TSIA and/or AP English examinations, and admission application and acceptance for Palo Alto College (Alamo College District).***

1444 English IV 1420 College Prep English 1499 AP English IV 1097 AP English IV Colloquium 1500 English IV Dual Credit 2	English III, AP English III, or AP English III Colloquium
	Colloquium required to pair with corresponding Colloquium History course
	Dual Credit English IV: ***Approved Dual Credit Application; Students must earn a minimum of a "C" in English 3 Dual Credit 1302 in order to take the English 2322 course in the fall semester***
ELA Elective Courses: These courses do not satisfy the ELA graduation requirements, but they are elective course options	
1520 Creative Writing	None
1022-24 Reading I, II, III	Reading Assessment
6635 Introduction to Journalism	None
6640 Photojournalism	None
6651-54 Newspaper Prod. I, II, III, IV	Introduction to Journalism, Middle School Experience, or portfolio
6641-44 Yearbook I, II, III, IV	Introduction to Journalism, Middle School Experience, or portfolio
1520 Creative Writing	None

English Language Arts Course Descriptions

1111 English 1 ***Grade: 9*** ***Credit: 1.0***
Prerequisite: None
This course develops students' foundational knowledge and skills in literacy with an emphasis on comprehension to respond. Learning experiences include analyzing author's purpose and craft among multiple genres, engaging in the expository writing process to produce original compositions, and practicing inquiry and research. Students will apply critical listening, speaking, reading, writing, and thinking in independent and collaborative tasks.

1191 English 1 Honors ***Grade: 9*** ***Credit: 1.0***
Prerequisite: None
This course develops students' foundational knowledge and skills in literacy with an emphasis on comprehension to respond. Learning experiences include analyzing author's purpose and craft among multiple genres, engaging in the expository writing process to produce original compositions, and practicing inquiry and research. Students will apply critical listening, speaking, reading, writing, and thinking in independent and collaborative tasks. This course prepares students for English II Honors and the Advanced Placement examinations in English Language and Literature.

1001 ESOL 1 (English for Speakers of Other Languages) ***Grade: 9*** ***Credit: 1.0***

1002 ESOL 2 ***Grade: 10*** ***Credit: 1.0***
These are restricted courses
In this course, students will practice listening, speaking, reading, writing, and thinking through comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. The course will focus on academic oracy (proficiency in oral expression and comprehension), authentic reading, and reflective writing. Students will continue to develop knowledge and skills with increased complexity and nuance in order to think critically and adapt to the ever-evolving nature of language and literacy.

1222 English 2 ***Grade: 10*** ***Credit: 1.0***
Prerequisite: English 1
This course develops students' foundational knowledge and skills in literacy with an emphasis on comprehension to respond. Learning experiences include analyzing author's purpose and craft across multiple genres, engaging in the persuasive writing process to produce original compositions, and practicing inquiry and research. Students will apply critical listening, speaking, reading, writing, and thinking in independent and collaborative tasks.

1282 English 2 Honors ***Grade: 10*** ***Credit: 1.0***

Prerequisite: English 1 or English 1 Honors

This course develops students' foundational knowledge and skills in literacy with an emphasis on comprehension to respond. Learning experiences include analyzing author's purpose and craft across multiple genres, engaging in the persuasive writing process to produce original compositions, and practicing inquiry and research. Students will apply critical listening, speaking, reading, writing, and thinking in independent and collaborative tasks. This course prepares students for AP English 3 and the Advanced Placement examinations in English Language and Literature.

1333 English 3 ***Grade: 11*** ***Credit: 1.0***

Prerequisite: English 2

This course develops students' foundational knowledge and skills in literacy with an emphasis on evaluating author's purpose and craft across multiple genres, engaging in the analytical writing process to produce original compositions, and conducting inquiry and research through synthesis-based tasks. Students will apply critical listening, speaking, reading, writing, and thinking in independent and collaborative tasks.

1399 AP English 3 (AP English Language) ***Grade: 11*** ***Credit: 1.0***

Prerequisite: English 2 or English 2 Honors

This course prepares students to take the Advanced Placement examination in English Language and Composition during the Spring semester. Students will engage in extensive critical readings of texts across multiple genres in order to conduct in-depth rhetorical analysis and compose multi-paragraph essays in various writing modes.

1444 English 4 ***Grade: 12*** ***Credit: 1.0***

Prerequisite: English 3

This course develops students' knowledge in 21st century literacy skills with an emphasis on analyzing and evaluating author's purpose and craft across multiple genres, engaging in the analytical writing process to produce multiple original compositions, executing inquiry with real world relevance, conducting ethical research through synthesis-based tasks, and creating multimedia projects of contemporary significance. Students will apply critical listening, speaking, reading, writing, and thinking skills independently and collaboratively.

1499 AP English 4 (AP English Literature) ***Grade: 12*** ***Credit: 1.0***

Prerequisite: English 3 or AP English #

This course prepares students for the Advanced Placement examination in English Literature during the Spring semester. Students will engage in extensive critical readings of texts across multiple genres in order to conduct in-depth literary analysis and compose multi-paragraph essays in various writing modes.

1420 College Prep English ***Grades: 12*** ***Credit: 1.0***

Prerequisite: English 3

In this college preparatory course, students improve their reading and writing skills through engagement with a variety of texts across content areas and genres. As a result, students develop and express ideas clearly and effectively to communicate with different audiences for various purposes and occasions. Students must pass with an average grade of 75 or better on the three minimum essays and the comprehensive portfolio assessment in order to be considered TSI exempt for Alamo Colleges, UTSA, and Texas A&M San Antonio. ELAR College Prep is intended to build the foundation for the study of Freshman Composition. **This course qualifies as a NCAA core course.**

1091, 1092, 1095, 1097 Honors Colloquium 1-4 ***Grades: 9-12*** ***Credits: 2.0***

Prerequisite: Acceptance or provisional placement in G/T Program

Honors Colloquium is an English and social studies humanities-based interdisciplinary program for gifted and talented students. The Colloquium program is designed to meet the unique learning needs of gifted students through a differentiated curriculum providing enrichment, acceleration, grouping, and guidance. Classes meet two periods daily for the entire year. The transcripts of Colloquium students will reflect credit in English and social studies

(Honors or AP level). Students have the opportunity to earn college credit by taking AP exams and will be expected to take the exam in the spring semester.

1335 English 3 Dual Credit (1301-1302) ***Grade: 11/12 Credit: .5***
1498 English 4 Dual Credit (1301-1302) ***Grade: 11/12 Credit: .5***
Prerequisite: English 2 or English 2 Honors/ English 3 or AP English 3, Approved Dual Credit Application, Qualifying Exam Scores on TSIA and/or AP English examinations, and admission application and acceptance for Palo Alto College (Alamo College District). Students must earn a minimum of a "C" in English 1301 in the fall semester in order to take English 1302 in the spring semester.
In the fall semester, this course is an intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. There is an emphasis on effective rhetorical choice, including audience, purpose, arrangement, and style. Students focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis. In the Spring semester, this course is an intensive study of an practice in the strategies and techniques for developing research based expository and persuasive texts. There is an 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.

1500 English 4 Dual Credit 2 (2322-2323) ***Grade: 12 Credit: 1.0***
Prerequisite: Approved Dual Credit Application; Students must earn a minimum of a "C" in English 3 Dual Credit 1302 in order to take the English 2322 course in the fall semester; Students must earn a minimum of a "C" in English 4 Dual Credit 2322 in order to take the English 2323 course in the spring semester.
This course is a survey of the development of British literature (fall semester: Anglo-Saxon period to the Eighteenth Century; spring semester: Romantic period to the present). 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.

1520 Creative Writing ***Grades: 9-12 Credit: 0.5***
Prerequisite: None
Students develop ways to practice their writing skills through creative writing process in essays, short stories, poems, and plays. Students evaluate and analyze their own writing as well as the writing of others. Students are given the opportunity to explore publishing in a literary magazine or develop a web page as a resource for displaying their writing. **This course qualifies as a NCAA core course.**

1022-24 Reading 1-3 ***Grades: 9-12 Credit: 1.0***
Prerequisite: Reading Assessment
These courses provide students the opportunity to strengthen their reading skills. The instruction is individualized, intensive, and utilizes multi-sensory instructional strategies. The courses contain writing and spelling components, strategies for decoding and encoding, and meaning based instruction with an emphasis on comprehension and composition. Enrollment in this course is restricted to students who are recommended by committee. **This course does NOT meet core course requirements for NCAA.**

6635 Introduction to Journalism ***Grades: 9-12 Credit: 0.5***
Prerequisite: None
Journalism is the study of mass media: print, electronic and film, and its place in historical and current society. Students are assigned news events to feature stories, work with major photography projects, and collaborate with yearbook production. Topics include the methods of news gathering, the structure of the lead, construction of special types of stories, editing, layout and design. Class members will use interview, print, and film media to gain insight into journalism as a career. Students will prepare for staff positions on the school newspaper or yearbook. Typing experience is recommended, but not required. Students who enroll in this class should have an interest in participating in the school yearbook or newspaper the following year. **This course qualifies as a NCAA core course.**

6640 Photojournalism ***Grades: 9-12 Credit: 1.0***
Prerequisite: None

Students learn camera handling, f-stops, shutter speeds, depth-of-field, and composition. Units are digital and will be completed on the computer. Students will photograph, "A Day in the Life of," at a selected location during a one-day field trip or event. Other assignments include portraits, sports, nature, and a variety of composition shots.

6651 Newspaper Production 1 ***Grades: 9-12 Credit: 1.0***
Prerequisite: Introduction to Journalism, middle school experience, or portfolio assessment

6652 Newspaper Production 2 ***Grades: 10-12 Credit: 1.0***
Prerequisite: Newspaper Production 1

6653 Newspaper Production 3
Prerequisite: Newspaper Production 2 ***Grades: 11-12 Credit: 1.0***
Students are assigned to staff positions on the school newspaper. Assigned projects will require students to further explore areas of journalism and communications such as social responsibility, current events, ethics, mass communication, and advertising. Studies will include actual production techniques of newspapers and news magazines. Students will be required to produce and edit stories, photos, art, and/or layouts for publication as well as participate in the advertising campaign which includes the sale of advertising space. Participation in UIL competition and journalism workshops is encouraged. Ad sales are required as part of this course. **This course does NOT meet core course requirements for NCAA.**

6654 Newspaper Production 4 ***Grade: 12 Credit: 1.0***
Prerequisite*: *Newspaper Production 3
This course is designed for advanced journalism high-achieving students. The students are provided opportunities to do one or more of the following: conduct research, produce original work in print, develop an advanced skill, or study a specific area of interest. Students are required to participate in sales of advertisements.

6641 Yearbook 1 ***Grades: 9-12 Credit: 1.0***
Prerequisite: Introduction to Journalism, middle school experience, or portfolio assessment
6642 Yearbook 2 ***Grades: 10-12 Credit: 1.0***
Prerequisite: Yearbook 1
6643 Yearbook 3 ***Grades: 11-12 Credit: 1.0***
Prerequisite: Yearbook 2
Students are assigned to positions of responsibility on the staff of the yearbook. The class will work as a team to develop a theme and layout plan for the book. Each student will be responsible for covering and reporting on a number of different areas. Skills in reporting, feature writing, headlines, photo work, layout, and editing will be employed as well as marketing skills to sell advertising space in the yearbook. Participation in UIL competition and journalism workshops are encouraged. Ad sales are required as part of this course. **This course does NOT meet core course requirements for NCAA.**

6644 Yearbook 4 ***Grade: 12 Credit: 1.0***
Prerequisite: Yearbook 3

Math Courses at ECHS

Graduation Requirements: Students must complete 3 credits in math. To graduate with an endorsement, students must complete 4 credits including Algebra I, Geometry, and at least 2 other math courses.

Math Courses	Prerequisites Requirements

2014/ 2015 Strategic Learning for High School Math	None: This course is required for all freshman who are not successful on the Algebra I EOC but have an Algebra I credit **This course does not meet the core requirements for NCAA**
2121 Algebra I	Math 2 or 8th Grade Math (or Equivalent)
2221 Geometry 2291 Geometry Honors	Algebra I
2126 Algebraic Reasoning	Algebra I
2301 Mathematical Models with Applications	Algebra I Recommended Prerequisite: Geometry **This course does not meet the core requirements for NCAA**
2588 Statistics	Algebra I
2311 Algebra I 2391 Algebra 2 Honors	Algebra I Recommended Prerequisite: Geometry
2418 Engineering Mathematics	Algebra 2
7403 Mathematics for Medical Professionals	Algebra I, Geometry, and Algebra 2 **This course does not meet the core requirements for NCAA**
2411 Pre- Calculus 2491 Pre- Calculus Honors	Algebra I, Geometry, and Algebra 2
2498 College Pre- Calculus (Dual Enrollment)	Algebra I, Geometry, and Algebra 2
2599 AP Calculus AB	3 Credits of Math to include Pre- Calculus
2595 AP Calculus BC	3 Credits of Math to include Pre- Calculus
2589 AP Statistics	3 Credits of Math to include Algebra 2
2408 College Prep Mathematics	Algebra I, Geometry, and Algebra 2 **This course does not meet the core requirements for NCAA**

Math Course Descriptions

2014/2015 Strategic Learning for High School Math Grades: 9-10 Credit: 1.0

Prerequisite: None. This course is REQUIRED for all freshmen who are not successful on the Algebra I EOC, but have Algebra 1 credit.

This course is intended to create strategic mathematical learners from underprepared mathematics students. The basic understandings will stimulate students to think about their approach to mathematical learnings. Students will deepen their understanding of both the teaching and learning processes involved in mathematics to include input errors, output errors, patterns and reasoning. **This course does NOT meet core course requirements for NCAA.**

2121 Algebra 1 Grades: 9-12 Credit: 1.0

Prerequisite: Math 2 or Grade 8 Math or Equivalent

Algebra 1 is designed to expand the basic arithmetic skills to a more abstract level required for advanced mathematics. Topics studied includes real number operations, function concepts, rational and polynomial concepts, and linear functions, inequalities with one or two variables, graphs in a plane, square roots, and quadratic functions.

2126 Algebraic Reasoning Grades: 9-12 Credit: 1.0

Prerequisite: Algebra 1

Students will broaden their knowledge and application of algebraic concepts by using multiple representations of relationships that include linear, quadratic, square root, rational, cubic and exponential functions. Additional topics studied include patterns, structures, composition of functions, modeling real world applications through algebraic methods and problem solving. **This course does NOT meet core course requirements for NCAA.**

2221 Geometry ***Grades: 9-12 Credit: 1.0***
2291 Geometry Honors ***Grades: 9-12 Credit: 1.0***
Prerequisite: Algebra 1
This course provides a general study of plane and solid geometry. Techniques used in deductive reasoning will be introduced. Topics include geometric properties, postulates and theorems, triangles, polygons, circles, geometric formulas, constructions, coordinate geometry, and transformations.

2301 Mathematical Models with Applications ***Grades: 9-12 Credit: 1.0***
Prerequisite: Algebra 1
Recommended Prerequisite: Geometry
Mathematical Models with Applications combines algebraic, geometric, and graphical reasoning to model and solve real-life applied problems involving money, data, chance, patterns, music, design, and science. **This course does NOT meet core course requirements for NCAA.**

2588 Statistics ***Grades: 10-12 Credit 1.0***
Prerequisite: Algebra 1
Students will study various techniques for analyzing data. Topics include sampling and experimentation, categorical and quantitative data, probability and random variables, and inference. Students will explore how these statistical methods connect to real world situations and the interpretation and analysis of data.

2311 Algebra 2 ***Grades: 10-12 Credit: 1.0***
2391 Algebra 2 Honors ***Grades: 10-12 Credit: 1.0***
Prerequisite: Algebra 1
Recommended Prerequisite: Geometry
Algebra 2 is designed to increase skills in algebraic operations. Studies include the complex number system, higher-degree polynomials, and exponential and logarithmic functions, and second-degree equations, systems of linear equations, sequence and series, and application of algebraic skills through stated problems.

2418 Engineering Mathematics ***Grades: 11-12 Credit: 1.0***
Prerequisite: Algebra 2
Engineering Mathematics is a course where you will solve and model robotic design problems. Students will also use a variety of mathematical methods and models to represent and analyze problems involving electrical measurement, manufacturing processes, materials engineering, mechanical drives, hydraulics, and robotics with computer programming.

7403 Mathematics for Medical Professionals ***Grades: 11-12 Credit: 1.0***
Prerequisites: Algebra 1, Geometry and Algebra 2
In Medical Mathematics students will extend and apply mathematical skills necessary for health science professions. Course content consists primarily of high school level mathematics concepts and their applications to health science professions. Students will demonstrate high levels of mathematical thought through hands-on experiences which extend beyond traditional computation, algebra, and geometry and out to all health science professions. This course meets a mathematics credit requirement for high school. **This course does NOT meet core course requirements for NCAA.**

2411 Pre-calculus ***Grades: 11-12 Credit: 1.0***
2491 Pre-calculus Honors ***Grades: 11-12 Credit: 1.0***
Prerequisite: Algebra 1, Geometry, and Algebra 2
Topics in this college-preparatory course include functions and their graphs, trigonometric identities and equations, vectors, periodic functions, and trigonometric application to the sciences. Pre-calculus reviews and unifies the ideas and skills of algebra, geometry, and trigonometry for analytic applications.

2498 College Pre-calculus (Dual Enrollment) ***Grades: 11-12 Credit: 1.0***
Prerequisite: Algebra 1, Geometry, Algebra 2

This dual enrollment course is in collaboration with the University of Texas at Austin OnRamps initiative. OnRamps' innovative dual enrollment program brings rigorous courses aligned with the state of Texas Pre-calculus curriculum deepening and extending the student's knowledge of functions, graphs, and equations from their high school algebra and geometry courses so they can successfully work with the concepts in a rigorous university-level Calculus course. This course is designed to push students with an emphasis on unpacking the mathematical definitions and making logical arguments to their peers. Students will experience high quality curriculum deigned by the faculty at The University of Texas at Austin. Students can earn a high school mathematics credit and then can choose to accept or decline the college grade for the OnRamps course. Students develop independent learning skills, understand college level expectations, and increase college success with an opportunity to earn core credit from UT Austin.

2599 AP Calculus AB ***Grades: 11-12 Credit: 1.0***

Prerequisite: 3 credits of math to include Pre-Calculus

The ability to critically analyze a problem, make assumptions and observations, and draw conclusions will be emphasized through topics such as functions, limits, derivatives, integrals, and their applications. This course is taught at the honors level. Students in this class will take the Advanced Placement (AP) examination in Calculus AB. Students receiving a passing score on that examination may receive college credit for Calculus I and/or advanced placement at most colleges and universities.

2595 AP Calculus BC ***Grades: 11-12 Credit: 1.0***

Prerequisite: 3 credits of math to include Pre-Calculus

The ability to critically analyze a problem, make assumptions and observations, and draw conclusions will be emphasized through topics from AP Calculus AB such as functions, limits, derivatives, integrals, and their applications and the additional topics of sequences and series. This course is taught at the honors level. Students in this class will be expected to take the Advanced Placement (AP) examination in Calculus BC. Students receiving a passing score on that examination may receive college credit for Calculus I and Calculus II and/or advanced placement at most colleges and universities.

2589 AP Statistics ***Grades: 11-12 Credit: 1.0***

Prerequisite: 3 credits of math to include Algebra 2

The ability to investigate a task, explore data, organize a study, analyze and anticipate patterns, and interpret data will be emphasized through all topics of statistics with an emphasis on the graphing calculator and computer. Students in the class will be expected to take the Advanced Placement examination in Statistics and may receive college credit and/or advanced placement at most colleges and universities with a qualifying score.

2408 College Preparatory Mathematics ***Grades: 11-12 Credit: 1.0***

Prerequisite: Algebra 1, Geometry, and Algebra 2

Topics include real numbers, basic geometry, polynomials, factoring, linear equations, inequalities, quadratic equations, rational expressions, factoring techniques, radicals, algebraic fractions, complex numbers, graphing linear equations and inequalities, quadratic equations, systems of equations, and an introduction to functions. Emphasis is placed on developing the skills necessary to successfully complete an entry-level college mathematics course. Students will be required to solve problems with and without the use of a calculator. **This course does NOT meet core course requirements for NCAA.**

Science Courses at ECHS

Graduation Requirements: Students must complete 4 credits of Science to graduate with an Endorsement

Science Courses	Prerequisites Requirements
3111 Biology I 3191 Biology I Honors	None

3331 Chemistry I 3391 Chemistry I Honors	Biology I
3399 AP Chemistry	Biology and Chemistry
3499 AP Biology	Biology and Chemistry
3515 Physics 3594 AP Physics I	Physics: Biology and Chemistry
	AP Physics: Biology, Chemistry, and Algebra 2 (concurrent enrollment) or higher math
3595 AP Physics C- Mechanics	AP Physics or Physics and concurrently enrolled in Calculus
3511 Aquatic Science	Two science credits, preferably biology and chemistry
3513 Environmental Systems	Two science credits, preferably a living science and a physical science
7523 Engineer Your World	Algebra 1 and Geometry, completed or concurrently enrolled AP Physics I This course does not meet course requirements for NCAA
3514 Astronomy	Recommended: Physics
3519 AP Environmental Science	Biology and Chemistry
Science/ CTE Courses	Prerequisite Requirements: These CTE science courses can satisfy the science graduation requirement.
3518 Anatomy and Physiology	Biology and Chemistry
3520 Medical Microbiology	Anatomy and Physiology or concurrently enrolled
3522 Pathophysiology	Anatomy and Physiology or concurrently enrolled
7528 Advanced Animal Science	Biology and Chemistry, Algebra and Geometry, and Small Animal Management, Equine Science or Livestock Production
3610 Food Science	Biology and Chemistry + 1 other Advanced Science **This course does not meet course requirements for NCAA**
3612 Forensic Science	Biology and Chemistry

Science Course Descriptions

3111 Biology 1 ***Grades: 9-12 Credit: 1.0***

Prerequisite: None

Students in Biology study a variety of topics that include: structures and functions of cells and viruses; growth and development of organisms; cells, tissues and organs; nucleic acids and genetics; biological evolution; taxonomy; metabolism and energy transfers in living organisms; living systems; homeostasis; ecosystems; plants and the environment. The student will gain experience in manipulating the conditions of a laboratory investigation and in evaluating the applications of biological principles in everyday life.

3191 Biology 1 Honors ***Grades: 9-12 Credit: 1.0***

Prerequisite: None

Biology 1 Honors is an intensified study of living organisms. The content is similar to Biology 1 but is more in depth and provides more analysis. The student should be able to critically assess biological information and to formulate bridges between vastly different biological phenomena. The student will study current advances and problems in biology and will be able to state an informed opinion and support it with facts.

3331 Chemistry 1 ***Grades: 10 -12 Credit: 1.0***

Prerequisite: Biology

Chemistry is a course in which students will associate chemical principles to real world experiences. This year long, lab-oriented course will allow students to use scientific inquiry techniques for experimentation, data collection and analysis. To be successful in this course, students will need basic knowledge of algebra, the metric system and measurement conversions, and the periodic table.

3391 Chemistry 1 Honors ***Grades: 10-12 Credit: 1.0***

Prerequisite: Biology
This course is an intensified study of chemical principles. The content is a rigorous curriculum that includes mathematical applications in chemistry and a number of laboratory experiences. It is designed to prepare the student to advance to AP Chemistry. This year long, lab-oriented course will allow students to use scientific inquiry techniques for experimentation, data collection and analysis. To be successful in this course, students will need a basic knowledge of algebra, the metric system and measurement conversions, and the periodic table.

3399 AP Chemistry Grades: 11-12 Credit: 1.0
Prerequisite: Biology and Chemistry
AP Chemistry is open to all students who have completed a year of chemistry and wish to take part in a rigorous and academically challenging course. This course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. It is intense and fast paced and will require extra time outside of class studying. As such, the course is suitable for high school students who exhibit high levels of commitment, motivation, and academic maturity. The problem-solving strategies and techniques obtained in this course will prepare college-bound students for career in the sciences, medicine, engineering and other technical areas. Students can also expect laboratory work with a formal lab report. Students are expected to take the Advanced Placement examination in Chemistry administered at the end of the school year.

3499 AP Biology Grades: 11-12 Credit: 1.0
Prerequisite: Biology and Chemistry
AP Biology is an introductory college-level biology course and is open to students who have completed biology and chemistry and wish to take a rigorous and academically challenging course. The AP Biology course is equivalent to a college introductory course for biology majors. This challenging course is focused on inquiry, writing, problem solving, and collaboration. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. Students are expected to take the Advanced Placement examination in AP Biology at the end of the school year.

3515 Physics 1 Grades: 9-12 Credit: 1.0
Prerequisite: Biology and Chemistry
Physics 1 is recommended for the college-bound student planning to specialize in any scientific or technical area. Physics explores interactions and relationships of matter, energy, forces, and motion. Laboratory exercises will be used to evaluate cause-and-effect relationships and to describe physical processes. Since Physics 1 requires extensive problem solving, a good math background is recommended.

3594 AP Physics 1 Grades: 11-12 Credit: 1.0
Prerequisite: Biology and Chemistry, Algebra 2 (concurrent enrollment) or higher math
AP Physics 1 is an algebra based physics course that covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electronic circuits. Students are expected to take the Advanced Placement examination in Physics I at the end of the school year.

3595 AP Physics C-Mechanics Grade: 12 Credit: 1.0
Prerequisite: AP Physics 1 or physics, concurrently enrolled in Calculus
AP Physics C is a calculus based physics course covering Newtonian mechanics; work, energy, and power; momentum; circular motion and rotation; oscillations; and gravitation. We will focus on designing and implementing experiments and applying critical thinking, calculus, and physics concepts to solve real-world, complex problems. This course is appropriate for students planning to major in a science or engineering field. Students are expected to take the Advanced Placement examination in AP Physics C- Mechanics at the end of the school year.

3519 AP Environmental Science Grades: 11-12 Credit: 1.0
Prerequisite: Biology and Chemistry
The goal of the AP Environmental Science course is to provide students with the tools to understand the relationships of the natural world, to identify and analyze environmental problems, both natural and human-made, to

evaluate the risks associated with these problems and to examine solutions for resolving and preventing these problems. Field-Based lab work is a required component of coursework. This course is problem-based with real world connections for today's proactive student. Students are expected to take the Advanced Placement examination in Environmental Science at the end of the school year.

3518 Anatomy and Physiology Grades: 11-12 Credit: 1.0
Prerequisite: Biology and Chemistry
Anatomy and Physiology is a time intensive course geared for those juniors and seniors interested in pursuing higher education and careers in the medical field or biological fields. This class entails a comprehensive and detailed study of the structures and functions of the human body. The obtainable knowledge in this class will enable students to understand the medical terminology of physicians, to make informed decisions, to enhance their own health and quality of life, and to aid them in making health care decisions for themselves and their families. The laboratory section of the class requires detailed dissection of organs and animals such as the cat and fetal pig.

3520 Medical Microbiology Grades: 11-12 Credit:1.0
Prerequisite: Anatomy and Physiology or concurrently enrolled
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. This course is designed to promote an understanding of the effects of microorganisms on the human body. The study includes the standard precautions necessary for health maintenance and infection control. The focus is on reduction of diseases that interfere with basic human needs. Students will engage in many topics related to truly understanding the structure and functions of microorganisms.

3522 Pathophysiology Grades: 11-12 Credit: 1.0
Prerequisite: Anatomy and Physiology or concurrently enrolled
Students in Pathophysiology study disease processes and how humans are affected, while differentiating between normal and abnormal physiology. This course will research the causes of disease and make decisions concerning diagnosis, prevention, and treatment with an emphasis on prevention and treatment of disease.

3511 Aquatic Science Grades: 10-12 Credit: 1.0
Prerequisite: Two credits in science, preferably biology and chemistry
Aquatic science is the study of the interaction between the physical, biological, and chemical components of the aquatic environment, including the adaptations of the organisms that live there. This study includes: oceanic and fresh water ecosystems with particular emphasis on Texas aquatic environments; the role of cycles within aquatic environments; interrelationships among aquatic species, their habitats, and ecosystems; and the geological phenomena and fluid dynamics of aquatic environments. Student investigations emphasize accurate observations, collection of data, data analysis, and safe manipulation of scientific apparatus and materials during field and laboratory investigations. **NOTE: This course REQUIRES field work (outdoors).**

3513 Environmental Systems Grades 11-12 Credit: 1.0
Prerequisite: Two credits in science, preferably a living science and a physical science
In Environmental Systems, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: biotic and abiotic (living and non-living) factors in habitats, ecosystems and biomes, the relationships among resources, such as land, nutrients and water, and an environmental system, the sources and flow of energy through an environmental system, changes in populations and ecosystems, and changes in environments due to human impact.

7258 Advanced Animal Science Grades: 11-12 Credit: 1.0
Prerequisite: Biology and Chemistry, Algebra and Geometry, and Small Animal Management, Equine Science, or Livestock Production
This course will prepare students for careers in the field of animal science. The course examines how man and animal interrelate. Student should have taken Horse Management, Small Animal Care, Livestock Production or Vet Tech prior to Advanced Animal Science. **This course does NOT meet core course requirements for NCAA.**

3610 Food Science ***Grades: 11-12 Credit: 1.0***

Prerequisite: Biology and Chemistry + 1 Advanced Science

Food Science is designed to reinforce and enhance the student's knowledge of scientific principles and processes through the study of food and nutrition. You will discover the science behind foods by conducting laboratory and field investigations. Why does bread rise? Will you get sick if you eat mold? These questions and more will be answered as we investigate the nature of foods, the principles of food processing, the causes of deterioration, and how we can improve the quality of our foods. This science credit will help relate science principles to the "real" world. This course may be taken concurrently or following physics. **This course does NOT meet core course requirements for NCAA.**

3612 Forensic Science ***Grades: 11-12 Credit: 1.0***

Prerequisite: Biology and Chemistry

Forensic science is a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminalist behavior. Students will learn basic terminology and investigative procedures related to crime scene, question building, interviewing, criminal behavior characteristics, truth detection methodology, and scientific procedures used to solve crimes. Students will have the opportunity to collect and analyze evidence through case studies and mock crime scenes. Lab activities will be based on crime scene scenarios and analyzing fingerprints, ballistics, and blood spatter. Students will learn about the history, legal aspects of forensic science, and career options available in the forensic field. This course will count as a fourth science credit.

7523 Engineer Your World ***Grades: 11-12 Credit: 1.0***

Prerequisites: Algebra 1 and Geometry, completed or concurrently enrolled AP Physics 1

Developed by a team of University of Texas faculty, NASA engineers, and secondary teachers working with funding from the National Science Foundation, *Engineer Your World* is an innovative, student-centered curriculum that engages learners in authentic engineering experiences and inspires them to embrace an engineer's habits of mind. Collaborative, student-directed projects build resilient problem-solving skills and empower students to think like engineers, to adopt engineering processes, and to pursue engineering disciplines for the betterment of our world.

3514 Astronomy ***Grades: 11-12 Credit: 1.0***

Recommended Prerequisites: Physics

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

Social Studies Courses at ECHS

Graduation Requirements: Students must complete 3 credits in Social Studies. Two of the credits must include United States History (1 credit), Government (half credit), and Economics (half credit).

Social Studies Courses	Prerequisites Requirements
4221 World Geography 4291 World Geography Honors	None
4296 Colloquium Program: AP Human Geography	Colloquium required to take English I Honors Colloquium
4311 World History 4392 AP World History	Recommended: World Geography
4093 Colloquium: AP World History	Colloquium required to take corresponding English Colloquium
4111 US History	Recommended: World History

4194 AP US History 4091 Colloquium: AP US History	Colloquium required to take corresponding English Colloquium
4444 Government 4499 AP Government 4495 Colloquium Government	US History Colloquium required to take corresponding English Colloquium
4544 Economics 4599 AP Economics 4595 Colloquium Economics	US History Colloquium required to take corresponding English Colloquium
Social Studies Electives	Prerequisites Requirements
4645 Psychology (semester course)	Minimum of 2 social studies credits
4646 Sociology (semester course)	Minimum of 2 social studies credits
4698 AP Psychology	Minimum of 2 social studies credits
4711 Mexican American Studies	Recommended 11th and 12th Grade
4712 African American Studies	Recommended 11th and 12th Grade

Social Studies Course Descriptions

4221 World Geography ***Grade: 9*** ***Credit: 1.0***
Prerequisite: None
This course is designed to acquaint the student with the physical and cultural geography of the earth. Physical and cultural geography will be compared. Students will explore geographic principles and themes, the physical setting of the earth, and the world's regions and cultures.

4291 World Geography Honors ***Grade: 9*** ***Credit: 1.0***
Prerequisite: None
World Geography Honors incorporates all components of the regular level course. In addition to regular classroom expectations, the Honors section will strongly stress reading, research, writing, oral presentations, and geographical interpretations plus other skills necessary for students to be successful in upper level advanced placement classes.

4311 World History ***Grades: 9-12*** ***Credit: 1.0***
Prerequisite: None
This course will offer students a survey approach to the entire history of humankind. The major emphasis is on the study of significant people, events, and issues from the earliest times to the present. Students will analyze important events and issues in western civilizations as well as in civilizations in other parts of the world. Students will examine geographic factors of major historical events, the historic origins of contemporary economic and political systems, the influence and growth of religion and philosophy and the connections between major scientific and technological developments and industrial growth.

4392 AP World History ***Grades: 9-11*** ***Credit: 1.0***
Recommended Prerequisite: World Geography
This course will develop a greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. This course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. Students are expected to take the Advanced Placement examination in World History at the end of the school year.

4111 US History ***Grade: 11*** ***Credit: 1.0***
Recommended Prerequisite: World Geography or World History

The history of the United States from 1867 to the present is surveyed. Topics include the emergence of the US as a world power, the geographical influence on historical events, the economic growth and development of the US, social and cultural developments within the country, and the evolution of political processes since the Reconstruction.

4194 AP US History ***Grades: 11-12 Credit: 1.0***

Recommended Prerequisite: World Geography or World History

This AP course covers the history of the United States from the colonial era to the present. It will be taught at the collegiate level. Students are expected to take the Advanced Placement examination in United States History at the end of the school year.

4444 US Government ***Grade: 12 Credit: 0.5***

Prerequisite: US History

This course is designed to provide an understanding of the functions of federal, state, and local governments. Major focus is placed on the Constitution and its influence on all governmental levels, and the rights and responsibilities of American citizenship.

4499 AP US Government ***Grade: 12 Credit: 0.5***

Prerequisite: US History

US Government AP is the study of the United States' founding principles and beliefs. Students will study the structure, functions and powers of government at the national, state and local levels. Students are expected to take the Advanced Placement examination in US Government at the end of the school year.

4544 Economics ***Grade: 12 Credit: 0.5***

Prerequisite: US History

Economics emphasizes the free enterprise system of the United States. Topics include the theory of supply and demand, price factors of production, income distribution, the organization and function of the Federal Reserve System, and government regulation of the market system. Comparative economic systems are studied.

4599 AP Economics ***Grade: 12 Credit: 0.5***

Prerequisite: US History

AP Economics incorporates the practical application of economic theory through an in-depth study of labor unions, types of businesses and financial institutions in the free enterprise system, and international economics. Students are expected to take the Advanced Placement examination in Economics at the end of the school year.

4645 Psychology ***Grades: 11-12 Credit: 0.5***

Prerequisite: A minimum of two credits of social studies

Psychology will include the nature of psychology, human growth and development and behavior. In addition, students will learn stages of human growth and development; understand factors involved in learning and language development; describe thinking and creative processes; explain motivation and emotion and understand personality theories, disorder theories, and personality testing and assessment. Students also will analyze the development of self-concept, understand relationships of individuals with other individuals and with groups, and establish individual long range and short-range goals.

4698 AP Psychology ***Grades: 11-12 Credit: 1.0***

Prerequisite: A minimum of two credits of social studies

Psychology AP covers all the elements of Psychology along with conducting extensive research which will culminate in an original research project. Students are expected to take the Advanced Placement examination in Psychology at the end of the school year. AP Psychology is a semester course connected to a special topics course for the 2nd semester. In order to be prepared for the AP exam in May, students will need take both semester sections**. There will be the AP 12-point credit addition for one semester and a 10-point credit addition for the special topics semester.**

4646 Sociology ***Grades: 11-12 Credit: 0.5***

Prerequisite: A minimum of two credits of social studies
This sociology course includes the scientific study of human society, the structure and institutions of society, and research methods used by sociologists. Students will analyze social concepts; methods of sociologists in field studies; the status and roles of individuals and their relationship to the structure and institutions of society, technological development and social change. The students will review societal changes and understand the reason and impact of change in the world.

4296, 4093, 4091, 4495, 4595 Honors Colloquium 1-4 Grades: 9-12 Credits: 2.0
Prerequisite: Acceptance or provisional placement in G/T Program
Honors Colloquium is an English and social studies humanities-based interdisciplinary program for gifted and talented students. The Colloquium program is designed to meet the unique learning needs of gifted students through a differentiated curriculum providing enrichment, acceleration, grouping, and guidance. Classes meet two periods daily for the entire year. The transcripts of Colloquium students will reflect credit in English and social studies (Honors or AP level). Student work is expected to reflect ownership of a search for excellence. Students have the opportunity to earn college credit by taking AP exams. Students will be expected to take AP exam in each AP subject taught.

4711 Mexican American Studies (elective course) Grades: 11-12 Credits: 1.0
In Mexican American Studies, students learn about the history and cultural contributions of Mexican Americans. Students will explore history and culture from an interdisciplinary perspective. They will have opportunities to interact with relevant film, literature, art, and other media. The course emphasizes developments in the twentieth and twenty-first centuries, but students will also engage with developments prior to the twentieth century.

4712 African American Studies (elective course) Grades: 11-12 Credits: 1.0
African American Studies is a conceptually driven course that introduces students to the exploration of the rich and diverse history and culture of African Americans. The goal of this course is to broaden the knowledge and understanding of students interested in learning about history, citizenship, culture, economics, science, technology, geography, and the political realities of African Americans. These strands should not be taught in isolation but woven together in an integrated study that helps students understand the world in which we live. This course should provide students with an opportunity to engage with the social, economic, and political activities of African Americans in a way that allows them to make deep connections across the content. The historical content of this course should be taught with relevance to contemporary and current issues in order to ensure a deeper understanding for students.

PE Courses at ECHS

Graduation Requirements: Students must complete 1 credit in Physical Education

PE Courses	Prerequisites Requirements
8240 Lifetime Wellness & Fitness Pursuits (1.0 Credit)	None
8241 Lifetime Recreation and Outdoor Pursuits (1.0 Credit)	Recommended Prerequisite: Personal Foundations of Fitness
8242 Skill Based Lifetime Activities (1.0 credit)	Recommended Prerequisite: Personal Foundations of Fitness
PE Substitutes	Prerequisites Requirements
8041-8044 Golden Star Drill Team	Tryouts

8051-8054 Honeybees 1-4	Tryouts
8061-8064 Cheerleading 1-4	Tryouts
Athletics	
6011-6014 JROTC	None

PE Course Descriptions

The Health, Human Performance, Recreation, and Dance (HHPRD) curriculum operates under specific state and local guidelines. Each student is required to complete 1.0 credit of physical education from the areas of Human Performance or Recreation; however, several other courses may be substituted for this requirement. The substitutions include drill team, marching band, flags and cheerleading; JROTC, and athletics. The HHPRD program is designed to provide an opportunity to develop and maintain a desirable level of personal physical fitness as well as a proficiency in selected competitive sports and recreational activities.

8240 **Lifetime Wellness & Fitness Pursuits** ***Grade: 9-12 Credit: 1.0***
Prerequisite: None
The Lifetime Fitness and Wellness Pursuits course offers current approaches for the foundation of personal fitness, physical literacy, lifetime wellness, and healthy living. Students will apply the knowledge and skills to demonstrate mastery of the concepts needed to achieve lifetime wellness. Students will participate in a variety of physical activities for attaining personal fitness and lifetime wellness.
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8241 **Lifetime Recreation and Outdoor Pursuits** ***Grades: 9-12 Credit: 1.0***
Prerequisite: None
The Lifetime Recreation and Outdoor Pursuits course provides opportunities for students to develop competency in five or more lifelong recreational and outdoor pursuits for enjoyment and challenge. Students participate in activities that promote physical literacy, respect for and connection to nature and the environment, and opportunities for enjoyment for a lifetime. Students will experience opportunities that enhance self-worth and support community engagement.

8242 Skill Based Lifetime Activities ***Grades: 9-12 Credit: 1.0***
Prerequisite: None
The Skill-Based Lifetime Activities course offers students the opportunity to demonstrate mastery in basic sports skills, basic sports knowledge, and health and fitness principles. Students experience opportunities that promote physical literacy and lifetime wellness. Students participate in a minimum of one lifelong activity from each of the following five categories during the course: Target games, Striking and fielding games ,fitness activities, Rhythmic activities, and Innovative games and activities

PHYSICAL EDUCATION SUBSTITUTES

Athletics, Band, Military Science, and Color Guard

8041-8044 Golden Star Drill Team ***Grades: 9-12 Credit: 1.0***
Prerequisite: Tryouts
The students will acquire advanced skills in the following dance techniques: ballet, jazz, character, and modern. They will be given the opportunity to develop self-confidence through the use of the body as an expressive instrument through opportunities to audition, rehearse and perform in public performances. The students will learn to appreciate dance as an art form and to utilize their kinesthetic awareness. Students will choreograph and perform an original dance (ensemble), multicultural project, create music/dance videos and produce a class spring show; which is a collaboration of dance pieces choreographed throughout the year.

8051-8054 Honeybees 1-4 ***Grades: 9-12 Credit: 1.0***
Prerequisite: Tryouts

The Honeybees dance team performs at selected school functions and represents ECHS in competition with other area schools. Members are selected by a panel of judges. Parents should discuss costs with the sponsor. Team members are required to attend summer practices, camps, and participate in a number of activities outside regular school hours.

8061-8064 Cheerleading 1-4 ***Grade: 9 Credit: 1.0***
Prerequisite: Tryouts ***Grades: 10-12 Credit: 0.0***
Cheerleaders are selected by a screening process which includes an application, teacher evaluation, and demonstrating ability before a panel of judges. Parents should discuss costs with the sponsor. Cheerleaders are required to attend summer practices, camps, gymnastic classes, and participate in a number of activities outside regular school hours.

ATHLETICS
PE Credit ***Grades: 9-12 Credits: 1.0 per year***
Prerequisite: None
East Central High School offers a variety of competitive sports for both girls and boys. Athletic activities are operated under guidelines of the University Interscholastic League. Participation requires approval of the head coach of the respective sport, parent permission, a physical examination by a licensed physician, evidence of insurance, and maintenance of a satisfactory academic record. Refer to the student course selection form for a listing of all athletic offerings.

SPORTS MEDICINE
Will not count toward a PE Credit

8233 Sports Medicine I ***Grades: 9-12 Credit: 1.0***
Prerequisite: None
This course will introduce students to basic principles of sports medicine. This includes First Aid/CPR, taping, bandaging, and rehabilitation. Students will also learn medical terminology and basic human anatomy.

8235 Sports Medicine II ***Grades: 10-12 Credit: 1.0***
This course is designed for athletic training students. It provides an in-depth study and application of the components of sports medicine including but not limited to: basic rehabilitation techniques; therapeutic modalities; wound care, taping, and bandaging, techniques, prevention recognition, and care of musculoskeletal injuries; injuries to the young athlete; modern issues in sports medicine. Individualized and independent assignments will be included in this course. This course will involve out-of-classroom activities, outside on the field or in the gymnasium.

8811 Health Education ***Grades: 9-12 Credit: 0.5***
Prerequisite: None
This course focuses on the aspects of good physical and mental health. Topics include proper body functioning, safety and first aid, awareness of health problems, and the development of healthful attitudes and habits. This course is an elective course that does not meet PE requirements.

8814 Health 2 ***Grades: 9-12 Credit: 0.5***
Prerequisite: Health 1

JROTC Course Descriptions

PHYSICAL EDUCATION SUBSTITUTE

6011 JROTC (Leadership Education and Training 1) ***Grades: 9-12 Credit: 1.0***

Prerequisite: None (One P.E. or One Elective)
This course teaches ethics-based leadership skills intended to develop individual abilities that contribute to effective team building. Students learn about the following: effective oral and written communications, decision-making and planning skills, the responsibilities of an American citizen, leadership styles, teamwork and group effectiveness, basic military history, health and physical training, military customs and courtesies, and other supporting subjects.

6012 JROTC (LET 2) Grades: 10-12 Credit: 1.0
Prerequisite: JROTC (LET 1) (Elective)
This course introduces, reinforces, and expands effective individual and team aspects of the following: critical thinking techniques, verbal and nonverbal, and written communication, leadership elements, attributes, and competencies, responding to common injuries and first aid for emergencies, elements of health and nutrition, and other supporting subjects. Students gain valuable practical experience in conducting and supporting the training of lower-level LET cadets.

6013 JROTC (LET 3) Grades: 11-12 Credit: 1.0
Prerequisite: JROTC (LET 2) (Elective)
This course introduces, reinforces, and expands instruction and practical application in the following: personal and organizational planning, management, and leadership skills, planning for post-secondary education and/or career goals, ethical decision-making and resolving ethical dilemmas, assessing the impact of drugs and alcohol on whole health, fundamental principles and values of American society, and other supporting topics. Students gain valuable practical experience in planning, conducting, and supervising the training of lower-level LET cadets.

6014 JROTC (LET 4) Grade: 12 Credit: 1.0
Prerequisite: JROTC (LET 3) (Elective)
This course continues and refines theory and application of the following: leadership, management, and continuous improvement principles and skills, planning and conducting events at company and battalion levels, written and oral communications, critical thinking skills, using historical examples and case studies to illustrate leadership, ethical, and character-building principles and applications, planning, delegating, and supervising task and projects, service learning and community service events, and other supporting subjects. LET IV cadets gain valuable practical experience in supervising the planning and conduct of training for lower-level LET cadets.

Language Other Than English Courses at ECHS

Graduation Requirements: Students must complete 2 credits in the same LOTE or 2 computer science credits.

LOTE Courses	Prerequisites Requirements
6311 Spanish I 6381 Spanish I Honors	None
6312 Spanish 2 6382 Spanish 2 Honors	Spanish I
6313 Spanish 3 6383 Spanish 3 Honors	Spanish 2
6321 Discovering Languages and Cultures (High School Version)	Spanish 3 and in Dual Language Program or a fluent speaker in Spanish This course does not meet core requirements for NCAA
6384 AP Spanish 4	Spanish 3 and in Dual Language Program or a fluent speaker in Spanish. Suggest consulting with current Spanish teacher regarding recommendation
6385 AP Spanish 5	AP Spanish 4
6511 American Sign Language 1	None
6512 American Sign Language 2	American Sign Language 1
6513 American Sign Language 3	American Sign Language 2
6514 American Sign Language 4	American Sign Language 3

Language Other Than English

6311/6381 Spanish 1& Spanish 1 Honors ***Grades: 9-12 Credit: 1.0***
Prerequisite: None
Spanish 1 and Spanish 1 Honors are introductory courses in the language with emphasis on communication. Communication is the overarching goal of world language instruction. Students will be provided ample opportunities to engage in conversations, to present information to an audience, and to interpret culturally authentic materials in the language of study using three models of communication. The American Council on the Teaching of Foreign Languages (ACTFL) identifies *three modes of communication: interpersonal, interpretive, and presentational*. Spanish 1 Honors differentiates from Spanish 1 because of the specific focus on Advanced Placement Exam preparation. This course will be taught at an accelerated pace. The depth of the course is designed for the continuation of the study of the language through Spanish 2 Honors and Spanish 3 Honors.

6312 Spanish 2 ***Grades: 9-12 Credit: 1.0***
Prerequisite: Spanish 1
6382 Spanish 2 Honors ***Grades: 9-12 Credit: 1.0***
Prerequisite: Spanish 1 Honors
Spanish 2 and Spanish 2 Honors are an extension of Spanish 1/Spanish 1 Honors. Communication is the overarching goal of world language instruction. Students will be provided ample opportunities to engage in conversation, to present information to an audience, and to interpret culturally authentic materials in the language of study using the three modes of communication. Students are expected to reach a proficiency level of Novice High to Intermediate Low by the end of the course. The American Council on the Teaching of Foreign Languages (ACTFL) identifies *three modes of communication: interpersonal, interpretive, and presentational.* Spanish 2 Honors differentiates from Spanish 2 because of the specific focus on Advance Placement Exam preparation, the accelerated pace, and course design for the continued study of language through Spanish 3 Honors.

6313 Spanish 3 ***Grades: 9-12 Credit:1.0***
Prerequisite: Spanish 2
6383 Spanish 3 Honors ***Grades: 9-12 Credit: 1.0***
Prerequisite: Spanish 2 Honors
Communication is the overarching goal of world language instruction. Students will be provided ample opportunities to engage in conversation, to present information to an audience, and to interpret culturally authentic materials in the language of study using the three modes of communication. Students are expected to reach a proficiency level of Novice High to Intermediate low by the end of the course. *Students in Level III are expected to reach a proficiency level of Intermediate to Low to Intermediate Mid, as defined in the ACTFL Proficiency Guidelines.* Spanish 3 Honors differentiates from Spanish 3 because of the specific focus on Advance Placement Exam preparation, the accelerated pace, and course design for the continued study of language through Spanish 4 AP. The native speaker course is for students who demonstrate proficiency on a placement exam (see next course).

6321 Discovering Language and Culture (High School Version) Grades: 9-12 Credit: 1.0
Recommended Prerequisite: Spanish 3 and in dual language program or a fluent speaker in Spanish
This is a discovery course that allows students to explore other languages and cultures. The student demonstrates an understanding of the elements of language, demonstrates an understanding of cultures, and develops effective language study skills. 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. **This course does NOT meet core course requirements for NCAA.**

6384 AP Spanish 4 ***Grades: 10-12 Credit: 1.0***
Prerequisite: Spanish 3 Honors and in dual language program or a fluent speaker in Spanish. Suggest consulting with current Spanish teacher regarding their recommendation for placement in this course.

Spanish 4 AP will prepare students in the required areas for the Advanced Placement Language Exam of Language and Culture. Students who enroll should already have a strong knowledge of the language and culture of Spanish-speaking people and should have attained a reasonable proficiency in listening comprehension, speaking, reading, and writing. The course is taught in 100% Spanish. Students are expected to take the Advanced Placement examination in Spanish Language at the end of the school year. The results of this exam determine credit hours granted to the student, dependent upon university requirements.

6385 AP Spanish 5 ***Grades: 10-12 Credit: 1.0***
Prerequisite: Spanish 4 AP. Suggest consulting with current Spanish teacher regarding their recommendation for placement in this course.
Spanish 5 AP is an advanced class continuing the objective of AP Spanish Language and including studies in Spanish Literature for the five selected authors. Composition skills are highly stressed, as well as an expanded and enriched vocabulary. Students are expected to take the Advanced Placement examination in Spanish Literature at the end of the school year. The results of this exam determine credit hours granted to the student, dependent upon university requirements.

6511 American Sign Language 1 ***Grades: 9-11 Credit: 1.0***
Prerequisite: None
6512 American Sign Language 2 ***Grades: 10-12 Credit: 1.0***
Prerequisite: American Sign Language 1
6513 American Sign Language 3 ***Grades: 11-12 Credit: 1.0***
Prerequisite: American Sign Language 2
This is a course designed to enable students to communicate using sign language at a basic conversational level. The students will begin to learn vocabulary, grammar and syntax of American Sign Language necessary to develop both receptive and expressive skills. Students will be expected to develop an understanding of and respect for the culture and heritage of the hearing-impaired community.

6514 American Sign Language 4 ***Grades: 12 Credit: 1.0***
Prerequisite: American Sign Language 3
ASL 4 is an 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 on linguistic and cultural variations. The student will demonstrate comprehensive mastery of target, content-specific commands, questions, and statements in ASL. The student will be exposed to full dialogue in ASL as directed by the instructor.

Fine Arts Courses at ECHS

Graduation Requirements: Students must complete 1 credit in Fine Arts

Fine Arts Courses	Prerequisites Requirements
6211 Art 6215 Art I Honors	None
6251 Drawing 2 6256 Drawing 2 Honors	High School Art I
6252 Drawing 3 6257 Drawing 3 Honors	Drawing 2
6253 Drawing 4 6258 Drawing 4 Honors	Drawing 3
6280 Fiber Arts 2	Art I
6281 Fiber Arts 3	Fiber Arts 2
6271 Painting 2 6276 Painting 2 Honors	Art I
6272 Painting 3	Painting 2

6277 Painting 3 Honors	
6273 Painting 4 6278 Painting 4 Honors	Painting 3
6282 Printmaking 2	Art I
6283 Printmaking 3	Printmaking 2
6261 Sculpture 2 6266 Sculpture 2 Honors	Art I
6262 Sculpture 3 6267 Sculpture 3 Honors	Sculpture 2
6263 Sculpture 4 6268 Sculpture 4 Honors	Sculpture 3
6200 AP Studio Art – Drawing Portfolio	One level 2 or 3 art class
6297 AP Studio Art- 2D Design Portfolio	One level 2 or 3 art class
6298 AP Studio Art- 3D Design Portfolio	One level 2 or 3 art Honors class
6299 AP Art History	None
6221-6224 Theater Arts 1-4	None (for Theater Arts 1)
6241-6244 Technical Theater 1-4	None (for Technical Theater 1)
6231-6234 Varsity Theater 1-4	Auditions
6181-6184 Non- Varsity Choir 1-4	None
6185-6188 Junior Varsity Choir 1-4	Auditions
6191-6194 Varsity Choir 1-4	Auditions
8321-8324 Dance 1-4	None
6141-6175 Band 1-4	Audition or enrolled in band in HS or MS
6132-6134 Jazz Ensemble 2-3	Audition and concurrently enrolled in a band class
6041-6044 Color Guard 1-4	Audition or Director Approval
6094 Music Theory 1	Previous musical training or membership in a school performing ensemble
6099 AP Music Theory	Music Theory 1 or previous music training
6762-6764 Applied Music 2-3	Completed 1 year in Band and enrolled in an upper level band class
6781-6784 Piano 1-4	None (for Piano 1)
7094 Mariachi I	None
6301-6302 Music Business 1,2	None (for Music Business 1)
6303 Digital Audio Technology 1	None
7221 Floral Design	Recommended Prerequisite: Principles of Agriculture, Food and Natural Resources

Fine Arts Course Description

6211 Art ***Grades: 9-12*** ***Credit: 1.0***
Prerequisite: None
Students will explore all types of visual artistic expression through written and studio art projects**.** ***No prior art experience is necessary.*** Topics include basic design, painting, printmaking, sculpture, ceramics, art history, and art appreciation. Art 1 is a prerequisite course for all other level 2,3, and 4 courses.

6215 Art 1 Honors ***Grades: 9-11*** ***Credit: 1.0***
Prerequisite: None

Like the regular Art 1 class, students will explore all types of visual artistic expression through written and studio art projects***. However, placement in the Art I Honors requires that the student has extended interest and motivation in the visual arts***. Topics include basic design, painting, printmaking, sculpture, ceramics, art history and appreciation. Students will develop a wide range of visual communication and problem solving skills through studio art projects, written and sketchbook assignments. The goal of this course is to prepare students to take level 2 and 3 Honors art classes and eventually the AP Studio Art Portfolio classes in their junior and senior years.

6251 Drawing 2 ***Grades: 9-12 Credit: 1.0***
Prerequisite: High School Art 1
6252 Drawing 3 ***Grades: 10-12 Credit: 1.0***
Prerequisite: Drawing 2

6253 Drawing 4 ***Grades: 11-12 Credit: 1.0***
Prerequisite: Drawing 3
Drawing 2 is for students who have successfully completed Art 1 and would like to strengthen their drawing skills. Students will be working with a variety of media such as: pencil, colored pencil, charcoal, mixed media, and pen and ink. Emphasis will be placed on portraits, still life drawing, figure drawing, photo realism, some graphic design, and subject matter from imagination. Art history in relation to drawing will be explored. Drawing 3 and 4 students will continue to develop their drawing skills through more advanced projects and exploration of their own ideas.

6280 Fiber Arts 2 ***Grades: 9-12 Credit: 1.0***
Prerequisite: Art 1
Fiber Arts 2 is for students who have successfully completed Art 1 and would like to continue developing their artistic skills in the diverse media of Fibers. This course gives students a chance to explore media such as: weaving, wearable art, surface design of fabric and fashion, papermaking, dyeing and batik methods, embroidery, and basketry methods. This course will focus on art methods that are highly saleable in today's art market and students will explore business, critical thinking and studio skills necessary for careers as working artists.

6281 Fiber Arts 3 ***Grades: 9-12 Credit: 1.0***
Prerequisite: Fiber Arts 2
Fiber Arts 3 students will continue to develop their skills with fibers and surface design through more advanced projects. Students will experiment with weaving, dyeing, stitching, and mixed media, and will use their knowledge of these methods to formulate multiple solutions to expand personal themes. This course will focus on the fiber techniques and media based on the student's own interest and on building the student's personal portfolio.

6271 Painting 2 ***Grades: 9-12 Credit: 1.0***
Prerequisite: Art 1
Painting 2 is for students who have successfully completed Art 1 and would like to continue developing their artistic skills in painting media. This course is built on knowledge obtained in Art 1 and gives students a chance to improve their painting abilities with the following media: acrylic paint, watercolor and mixed media. Topics will include color theory, painting techniques and applications, landscape painting, still life, portraiture, non-objective and abstract painting techniques and historical study of paintings.

6272 Painting 3 ***Grades: 10-12 Credit: 1.0***
Prerequisite: Painting 2
6273 Painting 4 ***Grade: 11-12 Credit: 1.0***
Prerequisite: Painting 3
Painting 3 and 4 students will continue to develop their painting skills through more advanced projects. Students will further experiment with watercolors, acrylics and mixed media, and will use their knowledge of these methods to formulate multiple solutions to expand personal themes. Oil painting will be introduced in Painting 3 and will be an option for further study for Painting 4 students. Both courses will focus on building the student's personal portfolio.

6282 Printmaking 2 ***Grades: 10-12 Credit: 1.0***
Prerequisite: Art 1 with recommended prerequisite - Drawing 2

Printmaking 2 is for students who have successfully completed Art 1 and would like to continue developing their artistic skills in the diverse media of Printmaking. This course gives students a chance to explore various types of printmaking such as: linoleum prints, woodcut prints, mono prints, silk screen prints, and mixed media prints. This course will focus on art methods that are highly saleable in today's art market and students will explore business, critical thinking and studio skills necessary for careers as working artists.

6283 Printmaking 3 ***Grades: 10-12 Credit: 1.0***
Prerequisite: Printmaking 2
Printmaking 3 students will continue to develop their printmaking skills through more advanced projects. Students will further experiment with block printing--color and black and white, stenciling, screen printing and mixed media, and will use their knowledge of these methods to formulate multiple solutions to expand personal themes. This course will focus on the printmaking techniques and media based on the student's own interest and on building the student's personal portfolio.

6261 Sculpture 2 ***Grades: 9-12 Credit: 1.0***
Prerequisite: Art 1
6262 Sculpture 3 ***Grades: 10-12 Credit: 1.0***
Prerequisite: Sculpture 2
6263 Sculpture 4 ***Grade: 11-12 Credit: 1.0***
Prerequisite: Sculpture 3
Sculpture 2 is for students who have successfully completed Art 1 and would like to strengthen their artistic skills in three-dimensional artwork. Students will learn various approaches to three-dimensional media including hand building techniques with clay, papier mache, found objects, paper, plaster, mixed media and other materials. Students will learn about famous sculptors and sculptures. Students in level 3 and 4 Sculpture will continue to build and develop hand building and wheel through more advanced projects and exploration of their own ideas.

Honors Art Courses

6256 Drawing 2 Honors ***Grades: 9-11 Credit: 1.0***
6276 Painting 2 Honors ***Grades: 9-11 Credit: 1.0***
6266 Sculpture 2 Honors ***Grades: 9-11 Credit: 1.0***
6257 Drawing 3 Honors ***Grades: 10-11 Credit: 1.0***
6277 Painting 3 Honors ***Grades: 10-11 Credit: 1.0***
6267 Sculpture 3 Honors ***Grades: 10-11 Credit: 1.0***
Prerequisite: Corresponding Level 2 class, teacher recommendation
Students successfully completing high school Art 1 or Art 1 Honors can enroll in any level 2 art class as a preparation for taking an AP studio art class. Students successfully completing a level 2 art class can enroll in any level 3 art class as a preparation for taking an AP studio art class. Students should enroll in the level 2 or 3 course that corresponds to the student's desired portfolio. (Drawing =AP Drawing, painting =AP 2 D Design, Sculpture =AP 3D Design) Course content for Honors art classes will be similar to the non-Honors art classes with the addition of written and oral critiques and higher level projects designed for building a portfolio through inquiry and investigation of themes and media.

6258 Drawing 4 Honors ***Grade: 11 Credit: 1.0***
Prerequisite: Drawing 3 or Drawing 3 Honors
Drawing 4 Honors students will continue to develop their drawing skills through more advanced projects and exploration of their own ideas. The course is designed for students preparing for the AP Drawing class or AP 2D Design class. Students will build their portfolio through inquiry and investigation of themes and media.

6268 Sculpture 4 Honors ***Grades: 11 Credit: 1.0***
Prerequisite: Sculpture 3 or Sculpture 3 Honors
Sculpture 4 Honors students will continue to develop their skills in 3D media through more advanced projects and exploration of their own ideas. The course is designed for students preparing for the AP 3D Design class. Students will build their portfolio through inquiry and investigation of themes and media.

6278 Painting 4 Honors ***Grade: 11 Credit: 1.0***
Prerequisite: Painting 3 or Painting 3 Honors

Painting 4 Honors students will continue to develop their painting skills through more advanced projects. Students will further experiment with watercolors, acrylics, oils, and mixed media. They will use their knowledge of these methods to formulate multiple solutions to expand personal themes. This course is designed for students preparing for the AP 2D Design class or AP Drawing class. Students will build their portfolio through inquiry and investigation of themes and media.

Advanced Placement Studio Art Courses

6200 AP Studio Art Drawing Portfolio Grades: 11-12 Credit: 1.0
6297 AP Studio Art-2D Design Portfolio Grades: 11-12 Credit: 1.0
6298 AP Studio Art –3D Design Portfolio Grades: 11-12 Credit: 1.0

The AP Studio Art courses are designed for highly motivated and self-disciplined students who are interested in pursuing a high level of achievement in studio art. Students must be able to work independently in class and out of class. AP Studio Art students will submit a portfolio to the College Board for Advanced Placement Credit. Students will create a portfolio through inquiry and investigation of a personal theme and media, processes, techniques. When registering for the AP Studio Art class, students must choose one of the following areas of portfolio development: Drawing, 2 dimensional design or 3 dimensional design. See descriptions below:

6200 AP Studio Art - Drawing Portfolio Grades: 11-12 Credit: 1.0
Prerequisite: One level 2 or 3 art class

Students who work on a Drawing portfolio will create original works of art including, but not limited to, the following media: pencil, charcoal, markers, colored pencils, pen and ink, paint, printmaking and mixed media. Artworks in the drawing portfolio will show student's ability to draw through a variety of drawing skills and techniques.

6297 AP Studio Art - 2D Design Portfolio Grades: 11-12 Credit: 1.0
Prerequisite: One level 2 or 3 art class

Students who work on a 2D Design portfolio will create original works of art including, but not limited to, the following media and content areas: drawing media, painting, printmaking, graphic design, photography, electronic media, fashion design, architectural design, product design and mixed media. Artworks in the 2D design portfolio will show a student's ability to use the elements and principles of design and to creatively solve visual problems independently.

6298 AP Studio Art - 3D Design Portfolio Grades: 11-12 Credit: 1.0
Prerequisite: One level 2 or 3 art Honors class

Students who work on a 3D Design portfolio will create original works of art including, but not limited to the following media: paper, plaster, stone, jewelry, metals, clay, found objects, and mixed media. Artworks in the 3D design portfolio will show a student's ability to use the elements and principles of design and to creatively solve visual problems independently.

6299 AP Art History Grades: 10-12 Credit: 1.0
Prerequisite: None

The AP Art History course explores topics such as the nature of art, its uses and meanings, art making and responses to art. Students will investigate diverse artistic traditions of cultures from prehistory to the 21st century through a global perspective. When the course is completed, students will be able to apply skills of visual, contextual, and comparative analysis to create an understanding of art throughout history. Many colleges and universities offer advanced placement and/or credit to students who perform successfully on the AP Art History exam. Students who have experienced success in courses such as history, literature, or studio art are especially encouraged to enroll. **This course does NOT qualify as a NCAA core course.**

6221 Theatre Arts 1 Grades: 9-12 Credit: 1.0
Prerequisite: None

This is the basic introduction to acting and design. Students will build their confidence and performance skills while also developing their creativity.

6222 Theatre Arts 2 Grades: 10-12 Credit: 1.0

Recommended Prerequisite: Theatre Arts 1, or Technical Theatre I

6223 Theatre Arts 3 ***Grades: 11-12 Credit: 1.0***

Recommended Prerequisite: Theatre Arts 2, or Technical Theatre II

6224 Theatre Arts 4 ***Grade: 12 Credit: 1.0***

Recommended Prerequisite: Theatre Arts 3, or Technical Theatre III

6231-6234 Varsity Theatre 1-4 ***Grades: 10-12 Credit: 1.0***

Prerequisite: Audition

Students must audition into this class. Students are required to participate in every show throughout the year. This includes staying after school. Students will develop their skills as performers and technicians.

6241 Technical Theatre 1 ***Grades: 9-12 Credit: 1.0***

Recommended Prerequisite: None

6242 Technical Theatre 2 ***Grades: 10-12 Credit: 1.0***

Recommended Prerequisite: Theatre Arts 1

6243 Technical Theatre 3 ***Grades: 11-12 Credit: 1.0***

Recommended Prerequisite: Theatre Arts 2

6244 Technical Theatre 4 ***Grade: 12 Credit: 1.0***

Recommended Prerequisite: Theatre Arts 3

This class builds the sets, sews the costumes, and runs lights and sound for the ECHS shows throughout the year. Students get to program the light board, develop sound cues, sew costumes, work with power tools, and paint sets. Students will be encouraged to work after school.

6181-6184 Non-Varsity Choir 1-4 ***Grades: 9-12 Credit: 1.0***

Prerequisite: None

Beginning Choir provides an opportunity for ECHS students to develop skill in vocal performance. Musical selections and arrangements from all periods and styles are performed. Beginning Choir 1 is designed for beginning singers and no prior experience is required. This introductory course is open to all who enjoy singing and wish to learn more about choral music. Vocal music fundamentals are stressed including Solfege and sight-reading. Members of the Beginning Choir 2, 3, and 4 classes continue developing skills in vocal fundamentals while learning advanced styles of performance. Public performances of both the full choir and ensembles are made at high school activities, civic functions, and in UIL competition. Participation in performances and practices outside normal school hours is required.

6185-6188 Junior Varsity Choir 1-4 ***Grades: 10-12 Credit: 1.0***

Prerequisite: Audition

The Concert Choir is the major vocal performance group of East Central High School. Entry into the Concert Choir is by audition, interview, and director recommendation. Prior choral experience is recommended including understanding of more advanced choral techniques, Solfege, and sight-reading. The Concert Choir represents ECHS in UIL competition and in a variety of public appearances. Participation in performances and practices outside normal school hours is required. All rehearsals, sectionals, and performances must be attended (if eligible) in order to remain a performing member of the concert choir.

6191-6194 Varsity Choir 1-4 ***Grades: 10-12 Credit: 1.0***

Prerequisite: Audition

The Chorale is the major vocal performance group of East Central High School. Entry into the Chorale is by audition, interview, and director recommendation. Auditions will be held the last week of April each year. Prior choral experience is required including advanced chorale techniques, Solfege, and sight-reading. The Chorale represents ECHS in UIL competition and in a variety of public appearances. Participation in performances and practices outside normal school hours is required. All rehearsals, sectionals, and performances must be attended (if eligible) in order to remain a performing member of the Chorale.

8321-8324 Dance 1-4 ***Grades: 9-12 Credit: 1.0***

Prerequisite: None

This course will introduce dance as an art form through focus on perception, creative expression/performance, historical and cultural heritage and critical evaluation. Students' creative expression is fostered thought kinesthetic awareness/skill development, introduction to various dance forms, and choreography.

7221 Floral Design Grades: 10-12 Credit: 1.0
Recommended Prerequisite: Principles of Agriculture, Food and Natural Resources
Flowers, balloons, and more. This is a basic floral design course that will provide you with hands on skills in arranging flowers and the "book smarts" to make a competitive arrangement. This course meets the criteria for a fine arts credit.

6141-6175 Band 1-4 (Wind Ensemble, Symphonic, Concert A, Concert B, Gold Band Grades: 9-12 Credit: 1.0
Prerequisite: Audition for the director or enrolled in band in high school or in middle school
Band consists of all students enrolled in the band program at ECHS. All band members must attend a *mandatory* summer camp which starts approximately 4 weeks prior to the beginning of the fall semester. When school begins, the marching band rehearses after school. The band performs at a number of school events, including all varsity football games, pep rallies, civic functions, parades, marching and concert contests, and competes with other bands in University Interscholastic League (UIL) events, therefore all members must retain academic eligibility. Participation in performances and practices outside normal school hours are mandatory for the success of the band program. Placement is accomplished through auditions consisting of scales, etudes, and sight reading. All members of the marching band program must participate in one of the concert organizations. These groups meet separately during the school day. All rehearsals, sectionals and performances must be attended (if eligible) in order to remain a performing member of the band program. This is a full year course.

NOTE: Concert Band Placement: Students will audition for placement in one of the concert bands in the spring of the previous year. The students will re-audition again in November. At that time, schedule changes will be requested for the purpose of placing the student in the correct class. Students who cannot be placed in the proper band may not be allowed to participate in the band. Schedule conflicts will be addressed on a "per student" basis.

6132-6134 Jazz Ensemble 2-4 Grades: 9-12 Credit: 1.0
Prerequisite: Audition, director approval and must be concurrently enrolled in a Band class.
This Performance Ensemble is a standard Jazz Band. Students in the Jazz Band also must also be enrolled in a band class (Band 1-4). This class will serve as an introduction to the rich history of jazz music. Through ensemble rehearsal, individual practice, and a variety of performance opportunities the student will gain an understanding and appreciation for this great art form. Emphasis will be placed on not just performance technique, but also rudimentary improvisational skills, musicianship, and a sense of personal accountability.

6041-6044 Color Guard 1-4 Grades: 9-12 Credit: 1.0
Prerequisite: Audition or Director Approval (0.5 PE Credit)
The Color Guard members accompany and perform with the band at a variety of school, civic, and UIL events. Applicants must audition for membership in color guard. Members are selected each spring through competitive auditions held at the high school. Membership is open to any student in good academic standing. Color guard meets as a separate class and performs as a visual extension of the band at all football games, pep rallies, and competitions. During the spring semester, the team competes independently at several Winter Guard contests. Development of physical coordination, stamina, creativity, and leadership are stressed as well as high academic achievement. Members also participate in all functions of the band and are considered an integral part of the band program. All rules and regulations pertaining to membership and performances in band also apply to this auxiliary unit. Participation in performances and practices outside normal school hours is required.

6094 Music Theory 1 Grades: 9-11 Credit: 1.0
Prerequisite: Previous musical training or previous/current membership in a school performing ensemble.
The Music Theory course is designed to enhance music skills and basic music fundamentals. The essential aspects of melody, harmony, rhythm, and form are studies. Throughout the course of the year students will study basic notation, scales, key signatures, intervals, triads, cadences, non-chord tones, form, part-writing, and analysis of a score. Aural dictation and ear training are also an integral part of the course and will be taught throughout the year. Individual creativity is nurtured through both rhythmic and melodic composition. This course is highly recommended for students in a musical ensemble, and is a prerequisite for AP Music Theory.

6099 AP Music Theory ***Grades: 10-12 Credit: 1.0***

Prerequisite: Music Theory 1 or previous music training

The AP Music Theory course corresponds to one-to-two semesters of typical, introductory college music theory coursework. Musicianship skills, including dictation and listening skills, sight-singing, and harmony, are an important part of the course. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of tonal music that are heard or presented in a score.

6762 Applied Music 2 ***Grades: 10-12 Credit: 1.0***

Prerequisite: Must have completed 1 year in Band program and enrolled in an upper level band class (Wind Ensemble/Symphonic Band.

The Applied Music course allows students to advance their development of proficiency in instrumental performance. The course addresses the specific needs of each student and provides individualized instruction through challenging literature for study and performance. Performance opportunities will extend to region and all-state band auditions, and solo & ensemble entries. The course is based upon the Fine Arts Texas Essential Knowledge and Skills (TEKS) in Music.

6763 Applied Music 3 ***Grades: 10-12 Credit: 1.0***

Prerequisite: Must have completed 1 year in Band program and enrolled in an upper level band class (Wind Ensemble/Symphonic Band.

The Applied Music course allows students to advance their development of proficiency in instrumental performance. The course addresses the specific needs of each student and provides individualized instruction through challenging literature for study and performance. Performance opportunities will extend to region and all-state band auditions, and solo & ensemble entries. The course is based upon the Fine Arts Texas Essential Knowledge and Skills (TEKS) in Music.

6764 Applied Music 4 ***Grades: 10-12 Credit: 1.0***

Prerequisite: Must have completed 1 year in Band program and enrolled in an upper level band class (Wind Ensemble/Symphonic Band.

The Applied Music course allows students to advance their development of proficiency in instrumental performance. The course addresses the specific needs of each student and provides individualized instruction through challenging literature for study and performance. Performance opportunities will extend to region and all-state band auditions, and solo & ensemble entries. The course is based upon the Fine Arts Texas Essential Knowledge and Skills (TEKS) in Music.

6781-6784 Piano 1-4 ***Grades: 9-12 Credit: 1.0***

Using the state of the art piano lab in the Gary Patterson Center for the Performing Arts, the piano class provides students from beginner to advanced, an opportunity to learn how to play the piano/keyboard. Beginning students will learn basic piano skills and how to read music. Intermediate or advanced students will be placed by audition. Students will work individually and in small groups to master the techniques of playing the piano and to learn pieces for performance.

6301 Music Business 1 ***Grades:10-12 Credit: 1.0***

Prerequisite: None

The introduction to music business and industry careers will present a broad overview of the recording and music industry, and explains how the various segments operate on a day-to-day basis: where monies are generated, who the key players are, how deals are made and broken, how interests are protected, and what the new developments in digital technology are that are changing the way that music is marketed, promoted, distributed, and heard. Students will be encouraged to think as entrepreneurs as well as marketers.

6302 Music Business 2 ***Grades: 11-12 Credit: 1.0***

Prerequisite: Music Business 1

Music Business 2 is a continuation of Music Business I. There will be several hands-on opportunities aligned with students' interests. By the end of this course, the student will: 1. Understand the structure of, and relationship between the recording, music publishing, marketing, and live performance industries. 2. Learn about different career

and income opportunities, and how to develop a strategy to break in and succeed in the music industry. 3. Understand the business aspects involved in producing, manufacturing, marketing, and distributing recorded content. Participate in a project aligned with music industry including (but not limited to): digital recording, copyrighting original creative material, recording distribution and marketing, live performance management, and performance marketing.

6303 Digital Audio Technology I ***Grades: 11-12 Credit: 1.0***
Prerequisite: None
This course introduces the student to sound and recording technology, including historical framework and digital technology. The student will be exposed to music/audio recording, audio mixing (live and recorded), and digital music production and distribution.

7094 Mariachi Music Class ***Grades: 9-12 Credits: 1.0***
This course is designed for students to learn traditional Mexican music that is appropriate to the skill level of the students. It will concentrate on the development of note-reading skills, aural skills, singing skills, correct instrumental techniques, memorization, ear training, and stage presence. A progression of fundamental and technical proficiency is expected.

Speech Course Descriptions

6631 Professional Communications ***Grades: 9-12 Credit: 0.5***
Prerequisite: None
Professional Communications blends written, oral, and graphic communication in a career-based environment. Employers in the global economy list communications as the number one skill they look for in a potential employee when hiring. The ability to communicate professionally includes having a clear understanding of communication strategies, interpersonally and in a group, as well as in professional presentation. In this course students will study how and why we communicate in a professional setting as well as within our personal relationships. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, and conduct Internet research.

6633 Public Speaking ***Grades: 9-12 Credit: 0.5***
Recommended Prerequisite: Professional Communications
Students learn the basics of Public Speaking to include prepared, impromptu, technical and demonstration/performance speeches. Students learn how to prepare for a speech and how to avoid "stage fright." They will learn the basics of voice production and how to use their voice for maximum effectiveness. Students also study nonverbal delivery techniques and the effective use of language in their speeches. There is also information presented about demographics (learning your audience), using support materials, research, speech organization, and argumentation. Students must be prepared to speak in front of the class weekly. They will deliver informative and persuasive speeches, as well as learn about debate. The course will help take students who enjoy public speaking to the next level of competence and help the novice student gain confidence and poise in their presentations. **This course qualifies as a NCAA core course.**

6637 Independent Study in Speech (elective only) ***Grades: 9-12 Credit: 1.0***
Prerequisite: None
The purpose of this course is to give students interested in UIL Speech events a chance to research, write, learn, and practice speeches and speaking.

6661 Debate 1 ***Grades: 9-12 Credit: 1.0***
6662 Debate 2 ***Grades: 10-12 Credit: 1.0***
6663 Debate 3 ***Grades: 11-12 Credit: 1.0***
Prerequisite: None for Debate 1, previous levels of Debate for 2 and 3

In Debate I-III, students will conduct research on relevant social, political, and moral topics, write cases both affirming and negating their specific topic, compete against each other, and ultimately debate other teams in tournaments, thus develop and improve their reasoning and speaking skills.

Interdisciplinary Courses, Electives, and Special Topics Descriptions

Honors Colloquium 1-4) ***Grades: 9-12 Credits: 2.0***
(See English and Social Studies for course numbers
Prerequisite: Acceptance or provisional placement in G/T Program
Honors Colloquium is an English and social studies humanities-based interdisciplinary program for gifted and talented students. The Colloquium program is designed to meet the unique learning needs of gifted students through a differentiated curriculum providing enrichment, acceleration, grouping, and guidance. Classes meet two periods daily for the entire year. The transcripts of Colloquium students will reflect credit in English and social studies (Honors or AP level.

1003 ELDA ***Grade: 9-12 Credit: 1.0***
This is a restricted course
The English Language Development and Acquisition (ELDA) course will validate a student's native language and culture as a valuable resource and as a foundation to attain the English language. It will develop social language, survival vocabulary, and the basic building blocks of literacy for newly arrived and preliterate students.

7013 Teen Leadership ***Grades: 9-12 Credit: 0.5***
Prerequisite: None
This course is designed to develop student leadership, professional, and interpersonal skills. Students learn to develop a healthy self-concept, while at the same time developing skills in public speaking, decision making, and goal-setting. This course is highly interactive with students learning in a cooperative atmosphere.

7171 Peer Assistance Leadership 1 (P.A.L.S.) ***Grades: 11-12 Credit: 1.0***
Prerequisite: Application & Interview
7172 Peer Assistant Leadership 2 (P.A.L.S 2) ***Grade: 12 Credit: 1.0***
Prerequisite: P.A.L.S 1 and application and interviews
The course uses the potential of youth to make a difference in their lives, schools and communities. PALs recognizes an innate capacity for social understanding, personal well-being, and community participation with every student. PALs nurtures and builds capacities to help youth increase resiliency and build protective factors to help them achieve school and social successes which lead to a productive life.

7018 Student Leadership ***Grades: 10-12 Credit: 1.0***
Prerequisite: None (required for student council officers)
This course provides an opportunity to study, practice, and develop group and individual leadership and organizational skills. These skills include, but are not limited to the following topics or areas: leadership roles, interpersonal relations, civic responsibility, decision making, problem solving and communication. Students enrolled in this course apply these skills in dealing with peers, school administration and the community. This course takes a hands-on, lab oriented approach to leadership by involving students in the participatory leadership through project planning and implementation.

7050 College Transition ***Grades: 11-12 Credit: 0.5***
College Transition is designed to equip students with the knowledge, skills, and abilities necessary to be active and successful learners both in high school and in college. Students examine numerous research based learning strategies such as goal setting, effective time management, note-taking, active reading, test taking strategies and conducting research. This course provides a means for students to research financial aid, grants, and scholarships. Students will also learn about completing college applications and explore technical schools, colleges, and universities.

NON-CREDIT COURSES

0003 Student Aide ***Grade: 12*** ***Credit: 0.0***

Prerequisite: Excess credits required for graduation and a good attendance record

Students with an above average academic record and excess credits for graduation may volunteer to serve as a student aide to an administrative office on campus. Counselors may approve aides for department chairs or academic programs.

0015-17 College Release ***Grade: 12*** ***Credit: 0.0***

Prerequisite: Counselor approval and confirmed enrollment in a dual credit course.

Students need to seek information regarding dual credit offerings from their counselor and complete all designated requirements of the host college.

0007 Senior Option ***Grade: 12*** ***Credit: 0.0***

Prerequisite: Counselor approval form with parent signature required

Students have the option of being released from either 1st or 7th period their senior year. In order to qualify, students must have earned a minimum of 14 credits at the time of course selection and 21 credits by the end of their junior year and have passed all State EOC exams. Students must have their own means of transportation to and from campus.

Career and Technical Education Courses at ECHS

Programs of Study: The Texas Education Agency Division of College, Career, and Military Preparation has developed programs of study, including coherent sequences of courses, industry-based certifications, and work-based learning to ensure that students are prepared for in-demand, high-skills careers in Texas.

Agriculture, Food, and Natural Resources Cluster	
Courses	Prerequisites
7211 Principles of Agriculture, Food, and Natural Resources	None
7221 Floral Design	Recommended Prerequisite: Principles of Agriculture, Food and Natural Resources
7222 Advanced Floral Design	Floral Design
7223 Horticulture Science	Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources
7237 Equine Science (Horse Management)	Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources
7236 Livestock Production	Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources
7240 Wildlife, Fisheries, and Ecology Management	Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources
7255 Small Animal Management	None
7216 Veterinary Medical Applications w/ Lab	Equine Science, Small Animal Management, or Livestock Production
7251 Professional Studies & Professional Communication (Ag Leadership I)	Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources
7252 Agricultural Leadership, Research, and Communication (Ag Leadership II)	Professional Studies. & Professional Communication (Ag Leadership I
7253 Ag Business & Marketing (Ag Leadership III)	Agricultural Leadership, Research, and Communication (Ag Leadership II)

7258 Advanced Animal Science	Biology and Chemistry, Algebra and Geometry, and Small Animal Management, Equine Science, or Livestock Production
7271 Practicum in Ag, Food, and Natural Resources	None
7239 Agriculture Mechanics and Metal Technologies	Recommended Prerequisite: Principles of Agriculture, Food, and Natural Resources
7245 Agriculture Structures and Design	Recommended Prerequisite: Agriculture Mechanics and Metal Technologies
7233 Agriculture Equipment Design and Fabrication	Agriculture Structures and Design, Record of Shop Safety, and Written Exam

Agriculture, Food, and Natural Resources Course Descriptions

7211 Principles of Agriculture, Food and Natural Resources Grades: 9-11 Credit: 1.0
Prerequisite: None
Be a part of the world's most important industry! This is a basic class that will allow you to find your area of interest in animal, plant, food, or mechanical systems. Students will learn about global agriculture, career development, leadership, communications, personal finance, mechanized agriculture, and project programs. Other topics covered will include soils, plants, shop construction and animal science. This is where your FFA career begins!

7221 Floral Design Grades: 10-12 Credit: 1.0
Flowers, balloons, and more. This is a basic floral design course that will provide you with hands on skills in arranging flowers and the "book smarts" to make a competitive arrangement. This course meets the criteria for a fine arts credit. Students are encouraged to test for state certification.

7220 Advanced Floral Design Grades: 11-12 Credit: 1.0
Prerequisite: Floral Design
In this course, students build on the knowledge from the *Floral Design* course and are introduced to more advanced floral design concepts, with an emphasis on specialty designs and specific occasion planning. This course focuses on building skills in advanced floral design and providing students with a thorough understanding of the design elements and planning techniques used to produce unique specialty floral designs that support the goals and objectives of a specific occasion or event.

7223 Horticultural Science Grades: 10-12 Credit: 1.0
Recommended Prerequisite: Principles of Agriculture, Food and Natural Resources
Greenhouse, plants and more plants. Spend a fun and exciting time learning about plants and how to grow, manage, and market them.

7237 Equine Science (Horse Management) Grades: 10-12 Credit: 0.5
Recommended Prerequisite: Principles of Agriculture, Food and Natural Resources
So horses are your love? This is the class for you. A whole course devoted to the study of horses. We will focus on breeds, feeding, health, training, and careers dealing with horses. This is a must for anyone interested in trying out for the Horse Judging Team.

7236 Livestock Production Grades: 10-12 Credit: 1.0
Recommended Prerequisite: Principles of Agriculture, Food and Natural Resources
Does anyone want to be a veterinarian? Spend the semester devoted to learning and studying large animals. You think you might want to have a goat, lamb, or pig? Take this class and learn everything you ever wanted to know. This is a fun class that just focuses on livestock.

7240 Wildlife, Fisheries, and Ecology Management Grades: 10-12 Credit: 1.0
Recommended Prerequisite: Principles of Agriculture, Food and Natural Resources
Hunting, fishing, and the great outdoors! You'll love learning about our country's greatest natural asset.... our wildlife. You will go through the Texas Parks and Wildlife programs for Hunter Education, Boater Education, and

Angler Education. You will also learn vital management skills to maintain our wildlife.

7255 Small Animal Management Grades: 10-12 Credit: 0.5
Prerequisite: None
Do you love furry little kittens and floppy eared dogs with wet noses? Take a class that every animal lover can really learn something from. Learn about small animals including dogs, cats, lizards, snakes, birds, and much more. Examine health issues, selection, training, breeding, and social issues.

7216 Veterinary Medical Applications w/ Lab Grades: 11-12 Credits: 2.0
Prerequisite: Equine Science, Small Animal Management or Livestock Production
This course provides training in the veterinary assistant field. It includes topics such as animal handling and restraint, health and safety, sanitation, surgical preparation, anatomy, physiology, medical terminology, infectious diseases, instrument and equipment identification, vaccine preparation and injection techniques, laws and ethics, and veterinary office procedures. There is reinforcement of basic communication skills, utilizing listening skills to follow directions, practicing basic math skills as applied to a medical setting and reading to gain information and to perform assignments and tasks as directed.

7251 Professional Stds. & Professional Comm. (Ag Leadership I) Grades: 10-12 Credit: 1.0
Recommended Prerequisite: Principles of Agriculture, Food and Natural Resources
This class is designed for those students wanting to take their leadership and career development to another level. Students will develop leadership and communication skills in the fall by competing on leadership development teams. During the spring, students will continue developing their critical thinking skills, communication skills and problem solving skills by competing on career development event teams. FFA membership and team participation is required. Students in Ag Leadership I may receive speech credit.

7252 Agricultural Leadership, Research and Communication (Ag Leadership II) Grades: 11-12 Credit: 1.0
Prerequisite: Professional Stds. & Professional Communication
This class is designed for those students wanting to continue taking their leadership and career development to another level. Students will develop leadership and communication skills in the fall by competing on leadership development teams. During the spring, students will continue developing their critical thinking skills, communication skills and problem solving skills by competing on career development event teams. FFA membership and team participation is required.

7253 Ag Business & Marketing (Ag Leadership III) Grade: 12 Credit: 1.0
Prerequisite: Agricultural Leadership, Research and Communication
This practicum is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experiences such as independent student, internships, assistantships, mentorships or laboratories. FFA membership and team participation is required.

7258 Advanced Animal Science Grades: 11-12 Credit: 1.0
Prerequisite: Biology and Chemistry, Algebra and Geometry, and Small Animal Management, Equine Science, or Livestock Production
Advanced Animal Science will prepare students for careers in the field of animal science. The course examines how man and animal interrelate. Students must have taken Horse Management, Small Animal Care, Livestock Production or Vet Tech prior to Advanced Animal Science. If taken as a fourth science, students may receive a science credit. **This course does NOT meet core course requirements for NCAA.**

7271 Practicum in Ag, Food, and Natural Resources Grades: 11-12 Credit: 2.0

Prerequisite: None
Practicum in Ag, Food, and Natural Resources is a work based learning course for students who have completed all courses in their Agriculture Program of Study, and are looking for work based experience. Additionally, students who have completed Veterinary Medical Applications and are working towards completion of the Certified Veterinary Assistant should enroll in Practicum in AFNR to gain additional hours and experience.

7239 Agricultural Mechanics and Metal Technologies Grades: 10-11 Credit: 1.0
Recommended Prerequisite: Principles of Ag, Food, and Natural Resources
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. This course will prepare students 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. Students will have opportunities to learn, reinforce, apply, and transfer knowledge and skills and technologies in a variety of settings.

7245 Agricultural Structures and Design Grades: 11-12 Credits: 2.0
Recommended Prerequisite: Agricultural Mechanics and Metal Technologies
In Agricultural Structures Design and Fabrication, students will explore career opportunities, entry requirements, and industry expectations. In order to prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural structures design and fabrication. Students will have opportunities to learn, reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings.

7233 Agricultural Equipment Design and Fabrication Grades: 12 Credits: 2.0
Prerequisite: Agricultural Structures and Design, Record of Shop Safety, Written Exam
In Agricultural Equipment Design and Fabrication, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment. In order to prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural equipment design and fabrication. Students will reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings

Architecture and Construction Cluster	
Courses	Prerequisites
7513 Principles of Construction	None
7501 Construction Management I	Recommended Prerequisite: Principles of Construction
7507 Construction Management II	Construction Management I
7508 Practicum in Construction Management	Construction Management II
7512 Principles of Architecture	None
7521 Architectural Design I	Algebra I and English I
7522 Architectural Design II	Architectural Design I
7530 Practicum of Architectural Design	Architectural Design II

Architecture and Construction Course Descriptions

7512 Principles of Architecture Grades: 9-12 Credit: 1.0
Prerequisite: None
This course provides an introductory overview of the various fields and processes of Architecture. Students will use hand drafting and computer software such as AutoCAD to complete simple floor plan, elevations, and other architectural building assignments. Upon completing this course, students will understand Architecture and will be able to make informed decisions regarding a coherent sequence of future Architecture courses. This course is a prerequisite for all future courses in Architecture such as Architectural Design I, Advanced Architecture, and

Practicum. This course is designed for a student on the Architecture pathway.

7513 Principles of Construction ***Grades: 9-12 Credit: 1.0***
Prerequisite: None
Students will use a variety of machines and tools safely. Students will plan, communicate, and build projects from drawing and blueprints. Students will learn basic rigging, materials handling, and basic employability skills. Students could earn the National Center for Construction Education and Research certification in the core curriculum if they complete all coursework successfully.

7501 Construction Management 1 ***Grades: 10-12 Credits: 2.0***
Recommended Prerequisite: Principles of Construction
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 includes the knowledge of design techniques and tools related to the management of architectural and engineering projects.

7507 Construction Management II ***Grades: 11-12 Credits: 2.0***
Prerequisite: Construction Management I
In Construction Management II, 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 post-secondary degree in architecture, construction science, drafting, or engineering. Construction Management II includes knowledge of the design, techniques, and tools related to the management of architectural and engineering projects.

7508 Practicum in Construction Management ***Grades: 11-12 Credits: 2.0***
Prerequisite: Construction Management II
This class will allow students to be involved in the planning and construction of a major project in the cabinetmaking and millwork field. Activities include advanced machine operations, custom woodworking, interior house trim, and selected individual projects. This course focuses on helping students develop safe working habits using machinery or tools and to develop problem solving skills in designing and planning. National Center for Construction Education and Research (NCCER) certification: OSHA Certification 10-hour course.

7521 Architectural Design 1 ***Grades: 10-12 Credit: 1.0***
Prerequisite: Algebra I and English I
Students gain knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, and landscape architecture. Architectural design includes the knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

7522 Architectural Design II ***Grades: 11-12 Credits: 2.0***
Prerequisite: Architectural Design I
This course expands the knowledge gained in the Architectural Design course and provides opportunities for real life, hands-on experience.

7530 Practicum of Architectural Design ***Grades: 12 Credits: 2.0***
Prerequisite: Architectural Design II
Practicum in Architectural Design is a course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study. Students are expected to participate in extended learning experiences such as internships or externships.

Arts, A/V Technology, and Communication Cluster	
Courses	Prerequisites
7721 Principles of Arts, Audio Video	None

Technology, and Communications	
7531 Graphic and Design Illustration I	None
7997 Graphic and Design Illustration II	Graphic and Design Illustration I
7534 Practicum in Graphic Design and Illustration	Graphic and Design Illustration II
7532 Animation I	None
7999 Animation II	Animation I
7535 Practicum in Animation	Animation II
7722 Audio/ Video Production I	Recommended Prerequisite: Principles of Arts, AV Technology and Communication
7998 Audio/ Video Production II	Audio/ Video Production I
7724 Practicum in Audio/ Video Production	Audio/ Video Production II
6818 Video Game Programming	Recommended Prerequisite: Principles of Information Technology OR Principles of Arts, A/V, and Communications
6820 Advanced Video Game Programming	Recommended Prerequisite: Principles of Information Technology OR Principles of Arts, A/V, and Communications, Video Game Programming
7122 Fashion Design	None
7996 Fashion Design 2	Fashion Design 1
7125 Practicum in Fashion Design	Fashion Design 2

Arts, A/V Technology, and Communication Course Descriptions

7721 Principles of Arts, Audio Video Technology, and Communications Grades: 9-10 Credit: 1.0
Prerequisite: None
Students will work with technology applications, including image editing, basic animation, graphics, audio mixing, and video. The course will also lay a foundation for professional communication skills and an understanding of career opportunities.

7531 Graphic and Design Illustration I Grades: 10-12 Credit: 1.0
Prerequisite: None
This course is an introduction to skills required for a career in graphic design and illustration. Students will develop knowledge and skills needed for success in the digital arts, communication, and business careers. Students will develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design.

7997 Graphic and Design Illustration II Grades: 10-12 Credits: 2.0
Prerequisite: Graphic and Design Illustration I
This course is an advanced level course in graphic design and illustration. Students will continue to develop knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications careers. Students will build a deep understanding of the industry with a focus on fundamental elements and principles of visual art and design.

7534 Practicum in Graphic Design and Illustration Grades: 11-12 Credits: 2.0
Prerequisite: Graphic and Design Illustration II
Practicum in Graphic Design and Illustration is designed to provide you with advanced skills in traditional animation, digital media and game design. In this course, students will engage in teamwork activities as well as working with industry and community clients. Students will also develop an individual animated reel and develop marketing skills that are essential in the industry.

7532 Animation I ***Grades: 10-12 Credit: 1.0***

Prerequisite: None

This course is survey of different types of animation. Students will learn to plan and produce different animations using various methods and software applications. Students will apply the principles of good animation to their motion pictures and the principles of art to their designs and drawings. This course would be helpful to those interested in film, motion graphics, web development, or cartoon animation.

7999 Animation II ***Grades: 11-12 Credits: 2.0***

Prerequisite: Animation I

The advanced animation course will use 3D modeling and various computer software packages to complete animation projects. Students will work on advanced motion development of objects with the various tools.

7535 Practicum in Animation ***Grades: 11-12 Credits: 2.0***

Prerequisite: Animation II

Practicum in Animation is designed to provide the student with advanced skills and training in animation. Students enrolled in this course will engage in teamwork activities, work with community and industry clients, and develop the knowledge and skills necessary to pursue a career or post-secondary education in animation.

7722 Audio/Video Production I ***Grades: 10-12 Credit: 1.0***

Recommended Prerequisite: Principles of Arts, AV Technology and Communication

Designed to begin the preparation for a career in A/V technology and film production through in-class activities and long-term projects that students write, shoot, and edit. Students will develop an understanding of the industry, their technical skills, and creative instincts.

7998 Audio/Video Production II ***Grades: 11-12 Credits: 2.0***

Prerequisite: Audio/Video Production I

This two-hour course is an extension of AVP1. Students will develop an advanced understanding of the industry with a focus on pre-production, production, and post-production techniques. Work includes ECTV, live broadcasts, and short filmmaking.

7724 Practicum in Audio/Video Production ***Grade: 12 Credits: 2.0***

Prerequisite: Audio/Video Production II

Students will lead the AVP2 class through projects and continue to develop their skills in video broadcasting and filmmaking. Students will also have the opportunity for industry certifications.

6818 Video Game Programming ***Grades: 10-11 Credit: 1.0***

Recommended Prerequisite: Principles of Information Technology OR Principles of Arts, A/V, and Communications

In this course students will design and implement programs to develop games incorporating graphics and gaming strategies. Students will identify task requirements, plan search strategies, and use programming concepts to access, analyze, and evaluate information needed to design games.

6820 Advanced Video Game Programming ***Grades: 10-12 Credit: 1.0***

Recommended Prerequisite: Principles of Information Technology OR Principles of Arts, A/V, and Communications, Video Game Programming

Programing 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.

7122 Fashion Design ***Grades: 10-12 Credit: 1.0***

Prerequisite: None

This technical laboratory course focuses on apparel from the perspective of personal decision making related to apparel, the apparel industry, and career preparation. Topics include: an understanding of fashion and the textile and apparel industries, managing the apparel dollar, apparel repair and alteration, and wardrobe planning, care and maintenance. Quality apparel construction is addressed as it relates to consumer decision making and career

preparation for the apparel industry.

7996 Fashion Design 2 ***Grades: 11-12 Credits: 2.0***
Prerequisite: Fashion Design
In this 2 period class students will get a hands on learning experience related to the fashion industry. Careers in fashion span all aspects of the textile and apparel industries. In the course students will be expected to develop an advanced understanding of fashion, with emphasis on design and production.

7125 Practicum in Fashion Design ***Grades: 12 Credits: 2.0***
Prerequisite: Fashion Design 2
Careers in fashion design 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 may be delivered through lab based classroom experiences or career preparation opportunities.

Business, Marketing, and Finance Cluster	
Courses	Prerequisites
6613 Principles of Business, Marketing, and Finance	None
6721 Accounting 1	Recommended Prerequisites: Principles of Business, Marketing, and Finance
6722 Accounting 2	Accounting 1
7300 Practicum in Business Management	Accounting 2, Business Law, or Business Management
7312 Business Law	Recommended Prerequisite: Principles of Business, Marketing, and Finance
7313 Business Management	Recommended Prerequisite: Principles of Business, Marketing, and Finance

Business, Marketing, and Finance Course Descriptions

6613 Principles of Business, Marketing and Finance ***Grades: 9-11 Credit: 1.0***
Prerequisite: None
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. We will focus on the roles of business in the lives of individuals, consumers, workers and citizens.

7312 Business Law ***Grades: 11-12 Credit: 1.0***
Recommended Prerequisite: Principles of Business, Marketing and Finance
An introductory course on business law covering such topics as: contracts, ethics, employment law, credit, banking, partnerships, bankruptcy, and more. The course includes computer applications, electronic issues, and legal research, with an introduction to personal law topics that interest students. We will follow a young entrepreneur's business start-up and experience law in action.

7313 Business Management ***Grades: 10-12 Credit: 1.0***
Recommended Prerequisite: Principles of Business, Marketing and Finance
A practical course combining skills needed to manage and operate a successful business. Topics include: finance, marketing, communications, human resources, and many more. Profiles of business leaders, ethical and global issues, challenges in the business world, computer applications, and real-life scenarios are included throughout the course.

6721 Accounting I ***Grades: 10-12 Credit: 1.0***
Recommended Prerequisite: Principles of Business, Marketing and Finance
"The Language of Business", this course provides an introduction to standard business accounting. Whether you want to be an accounting major, work after school in an accounting-related job, work in a non-accounting job, or

want to learn how to take care of your personal finances, this class is for you. Regardless of your career field, employers want people who have these skills: problem solving, critical thinking, understanding of business/profit motive, organization/accuracy/integrity, and use of technology- all skills that are essential in the high school accounting.

6722 Accounting II ***Grades: 11-12 Credit: 1.0***
Prerequisite: Accounting 1
Advanced Accounting reinforces basic accounting principles through topics on partnerships and corporations. Students learn the material in "real-life" simulations and through automated accounting software. Other topics of study include: business ethics, career choices, accounting and business practices in the global community, and multicultural awareness.

7300 Practicum in Business Management ***Grades: 12 Credits: 2.0***
Prerequisite: Business Law or Business Management
Practicum in Business Management is designed to give students practical application of previously studied knowledge and skills. Students apply technical skills to address business applications of emerging technologies and to develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs.

Education and Training Cluster	
Courses	Prerequisites
7161 Principles of Education and Training	None
7168 Child Development Associate Foundations	Recommended Prerequisite: Principles of Education and Training
6680 Communication and Technology in Education	Recommended Prerequisite: Principles of Education and Training
7174 Instructional Practices (Teacher Prep I)	Recommended Prerequisite: Principles of Education and Training, application and skills assessment
7175 Practicum in Education and Training 9Teacher Prep II)	Instructional Practices (Teacher Prep I)
7163 Child Guidance	Recommended Prerequisites: Child Development
7345 Practicum in Human Services	Child Guidance

Education and Training Course Descriptions

7161 Principles of Education and Training ***Grades: 9-10 Credit: 1.0***
Prerequisite: None
This course is designed to introduce learners 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. Students will also gain an understanding of the basic knowledge and skills essential to careers within the education and training career cluster. Students will develop a graduation plan that leads to a specific career choice in the student's interest area.

7168 Child Development Associate Foundations ***Grades: 10-12 Credit: 1.0***
Recommended Prerequisite: Principles of Education and Training
Students enrolled in this course will begin work towards the Child Development Associate Certification.
The CDA is required for work in early learning settings. Students will learn about early childhood development and learning theories.

6680 Communication and Technology in Education ***Grades: 10-12 Credit: 1.0***
Recommended Prerequisite: Principles of Education and Training

Communication and Technology in Education is an extended course of study designed to provide students with the fundamentals of planning, managing and training services needed to provide learning support services in K-12 classrooms. Students will develop knowledge and skills regarding the professional, ethical, and legal responsibilities in teaching related to educational technology; as well as, understand laws and pedagogical justifications regarding classroom technology use. This course provides an opportunity for students to participate in training related to Google for Education, Microsoft Office Fundamentals, Common Sense Media and Digital Citizenship

7174 Instructional Practices (Teacher Preparation I) Grades: 11-12 Credits: 2.0
Recommended Prerequisite: Principles of Education and Training, application, skills assessment
This course is a field-based internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators or trainers in direct instructional roles with elementary, middle school, and high school aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete related responsibilities of teachers, trainers, paraprofessionals, or other educational personnel. Students will travel to local elementary, intermediate, and middle schools for practicum experiences.

7175 Practicum in Education and Training (Teaching Preparation II) Grade: 12 Credits: 2.0
Prerequisite: Instructional Practices
This course is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators in direct instructional roles with elementary, middle school, and high school aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with recordkeeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel. Students will travel to local elementary, intermediate, and middle schools for practicum experiences.

7163 Child Guidance Grades: 11-12 Credits: 2.0
Prerequisite or Co-Requisite: Child Development
This year-long course addresses the knowledge and skills related to child development and guidance equipping students to develop positive relationships with children and effective caregiver skills. Students use these skills to promote the well-being and healthy development of children and to pursue careers related to the care, guidance, and education of young children, including those with special needs. Students will travel to a local pre-school or daycare center to gain practicum experience. Students enrolled in this course will also begin working towards the Child Development Associate certification.

7345 Practicum in Human Services Grades: 12 Credits: 2.0
Prerequisite: Child Guidance
Practicum in Human Services utilizes prior knowledge in order to provide occupationally specific training and that focuses on the development of consumer services, early childhood development and services, counseling and mental health services, and family and community services careers. This course is designed to meet the career preparation needs and interests of students in the human services cluster. Students will travel to a local pre-school or daycare facility for practicum experience. Students should complete their Child Development Associate certification by the end of the school year.

Health Science Cluster	
Courses	Prerequisites
7401 Principles of Health Science	None
7421 Medical Terminology	Recommended Prerequisite: Principles of Health Science
3520 Medical Microbiology	Biology and Chemistry
3518 Anatomy and Physiology	Biology and a second science credit Recommended Prerequisite: a course from the Health Science Career Cluster

3522 Pathophysiology	Biology and Chemistry Recommended Prerequisite: a course from the Health Science Career Cluster
7402 Health Science Theory	Biology
7035 Science of Nursing	None
7030 Clinical Ethics	None
7094 Kinesiology I	None
7405 Pharmacology	Biology and Chemistry Recommended Prerequisite: a course from the Health Science Career Cluster
7411 Practicum in Health Science: Certified Nurse Assistant	Prerequisite: Health Science Theory, Biology, written assessment, forms as required by the state
7410 Practicum in Health Science: Registered Dental Assistant	Prerequisite: Health Science Theory, Biology, written assessment, forms as required by the state
7505 Practicum in Health Science: Certified Medical Assistant	Prerequisite: Health Science Theory, Biology, written assessment, forms as required by the state
7407 Practicum in Health Science: Pharmacy Technician	Pharmacology, Health Science Theory, Biology
7412 Practicum in Health Science: 2nd Time Taken	Practicum in Health Science (CNA, RDA, CMA, Pharmacy Technician)

Health Science Course Descriptions

7401 Principles of Health Science ***Grades: 9-10 Credit: 1.0***
Prerequisite: None
The Principles of Health Science course provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the healthcare industry.

7142 Principles of Exercise and Wellness ***Grades: 9-10 Credit: 1.0***
Prerequisite: None
The principles of exercise and wellness course is designed to provide for the development of knowledge and skills in fields that assist parents with maintaining physical, mental, and emotional health. Students in this course will understand diet and exercise, as well as techniques to help parents recover from injury, illness, and disease. They will also learn about introducing health science topics such as employability skills, lifespan development, and ethical and legal standards.

7402 Health Science Theory ***Grades: 10-12 Credit: 1.0***
Prerequisite: Biology
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. This course prepares the student for the transition to clinical or work-based experiences in healthcare.

7421 Medical Terminology ***Grades: 9-12 Credit: 1.0***
Recommended Prerequisite: Principles of Health Science
A course designed to develop a working knowledge of the language of medicine. Students acquire word-building skills by learning prefixes, suffixes, roots and abbreviations. Relating terms to body systems, students identify proper use of the word in a medical environment. Knowledge of medical terminology enhances the student's ability to successfully secure employment or pursue advanced education in health care.

7405 Pharmacology ***Grades: 11-12 Credit: 1.0***

Prerequisite: Biology and Chemistry
Recommended Prerequisite: a course from the Health Science Career Cluster
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.

7411 Practicum in Health Science – Certified Nurse Assistant Grades: 11-12 Credits: 2.0
Prerequisite: Health Science Theory, Biology, written assessment, forms as required by the state
This is a competitive course. Students wishing to enroll in this course will complete a written exam, and be evaluated on a rubric that includes behavior, absences, and program of study and endorsement identification.
This course prepares students for entry-level employment in a clinical and/ or medical setting. Upon completion, of the program, graduates will receive a Certificate of Completion and may be able to test for the Texas Nurse Aid certification exam.

7410 Practicum in Health Science – Registered Dental Assistant Grades: 11-12 Credits: 2.0
Prerequisite: Health Science Theory, Biology, written assessment, forms as required by the state
This is a competitive course. Students wishing to enroll in this course will complete a written exam, and be evaluated on a rubric that includes behavior, absences, and program of study and endorsement identification.
This is a course that prepares students for entry-level employment in a dental office. Upon successful completion of the program, graduates will receive a Certificate of Completion and may be able to test for the Registered Dental Assistant national certification exam.

7505 Practicum in Health Science - Certified Medical Assistant Grade: 12 Credits: 2.0
Prerequisite: Health Science Theory and Biology
This is a competitive course. Students wishing to enroll in this course will complete a written exam, and be evaluated on a rubric that includes behavior, absences, and program of study and endorsement identification.
This is a course that prepares students for entry-level employment in a clinical and/or medical setting. Upon successful completion of the program, graduates will receive a Certificate of Completion and may be eligible to test for the Certified Medical Assistant national certification exam.

7407 Practicum in Health Science – Pharmacy Technician Grades: 11 - 12 Credits: 2.0
Prerequisite: Pharmacology, Health Science Theory, Biology
This is a competitive course. Students wishing to enroll in this course will complete a written exam, and be evaluated on a rubric that includes behavior, absences, and program of study and endorsement identification.
A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills. The Practicum in Health Science course is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. In this course students will challenge the Pharmacy Technician exam.

7412 Practicum in Health Science – 2nd Time Taken Grade: 12 Credits: 2.0
Prerequisite: Practicum in Health Science, written assessment, forms as required by the state
This course is restricted to students who have completed a Practicum in Health Science CNA1, CMA, or RDA
This is a competitive course. Students wishing to enroll in this course will complete a written exam, and be evaluated on a rubric that includes behavior, absences, and program of study and endorsement identification.
A course designed to provide for the development of multi-occupational knowledge and skills related to a wide variety of health careers. Students will have hands-on experiences for continued knowledge and skill development. Students will have the opportunity to earn Nursing Assistant certification through the TX Department of Aging and Disability Services. Seniors may also begin the coursework to prepare for Phlebotomy certification. The course may be taught by different methodologies, such as pre-employment laboratory, clinical rotation, or cooperative education.

3518 Anatomy and Physiology ***Grades: 10-12 Credit: 1.0***
Prerequisite: Biology and a second science credit
Recommended Prerequisite: a course from the Health Science Career Cluster
Students must meet the 40% laboratory and fieldwork requirement. This course satisfies a high school science graduation requirement. The Anatomy and Physiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

3520 Medical Microbiology ***Grades: 10-12 Credit:1.0***
Prerequisite: Biology and Chemistry
Recommended Prerequisite: a course from the Health Science Career Cluster
Students must meet the 40% laboratory and fieldwork requirement. This course satisfies a high school science graduation requirement. The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases.

3522 Pathophysiology ***Grades: 11-12 Credit: 1.0***
Prerequisite: Biology and Chemistry
Recommended Prerequisite: a course from the Health Science Career Cluster
Students must meet the 40% laboratory and fieldwork. This course satisfies a high school science graduation requirement. The Pathophysiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Pathophysiology will study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease. Students will differentiate between normal and abnormal physiology.

7093 Kinesiology I ***Grades: 9-10 Credit: 1.0***
Prerequisite: None
This course is designed to introduce students to the basic concepts of kinesiology. Students will gain an understanding of body mechanics, physiological functions of muscles and movements, the history of kinesiology, and the psychological impact of sports and athletic performance.

7035 Science of Nursing ***Grades: 10-12 Credit: 1.0***
Prerequisite: None
The Science of Nursing course introduces students to basic research-based concepts in nursing. Topics include the nursing process, the importance of critical thinking to patient care, regulatory agencies, and professional organizations. Instruction includes skills needed to pursue a nursing degree and training requirements required for specialty nursing roles. Knowledge and skills learned will include emergency care, patient assessment, basic interpretation of vital signs, identification of patients with physical and mental disabilities, patient positioning, use of assistive devices, and application of nursing theories in patient care plans.

7030 Clinical Ethics ***Grades: 11-12 Credit: 1.0***
Prerequisite: None
The Clinical Ethics course is a practical review of a discipline that provides a structured approach to assist health professionals in identifying, analyzing, and resolving ethical issues that arise in clinical practice. Students analyze ongoing developments in advanced medical technology. The course may raise awareness of or concerns about the ethical dimensions of clinical care. Students will leave the course with a practical awareness of how to respect diverse perspectives on ethics, morals, and values in healthcare.

Hospitality and Tourism Cluster

Courses	Prerequisites
7566 Introduction to Culinary Arts	None
7563 Culinary Arts	Recommended Prerequisite: Introduction to Culinary Arts
7567 Advanced Culinary Arts	Culinary Arts
7567 Practicum in Culinary Arts	Advanced Culinary Arts
3610 Food Science	Biology and Chemistry + 1 Advanced Science This course does not meet core requirements for NCAA

Hospitality and Tourism Course Descriptions

7566 Introduction to Culinary Arts ***Grades: 9-12 Credit: 1.0***

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

7563 Culinary Arts ***Grades: 10-12 Credits: 2.0***

Recommended Prerequisite: Introduction to Culinary Arts

Culinary Arts explores the art and science of cooking and baking, as well as the anthropology of the foodservice industry. Culinary Arts is offered as a laboratory-based course that focuses on traditional and modern culinary industry professionalism standards, management and production methods, techniques, and soft skills. This includes the opportunity to earn a nationally recognized safety and sanitation certificate through the National Restaurant Association and potentially other industry-appropriate certifications.

7567 Advanced Culinary Arts ***Grades: 11-12 Credits: 2.0***

Prerequisites: Culinary Arts and written assessment

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. We will cover the restaurant industry, global cuisines, presentation methods, and baking and pastry arts. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular activities.

7565 Practicum in Culinary Arts ***Grade: 12 Credits: 2.0***

Prerequisite: Advanced Culinary Arts and written assessment

Practicum in Culinary Arts is unique in that it provides specific occupational opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts I integrate academic and career and technical education; provides more inter-disciplinary 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 arts based workplace.

3610 Food Science ***Grades: 11-12 Credit: 1.0***

Prerequisite: Biology and Chemistry + 1 Advanced Science

Food Science is designed to reinforce and enhance the student's knowledge of scientific principles and processes through the study of food. Discover the science behind foods by conducting laboratory and field investigations. Why does bread rise? Will you get sick if you eat mold? These questions and more will be answered as we investigate the nature of foods, the principles of food processing, the causes of deterioration, and how we can improve the quality of our foods. This science credit will help relate science principles to the "real" world. **This course does NOT meet core course requirements for NCAA.**

Manufacturing Cluster	
Courses	Prerequisites
7231 Introduction to Welding	Recommended Prerequisite: Principles of Manufacturing

7234 Welding I	None
7832 Welding II Dual Credit	Welding I, record of shop safety, skill test, acceptance to college
7515 Principles of Applied Engineering	None
7510 Robotics I	None
7511 Robotics II	Robotics I
7835 Practicum in Manufacturing	None
Alamo Academies Manufacturing Courses (Off Campus: Junior and Senior Year)	
TBD Precision Metal Manufacturing	Application and TSI Assessment (Alamo Academy)
TBD Practicum in Manufacturing AA	Precision Metal Manufacturing (Alamo Academy)

Manufacturing Course Descriptions

7231 Introduction to Welding ***Grades: 9-10 Credit: 1.0***
Recommended Prerequisite: Principles of Manufacturing
This hands-on course will give a brief look at oxy/fuel welding and cutting, Arc Welding, MIG Welding, soldering, brazing, and metal fabrication. Small projects will be built. In addition, safety, tool/fastener identification, electrical, and plumbing will be incorporated. The OSHA 10-hr. safety certification is available. The NCCER safety in construction may also be available.

7515 Principles of Applied Engineering ***Grades: 9-10 Credit: 1.0***
Prerequisite: None
This course provides an introductory overview to the various fields and processes of engineering. Students will use hand drafting and computer software such as AutoCAD to complete Orthographic, Isometric, and Mechanical drawing assignments. Upon completing this course, students will have an understanding of the various engineering fields and will be able to make informed decisions regarding a coherent sequence of future courses in engineering. This course is a prerequisite for all future courses in engineering such as Mechanical Engineering, Advance Mechanical Engineering, and Practicum. This course is designed for a student on the Engineering pathway.

7234 Welding I ***Grades: 10-11 Credits: 2.0***
Prerequisite: Introduction to Metal Working, skills test, record of shop safety
Have you ever wondered what welding has to offer you? This two period course will give an in-depth coverage of metal fabrication & welding. Students will gain a greater understanding of what the welding industry has to offer. An opportunity to participate in professional student organizations, contests for student projects/welding ability, and industry certifications are available in this course. Certifications may include: AWS Welding Certification, NCCER safety in construction, and OSHA 10-hr. certification.

7832 Dual Credit Welding II ***Grade: 11-12 Credits: 2.0***
Prerequisite: Welding I, record of shop safety, skills test; acceptance to college partner
Welding II builds on the knowledge and skills developed in Welding I. Students will develop advanced welding concepts and skills as related to personal and career development. Students will integrate 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. Students will earn 6 hours of Dual Credit in Welding

7510 Robotics I ***Grade: 10-11 Credit: 1.0***
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.

7511 Robotics II ***Grade: 11-12 Credit: 1.0***
Required Prerequisite: Robotics 1

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

7835 Practicum in Manufacturing Grade:12 Credit: 2.0

Recommended Prerequisite: Robotics II or Welding II

The Practicum in Manufacturing course is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations.

Alamo Academies Manufacturing Cluster Courses (Off Campus, Junior and Senior Year)

TBD Precision Metal Manufacturing Grades: 11-12 Credits: 3.0

Prerequisite: Application and TSI Assessment (Alamo Academy)

This course is Year 1 of the Advanced Technology and Manufacturing Academy. An approved application is required. This course is taught off-site at the St. Philips Southwest Campus.

TBD Practicum in Manufacturing AA Grade: 12 Credits: 3.0

Prerequisite: Advanced Precision Metal Manufacturing (Alamo Academy)

This course is Year 2 of the Advanced Technology and Manufacturing Academy. An approved application is required. This course is taught off-site at the St. Philips Southwest Campus.

Science, Technology, Engineering, and Math Cluster	
Courses	Prerequisites
7670 Principles of Informational Technology	None
7520 Foundations of Cybersecurity	Recommend Prerequisites: Networking or concurrent enrollment
6898 Fundamentals of Computer Science	None
6900 AP Computer Science Principles	Algebra
7517 Networking	Recommended Prerequisite: Principles of Informational Technology
7518 Capstone in Cyber Security	Recommended Prerequisite: Networking or concurrent enrollment
6899 AP Computer Science A	Computer Science I and Teacher Recommendation Preferred
7515 Principles of Applied Engineering	None
7586 Manufacturing Engineering Technology	None
7524 Engineering Design and Presentation I	Algebra I Recommended Prerequisite: Principles of Applied Engineering
7525 Engineering and Design Presentation II	Algebra I and Geometry Recommended Prerequisite: Principles of Applied Engineering
7500 Practicum in STEM	Algebra I and Geometry
7523 Engineer Your World	Algebra I and Geometry, completed or concurrently enrolled in AP Physics I
Alamo Academies STEM Courses (Off Campus: Junior and Senior Year)	
6702 Practicum in Informational Technology (Alamo Academy)	Application and Testing
6704 Practicum in Informational Technology 2nd time (Alamo Academy)	Practicum in Informational Technology

Science, Technology, Engineering and Math Course Descriptions

7670 Principles of Information Technology Grades: 9-10 Credit: 1.0
Prerequisite: None
Students develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. The student applies design and web publishing techniques.

7515 Principles of Applied Engineering Grades: 9-10 Credit: 1.0
Prerequisite: None
This course provides an introductory overview to the various fields and processes of engineering. Students will use hand drafting and computer software such as AutoCAD to complete Orthographic, Isometric, and Mechanical drawing assignments. Upon completing this course, students will understand the various engineering fields and will be able to make informed decisions regarding a coherent sequence of future courses in engineering. This course is a prerequisite for all future courses in engineering such as Mechanical Engineering, Advance Mechanical Engineering, and Practicum. This course is designed for a student on the Engineering pathway.

7520 Foundations of Cyber Security Grades: 10-12 Credit: 1.0
Recommended Prerequisites: Networking or concurrent enrollment in Networking
This course develops knowledge and skills to master the fundamental concepts of Cyber Security. Students will explore the challenges facing information security professionals related to ethics, system security, network security, and application security. Students will conduct risk assessments and development and implement security policies to mitigate those risks. Students will examine trends in cyber-attacks, common vulnerabilities, and the emergence of cyber terrorism. Foundational knowledge of networking components and principles is heavily encouraged. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace. Assessments for verification of industry recognized training is to be completed at the end of the course.

7518 Capstone in Cyber Security Grades: 11-12 Credit: 1.0
Prerequisite: Foundations of Cyber Security
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 cyber-attacks, threats, and vulnerabilities. Students will develop security polices to mitigate risks. The skills obtained in this course prepare students for additional study toward industry certification. Cybersecurity Capstone may serve as a culminating course in this field of study.

6898 Fundamentals of Computer Science Grades: 9-11 Credit: 1.0
This course is intended as a first course for those students just beginning the study of computer science. Students will earn about the computing tools at 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.

6900 AP Computer Science Principles Grades: 9-12 Credit: 1.0
Prerequisite: Algebra I
Computer Science is everywhere, from our smartphones and video games to music, medicine, and much more. AP Computer Science Principles (AP CSP) can help you understand how computing and technology influence the world around you. Learn how to creatively address real world issues while using the same tools and processes that artists, writers, computer scientists, and engineers use to bring ideas to life.

6899 AP Computer Science A Grades: 10-12 Credit: 1.0
Prerequisite: Satisfactory completion of Computer Science 1 and teacher recommendation preferred
Computer Science AP builds on the skills and knowledge acquired in Computer Science1. The students develop longer more complex programs using more advanced concepts such as classes, objects, inheritance, polymorphism, queues, stacks, trees and lists. The students will use a variety of media in programming and in communicating using networks. Students who enroll in this course are expected to take the National AP exam. **This course does NOT meet core course requirements for NCAA.** Students will be expected to attend Saturday study sessions hosted by NMSI and take the AP exam in Computer Science.

7517 Networking ***Grades: 10-12 Credit: 1.0***

Recommended Prerequisite: Principles of Information Technology

CompTIA Network+. Upon completion of this course, students will be able to implement a troubleshooting methodology, integrate appropriate security elements to ensure network availability and optimum performance as well as deploy, monitor, and maintain wired, wireless networking environments. Network + is a vendor neutral networking certification that validates knowledge and skills needed to confidently design, configure, manage, and troubleshoot networks. This training prepares the student for the CompTIA Network + Certification Exam, covering wireless and wired network management, mobility, virtualization, security, protocols, standards, and troubleshooting procedures.

7586 Manufacturing Engineering Technology I ***Grades: 10-12 Credit: 1.0***

Prerequisite: none

In Manufacturing Engineering Technology I, students will 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. Students will prepare for success in the global economy. The study of manufacturing engineering will allow 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.

7524 Engineering Design and Presentation 1 ***Grades: 10-12 Credit: 1.0***

Recommended Prerequisite: Principles of Applied Engineering

Required Prerequisite: Algebra I

An entry-level course designed to provide training for entry level drafting careers. First year emphasis on orthographic, isometric, oblique, lettering, dimensioning, and line development through the use of hand drafting and computer aided design for the production of drawings for mechanical applications. Current software used is West Point Bridge and AutoDesk Inventor for Engineers.

7525 Engineering Design and Presentation II ***Grades: 11-12 Credits: 2.0***

Recommended Prerequisite: Engineering Design and Presentation I

Required Prerequisite: Algebra I and Geometry

An advanced course designed to provide training for students who plan on attending college and considering a career in engineering. First and second year emphasis on model building skills, advanced orthographic, isometric, oblique, lettering, dimensioning, and line development through the use of hand drafting and computer aided design. Current software used is West Point Bridge and AutoDesk Inventor for engineers.

7500 Practicum in STEM ***Grades: 11-12 Credits: 2.0***

Prerequisite: Algebra 1 and Geometry

Practicum in STEM is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

7523 Engineer Your World ***Grades: 11-12 Credit: 1.0***

Prerequisites: Algebra 1 and Geometry, completed or concurrently enrolled AP Physics 1

Developed by a team of University of Texas faculty, NASA engineers, and secondary teachers working with funding from the National Science Foundation, *Engineer Your World* is an innovative, student-centered curriculum that engages learners in authentic engineering experiences and inspires them to embrace an engineer's habits of mind. Collaborative, student-directed projects build resilient problem-solving skills and empower students to think like engineers, to adopt engineering processes, and to pursue engineering disciplines for the betterment of our world.

Alamo Academies STEM Cluster Courses (Off Campus, Junior and Senior Year)

6702 Practicum in Information Technology (Alamo Academy) Grades: 11-12 Credits: 3.0
Prerequisite: Application and Testing
This course is Year 1 of the Information Technology and Security Academy. An approved application is required. This course is taught off-site at the St. Philips Southwest Campus.

6704 Practicum in Information Technology 2nd time (Alamo Academy) Grades: 12 Credits: 2.0
Prerequisite: Research in IT Solutions I
This course is Year 2 of the Information Technology and Security Academy. An approved application is required. This course is taught off-site at the St. Philips Southwest Campus.

Law, Public Safety, Corrections, and Security Cluster	
Courses	Prerequisites
7555 Principles of Law, Public Safety, Corrections and Security	None
7557 Law Enforcement I	Principles of Law, Public Safety, Corrections and Security
7559 Law Enforcement II	Law Enforcement I
7560 Correctional Services	None
3612 Forensic Science	Biology and Chemistry
7552 Practicum in Law Enforcement	Recommended Prerequisite: Principles of Law, Public Safety, Corrections and Security
7539 Disaster Response	Recommended Prerequisite: Principles of Law, Public Safety, Corrections and Security
7540 Fire Science I	Recommended Prerequisite: Disaster Response
7541 Fire Science II & 7408 Emergency Medical Technician Basic	Fire Science I and Biology
Alamo Academies Aerospace Academy Cluster	
Courses	Prerequisites
TBD Occupational Safety and Environmental Technology	Application and TSI Assessment
TBD Aircraft Airframe Technology	Year 1 of Alamo Area Aerospace Academy
TBD Practicum in Transportation Systems	Application and TSI Assessment

Law, Public Safety, Corrections, and Security Course Description

7555 Principles of Law, Public Safety, Corrections & Security Grades: 9-11 Credit: 1.0
This course introduces students to professions in law enforcement, security, corrections and fire and emergency management services. Students will examine the roles and responsibilities of police, courts, corrections and private security.

7557 Law Enforcement I Grades: 10-12 Credit: 1.0
Prerequisite: Principles of Law, Public Safety, Corrections & Security
This course is an overview of the history, organization, functions of local, state, and federal law enforcement. The course includes the role of constitutional law, the United States legal system, criminal law, law enforcement terminology, and the classification and elements of crime.

7559 Law Enforcement II ***Grades: 11-12 Credit: 1.0***
Prerequisite: Law Enforcement I
This course provides the knowledge and skills necessary to prepare for a career in law enforcement. It includes the ethical and legal responsibilities, operation of police and emergency telecommunication equipment, and courtroom.

3612 Forensic Science ***Grades: 11-12 Credit: 1.0***
Prerequisite: Biology and Chemistry
Forensic science is a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminalist behavior. Students will learn basic terminology and investigative procedures related to crime scene, question building, interviewing, criminal behavior characteristics, truth detection methodology, and scientific procedures used to solve crimes. Students will have the opportunity to collect and analyze evidence through case studies and mock crime scenes. Lab activities will be based on crime scene scenarios and analyzing fingerprints, ballistics, and blood spatter. Students will learn about the history, legal aspects of forensic science, and career options available in the forensic field. This course will count as an additional science credit.

7560 Correctional Services ***Grades: 10-12 Credits: 1.0***
In Correctional Services, students prepare for certification required for employment as a municipal, county, state, or federal correctional officer. Students will learn the role and responsibilities of a county or municipal correctional officer; discuss relevant rules, regulations, and laws of municipal, county, state, or federal facilities; and discuss defensive tactics, restraint techniques, and first aid procedures as used in the municipal, county, state, or federal correctional setting. Students will analyze rehabilitation and alternatives to institutionalization for inmates.

7552 Practicum in Law Enforcement ***Grades: 11-12 Credits: 2.0***
Recommended Prerequisite: Principles of Law, Public Safety, Corrections, & Security
The practicum in Law Enforcement is designed to give students supervised practical application of previously studied knowledge and skills in Law, Public Safety, Corrections, and Security. The purpose is to allow students to gain career specific experiences while utilizing critical thinking skills, teamwork, and leadership. **Students should be prepared to provide their own transportation to and from practicum experience sites.**

7539 Disaster Response ***Grade: 10 Credit: 1.0***
Recommended Prerequisite: Principles of Law, Public Safety, Corrections, and Security
Disaster Response includes basic training of students in disaster survival and rescue skills that would improve the ability of citizens to survive until responders or other assistance could arrive. Students will receive education, training, and volunteer service to make communities safer, stronger, and better prepared to respond to the threats of terrorism, crime, public health issues, and disasters of all kinds.

7540 Fire Science 1 ***Grade: 11 Credits: 2.0***
Recommended Prerequisite: Disaster Response
Fire Science 1 introduces students to firefighter safety and development. Students will analyze 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 explore public safety communication, hazardous material data, and practice aspects of physical fitness essential to success in the firefighting profession. Students enrolled in this course will need to purchase the class uniform.

7541 Fire Science 2 &
7408 Emergency Medical Technician Basic ***Grade: 12 Credits: 4.0***
Prerequisite: Fire Science I
Fire Science 2 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. This course will exceed the hours of the typical school day. Students will be required to complete additional hours for EMT Certification. The EMT Curriculum includes the skills necessary for a student to provide entry level emergency medical care, life

support, and ambulance service.

Alamo Academies Aerospace Cluster Courses (Off Campus, Junior and Senior Year)

TBD Occupational Safety and Environmental Technology ***Grades: 11*** ***Credits: 3.0***
TBD Aircraft Airframe Technology
Prerequisite: Application and TSI Assessment (Alamo Academy)
This course is Year 1 of the Alamo Area Aerospace Academy located at the St. Philip's Southwest Campus. An approved application is required.

TBD Practicum in Transportation Systems ***Grade: 12*** ***Credits: 3.0***
Prerequisite: Year 1 of Alamo Area Aerospace Academy (Alamo Academy)
This course is Year 2 of the Alamo Area Aerospace Academy. An approved application is required.

Alamo Academies Diesel Technology Academy Cluster Courses (Off Campus, Junior and Senior Year)

TBD Occupational Safety and Environmental Technology ***Grades: 11*** ***Credits: 3.0***
TBD Diesel Equipment Technology
Prerequisite: Application and TSI Assessment (Alamo Academy)
This course is Year 1 of the Alamo Area Aerospace Academy located at the St. Philip's Southwest Campus. An approved application is required.

TBD Diesel Equipment Technology II w/ Lab ***Grade: 12*** ***Credits: 3.0***
Prerequisite: Year 1 of Alamo Area Aerospace Academy (Alamo Academy)
This course is Year 2 of the Alamo Area Aerospace Academy. An approved application is required.