

SHERMAN HIGH
SCHOOL
COURSE GUIDE



2016-2017

MESSAGE TO STUDENTS

The high school Course Guide has been developed to assist you and your parents in planning your high school course program. The district's graduation requirements as well as your own individual needs should be considered as you select your courses. Select your courses carefully. We want your high school experience to be meaningful and enjoyable.

All of the courses listed in the Course Guide will not necessarily be offered each semester. Course offerings will be dependent on a sufficient number of students being enrolled in each course to warrant scheduling.

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<u>GRADE CLASSIFICATION</u>
9th grade: 0-4.5 units of credit
10th grade: 5-11.0 units of credit
11th grade: 11.5-17.5 units of credit
12th grade: 18.0 or more units of credit

***Students will be assigned to the proper grade level based on the number of documented credits earned as of Aug 1 and will remain in that grade level for the entire school year.**

<u>STAAR / EOC TEST</u>
All students entering 9th grade in 2011-2012 and thereafter are required to pass 5 State of Texas Assessments of Academic Readiness (STAAR) end-of-course (EOC) exams.
Algebra 1
English I (combined reading/writing)
English II (combined reading/writing)
Biology
U. S. History

A student's score on each exam will be designated as Level II (Satisfactory) or Level III (Advanced Academic Performance). (HB 5, 83rd Texas Legislature)

OUT-OF-STATE TRANSFERS

Out-of-state transfer students shall complete all state and local graduation requirements to be eligible for a Texas diploma. Credits required that are not completed prior to enrolling may be satisfied by advanced placement examinations, credit-by-exam for acceleration, completing the course, or demonstrating achievement by meeting the standard requirements of the course. 19 TAC Education Code (See EEJA and EI)

ADDITIONAL LOCAL REQUIREMENTS

The District may require additional local credits for graduation under any of the high school programs. 19 TAC.

DISTANCE LEARNING

Juniors and Seniors who are interested in Distance Learning opportunities via Grayson College Online Courses should see their counselor for a list of available courses. These courses will vary each semester.

GRADUATION REQUIREMENTS FOR STUDENTS RECEIVING SPECIAL EDUCATION SERVICES

The secondary program of a student receiving special education services shall terminate either with graduation or when the student no longer meets the age requirement for eligibility in the Texas Education Code. A student receiving special education services who has not reached his or her 22nd birthday on September 1 of a scholastic year shall be eligible for services through the end of that scholastic year or until graduation.

Graduation with a regular high school diploma terminates a student's eligibility for special education services. In addition, as provided in Texas Education Code, graduation with a regular high school diploma under subsection (b) or (d) of this section terminates a student's entitlement to the benefits of the Foundation School Program.

A student receiving special education services may graduate and be awarded a regular high school diploma if: a. The student has satisfactorily completed the state's or district's (whichever is greater) minimum curriculum and credit requirements for graduation applicable to students in general education, including satisfactory performance on the state assessment instrument(s), or b. The student has satisfactorily completed the state's or district's (whichever is greater) minimum curriculum and credit requirements for graduation applicable to students in general education, including participation in the required state assessments. The student's admission, review and dismissal (ARD) committee shall determine whether satisfactory performance on a required assessment shall also be required for graduation.

A student receiving special education services, also, may graduate and receive a regular high school diploma when the student's ARD committee has determined that the student has successfully completed: a. The student's individualized education program (IEP), or b. One of the following conditions, consistent with the student's IEP: Full time employment, based on the student's abilities and local employment opportunities, in addition to self help skills to enable the student to maintain the employment without direct and ongoing educational support of the local school district, demonstrated mastery of specific employability skills and self-help skills which do not require direct ongoing educational support of the local school district, or access to services which are not within the legal responsibility of public education or employment or educational options for which the student has been prepared by the academic program.

A student receiving special education services, also, may graduate and receive a regular high school diploma upon the ARD committee determining that the student no longer meets age requirements and has completed the requirements specified in the IEP. All students graduating under this section shall be provided with a summary of academic achievement and functional performance. This summary shall consider, as appropriate, the views of the parent and student and written recommendations from adult service agencies on how to assist the student in meeting postsecondary goals.

Employability and self-help skills referenced in paragraph 4 are those skills directly related to the preparation of students for employment, including general skills necessary to obtain or retain employment.

For students who receive a diploma according to paragraph 4, the ARD committee shall determine needed education services upon the request of the student or parent to resume services, as long as the student meets the age eligibility requirements.

PRE-AP/AP COURSE CRITERIA AND GRADE WEIGHTING

A student wishing to take a Pre-AP, AP or GT class must meet the following criteria:

1. Students enrolling in a GT class must be identified as Gifted/Talented from a previous school; testing for GT classes is not done at the high school level.
2. Students enrolling in a Pre-AP or AP class must meet the prerequisites for each subject area they wish to take. To check out the requirements, see each subject area class.
3. Students in a Pre-AP, AP or GT class must make adequate progress or be subject to probation and/or removal from the class.
4. Most Pre-AP and AP courses require summer assignments. All students should check with the teacher of the Pre-AP/AP course about the summer assignment.
5. Students taking AP classes must take the AP Exam for those courses.

2016-2017 SISD PRE-AP/AP COURSE CONTRACT

Sherman High School encourages all students to enroll in available Advance Placement (AP) and Pre-AP classes to enhance their academic experience. These courses are designed to challenge motivated students to prepare for success in higher academic pursuits. The Advanced Placement program is a cooperative educational endeavor between secondary schools and colleges and universities where college level courses are taught in a high school program. The purpose of Pre-AP courses is to give students the opportunity to develop skills that will enable them to be successful in AP courses. Both of these courses are characterized by immersion in rigorous content, an accelerated pace, and performance assessment at the synthesis and evaluative levels. It is crucial that students in these classes prioritize their time and have parental support. Students requesting admission to Pre-AP or AP courses are required to have maintained an 85 average in the previous course and the teacher's recommendation.

Typically, successful Pre-AP/AP students are:

- Task oriented;
- Proficient readers;
- Able to prioritize their time and maintain an organizational system;
- Willing to seek help from teachers as soon as problems arise; and
- Successful in meeting the requirements of regular level courses, typically earning grades of A or B

Students who enroll in an Pre-AP/AP class are expected to remain in the class all year; however, students will be permitted a transfer to a regular level class if there is space after the first progress report. Students who want to drop a PreAP/AP course at semester, must remain in the class until the last FULL day of the semester. An exit form must be submitted and approved by the parent, teacher, and counselor. A student with a grade average less than 70 may be removed from the PreAP/AP class after communication between the teacher, counselor, and parent.

_____ I realize I must complete the summer assignment (if applicable) to be admitted to a Pre-AP/AP class.

_____ I realize I must remain in the Pre-AP/AP class for the first 3 weeks of the semester.

Pre-AP/AP Course	Teacher	Teacher Signature

Student: _____

Date: _____

Parent: _____

Date: _____

EARLY HIGH SCHOOL GRADUATION

Students wishing to pursue the Early High School Graduation program should see their Counselor. Documentation of intent to pursue the Early High School Graduation program must be on file in the Counseling Office prior to the beginning of the student's sophomore year in order to prepare a plan for taking courses and passing EOC tests to graduate early.

GRADES & GPA CALCULATION

<u>Category</u>	<u>Weight</u>
AP	plus 10 points
Pre-AP, Dual Credit (taken on the SHS campus), and Honors	plus 5 points
Excel	plus 2 points
Regular	no points added

Unweighted numerical grades will be recorded on student transcripts.

COLLEGE CREDIT COURSES ON CAMPUS

If a sufficient number of students enroll, Sherman High School will offer the following college courses to seniors for concurrent high school and college credit:

- College English—3 hrs each semester
- College Biology—4 hrs each semester
- Government—3 hours
- Economics—3 hours
- College Math—6 hrs (3 hrs College Algebra and 3 hrs College Statistics)

These courses are taught at Sherman High School by a high school instructor who is an adjunct instructor of the college or online with a Sherman High School instructor monitoring students' progress.

For all college credit courses taken on campus, the student is responsible for the payment of all tuition, fees, and books to Grayson College and must meet all of Grayson College's entrance requirements, including the completion of the ApplyTexas application for admission. The student and/or parent/guardian must attend a mandatory dual credit information meeting at SHS in the spring. All required documentation, including the signed Dual Credit Enrollment/Permission Form, must be submitted to the counselor by the designated deadline.

For students who qualify for free or reduced lunches, Grayson may offer a full or partial exemption of tuition and fees. See the Counselor for more information.

COLLEGE CREDIT COURSES TAKEN OFF CAMPUS

Juniors and Seniors wishing to take college courses on the Grayson College campus for high school credit **MUST** receive prior approval. All Grayson College entrance requirements must be met, including the submission of the online ApplyTexas application for admission. All transportation to and from the Grayson College campus is the responsibility of the student. In addition, students are responsible for the payment of all tuition/fees and required textbooks/materials. The student and/or parent/guardian must attend a mandatory dual credit information meeting at SHS in the spring. All required documentation, including the signed Dual Credit Enrollment/Permission Form, must be submitted to the counselor by the designated deadline. Online courses off the Sherman High School campus will not be approved for dual credit.

CORRESPONDENCE COURSES

Correspondence courses may be accepted as part of high school graduation requirements for accredited schools in Texas. The student must have the Counselor's or Principal's prior approval before enrolling in a correspondence course. Only those students who are juniors or seniors will be approved for correspondence course work.

TEXAS VIRTUAL SCHOOL NETWORK COURSES

Students who wish to take a course not offered by SHS may inquire about the Texas Virtual School Network (TXVSN). Online courses are offered for a fee, and that fee is the responsibility of the student. See your counselor for more information.

SELECTION OF COURSES

The Course Guide is carefully prepared each year with students' needs and graduation requirements in mind. All effort will be made to have as many of the listed courses as possible; however, it is possible that not all courses will be offered each year. Additionally, the Course Guide is prepared with the most current information available at the time of printing, and some information may be subject to change.

NON-DISCRIMINATION CLAUSE

It is the policy of Sherman ISD not to discriminate on the basis of race, color, national origin, sex or handicap in its vocational programs, services or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and section 504 of the Rehabilitation Act of 1973, as amended.

Es norma del distrito de Sherman ISD no discriminar por motivos de raza, color, origen nacional, sexo o impedimento, en sus programas, servicios o actividades vocacionales, tal como lo requieren el Título VI de la Ley de Derechos Civiles de 1964, según enmienda; el Título IX de las Emiendas en la Educación, de 1972, y la Sección 504 de la Ley de Rehabilitación de 1973, según enmienda.

GRADUATION PLANS

The Course Guide is carefully prepared each year with students' needs and graduation requirements in mind. All effort will be made to have as many of the listed courses as possible; however, it is possible that not all courses will be offered each year. Additionally, the Course Guide is prepared with the most current information available at the time of printing, and some information may be subject to change.

Students should choose courses in consideration of their post-secondary plans. Students planning to attend college should contact the individual schools to make sure that they are taking appropriate courses.

All effort is made to have the student take the courses needed for graduation, but it is the student's/parent's responsibility to ensure that the student completes all graduation requirements.

GRADUATION CREDIT REQUIREMENTS (See page 1 for graduation TEST requirements.) (All students entering 9th grade in 2012-2013 and 2013-2014)

RECOMMENDED PLAN

ENGLISH	4 credits
MATH	4 credits
Algebra 1, Geometry, and Algebra 2 plus one of the following: Math Models (if completed prior to Alg 2), AQR, College Algebra/College Stats, Math Apps in Ag, Food, & Natural Resources, Statistics & Business Decision Making, Pre-Calculus, AP Computer Science, AP Statistics, AP Calculus	
SCIENCE	4 credits
Biology..... 1 credit	
IPC* or Chemistry or Physics/Principles of Technology... 2 credits	
Environmental Systems, **Food Chemistry, **Advanced Animal Science, **Astronomy, **Forensic Science, **Engineering Design & Problem Solving, Anatomy & Physiology, Medical Microbiology, Pathophysiology, College Biology, AP Biology, AP Chemistry, AP Physics or AP Environmental Science.....1 credit	
<i>*(In order for IPC to count, it must be successfully completed prior to Chemistry and Physics.)</i>	
<i>**In order to count as a 4th Science credit, must be taken after successful completion of Biology, Chemistry, and Physics)</i>	
SOCIAL STUDIES	4 credits
World Geography..... 1 credit	
World History.....1 credit	
U.S. History..... 1 credit	
U.S. Government......5 credit	
Economics..... .5 credit	
PE	1 credit
OTHER LANGUAGE	2 credits
(must be same language)	
FINE ARTS	1 credit
SPEECH5 credit
Professional Communications	
ELECTIVES (STATE)	5.5 credits
TOTAL	26 credits

DISTINGUISHED ACHIEVEMENT PLAN

ENGLISH	4 credits
MATH	4 credits
Algebra 1, Geometry, and Algebra 2 plus one of the following: AQR, Statistics & Business Decision Making, Pre-Calculus, College Algebra/College Stats, AP Statistics, AP Computer Science, AP Calculus	
SCIENCE	4 credits
Biology.....1 credit	
Chemistry and Physics.....2 credits	
Environmental Systems, *Food Chemistry, *Advanced Animal Science, *Astronomy, *Forensic Science, *Engineering Design & Problem Solving, Anatomy & Physiology, Medical Microbiology, Pathophysiology, College Biology, AP Biology, AP Chemistry, AP Physics or AP Environmental Science.....1 credit	
<i>*In order to count as a 4th Science credit, must be taken after successful completion of Biology, Chemistry, and Physics)</i>	
SOCIAL STUDIES	4 credits
World Geography.....1 credit	
World History.....1 credit	
U.S. History.....1 credit	
U.S. Government......5 credit	
Economics......5 credit	
PE	1 credit
OTHER LANGUAGE	3 credits
(must be same language)	
FINE ARTS	1 credit
SPEECH	5 credit
Professional Communications	
ELECTIVES (STATE)	4.5 credits
TOTAL	26 credits

Additionally, students must complete "4 advanced measures" (per TEA standards). Advanced Measures may be earned through the following options:

1. Test Data
 - *a score of 3 or above on AP Exams
 - *a score on the PSAT that qualifies a student for recognition as a commenced scholar or higher by the National Merit Scholarship Corporation, as part of the National Hispanic Scholar Program of the College Board, or as part of the National Achievement Scholarship Program of the National Merit Scholarship Corporation. *The PSAT score shall count as only one advanced measure, regardless of the number of honors received by the student.*
2. College Courses
 - *a grade of 3.0 (B) or higher on college academic courses, advanced technical credit courses, and dual credit courses

Core Course Sequence Options

***Courses with an * indicate prerequisites and/ or specific requirements.
Students must review course descriptions to determine qualifications.***

Requirements	# of Credits Required	8 th Grade	9 th Grade	10 th Grade	11 th Grade	12 th Grade
English	4 Credits		English I or *Pre-AP English I	English II or *Pre-AP English II	English III or *Pre-AP English III or *AP English III	English IV or *AP English IV or *College English
Requirements	# of Credits Required	8 th Grade	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Math	4 Credits	Algebra I	Algebra I or Pre-AP Algebra I or *Geometry or *Pre-AP Geometry	*Geometry or *Pre-AP Geometry or *Algebra II or *Pre-AP Algebra II	*Algebra II or *Pre-AP Algebra II or *Mathematical Models or *Pre-Calculus or *Pre-AP Pre-Calculus or *College Algebra and College Statistics or *AP Statistics or *Statistics and Business Decision Making or *AP Computer Science A	*Algebra II or *Pre-AP Algebra II or *Advanced Quantitative Reasoning (AQR) or *Pre-Calculus or *Pre-AP Pre-Calculus or *AP Calculus AB or *AP Calculus BC or *College Algebra and College Statistics or *AP Statistics or *Statistics and Business Decision Making or *Mathematical Applications in Agriculture, Food, and Natural Resources or *AP Computer Science A

Requirements	# of Credits Required	8 th Grade	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Science	4 Credits		Biology or *Pre-AP Biology or Integrated Physics & Chemistry (IPC)	Biology or *Pre-AP Biology or *Chemistry or *Pre-AP Chemistry	*Chemistry or *Physics or *Principles of Technology (Physics substitute for Recommended Plan only) or *AP Physics or *Medical Microbiology or *AP Chemistry or *AP Biology or *AP *Environmental Science or *Environmental Systems or *Engineering Design & Problem Solving or *Pathophysiology	*Anatomy & Physiology or *Astronomy or *Physics or *AP Physics or *Forensic Science or *College Biology or *Food Chemistry or *Advanced Animal Science or *Medical Microbiology or *Pathophysiology or *AP Chemistry or *AP Environmental Science or *Environmental Systems or *Engineering Design & Problem Solving
Requirements	# of Credits Required	8 th Grade	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Social Studies	4 Credits		World Geography or *Pre-AP World Geography	World History or *Pre-AP World History or *AP World History	US History or *Pre-AP US History or *AP US History	Government (sem) or *College Government or *AP U.S. Government AND Economics (sem) or *College Economics or *AP Macroeconomics

ENGLISH

ENGLISH PRE-AP/AP CRITERIA:

For students to remain in the Pre-AP/AP track, they must maintain an average of 75 each semester. Any Pre-AP or AP student not achieving a 75 semester average will be required to drop to a regular class.

Any student entering the Pre-AP track for the first time must meet both of the following requirements:

- 1. have achieved a grade of at least 85 (year average) in their last regular English class**
- 2. have achieved Level 2 Satisfactory Performance on 8th grade STAAR Reading test**

ESOL

GRADES: 9-11

1 Year 1 Credit

English for speakers of other languages (ESOL) is available for students who qualify by testing. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11.

ENGLISH 1

GRADE: 9

1 Year 1 Credit

English 1 includes grammar, composition, and literature. The course includes a survey of world, British, and American literature with special emphasis on grammar, composition, and vocabulary, including basic research skills. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11.

PRE-AP ENGLISH 1

GRADE: 9

1 Year 1 Credit

PREREQUISITE: Meets Pre-AP/AP course criteria

This course is designed to introduce students to various authors and genres of American, British, and world literature. Studies will include grammar, oral and written composition, advanced placement vocabulary, and basic research procedures. Genres include fiction and nonfiction stories, fables, speeches, poetry, drama, epics, screenplays, and novels. A major emphasis is placed on writing and the use of critical and analytical thinking skills. Students should anticipate various assignments which require time outside of class. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11. **This course requires outside summer reading and/or other preparatory work.**

G/T PRE-AP ENGLISH 1

GRADE: 9

1 Year 1 Credit

PREREQUISITE: Meets GT and Pre-AP course criteria

This course is designed for the college-bound student and includes an introduction to various authors and genres of American, British, and world literature. Studies will include grammar, oral and written composition, advanced placement vocabulary, and basic research procedures. Genres include fiction and nonfiction stories, fables, speeches, poetry, drama, epics, screenplays, and novels. A major emphasis is placed on writing and the use of critical and analytical thinking skills. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11. **Students should anticipate various assignments and major projects which require time outside of class, including summer reading and/or other preparatory work. Student commitment is a strict requirement for this course.**

ENGLISH 2

GRADE: 10

1 Year 1 Credit

English 2 is a survey of world, British, and American literature with a special emphasis on grammar and composition, including research procedures. Thinking skills and vocabulary development are emphasized. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11.

PRE-AP ENGLISH 2

GRADE: 10

1 Year 1 Credit

PREREQUISITE: Meets Pre-AP/AP course criteria

English 2 Pre-AP is designed for the college-bound student and includes a survey of world literature with emphasis on language, formal composition, oral communication skills, creative thinking activities, and advanced research skills. The research project is on a topic of the student's choice that will demonstrate both a synthesis of the ideas presented in multiple resources and an increased ability to present and communicate information in an organized and formal fashion. Critical and analytical thinking skills and vocabulary development are emphasized. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11. **This course requires outside summer reading and/or other preparatory work.**

GT/ PRE-AP ENGLISH 2

GRADE: 10

1 Year**1 Credit**PREREQUISITE: **Meets G/T and Pre-AP/AP criteria**

This course emphasizes the skills of nonfiction, persuasive writing and the analysis of literary texts for author's meaning, intended effect on the reader, and the literary tools used to achieve that effect. This course will have required outside summer reading assignments/projects. It also requires an extensive commitment of time and energy in outside reading and research, note-taking and review, and meeting assignment deadlines. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11.

ENGLISH 3

GRADE: 11

1 Year**1 Credit**

English 3 is a survey of American literature, a study of grammar, and of oral and written composition, including the formal research paper, SAT preparation, critical thinking skills, and vocabulary development. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11.

PRE-AP ENGLISH 3

GRADE: 11

1 Year**1 Credit**PREREQUISITE: **Meets Pre-AP/AP course criteria**

American literature will be analyzed in terms of literary elements and style, social and historical significance, and used as models for a student's own writing. Analytical and creative writing will be assigned along with a research paper involving the study of an American writer and one or more related works. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11. **This course requires outside summer reading and/or other preparatory work.**

AP ENGLISH 3

GRADE: 11

1 Year**1 Credit**PREREQUISITE: **Meets Pre-AP/AP course criteria**

Advanced Placement is designed for the college-bound student wishing to obtain college credit while still in high school. Only students planning to take the AP test should enroll, as extensive reading and writing, under strict time constraints, is required in relation to the tests. Readings will come from American literature fiction and nonfiction, historical texts, and satirical essays. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11. **This class requires extensive reading, time commitment, and the ability to meet time deadlines, including summer reading and/or other preparatory work. The student must take the AP Exam.**

GT/AP ENGLISH 3

GRADE: 11

1 Year**1 Credit**PREREQUISITE: **Meets G/T and Pre-AP/AP course criteria**

GT/AP English is designed to link with GT/AP U.S. History; therefore, both classes should be taken. This college-level course will include a survey of American literature in chronological order focusing on major literary/historical periods and major works and authors. Readings will come from American literature, fiction and nonfiction, historical texts, and satirical essays. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11. The class is intended to show the correlation of American history to American literature. **This class requires extensive reading, time commitment, and the ability to meet time deadlines, including summer reading and/or other preparatory work. The student must take the AP Exam.**

ENGLISH 4

GRADE: 12

1 Year**1 Credit**

English 4 includes a chronological study of British literature and history with emphasis on composition, including the formal research paper, SAT preparation, critical thinking skills, and vocabulary development. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11.

COLLEGE ENGLISH**ENGL 1301 (fall) & ENGL 1302 (spring) --3 Hours each Semester**

GRADE: 12

1 Year**1 Credit**PREREQUISITE: **English 3 and must meet all requirements of Grayson College and pay all tuition, fees, and books through Grayson**

ENGL 1301—The first half of freshman composition, encourages process writing. Using computer technology, students write essays that result from their evaluating, analyzing, and synthesizing experience and texts. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11.

ENGL 1302—Continues the writing instruction of English 1301. Students analyze problems and texts to make convincing written and oral presentations, which include literary analyses, expository and persuasive essays, and a research paper on a literary topic. Using computer technology, students write their presentations on short stories, poetry, and drama. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11.

AP ENGLISH 4

GRADE: 12

1 Year **1 Credit**PREREQUISITE: **Meets Pre-AP/AP course criteria**

Advanced Placement English 4 is designed for the college-bound student wishing to obtain college credit while still in high school. Only students planning to take the test should enroll, as extensive reading and writing is required in relation to the tests. Reading will be from American, English, and world literature with emphasis also placed on work completed in class under strict time limits. Students will produce a binder of reference materials for all college-level writing. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11. **This course requires outside summer reading and/or other preparatory work. The student must take the AP Exam.**

G/T AP ENGLISH 4

GRADE: 12

1 Year **1 Credit**PREREQUISITE: **Meets G/T and Pre-AP/AP course criteria**

This college-level course will include an in-depth survey of British literature focusing on major literary/historical periods and major works and authors. The chronological study will involve self-directed learning and choices within parameters of the course content. Students will do intense test preparation for the AP English Literature and Composition test. College level analysis, writing techniques, and a detailed study of advanced literary elements will be covered. Speech requirements will be included in the curriculum of this course, in accordance with TEC 74.11. **This course requires outside summer reading and/or other preparatory work. The student must take the AP Exam.**

DEBATE 1

GRADES: 9-12

1 Year **1 Credit**

PREREQUISITE: None

Students will learn to research significant social and political questions and to organize research into a meaningful persuasive presentation. Students will learn to defend a presentation against the attack of a well-trained opponent through critical listening and thinking.

DEBATE 2—HONORS

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Debate 1**

Honors Debate is designed for students showing an advanced aptitude in sequential logic and problem-solving activities. Students who will benefit are those who are committed to research and intrigued by politics. This class is designed for students interested in debate competition.

DEBATE 3—HONORS

GRADES: 11-12

1 Year **1 Credit**PREREQUISITE: **Debate 2**

Honors Debate is designed for students showing an advanced aptitude in sequential logic and problem-solving activities. Students who will benefit are those who are committed to research and intrigued by politics. This class is designed for students interested in debate competition.

PHOTOJOURNALISM 1

GRADES: 9-12

1 Semester (Fall) **.5 Credit**

PREREQUISITE: None

Photojournalism 1 is an elective in which students will learn about photographic history, media ethics and legal standards, principles of photographic composition, camera techniques and how to use various types of cameras to create correctly exposed images. Students are expected to devote time outside of class to photography assignments. **Students should expect to spend a minimum of \$25 per semester for supplies and materials, excluding a camera.** (Students with a financial need should speak to the teacher, counselor or grade level principal before deciding not to take the course.) It would be to the student's advantage to have a personal camera for use inside and outside of the classroom as course-provided materials are limited.

PHOTOJOURNALISM 2

GRADES: 9-12

1 Semester (Spring) **.5 Credit**PREREQUISITE: **Photojournalism 1**

Photojournalism 2 is designed for students who have an interest in photography and current technological trends in digital photography. Photocomposition will be emphasized as well as improving production quality through technology (editing digital images using Adobe Photoshop). Planning photo essays in a desktop environment and writing effective captions will be covered. Students are expected to devote time outside of class to photography assignments. **Students should expect to spend a minimum of \$25 per semester for supplies and materials, excluding a camera.** (Students with a financial need should speak to the teacher, counselor or grade level principal before deciding not to take the course.) It would be to the student's advantage to have a personal camera for use inside and outside of the classroom as course-provided materials are limited.

JOURNALISM 1

GRADES: 10-12

PREREQUISITE: None

Journalism 1 is an elective and may serve as a preliminary course for students interested in serving as a member of the newspaper staff. The course will cover all aspects of journalism, including media law, ethics and responsibilities, writing, photography, layout design, headline writing, investigation and research. Students taking this course should have a strong interest in magazine or newspaper production or a desire to investigate a broad range of skills involved in journalism. This course is writing intensive and requires a basic understanding of sentence structure, grammar and spelling.

1 Year **1 Credit****ADVANCED JOURNALISM / YEARBOOK PRODUCTION 1, 2, 3/DESKTOP COMPUTING**

GRADES: 10-12

PREREQUISITE: **Photojournalism 1 & 2 and Yearbook Advisor's Approval**

Advanced Journalism/Yearbook Production is for the Athenian staff members and editors who have completed Photojournalism 1. Students are responsible for designing, producing, marketing and financing the Athenian. Students are expected to know basic computer skills, which includes using a word processor, spreadsheet, database and completing desktop publishing assignments. Students are expected to devote time outside of class to covering school events and completing deadlines.

1 Year **1 Credit****ADVANCED JOURNALISM / NEWSPAPER PRODUCTION 1, 2, 3/DESKTOP COMPUTING**

GRADES: 10-12

PREREQUISITE: **Journalism 1 and Newspaper Advisor's Approval**

Advanced Journalism/Newspaper Production is for the Paw Print staff members and editors who have completed Journalism 1. Students are responsible for designing, producing, marketing and financing the Paw Print. Students are expected to know basic computer skills, which includes using a word processor, spreadsheet, database and completing desktop publishing assignments. Students are expected to devote time outside of class to covering school events, interviewing sources and completing story deadlines.

1 Year **1 Credit****HONORS ADVANCED JOURNALISM**

GRADES: 11-12

PREREQUISITE: **Journalism 1/Photojournalism 1 & 2, and 1 year on either the Athenian or Paw Print staff****Honors Advanced Journalism is strictly for the editors of the Athenian and the Paw Print.**

This class is designed to allow students to continue studying the skills necessary to produce a high-quality publication. However, Honors Advanced Journalism students must act in leadership roles and devote special attention to refining necessary skills.

1 Year **1 Credit****PROFESSIONAL COMMUNICATIONS (Speech)**

GRADES: 9-12

PREREQUISITE: None

Students will understand and develop skills in oral communication, which is fundamental to all other learning and to all levels of human interaction. Students will understand concepts and processes involved in sending and receiving oral messages, evaluating, and using nonverbal communication and listening for a variety of purposes.

1 Semester (Fall or Spring) **.5 Credit****PSAT/SAT/ACT PREPARATION**

GRADES: 10-12

PREREQUISITE: None

Designed to aid students in math and language reasoning skills, which are vital to College Readiness and success on the ACT exam and the College Board Scholastic Aptitude Test. Students will receive instruction from both a math and English teacher, with staggered instruction for various portions of the tests. Student progress will be monitored through a pre-test, post-test, and actual ACT/SAT reports. Lessons will be designed to help students with actual sections of the test.

1 Semester **.5 Credit**

MATHEMATICS

ALGEBRA 1

GRADE: 9

1 Year1 Credit

PREREQUISITE: None

This course is the study of linear and quadratic functions and their properties. There will be an emphasis on real-world applications and methods for solving problems using the graphing calculator.

PRE-AP ALGEBRA 1

GRADE: 9

1 Year1 CreditPREREQUISITE: **See criteria below**

Pre-AP Algebra 1 is a college-prep class. It should be taken by students who are planning to go to college.

To enroll in this class, students must meet the following criteria:

- 1) 80 average for each semester in 8th Grade Math**
- 2) Level 2 Satisfactory Academic Performance on 8th grade Math STAAR**

GEOMETRY

GRADES: 10-12

1 Year1 CreditPREREQUISITE: **Algebra 1 or Algebra I Pre-AP**

This course will cover topics involving plane, solid, and coordinate geometry by exploring proofs and formulas. Algebra 1 and Geometry cannot be taken concurrently.

PRE-AP GEOMETRY

GRADES: 9-11

1 Year1 CreditPREREQUISITE: **See criteria below**

Pre-AP Geometry is a college-prep class. It should be taken by students who are planning on going to college.

To enroll in this class, students must meet the following criteria:

- 1) 85 average for each semester in Algebra 1 or 75 in Algebra 1 Pre-AP**
- 2) Level 2 Satisfactory Performance on Algebra 1 EOC test**

MATHEMATICAL MODELS WITH APPLICATIONS

GRADE: 11

1 Year1 CreditPREREQUISITE: **Algebra 1 (Math Models and Algebra 2 may not be taken concurrently).**

The purpose of this course is to prepare students for success in Algebra 2. Math Models will review Algebra 1 and Geometry through the use of applications of mathematics, while bridging into higher level mathematics courses such as Algebra 2 and Trigonometry. Topics include probability, data collection and analysis, modeling real-life situations through functions, art, architecture, music, and finance. The use of a graphing calculator is required.

This course is recommended for students who:

- **have not passed the Algebra 1 EOC test**
- **have struggled with Algebra 1 and/or Geometry**

ALGEBRA 2

GRADES: 10-12

1 Year1 CreditPREREQUISITE: **Algebra 1 and Geometry**

This course is a study of functions extended from Algebra 1, including linear, quadratic, inverse, compound, square root, logarithmic, exponential and rational functions. The students will learn how to geometrically represent these algebraic functions. The use of a graphing calculator is required.

PRE-AP ALGEBRA 2

GRADES: 10-12

1 Year1 CreditPREREQUISITE: **See criteria below**

Pre-AP Algebra 2 is a college-prep class. It should be taken by students who are planning on going to college and majoring in Mathematics, Engineering, Science, Business, Pre-Med, Computer Science, or any major requiring Calculus or Statistics.

To enroll in this class, students must meet the following criteria:

- 1) 85 average for each semester in Algebra 1 and Geometry or 75 in Pre-AP courses**
- 2) Level 2 Satisfactory Academic Performance on Algebra I EOC test**

ADVANCED QUANTITATIVE REASONING (AQR)

GRADE: 12

1 Year1 CreditPREREQUISITE: **Algebra 2**

This course is designed to extend the mathematical understanding of the student beyond the Algebra 2 level by addressing logical reasoning, processes, and algorithms. This course includes a strong emphasis on probability, statistics, financial applications, and the use of mathematical models from discrete mathematics, algebra, geometry, and trigonometry to solve problems in a variety of contexts.

PRE-CALCULUS (EXCEL)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **See criteria below**

Pre-Calculus is a college-prep class. It should be taken by students who are planning on going to college and majoring in Mathematics, Engineering, Science, Business, Pre-Med, Computer Science, or any major requiring Calculus.

To enroll in this class, students must meet the following criteria:

- 1) 80 average for each semester in Algebra 2 or 75 in Pre-AP Algebra 2**
- 2) Level 2 Satisfactory Academic Performance on Algebra 1 EOC test**

PRE-AP PRE-CALCULUS

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **See criteria below**

Pre-AP Pre-Calculus is designed to prepare students to take AP Calculus in high school or as a college-prep class for students majoring in Math, Engineering, Science, Business, Pre-Med, Computer Science, or any major requiring Calculus.

To enroll in this class, students must meet the following criteria:

- 1) 85 average for each semester in Algebra 2 or 75 in Pre-AP Algebra 2**
- 2) Level 3 Advanced Academic Performance on Algebra 1 EOC test**

COLLEGE ALGEBRA (fall semester)**COLLEGE STATISTICS (spring semester)****GRAYSON MATH 1314 (3 hrs) AND MATH 1342 (3 hrs)**

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Algebra 2 and must meet all entrance requirements of Grayson College and pay all tuition, fees, and books**

COLLEGE ALGEBRA: Further study of quadratics; polynomial, rational, logarithmic and exponential functions; system of equations; progressions; sequences and series; matrices and determinants.

STATISTICS: Students should take this course if they are planning to go to college and major in Business, Science, Psychology, Pre-Med, Math, or any major that requires Statistics.

AP STATISTICS

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **See criteria below**

AP Statistics is equivalent to a college-level introductory Statistics class. It is designed to prepare the students to take the AP Statistics exam. Students should take this course if they are planning on going to college and majoring in Math, Engineering, Science, Psychology, Business, Pre-Med, or any major that requires Statistics.

To enroll in this class, students must meet the following criteria:

- 1) 85 average for each semester in Algebra 2 (80 in Pre-AP Algebra 2 or Pre-Calculus)(75 in Pre-AP Pre-Calculus)**
- 2) Level 3 Advanced Academic Performance on Algebra 1 EOC test**

AP CALCULUS AB

GRADE: 12

1 Year**1 Credit**PREREQUISITE: **See criteria below**

AP Calculus AB is equivalent to a college-level Calculus 1 class. It should be taken by anyone who will be majoring in Mathematics, Engineering, Science, Business, Pre-Med, Computer Science, or any major requiring Calculus 1. Students must take the national AP exam. Those who pass the exam may receive credit for Calculus 1 from the college they attend.

To enroll in this class, students must meet the following criteria:

- 1) 90 average for each semester in Pre-Calculus (80 in Pre-AP Pre-Calculus)**
- 2) Level 3 Advanced Academic Performance on Algebra 1 EOC test**

AP CALCULUS BC

GRADE: 12

1 Year**1 Credit**PREREQUISITE: **See criteria below**

AP Calculus BC is equivalent to college-level Calculus 1 and Calculus 2 classes. It should be taken by anyone who will be majoring in Mathematics, Engineering, Science, Business, Pre-Med, Computer Science, or any major requiring Calculus 2. Students must take the national AP exam. Those who pass the exam may receive credit for Calculus 1 and/or Calculus 2 from the college they attend. Students will move to Calculus AB if this course does not have sufficient enrollment numbers to make a class.

To enroll in this class, students must meet the following criteria:

- 1) 97 average for each semester in Pre-AP Pre-Calculus**
- 2) Level 3 Advanced Academic Performance on Algebra 1 EOC test**

STATISTICS AND BUSINESS DECISION MAKING

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Algebra 2**

Students will use a variety of graphical and numerical techniques to analyze patterns and departures from patterns to identify and manage risk that could impact an organization. Students will use probability as a tool for anticipating and forecasting data within business models to make decisions. Students will determine the appropriateness of methods used to collect data to ensure conclusions are valid. (This course is also listed in the Finance Career Cluster section.)

MATHEMATICAL APPLICATIONS IN AGRICULTURE, FOOD, AND NATURAL RESOURCES

GRADE: 12

1 Year**1 Credit**PREREQUISITE: **Algebra 1, Geometry, and Algebra 2**

To be prepared for careers in agriculture, food, and natural resources, students must acquire technical knowledge in the discipline as well as apply academic skills in mathematics. Students should apply knowledge and skills related to mathematics, including algebra, geometry, and data analysis in the context of agriculture, food, and natural resources. To prepare for success, students are afforded opportunities to reinforce, apply, and transfer their knowledge and skills related to mathematics in a variety of contexts.

AP COMPUTER SCIENCE A

GRADES: 11-12

1 Year**1 Credit**PREREQUISITES: **Algebra 1, Geometry, Algebra 2 and Computer Programming 1**

AP Computer Science A is a programming course designed to cover the Advanced Placement Computer Science Exam topics. The curriculum will build upon the topics addressed in Computer Programming 1 Honors. Object-oriented components in the language of Java will be stressed. Other topics include decision making, looping, arrays, inheritance, interfaces, abstract classes, Java collections, sorting, searching, and corresponding labs. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. **Students will be prepared for and must take the AP Computer Science A Exam.** (This course is also listed in the Information Technology and Technology Applications sections.)

SCIENCE

All students should read the prerequisites carefully and try to meet these requirements for the desired classes. Students taking the AP classes must take the AP test for those courses.

INTEGRATED PHYSICS AND CHEMISTRY

GRADES: 9-10

1 Year

1 Credit

PREREQUISITE: None

This class will provide an overview of the various forms of matter and energy and their relationships to one another and man. Among the basic concepts presented: structure of matter, properties of matter, changes in matter, measurement of matter and energy, how matter and energy are related, energy and motion, and an overview of technology and electronics. Many applications of the use of chemistry and physics in daily life are demonstrated. Student projects and outside assignments may be assigned at the teacher's discretion. Students will use laboratory equipment and supplies to investigate basic physical and chemical concepts. Lab notebooks may also be required as part of the student's grade.

BIOLOGY

GRADES: 9-11

1 Year

1 Credit

PREREQUISITE: None

Biology is a rigorous and in-depth study of life. It includes studying the structure and function of living organisms and their relationships with other organisms and the environment. Students will learn scientific theories, scientific laws and concepts through lecture, laboratory investigations, research and observations. Emphasis is placed on the study of the cell, DNA and the phylogenetic approach through the various Kingdoms of Life. Class requirements include, but are not limited to, the following: lab notebooks, research projects, class projects and laboratory investigations as well as learning how to properly use lab and safety equipment.

PRE-AP BIOLOGY

GRADES: 9-10

1 Year

1 Credit

PREREQUISITE: **A student's 8th grade Science and Math STARR results will be used in determining enrollment into the Pre-AP Science Program. A student must meet the Level 3 Advanced Academic Performance level as established by TEA on the Math or Science STAAR exam to be eligible for enrollment into Pre-AP Biology.**

Pre-AP Biology will exceed the Biology course of study providing students with a more comprehensive, analytical study of biological processes involving more group and problem solving skills. Emphasis is on the study of the cell, DNA and the phylogenetic approach through the various Kingdoms of Life. Students will work in lecture, discussion, laboratory and project situations, with emphasis on practical application of biological sciences as they relate to everyday life. Outside research and student projects may be assigned at the teacher's discretion. Students will use laboratory equipment and supplies to investigate basic biological concepts. A lab book is required to be kept as part of the grade.

CHEMISTRY

GRADES: 10-12

1 Year

1 Credit

PREREQUISITE: **Biology**

A rigorous lab based course designed to develop methods and an awareness of science by using the role of chemistry in daily life. Specific areas of study are: atomic structure, chemical periodicity, chemical bonding, nomenclature, chemical reactions, state of matter, gas laws, reaction rates and equilibrium, acid base chemistry, electrochemistry and organic chemistry. Outside research will be assigned from time to time. Students will use laboratory equipment and supplies to investigate basic chemical concepts. A lab book may be required to be kept for formal lab write-ups.

PRE-AP CHEMISTRY

GRADES: 10-12

1 Year

1 Credit

PREREQUISITE: **85 or higher in regular Biology or 75 or higher in Pre-AP Biology**

Pre-AP Chemistry will provide a more comprehensive, analytical and experimental study of chemical processes. Specific areas of study are: atomic structure, chemical periodicity, chemical bonding, nomenclature, chemical reactions, state of matter, gas laws, reaction rates and equilibrium, acid base chemistry, electrochemistry and organic chemistry. Students will be expected to solve problems using advanced critical thinking skills. Students will work in lecture, discussion, and laboratory groups. A wide variety of chemical concepts will be covered. Student projects and outside assignments may be given at teacher's discretion. Students will use laboratory equipment and supplies to investigate basic and advanced chemical concepts. A lab book is required to be kept for formal lab write-ups.

PHYSICS

GRADES: 10-12

1 Year

1 Credit

PREREQUISITE: **Biology and Chemistry**

Physics is a rigorous lab based course which will investigate motion in everyday life. Physics introduces concepts of motion, mechanics, electricity, light, waves, and other topics through relationships with common objects and machines. Outside research may be assigned from time to time. At least one major project will be required each semester. Students will use laboratory equipment and supplies to investigate basic physical phenomena. A lab book is required to be kept for formal lab write-ups.

PRINCIPLES OF TECHNOLOGY

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Biology and Chemistry**

In Principles of Technology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Various systems will be described in terms of space, time, energy, and matter. Students will study a variety of topics that include laws of motion, conservation of energy, momentum, electricity, magnetism, thermodynamics, and characteristics and behavior of waves. Students will apply physics concepts and perform laboratory experimentations for at least 40% of instructional time using safe practices.

AP PHYSICS 1

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Algebra 1 and Geometry; 80 or higher in Pre-AP Chemistry or 85 or higher in regular Chemistry**

The science of physics is presented as a lab based investigation into the behavior of matter and energy in their most general and fundamental levels. Using mathematics as the language of physics, students will develop problem solving and critical thinking skills by seeking understanding in the area of mechanics including Newton's laws of motion, Rotational Motion, Energy and Momentum, and Mechanical Waves. At least one major project will be required each semester. Students will use laboratory equipment and supplies to investigate basic and advanced physical concepts. **A lab book is required to be kept for formal lab write-ups on laboratory investigations. Students will be required to take the AP Physics 1 Exam at the end of the year.**

This course is recommended for students looking to continue education in any type of engineering especially mechanical, aerospace, and acoustical.

AP PHYSICS 2

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **AP Physics 1**

This course will provide a comprehensive exploration of the physical and mathematical phenomena involved in Fluid Dynamics, Thermodynamics, Electricity and Magnetism, Optics, and topics in Modern Physics. High emphasis will be placed on advanced level critical thinking and problem solving. Students will be required to do at least one major project each semester. Students will use laboratory equipment and supplies to investigate basic and advanced physical concepts. **A lab book is required to be kept for formal lab write-ups on laboratory investigations. Students will be required to take the AP Physics 2 Exam at the end of the year.**

This course is recommended for students looking to continue education in any type of engineering especially electrical and biomedical.

AP PHYSICS C

GRADE: 12

1 Year**1 Credit**PREREQUISITE: **80 or above in AP Physics 1 COREQUISITE: AP Calculus AB or BC**

AP Physics C is equivalent to a one year, calculus based, college level physics course. Mechanics topics such as kinematics, Newton's laws of motion, work, energy and power, systems of particles and linear momentum, circular motion and rotation, and gravitation and oscillations will be covered during the fall semester. Electricity and Magnetism topics such as electrostatics, conductors, capacitors and dielectrics, electric circuits, magnetic fields, and electromagnetism will be covered during the spring semester. Differential and integral calculus will be used throughout the course. Students will participate in hands- on and virtual laboratory exercises to explore various topics covered in class; a laboratory notebook will be required for formal lab reports. **Students will be required to take the AP Physics C: Mechanics and AP Physics C: Electricity and Magnetism exams at the end of the year.** This course is recommended for students planning to specialize or major in the physical sciences or engineering.

FOOD CHEMISTRY

GRADES: 12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, Physics**

Food Chemistry is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public. Students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students will gain an understanding of the nature of science, scientific inquiry, science and social ethics, and science systems and models.

ADVANCED ANIMAL SCIENCE

GRADES: 12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, Physics**

Advanced Animal Science is the study of animal systems and career opportunities, entry requirements, and industry standards. This course also examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Field and laboratory experiences will be included.

ANATOMY & PHYSIOLOGY OF HUMAN SYSTEMS

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, Physics (concurrent)**

This is an intensive course that will give the student a basic understanding in the following biological topics: the structure, function, characteristics and location of epithelial, connective, muscular and nervous tissue; the integumentary system and how it functions in temperature control; the skeletal system and how it functions to protect and help the body move; the muscular system and how it helps the body move and produce heat, the digestive system and the manner in which nutrients are broken down and absorbed; the circulatory system and how gases are exchanged; the excretory system and the manner in which the blood is cleansed; the nervous system and how organisms interact with the environment; the sense organs and how sight and hearing occur; the skeletal system and how the parts function to allow body movement; the reproductive system; the lymphatic system and how it provides immunity; and the endocrine system and how hormones are involved in control of the body.

ASTRONOMY

GRADE: 12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, and 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 will utilize concepts from Biology, Chemistry, and Physics to acquire knowledge about astronomical concepts, conduct observations of the sky, work collaboratively, and develop critical-thinking skills.

FORENSIC SCIENCE

GRADE: 12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, and Physics**

Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes, such as fingerprint analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for Forensic Science.

ENGINEERING DESIGN AND PROBLEM SOLVING

GRADES: 11-12

1 Year**1 Credit**PREREQUISITES: **Algebra 1, Geometry, Biology, Chemistry**COREQUISITES: **Algebra 2, Physics**

Engineering Design and Problem Solving utilizes the Engineering Process to identify needs and come up with solutions to problems. Solutions can include products, techniques, structures, and processes. Whereas science aims for understanding the natural world, engineering seeks to shape the world by meeting human needs and wants. Students will explore real-world problems in the course and use skills and concepts learned in previous mathematics and science courses to justify solutions from multiple designs. Students will also gain experience with robotics and simple programming techniques.

MEDICAL MICROBIOLOGY

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, Physics (concurrent)**

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.

COLLEGE BIOLOGY -BIOL 1406 (Fall) & BIOL 1407 (Spring)

GRADE: 12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, and Physics****Must meet all requirements of Grayson College and pay all tuition, fees, and books through Grayson.**

College Biology is a fast paced rigorous course providing a comprehensive, analytical study of biology. A strong emphasis is placed on advanced analytical thinking. The course will be a general survey, covering a wide variety of biological topics and areas. The class will progress from atomic structure to the cell, energy transfers, genetics, evolution, anatomy and physiology, with a brief survey of the plant and animal Kingdoms. Outside research will be assigned for each semester. The first project will be an assigned project of pure research. The second will be experimental with a class presentation. Each semester project will be 1/7 of the semester grade. Students are required to pay for all tuition, fees, and books through Grayson College. Students on free or reduced lunches may qualify for tuition exemption through Grayson.

AP BIOLOGY

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Pre-AP Biology, Pre AP Chemistry (concurrently)**

This course is a comprehensive survey of general biology that includes biochemistry, cellular biology, molecular genetics and heredity, biotechnology, diversity, structure and function of organisms and ecology and evolution. Emphasis will be placed on overarching themes. Outside research will be assigned from time to time. Student projects will be required from time to time. A rigorous lab component will go along with this course. Students will use laboratory equipment and supplies to investigate basic and advanced biological concepts. A lab book is required to be kept and will be 1/ 4 of the nine weeks grade. **The student must take the AP Exam.**

AP CHEMISTRY

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Pre-AP Biology, Pre-AP Chemistry, AP Physics 1**

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. The course will develop the student's ability to express ideas orally and in writing, with clarity and logic. Group work will be required in both the lecture and lab setting. Emphasis will be placed on atomic structure, chemical periodicity, chemical bonding, nomenclature, chemical reactions, state of matter, gas laws, reaction rates and equilibrium, acid base chemistry, electrochemistry and organic chemistry. A rigorous lab component will go along with this course. Students will use laboratory equipment and supplies to investigate advanced chemical concepts. A lab book is required to be kept for formal lab write-ups. **The student must take the AP Exam.**

AP ENVIRONMENTAL SCIENCE

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Pre-AP Biology, Pre-AP Chemistry, AP Physics 1 (Concurrent) and achieved Level 2 Satisfactory performance on the Biology EOC test**

This course will provide students with the scientific principles, concepts and methodology required to understand the interrelationships of the natural world, to identify and analyze environmental problems, both natural and man-made; to evaluate the relative risk associated with these problems; and to examine alternate solutions for resolving or preventing them. **The student must take the AP Environmental Science Exam.**

PATHOPHYSIOLOGY

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, Physics (concurrent)**

This course introduces the student to the pathophysiologic disruptions in the normal body functioning in individuals across the lifespan; assessment and analysis of objective and subjective manifestations of common health problems resulting from environmental, genetic and stress-related maladaptations are analyzed. Diagnostic assessments are discussed for each disease process. Alternative medical and pharmacological management is briefly discussed for selected disease processes. (This course may also be eligible for the 4th Science credit, provided the specific Science course prerequisites are completed.)

ENVIRONMENTAL SYSTEMS

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, Physics**

In Environmental Systems, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include: biotic and abiotic factors in habitats, ecosystems and biomes, interrelationships among resources and an environmental system, sources and flow of energy through an environmental system, relationship between carrying capacity and changes in populations and ecosystems, and changes in environments

SOCIAL STUDIES

SOCIAL STUDIES PRE-AP/AP CRITERIA

For students to remain in the Pre-AP/AP track, they must maintain an average of 75 in a Pre-AP course and 80 in an AP course each semester. Any Pre-AP or AP student not achieving the required average will be required to drop to a regular-level course.

Most Pre-AP/AP Social Studies courses require a summer assignment. All students taking one of these courses must check with the teacher of the Pre-AP/AP course about the summer assignment. If the summer assignment is not completed, the student may be dropped from the Pre-AP/AP course to a regular-level course.

Any student entering the Pre-AP track for the first time must meet the following criteria:

- 1) have achieved a grade of at least 85 (year average) in their last regular Social Studies class**
- 2) have achieved at least Level 2 Satisfactory Academic Performance on the 8th grade STAAR Social Studies**

WORLD GEOGRAPHY

GRADE: 9

1 Year

1 Credit

PREREQUISITE: None

World Geography is the study of the physical features and cultures on earth. The first semester consists of physical geography: the study of maps and charts and how to use them. The earth's movement around the sun, land forms, and ecosystems will also be studied. The second semester focuses on different continents, countries and their cultures as the course travels around the world.

PRE-AP WORLD GEOGRAPHY

GRADE: 9

1 Year

1 Credit

PREREQUISITE: None

World Geography is the study of the physical features and cultures of the earth. This course analyzes the various aspects of physical and human geography, as well as, the impact of man on the environment. Physical geography focuses on earth-sun relationships, land forms, earth processes, ecosystems, the study of maps and charts and how to use them. Human geography focuses on the social characteristics of various cultures as the course travels around the world. Also examined are topics in human-environment interaction and global problems, such as overpopulation, environmental degradation, water issues, and conflict. The development of writing and study skills are emphasized in preparation for AP World History.

This course requires outside summer reading and/or other preparatory work.

WORLD HISTORY

GRADE: 10

1 Year

1 Credit

PREREQUISITE: None

This course includes the history and development of ancient civilizations, western civilization, and other world regions from their beginnings to the present. The course provides students the opportunity to compare and analyze various ways of life and cultural patterns that reflect the diversity and commonality of human experiences and the understanding of how these patterns occur. Geographic influences on world history are a part of the study.

PRE-AP WORLD HISTORY

GRADE: 10

1 Year

1 Credit

PREREQUISITE: **Meets Pre-AP/AP course criteria**

This class will prepare the student for advancing to the next step in the Pre-AP/AP series of classes. It requires map tests on a regular basis and develops conceptual writing skills. It will take a dedicated and hard-working student to be successful in this class. **A summer reading assignment or project will be assigned for this course. The assignment is due the first day of class.**

AP WORLD HISTORY

GRADE: 10

1 Year

1 Credit

PREREQUISITE: Meets Pre-AP/AP course criteria

The AP World History course is divided into six major sections, covering the interactions of global civilizations. There is a required outside summer reading assignment and project consisting of reading and annotating the first eight chapters of the text (due to time constraints during the school year). The class requires a serious commitment of time and energy in outside reading and research, note-taking and review, and to meeting assignment deadlines. This course differs from GT/AP World History in that students are not expected to arrive with the same level of writing proficiency or higher-level thinking skills. The course provides the student with incremental "helps" to achieve success on the AP Exam with these two essential skills. **The student must take the AP Exam.**

GT/ AP WORLD HISTORY

GRADE: 10

1 Year

1 Credit

PREREQUISITE: Meets GT and Pre-AP/AP course criteria

GT/AP World History is divided into six major sections, covering the interactions of global civilizations. There is a required outside summer reading assignment/project for this course. This course also requires an extensive commitment of time and energy in outside reading and research, note-taking and review, and meeting assignment deadlines. **The student must take the AP Exam.**

U.S. HISTORY

GRADE: 11-12

1 Year **1 Credit**

PREREQUISITE: None

United States History Studies is designed to demonstrate the relationship between past national events and their impact on the present and future state of our nation. This will be accomplished by an analysis of social, economic and political development of the United States from Reconstruction to the present.

PRE-AP U.S. HISTORY

GRADE: 11

1 Year **1 Credit**

PREREQUISITE: Meets Pre-AP/AP course criteria

This is a writing intensive class. The student will learn how to write conceptually about historical people and events in U.S. History. They will also be required to write an MLA-style paper every nine weeks to prepare for college writing. This is a pre-college class, and students who are successful in this class will be ready and able to take college classes during their senior year. This class requires dedication and hard work by the student to be successful. A summer project will be assigned for all Pre-AP U.S. History classes. **The project will be due on the first day of class. There will also be a test over the project on the first day of class.**

AP U.S. HISTORY

GRADE: 11

1 Year **1 Credit**PREREQUISITE: **Meets Pre-AP/AP course criteria**

This course is designed to provide the opportunity for students to enhance their knowledge and skills by doing work at the pre-college level. Instruction will provide students with the skills necessary to deal critically with the problems and principal themes in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Extensive reading and writing (including work done under strict time limits) is required in preparation for the AP U.S. History exam. **The student must take the AP Exam.**

G/T AP U.S. HISTORY

GRADE: 11

1 Year **1 Credit**PREREQUISITE: **Meets GT and Pre-AP/AP criteria**

This course is designed to provide students with the knowledge necessary to deal critically with the problems and principal themes in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Extensive reading and writing (including work done under strict time limits) is required in preparation for the AP U.S. History Exam. **This course requires outside summer reading and/or other preparatory work. The student must take the AP Exam.**

GOVERNMENT

GRADE: 12

1 Semester **.5 Credit**

PREREQUISITE: None

A course designed to develop an understanding of the structure, functions, and development of the United States governmental and political systems. Students will analyze political institutions, processes, and civic values inherent in the political system and will develop and apply the participatory skills needed to carry out civic responsibilities and exercise their rights as citizens.

ECONOMICS

GRADE: 12

1 Semester **.5 Credit**

PREREQUISITE: None

This course provides opportunities for students to study basic principles concerning production, consumption, and distribution of goods and services. It builds an understanding of the essential components and benefits of the free enterprise system. Students study concepts of personal finance (as required by HB 34), scarcity, economic interdependence, the market system, prices, economic stability, and growth. Students will examine the role of the government in the American economic system and explore selected aspects of international economic systems.

COLLEGE GOVERNMENT -GOVT 2305

GRADE: 12

1 Semester **.5 Credit**PREREQUISITE: **Must meet Grayson College entrance requirements and pay all tuition, fees, and books.**

This course is an option for students interested in politics, law, governmental structures, and who want an opportunity to earn 3 hours of college credit during their senior year while meeting a high school graduation requirement. Students on free or reduced lunches may qualify for a tuition exemption through Grayson. This course may be taught online during the school day with an SHS teacher monitoring and proctoring the students.

COLLEGE ECONOMICS -ECON 2301

GRADE: 12

1 Semester **.5 Credit**PREREQUISITE: **Must meet Grayson College entrance requirements and pay all tuition, fees, and books**

This is a demanding option for those students with particular interest in banking; financing, national and international monetary systems who wish to earn 3 college credit hours during their senior year while meeting a high school graduation requirement. Students on free or reduced lunches may qualify for a tuition exemption through Grayson. This course may be taught online during the school day with an SHS teacher monitoring and proctoring the students.

AP MACROECONOMICS

GRADE: 12

Fall Semester .5 CreditPREREQUISITE: **Meets Pre-AP/AP course criteria**

This course is designed for college-bound students wishing to obtain college credit while still in high school. Macroeconomics gives students a thorough understanding of the principles of economics that apply to an economic system as a whole. The course develops students' familiarity with economic performance measures, economic growth, and international economics. **An outside reading assignment will be expected to be completed over the summer. The assignment is due on the first day of class. The student must take the AP Exam.**

AP U.S. GOVERNMENT AND POLITICS

GRADE: 12

Spring Semester .5 CreditPREREQUISITE: **Meets Pre-AP/AP course criteria**

This course is designed to give students an analytical perspective on government and politics in the United States. The course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It promotes familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. **An outside reading assignment will be given in the FALL. The assignment is due on the first day of class in the spring. The student must take the AP Exam.**

PSYCHOLOGY

GRADES: 11-12

Fall Semester .5 Credit

PREREQUISITE: None

Psychology is the study of human behavior. This course is designed to help students better understand the human environment. Emphasis is placed on practical, everyday living.

SOCIOLOGY

GRADES: 11-12

Spring Semester .5 Credit

PREREQUISITE: None

Sociology is the study of society and its institutions. This course helps students to understand some of the effects of the various cultures on our society. Students study the different behavioral patterns of ethnic groups and the dynamics of group behavior from the perspective of sociologists.

PRE-AP PSYCHOLOGY

GRADES: 11-12

Fall Semester .5 CreditPREREQUISITE: **Meets Pre-AP/AP course criteria**

This course will introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students will be exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students will also learn about the ethics and methods psychologists use in their science and practice. **Students will be expected to take the AP Psychology Exam. A summer assignment will be given and is due on the first day of class.**

AP PSYCHOLOGY

GRADES: 11-12

Spring Semester .5 CreditPREREQUISITE: **Pre-AP Psychology (Fall Semester)**

This course will introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students will be exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students will also learn about the ethics and methods psychologists use in their science and practice. **A summer assignment will be given and is due on the first day of class. The student must take the AP Exam.**

AP EUROPEAN HISTORY

GRADE: 10-12

1 Year 1 CreditPREREQUISITE: **Average of 85 or higher in Pre-AP of previous year**

This course is designed to help students develop an understanding of some of the principal themes in modern European history (1450-present) and their applications in European literature. It will require extensive outside reading and research resulting in analysis of historical evidence and literary works. **The student must take the AP Exam.**

AP HUMAN GEOGRAPHY

GRADES: 10-12

1 Year 1 CreditPREREQUISITE: **Meets Pre-AP/AP course criteria**

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students employ spatial concepts and landscape analysis to analyze human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. **The student must take the AP Exam.**

Fine Arts Credit Options for Graduation Requirement

*Courses with an * indicate prerequisites and/ or specific requirements.
Students must review course descriptions to determine qualifications.*

Requirements	# of Credits Required	9 th Grade- 12 th Grade
Fine Arts	1 Credit	Art or Band or Choir or Orchestra or Theatre Arts

FINE ARTS

ART 1/ INTRODUCTION TO ART

GRADES: 9-12

1 Year

1 Credit

PREREQUISITE: None

Emphasis is on understanding art elements and principles of design. Art 1 students will explore a variety of art techniques and styles, both two and three dimensional work. They will examine the significance and value of art as a means of expression. This beginning level of Art is designed as an introduction to a variety of media and techniques with preliminary work in both drawing and painting. Art 1 students will begin portfolio work. **Students are required to furnish some of their own art supplies and materials.**

ART 1 PRE-AP

GRADES: 9-12

1 Year

1 Credit

PREREQUISITE: None

This course is designed for students who intend to pursue a degree in art or design. Students will be provided the opportunity to develop their art-making skills in order to express their own ideas, thoughts, and feelings. This course goes beyond the regular Art 1 class. Focus is on developing an ongoing collection of artworks in a portfolio that demonstrates the student's proficiency in using a variety of art media in order to display their knowledge and ability in using the elements and principles of design. The portfolio development is intended to be in preparation for the AP Studio Art course or college entrance portfolio work. The Pre-AP Art 1 curriculum follows the College Board directive of the AP Studio requirements.

ART 2 / STUDIO ART Pre-AP DRAWING / PAINTING

GRADES: 10-12

1 Year

1 Credit

PREREQUISITE: **Successful Completion of Art 1**

Art in the second year is designed for students who intend to pursue a professional degree in art, a career in design, or other art related fields, such as architecture, graphic design, interior design, or fashion illustration. Students at this level begin development of a portfolio, selecting projects and work that suit their particular interests and chosen career path. Second year students will be allowed to take two sections of Advanced Art. **Students at this level need to furnish most of their own materials; some drawing supplies will be furnished.**

ADVANCED STUDIO ART / ART 3 & 4 PRE-AP

GRADES: 10-12

1 Year

1 Credit

PREREQUISITE: **Successful completion of Art 2**

This course is oriented toward students who are interested in a professional degree in art and design. The studio work at this level is for the student who is capable of doing advanced work in drawing, painting, and design. Students will be working with a variety of professional media, such as graphite, prisma colors, pastels, watercolors and acrylics. Students will be given an opportunity to pursue areas of special interest with the goal of further developing individual portfolios. **Senior level students are required to participate in the Senior Art Show held in the spring. Students at this level need to furnish most of their own materials; some drawing supplies will be furnished.**

AP STUDIO ART DRAWING PORTFOLIO

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Successful Completion of Art 1 and 2**

This advanced level art course is designed for students who would like to pursue college credit as part of the Advanced Placement program. It is oriented toward students who are interested in a professional degree in art, design, and other art related fields. Advanced Placement students will be required to research artists, art works and styles, and to participate in critiques, style analysis, and art comparisons. The objective of the course is to develop work for the Drawing Portfolio as outlined by the College Board. **Students at this level need to furnish most of their own materials; some drawing supplies will be furnished. The student must take the AP Exam.**

AP ART 2D DESIGN PORTFOLIO

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Successful Completion of Art 1 and 2**

This advanced level art course is designed for students who would like to pursue college credit as part of the Advanced Placement program. It is oriented toward students who are interested in a professional degree in art, design, and other art related fields. Advanced Placement students will be required to research artists, art works and styles, and to participate in critiques, style analysis, and art comparisons. The objective of the course is to develop work for the 2D Design Portfolio as outlined by the College Board. **Students at this level need to furnish most of their own materials; some drawing supplies will be furnished. The student must take the AP Exam.**

AP ART 3D DESIGN PORTFOLIO

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Successful Completion of Art 1 and 2**

This advanced level art course is designed for students who would like to pursue college credit as part of the Advanced Placement program. It is oriented toward students who are interested in a professional degree in art, design, and other art related fields. Advanced Placement students will be required to research artists, art works and styles, and to participate in critiques, style analysis, and art comparisons. The objective of the course is to develop work for the 3D Design Portfolio as outlined by the College Board. **Students at this level need to furnish most of their own materials; some drawing supplies will be furnished. The student must take the AP Exam.**

AP ART HISTORY

GRADES: 11-12

1 Year **1 Credit**

PREREQUISITE: None

AP Art History is the study of the relationships between the artist and his world, between one movement and another, between different cultures and time periods. The study of mankind's creative endeavors seen in historical context will facilitate comparisons for a better interpretation of the human experience through art. The study of Art History will expand student awareness of their world and our ethnic and cultural roots. Focus is on developing student writing skills and comparative observation. This advanced level art course is designed for students who would like to pursue college credit as part of the Advanced Placement program of the College Board. **The student must take the AP Exam.**

AP MUSIC THEORY 1

GRADES: 11-12

1 Year **1 Credit**PREREQUISITE: **2 years of experience in a performing music class (band, choir, or orchestra) and teacher approval**

This advanced level course is designed to prepare students for music theory classes in college. Course work will begin with basic notation skills and terminology, and progress to areas including harmony and harmonic analysis, melodic, harmonic, and rhythmic dictation, sight singing, and keyboard skills. Basic elements of composition and music history will also be explored.

The student must take the AP Exam.**PRINCIPLES AND ELEMENTS OF FLORAL DESIGN (CTE)**

GRADES: 9-12

1 Year **1 Credit**

PREREQUISITE: None

This course is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students develop respect for the traditions and contributions of diverse cultures. To be prepared for careers in floral design, students need to attain academic skills and knowledge as well as technical knowledge and skills regarding career opportunities, entry requirements, and industry expectations. Students will be working towards Floral Design certification.

BAND—WIND ENSEMBLE MARCHING BAND

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Audition**

Wind Ensemble Band consists of the 50 best instrumental wind and percussion musicians in the school. It can be considered the honors group of the band program. The band performs at various concerts, concert festivals, and UIL contests. **Performance at selected events is mandated for credit. This band forms a portion of the Bearcat Marching Band, which rehearses after school Monday through Friday. Attendance at all football games and marching contests is required. There are equipment and fee requirements.**

BAND—SYMPHONIC MARCHING BAND

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Audition**

Symphonic Band is a performing organization incorporating the same curriculum and performance goals as the Wind Ensemble Band, though at a less advanced level. **Performance at selected events is mandated for credit. This band forms a portion of the Bearcat Marching Band, which rehearses after school Monday through Friday. Attendance at all football games and marching contests is required. There are equipment and fee requirements.**

CONCERT MARCHING BAND

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Audition**

Concert Band is a performing organization incorporating the same curriculum and performance goals as the Symphonic Band, though at a less advanced level. **Performance at selected events is required for credit. This band forms a portion of the Bearcat Marching Band, which rehearses after school Monday through Friday. Attendance at all football games and marching contests is required. There are equipment and fee requirements.**

BAND—JAZZ BAND

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Audition; member of the Symphonic Band**

Students will study the performance and literature of jazz music. **The course is performance-oriented with participation at concerts, selected athletic events, and contests. There are equipment and fee requirements.**

BAND—COLOR GUARD

Grades: 9-12

Fall Semester **.5 Credit**PREREQUISITE: **Audition**

This course teaches the techniques of marching band flag corps performance. The emphasis of this group is on public performance utilizing discipline, uniformity, precision marching, and flag control. Performance at football games, marching contests, and parades is required. **There are equipment and fee requirements.**

BAND—COLOR GUARD

Grades: 9-12

Spring Semester **.5 Local Credit**PREREQUISITE: **Audition and Participation in Fall Color Guard**

This course expands upon the techniques of color guard performance. The emphasis of this group is on public performance utilizing discipline, uniformity, dance, and equipment control. Performance in various school activities, exhibitions, and several competitions is required. **There are equipment and fee requirements.**

BAND—DRUM LINE

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Audition**

The Drum Line is an auxiliary group of percussionists that form an integral part of the Bearcat Marching Band. This course teaches the techniques of marching and front line percussion. The emphasis of this group is on public performance utilizing discipline, uniformity, precision marching, and playing. **Participation at all football games, marching contests, and performances of the Bearcat Band is required for credit. There are equipment and fee requirements.**

CONCERT CHORALE

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Audition**

Concert Chorale is an advanced performing group of mixed voices. Selection for this choir is on the basis of an audition consisting of a solo performance and sight reading capability as well as behavior. Class activities include performance skills, vocalization, building and development of the voice and sight reading skills, theory, music history and literature, and learning songs representative of various choral styles and historic periods. Choir members will develop solo and ensemble skills as well as a passion for music. **Performances are required as well as all competitions.**

BEL CANTO

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **None**

The Bel Canto women's chorale is Italian for "beautiful singing" and is one of the two women's chorales. Class activities include proper singing habits, performance skills, vocalization, building and developing voice, theory, sight reading skills, music history and literature, and learning songs representative of various choral styles and historic periods. Choir members will develop solo and ensemble skills as well as a passion for music. **Performances are required.**

MEN'S CHORALE

GRADES: 9-12

1 Year **1 Credit**

PREREQUISITE: None

The Men's Chorale is a training choir for male voices. Class activities include proper singing habits, performance skills, vocalization, building and developing of voice, theory and sight reading skills, music history and literature, and learning songs representative of various choral styles and historic periods. Choir members will develop solo and ensemble skills as well as a passion for music. **Performances are required.**

APPLIED MUSIC

GRADES: 9-12

1 Year **1 Credit**

PREREQUISITE: None

Applied Music is a class for students who plan to audition for All Region, Solo and Ensemble, extra performing groups, etc. This class will focus on building their solo repertoire as well as furthering the fundamentals we cover in choir. It is recommended, but not required, that the student be concurrently enrolled in any of the Choral Ensembles. **Students who are not currently in a choral ensemble must get instructor approval.**

STRING ORCHESTRA

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Audition**

String Orchestra is a performing group with the same goals as Chamber, but at a less rigorous pace, and will compete as a non-varsity UIL group. Members will meet in weekly mandatory after-school rehearsals and will be required to perform in some concerts, festivals, gigs and UIL activities throughout the school year, as well as have the opportunity for voluntary performances in the community. **This class has equipment and fee requirements.**

CHAMBER ORCHESTRA

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Audition**

Chamber Orchestra is an advanced performing group of select musicians and will be the string portion of the Philharmonic Orchestra (a full group of strings, winds and percussion). Chamber will meet in weekly mandatory after-school rehearsals. As members of Chamber, students are required to participate and perform in concerts, festivals, gigs and UIL activities throughout the school year, as well as have the opportunity for voluntary performances in the community. **The class has equipment and fee requirements.**

TECHNIQUES ORCHESTRA

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Audition and teacher approval**

Techniques Orchestra is an opportunity for students to learn how to play a stringed instrument—violin, viola, cello, or double bass—as well as a course for intermediate-level string musicians to continue development of fundamental skills. Activities will include work on tone production, technical facility and ensemble playing. A small number of performances are required each year, with an opportunity for voluntary performances in the community. **This class has equipment and fee requirements.**

THEATRE ARTS 1

GRADES: 9-12

1 Year **1 Credit**

PREREQUISITE: None

Theatre Arts 1 is a survey course which initiates the student to the art form of theatre. The emphasis is on acting and the student's potential and ability in acting. The technical areas of theatre, such as costume, make-up, lights, and staging are also taught. **Guest speakers and attendance at theatre events are also incorporated.**

THEATRE ARTS 2

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Theatre Arts 1**

Theatre Arts 2 is an intermediate preparation and performance course building on the background established in Theatre Arts 1, focusing on the performer's mental preparation and understanding of the role in performance. **Students are required to participate in tournaments and festivals.**

THEATRE PRODUCTION 1 & 2

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Audition and Successful Completion of Theater 1**

Theatre Production is a performance related class which uses the skills, talent, and abilities acquired in previous Theatre Arts classes. **Students are required to do one or more roles for public presentation. The one-act play cast is selected from this class.**

MUSICAL THEATRE 1

GRADES: 9-12

1 Year**1 Credit**PREREQUISITE: **Teacher approval**

Musical Theatre will expose students to a wide range of on-stage performance disciplines, including acting performance, vocal performance, and dance performance. The course will also provide an atmosphere in which students benefit from a teaching and learning experience in these performance disciplines of musical theatre. Students will receive comprehensive and rigorous instruction so that they may make informed choices about the craft, college, and the profession. The course will enhance and cultivate the creative gifts of each student while encouraging a sense of self-confidence. The course will enable students to study and perform the varied styles of musical theatre with special attention to the principles of stage movement, stage vocal technique, stage choreography, acting, characterization, and other aspects of a musical production. **Students will be required to participate in the fall musical.**

Other Languages Credit Options for Graduation Requirement

*Courses with an * indicate prerequisites and/ or specific requirements.
Students must review course descriptions to determine qualifications.*

Requirements	# of Credits Required	8th	9th Grade-12 th Grade
Other Languages	2 Credits (must be Level I & 2 of the same language)	Spanish I	Spanish I & II or Latin I & II or French I & II or German I & II or American Sign Language I & II

OTHER LANGUAGES

FRENCH 1

GRADES: 9-12

PREREQUISITE: None

1 Year

1 Credit

French 1 concentrates on establishing a basic vocabulary of practical, everyday words and expressions. The four language skills of listening, speaking, reading, and writing will be practiced throughout the year, with the primary focus being listening and speaking during the first semester. Correct pronunciation is also emphasized to help students "sound" French. Cultural and language comparisons are constantly made to help students understand how language works and to appreciate the similarities and differences between their own culture and that of francophone countries.

FRENCH 2

GRADES: 10-12

PREREQUISITE: **French 1**

1 Year

1 Credit

French 2 examines the language more carefully with respect to its grammatical framework. More complex tenses are introduced, and vocabulary enrichment is stressed. Each of the four language skills are strengthened through practice. Students study culture through a variety of authentic sources, including films, music videos, French language websites, and food projects.

FRENCH 3 HONORS

GRADES: 11-12

PREREQUISITE: **French 2**

1 Year

1 Credit

In this class, grammar will be reviewed, refined and expanded. French culture will be studied from many different aspects. Excerpts from French literature as well as short stories and novels in the target language will be read and analyzed. All work is done in French.

FRENCH 4 HONORS

GRADES: 11-12

PREREQUISITE: **French 3**

1 Year

1 Credit

The course emphasizes the use of language for active communication through various reading selections, audio and video recordings, films, newspapers, and magazines. Fine tuning of more complex grammatical structures as well as training in the organization and writing of compositions are also emphasized.

LATIN 1

GRADES: 9-12

PREREQUISITE: None

1 Year

1 Credit

The Cambridge Latin course has the reading-inductive reasoning approach to the study of Latin. The course has a rapid pace; two texts must be covered during the first year. In addition to the reading and the grammar, Roman culture, which pertains to each stage of the text, is studied. The student must learn the inflectional endings and other letter signals which help one read, write, speak and understand a Latin sentence. Although the beginning of the language requires an acquisition of a vast amount of basic knowledge rather rapidly, the rewards are great for the learner. Latin is the basic language for all of the modern Romance languages and the basis for many words in the English language. A student should be able to handle the English language, or the language spoken in his/her home, with great skill and accuracy before enrolling in this course. Latin, in turn, will enable the student to handle the English language and vocabulary with more skill and accuracy.

LATIN 2

GRADES: 9-12

1 Year**1 Credit**PREREQUISITE: **Latin 1**

The second-year student will be administered a test a few days into the course. There will be a brief, rapid review before the test. The student is expected to have preserved a copy of the previous year's grammar notes. In order to ensure success in the second year of Latin, the student should make no lower than an 85 on this test. When taking this test, no texts, notes or dictionaries are allowed. Latin 2 continues the study of the Latin grammar with the passive participles and more complex prepositional phrases and clauses. The subjunctive mood is introduced and also ablative absolutes. There is a continuance of the study of the uses of the ablative. Oral and written experiences are increased. The cultural studies are also continued.

PRE-AP LATIN 3

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Latin 2; strongly recommended that the student have a Latin 2 year average of 85 or higher**

At the beginning of the third year, another test will be administered a few days into the course. Again, there will be only a brief rapid review before the test. Again, all previous grammar notes are expected to have been preserved. The cultural studies continue. The grammar continues with indirect statement, use of the gerundive, conditional sentences and more complex uses of the subjunctive. The written exercises keep pace with the grammar. The second half of the year introduces the learner to the reading of primary Latin sources. The student will begin the study of various genre and Latin literary techniques. The student will be required to evaluate and compare various genres.

AP LATIN 4

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Pre-AP Latin 3**Required readings in Latin from Vergil's *Aeneid*:

Book 1: lines 1-209, 418-440, 494-578

Book 2: lines 40-56, 201-249, 268-297, 559-620

Book 4: lines 160-218, 259-361, 659-705

Book 6: lines 295-332, 384-425, 450-476, 847-899

Required readings in Latin from Caesar's *Gallic Wars*:

Book 1: chapters 1-7

Book 4: chapters 24-35 and the first sentence of chapter 36 (eodem die legati...venerunt)

Book 5: chapters 24-48

Book 6: chapters 13-20

Required readings in English from Vergil's *Aeneid*:

Books 1, 2, 4, 8, 12

Required readings in English from Caesar's *Gallic Wars*:

Books 1, 6, 7

Students must sight read with facility. This requires the student to learn vocabulary not only of the required readings but to also go to internet Latin vocabulary practice sources. A good source is Tabney. **Students must take the AP Exam.**

LATIN 5 POST AP

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Latin 4 and the AP test taken**

The Latin 5 student will begin the year with an introduction to Medieval Latin. Students will become familiar with the structure, pronunciation, and vocabulary used in Medieval Latin. Selections from the 12th century author Abelard and the 9th century author Alcuin will be used in this study. Familiarity with the Medieval Latin will enable the student to enjoy the contemporary Latin translators of popular books. The two books which are contemporary classics and are now available are *Harry Potter et Philosophi Lapis* and the recently published *Hobbitus Ille*. The members of the fifth year class may decide early in the first semester which of the two texts they wish to read during the second semester. **Students must take the AP Exam.**

AMERICAN SIGN LANGUAGE 1

GRADES: 9-12

1 Year**1 Credit**

PREREQUISITE: None

While other languages possess a written and/or spoken element, American Sign Language (ASL), as well as all other sign languages, have no verbal and/or written form. ASL is a fully-developed natural language that is used by members of the North American Deaf Community. The language is distinct from gestures seen in spoken languages in that ASL is controlled by the structures of its linguistic system, independent of English. ASL encompasses all of the features that make a language a unique, rule-governed communication system. ASL has five parameters, which are handshapes, movements, locations, palm orientations, and non-manual signals, and, when combined, produce words. It is not a simplified language and contains structures and processes that English does not.

AMERICAN SIGN LANGUAGE 2

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **ASL 1**

Using grade-appropriate materials, students develop the ability to perform the tasks of the novice-to-intermediate language learner. The novice-to-intermediate language learner, when dealing with familiar topics, should: understand American Sign Language (ASL) phrases receptively and respond expressively with learned material; sign learned words, concepts, phrases, and sentences; recognize the importance of communication and how it applies to the American Deaf culture; and recognize the importance of accuracy of expression by knowing the components of ASL; and use expressive and receptive skills for comprehension.

AMERICAN SIGN LANGUAGE 3

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **ASL 2**

Students of ASL gain the knowledge to understand cultural practices (what people do) and products (what people create) and to increase their understanding of other cultures as well as to interact with members of those cultures. Through the learning of ASL, students obtain the tools and develop the context needed to connect with other subject areas and to use the language to acquire information and reinforce other areas of study. Students of ASL develop an understanding of the nature of language, including grammar, and culture and use this knowledge to compare languages and cultures and to expand insight into their own language and culture. Students enhance their personal and public lives and meet the career demands of the 21st century by using ASL to participate in Deaf communities in Texas, in other states, and around the world.

SPANISH 1 (designed for non-heritage speakers)

GRADES: 9-12

1 Year**1 Credit**

PREREQUISITE: None

The Spanish courses at all levels are designed to develop an understanding of the Spanish-speaking peoples-their problems, their achievements, and their culture. Students learn to communicate by speaking, reading, and writing in the Spanish language. In Spanish 1, the student acquires a vocabulary which is carefully chosen so that the student learns the basic structure of the language. Reading and writing follow oral practice. Most conversations at this level are in the present tense.

SPANISH 2 (designed for non-heritage speakers)

GRADES: 9-12

1 Year**1 Credit**PREREQUISITE: **Spanish 1**

The gradual process of building vocabulary and gaining knowledge of structure of the language is continued in oral drills and written practices of increasing complexity. Simple tenses of the verb are gradually introduced and practiced. Readings provide information on the life of Spanish-speaking people and the countries in which they live. Oral practice and correct pronunciation are stressed.

PRE-AP SPANISH 2 (designed for non-heritage speakers)

GRADES: 9-12

1 Year**1 Credit**PREREQUISITE: **Spanish 1 with a grade of 85 or higher**

Pre-AP Spanish 2 is designed to develop fluency. This course will emphasize speaking, through ample practice with reading, writing, and listening to address the requirements of the AP exam. Students will read and present plays and skits in Spanish. Short stories, articles and essays will be used to broaden vocabulary and increase mastery of structure. Students should enter this course with full mastery of the present tense of verbs, both regular and irregular.

SPANISH 3 (designed for non-heritage speakers)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Spanish 2**

This course is designed for students who would like to continue their study of Spanish but need oral practice along with emphasis on vocabulary development and a review of the grammar learning in Spanish 2.

PRE-AP SPANISH 3 (designed for non-heritage speakers)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Spanish 2 with a grade of 85 or higher**

Spanish 3 Pre-AP is designed to develop fluency. The emphasis will be on speaking. The students will read and present plays and skits in Spanish. Short stories, articles and essays will be used to broaden vocabulary and increase mastery of structure.

AP SPANISH 4 (designed for non-heritage speakers)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Spanish 3**

This course is designed to refine, perfect, and enhance skills already learned, and to broaden the student's knowledge of modern Spanish literature. Students will read novels and poetry and will learn to compare styles, genres, and themes from different authors.

The student must take the AP Exam.

SPANISH 1 AND 2 FOR SPANISH SPEAKERS

GRADES: 9-12

1 Year **2 Credits**1st sem=Span 12nd sem=Span 2**PREREQUISITE: Must be a Heritage Speaker**

This course is designed to help Hispanic students capitalize on the verbal skills they already possess. The student objectives will be to improve their reading and writing skills in Spanish, while refining existing listening and speaking skills.

PRE-AP SPANISH 1 AND 2 FOR SPANISH SPEAKERS

GRADES: 9-12

1 Year **2 Credits**1st sem=Span 12nd sem=Span 2**PREREQUISITE: Must be a Heritage Speaker**

This course is designed for AP program tracking of heritage speakers who have grade-level reading and writing skills in Spanish.

PRE-AP SPANISH 3 FOR SPANISH SPEAKERS

GRADES: 10-12

1 Year **1 Credit****PREREQUISITE: Successful completion of Spanish 2 for Spanish Speakers**

This course is designed to prepare heritage speakers of Spanish to master higher grammar structures in Spanish. The emphasis in this course is on reading and writing Spanish. This course is a prerequisite to Spanish 4 AP Language and/or Literature.

AP SPANISH LANGUAGE 4 FOR SPANISH SPEAKERS

GRADES: 11-12

1 Year **1 Credit****PREREQUISITE: Successful completion of Pre-AP Spanish 3 for Spanish speakers**

Students in this class will work on higher Spanish reading, writing, and listening skills. **The student must take the AP Exam.**

AP SPANISH LITERATURE 4 FOR SPANISH SPEAKERS

GRADES: 11-12

1 Year **1 Credit****PREREQUISITE: Successful completion of Pre-AP Spanish 3 for Spanish speakers**

Students will read and analyze Spanish literature through the centuries, comparing different authors and styles. **The student must take the AP Exam.**

Physical Education Credit Options for Graduation Requirement

*Courses with an * indicate prerequisites and/ or specific requirements.
Students must review course descriptions to determine qualifications.*

Requirements	# of Credits Required	9 th Grade-12 th Grade
Physical Education	1 Credit	Foundations of Personal Fitness Foundations of Personal Fit./Individual Sports PE Weightlifting *Athletics: <i>Football,</i> <i>Basketball,</i> <i>Volleyball,</i> <i>Soccer,</i> <i>Softball,</i> <i>Baseball,</i> <i>Tennis,</i> <i>Golf,</i> <i>Swimming</i> *Drill Team: Fall Semester Only (.5 credit) *Cheer: Fall Semester Only (.5 credit) *Band: Fall Semester Only (.5 credit) *Require a Physical and may require tryouts

PHYSICAL EDUCATION / HEALTH/ATHLETICS

Students may substitute certain physical activities for the required physical education credits for graduation. Such substitutions shall be based on the physical activity involved in:

1. **The Fall semester of each of the following courses earns .5 of state credit in PE:**
Marching Band, Drill Team, and Cheerleading
***To complete the PE credit requirement for graduation, students must enroll in fall semester of the above courses for 2 years.**
2. **Athletics**

HEALTH

GRADES: 9-12

1 Semester .5 Credit

PREREQUISITE: None

This course includes instruction in environment and community health, consumer health, care of the human body, nutrition, mental health, substances that modify behavior, prevention of disease, chronic health conditions, accident prevention, first aid, emergency care, and family life education. **(This course does NOT satisfy the physical education credit required for graduation.)**

FOUNDATIONS OF PERSONAL FITNESS

GRADES: 9-12

1 Year 1 Credit

PREREQUISITE: None

Physical Education is designed to develop the whole student-physically, emotionally, and socially. It includes a variety of team, individual, and lifetime activities. Each student is challenged to develop a total fitness program which they can continue throughout their lifetime. **Students are required to dress out in this class.** Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

WEIGHTLIFTING PE/FOUNDATIONS OF PERSONAL FITNESS/INDIVIDUAL SPORTS

GRADES 9-12

1 Year 1 Credit

PREREQUISITE: None

This course is designed to give students the basic understanding of and appreciation for strength training. Throughout this course, students will be exposed to many different training principles, benefits of strength training and current training issues. Some issues of importance include: basic muscle physiology (including bone, muscle, and connective tissue), proper warm-up (including flexibility and stability), training methods and modes (including safety issues and spotting), nutritional factors in performance and health. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

BASEBALL

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Annual Physical Exam required**

Baseball on a competitive interschool basis offers the student the opportunity to develop the individual skills of base running and hitting, catching, and throwing the ball. Since baseball is a team sport, students develop those qualities characteristic of good team membership. The varsity team is composed of eighteen to twenty-four players who compete in approximately twenty-five games a year. The ninth grade and the junior varsity teams play between 15 and 20 games a year. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

9th grade students who play ONLY Baseball will NOT schedule into an athletic period. They will begin after-school workouts in the spring semester.

BASKETBALL—GIRLS AND BOYS

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Annual Physical Exam required**

Basketball is an interschool activity that enables students to develop and test specific motor skills, such as dribbling, passing, and shooting the basketball. "Total student" development is stressed, and emphasis is placed on developing assets such as poise, respectable academic standing, and positive self-concept. There are three girls' and boys' teams-varsity, junior varsity, and freshmen. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

FOOTBALL (Fall semester only for 12th grade)

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Annual Physical Exam required**

Football is a sport that helps the student develop individual physical skills such as blocking, tackling, running, kicking, catching, and throwing the football. Varsity, junior varsity, and two freshmen teams are fielded at the high school. A structured off-season program is provided for physical development during the second semester. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

GOLF-GIRLS AND BOYS

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Annual Physical Exam required, and students must provide their own transportation**

Golf is an individual sport in which a student competes against other students for individual recognition. It is also a team sport in which a team competes on an interscholastic level.

It provides a person with a life-long means for recreation. The varsity and junior varsity teams compete against other schools. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

SOFTBALL

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Annual Physical Exam required**

Softball offers students the opportunity to develop the individual skills of base running and hitting, catching, and throwing the ball. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

SOCCER-GIRLS AND BOYS

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Annual Physical Exam required**

The interschool soccer team provides students with the opportunity to learn a truly international game. The course requirements include learning the rules of play and the skills needed to play competitively. This involves the development of running ability, body coordination, conditioning, and strategy. Varsity and junior varsity teams play approximately ten games in scheduled competition. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

SPORTS MEDICINE I

GRADES: 9-11

1 Semester **.5 Credit**

PREREQUISITE: None

This course provides an opportunity for the study and application of the components of sports medicine including, but not limited to, sports medicine related careers, organizational and administrative considerations, prevention of athletic injuries, recognition, evaluation, and immediate care of athletic injuries, rehabilitation and management skills, taping and wrapping techniques, first aid/CPR/AED, emergency procedures, nutrition, sports psychology, human anatomy and physiology, therapeutic modalities, and therapeutic exercise. Students will also have to complete a number of game observations during the semester. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

(This course does NOT satisfy the 1.0 state PE credit requirement.)

SPORTS MEDICINE 2

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Successful completion of Sports Medicine 1, followed by an application and interview process**

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 rehabilitative techniques; therapeutic modalities; wound care, taping, and bandaging techniques;; prevention, recognition, and care of musculoskeletal injuries; injuries to the young athlete; drugs in sports; modern issues in sports medicine. Individualized and independent assignments will be included in this course. This course will involve outside-of-class time homework and time required working with athletes and athletic teams. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11. **(This course does NOT satisfy the 1.0 state PE credit requirement.)**

SWIMMING-GIRLS AND BOYS

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Must participate in Spring tryouts and Annual Physical Exam required.**

Swimming is a team and an individual sport which competes on an interscholastic level. During the year students will cover all aspects of competitive swimming. There is a junior varsity and a varsity team. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

TENNIS-GIRLS AND BOYS

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Must participate in the SHS tryout tournament and Annual Physical Exam required.**

Tennis on the high school level is a highly competitive program beginning in September and ending in May. During the school year, students cover all phases of the game, from basic fundamentals through competitive play. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

VOLLEYBALL—GIRLS (Fall semester only for 12th grade)

GRADES: 9-12

1 Year **1 Credit**PREREQUISITE: **Must be willing to participate in workouts before the start of the school year and Annual Physical Exam required.**

Volleyball is an interschool sport following the rules and regulations of "power" volleyball. To play the game, a student must develop individual skills and must learn to work well in a team situation. There is a freshman team, a junior varsity team, and a varsity team. Basic instruction in cardiopulmonary resuscitation (CPR) will be included in the curriculum of this class, in accordance with TEC 74.11.

OTHER PE SUBSTITUTION COURSES**DRILL TEAM**

GRADES: 9-12

1 Semester (Fall) **.5 credit*****1 Year (Fall & Spring Semester)** **.5 state credit & .5 local credit**PREREQUISITE: **Spring Tryouts required**

The SHS Drill Team provides entertainment at athletic events and school activities and participates in various competitions. **Selection to the Drill Team will be based on tryouts and academic and discipline records. Members of the Drill Team will be required to attend mandatory camp(s). Before— and after-school practices, rehearsals, competitions, and performances are required throughout the year. Mandatory parent meetings are also required. There are fees and expenses required of Drill Team members. *If taken for full year, only fall semester earns state credit. Spring semester is for local credit only.**

CHEERLEADING

GRADES: 9-12

1 Semester (Fall) **.5 credit*****1 Year (Fall & Spring Semester)** **.5 state credit & .5 local credit**PREREQUISITE: **Spring Tryouts required**

The SHS Cheerleading team promotes school spirit at athletic events and community activities. **Selection to the cheerleading squads is based on mandatory tryouts before a panel of judges. Academic and discipline records may also be considered. Members of the Cheerleading squad are required to attend athletic events and community activities. Attendance at cheerleading camp is mandatory, as is attendance at mandatory parent meetings. Additionally, there are fees and expenses required. *If taken for full year, only fall semester earns state credit. Spring semester is for local credit only.**



“Learning by Doing”

Career and Technical Education provides competency-based applied learning which contributes to academic knowledge, higher order thinking skills, problem solving skills, work attitudes, general employability skills, and occupationally-specific skills needed for success in the workplace or in post-secondary education. Various types of programs are offered: project-based program classes, work based learning classes, internships, and a variety of courses centered on technology.

In project-based classes, the student learns both technical and practical occupational information in a one, two, or three period course.

Choosing a Career Pathway: A Personalized Education Plan

Jobs in the twenty-first century will require both high academic and technical skills. Primarily because of ever-changing technology, our society will see many new job titles and work areas added each year. That makes it especially important for students to begin thinking early about what types of occupations they might want to pursue and then to plan a rigorous high school program that will give them opportunities for success.

The term “Career” implies more than just a job; it includes education, work, and lifestyle. Achieving a successful career requires years of planning, studying, training, and hard work. If used correctly, the following section should help students select the right path to follow in high school, one of the most important decisions students will make in their lives.

GRAYSON COLLEGE ARTICULATED COURSES

The Sherman Independent School District has a college credit articulation agreement with Grayson College in the areas of health science technology, business education, computer information technology, agriculture science, family & consumer sciences, and trade and industrial education. The Grayson College course articulation program emphasizes rigorous technical training using principles taught in mathematics, science, English, and other academic subjects while enrolled in a coherent sequence of career and technology courses. Because this program was developed with input and assistance from local business leaders and employers, students can attain a greater understanding of the work place while they are in high school. Students who complete the articulation plan can earn (articulated) college credit at the community college while they are in high school. After high school graduation, students may be able to start college at an advanced level, saving time and college tuition costs as they pursue their careers and work toward associate degrees.

Current articulated courses through Grayson College and/or Collin County College include*:

Business Information Management 1 & 2
Networking
Business Law
Money Matters
Accounting 1 & 2
HVAC
Culinary Arts
Hospitality /Tourism
Computer Maintenance

Principles of Health Science
Health Science
Practicum in Health Science
Medical Terminology
Child Development (also CCC)
Child Guidance (also CCC)
Instructional Practices
Practicum in Education & Training (also CCC)

*Agreement subject to change from year to year

GRAYSON COLLEGE TECHNICAL DUAL-CREDIT PROGRAM

***See additional dual-credit information on page 6.**

Junior and Senior students have the opportunity to partnership with Grayson College by entering certificate courses in Advanced Manufacturing, Welding and Cosmetology, among others. Students must be eligible for early dismissal, as these classes are offered in the afternoon.

Students must provide their own transportation. High school credit will be awarded after successful completion of the course.

INDUSTRY CERTIFICATIONS

Most CTE courses prepare students for various industry certifications that are currently recognized and accredited. Based on interests, work ethics, and level of academic achievement, some students may have the opportunity to take certification exams in current CTE courses. Students can potentially graduate with high school and college credit, a new skill, and an industry-recognized certification.

Career and Technical Education Courses

*****AGRICULTURE, FOOD, & NATURAL RESOURCES*****

PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES (CTE)

GRADES: 9-12

1 Year

1 Credit

PREREQUISITE: None

To be prepared for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for success, students need to have opportunities to learn, reinforce experience, apply, and transfer their knowledge and skills in a variety of settings.

PRINCIPLES AND ELEMENTS OF FLORAL DESIGN (CTE)

GRADES: 9-12

1 Year

1 Credit

PREREQUISITE: None

This course is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students develop respect for the traditions and contributions of diverse cultures. To be prepared for careers in floral design, students need to attain academic skills and knowledge as well as technical knowledge and skills regarding career opportunities, entry requirements, and industry expectations. Students will be working towards Floral Design certification. (This course is also eligible for Fine Arts credit.)

WILDLIFE, FISHERIES, AND ECOLOGY MANAGEMENT (CTE)

GRADES: 10-12

1 Year

1 Credit

PREREQUISITE: **Principles of Agriculture, Food, & Natural Resources**

To be prepared for careers in natural resource systems, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to natural resources, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. This course examines the management of game and non-game wildlife species, fish, and aquacrops and their ecological needs as related to current agricultural practices. Students will be working towards Texas Hunter Safety certification.

HORTICULTURE SCIENCE (CTE)

GRADES: 11-12

1 Year

1 Credit

PREREQUISITE: **Principles and Elements of Floral Design**

To be prepared for careers in horticultural systems, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to horticulture and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings. This course is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production. Students will be working towards Private Pesticide Applicator License.

AGRICULTURAL MECHANICS & METAL TECHNOLOGIES (CTE)

GRADES: 10-12

1 Year

1 Credit

PREREQUISITE: **Principles of Agriculture, Food, & Natural Resources**

This course prepares students for careers in agricultural power, structural, and technical systems. Students will be provided the opportunity 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. Student will gain knowledge with regard to future career opportunities, the education and training required for field entry, and industry expectations and certifications.

AGRICULTURAL STRUCTURES DESIGN AND FABRICATION (CTE)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Agricultural Mechanics & Metal Technologies******ADVANCED CTE COURSE****

To be prepared for careers in mechanized agriculture and technical systems, students attain knowledge and skills related to agricultural facilities design and fabrication. Students explore career opportunities, entry requirements, and industry expectations. To prepare for success, students reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings.

AGRICULTURAL POWER SYSTEMS (CTE)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Principles of Agriculture, Food, & Natural Resources******ADVANCED CTE COURSE****

To be prepared for careers in agricultural power, structural, and technical systems, students should attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the workplace; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations. To prepare for success, students should have opportunities to learn, reinforce, apply, and transfer their knowledge and technical skills in a variety of settings. This course is designed to develop an understanding of power and control systems as related to energy sources, small and large power systems, and agricultural machinery. Students will be working towards Tractor & Machinery Operators certification.

LIVESTOCK PRODUCTION (CTE)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Principles of Agriculture, Food, and Natural Resources******ADVANCED CTE COURSE****

To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. Animal species to be addressed in this course may include, but are not limited to, beef cattle, dairy cattle, swine, sheep, goats, and poultry.

ADVANCED ANIMAL SCIENCE (CTE)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, Physics******ADVANCED CTE COURSE****

Advanced Animal Science is the study of animal systems and career opportunities, entry requirements, and industry standards. This course also examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Field and laboratory experiences will be included. (This course may count as a fourth science credit and is also listed in the Science section.)

MATHEMATICAL APPLICATIONS IN AGRICULTURE, FOOD, & NATURAL RESOURCES (CTE)

GRADE: 12

1 Year**1 Credit**PREREQUISITE: **Minimum of one credit from the courses in the Agriculture, Food, and Natural Resources section******ADVANCED CTE COURSE****

To be prepared for careers in agriculture, food, and natural resources, students must acquire technical knowledge in the discipline as well as apply academic skills in mathematics. Students should apply knowledge and skills related to mathematics, including algebra, geometry, and data analysis in the context of agriculture, food, and natural resources. To prepare for success, students are afforded opportunities to reinforce, apply, and transfer their knowledge and skills related to mathematics in a variety of contexts. (This course may count as a fourth math credit and is also listed in the Mathematics section.)

PRACTICUM IN AGRICULTURE, FOOD, & NATURAL RESOURCES (CTE)

GRADE: 12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Minimum of two credits from the courses in the Agriculture, Food, and Natural Resources cluster******ADVANCED CTE COURSE****

The 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 employment, independent study, internships, assistantships, mentorships, or laboratories.

*****ARCHITECTURE & CONSTRUCTION*****

PRINCIPLES OF ARCHITECTURE & CONSTRUCTION (CTE)

GRADES: 9-12

1 Year**1 Credit**

PREREQUISITE: None

This course provides an overview to the architectural and construction fields. Introduction to the technology systems in computer-aided drafting. The student will achieve proficiency in decision-making and problem-solving. Job-specific skills will be taught, including communication, teamwork, critical thinking, safety, math concepts as it relates to measurements and estimating, ethics, employability and technical skills. Students will be working towards being certified in the Chief Architect computerized drafting program and/or the (NCCER) National Center for Construction Education and Research.

ARCHITECTURAL DESIGN (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Principles of Architecture & Construction**

This course takes students through the design and presentation process involved in architecture. Students will review the computer-aided systems for computerized drafting. Work developing blue prints will be completed, both independently and collaboratively. Students will assemble an architectural design. Students will be working toward Chief Architect computerized drafting program certification.

ADVANCED ARCHITECTURAL DESIGN (CTE)

GRADES: 10-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Architectural Design******ADVANCED CTE COURSE****

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

CONSTRUCTION TECHNOLOGY (CTE)

GRADES: 10-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Principles of Architecture & Construction**

This course allows students to gain knowledge and skills specific to those needed to enter the workforce as construction workers and carpenters. Students acquire knowledge and skills in safety, tool usage, building materials, codes, framing communication, and employability skills. Individual or group project will be completed. Students will work toward certification in the National Center for Construction Education and Research (NCCER) program.

ADVANCED CONSTRUCTION TECHNOLOGY (CTE)

GRADES: 10-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Construction Technology******ADVANCED CTE COURSE****

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

BUILDING MAINTENANCE TECHNOLOGY (CTE) *Replaces Piping/Plumbing Technology*

GRADES: 10-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Principles of Architecture & Construction**

In Building Maintenance Technology, students gain knowledge and skills specific to those needed to enter the field of building maintenance as a building maintenance technician or supervisor or secure a foundation for a postsecondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in plumbing, electrical, and Heating, Ventilation, and Air Conditioning (HVAC) systems. Additionally, students learn methods for repair and installation of drywall, roof, and insulation systems.

ADVANCED BUILDING MAINTENANCE TECHNOLOGY (CTE)

GRADES: 10-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Piping/Plumbing Technology or HVAC*****ADVANCED CTE COURSE***

In Advanced Building Maintenance Technology, students continue to gain advanced knowledge and skills specific to those needed to enter the work force as a building maintenance technician or supervisor and construction project manager or secure a foundation for a postsecondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in safety, Occupational Safety and Health Administration (OSHA) standards, safety devices in electrical circuits, maintenance of electrical and HVAC systems, and concepts of historic preservation.

HEATING, VENTILATION, AIR-CONDITIONING, & REFRIGERATION (HVAC-R) (CTE)

GRADES: 10-12

1 Year**1 Credit**

PREREQUISITE: None

****ADVANCED CTE COURSE****

Students will gain knowledge and skills related to the design, operation, installation, diagnostics, and service of heating, ventilation, air-conditioning, and refrigeration systems. Students will also gain knowledge and skills required for employment in these fields or to pursue further education in HVAC classes. The outlook for work in this field is very good, with an average pay of \$43,000 a year when working for an HVAC company. You could eventually start your own business and make \$90 an hour. This course will also give you college credit at Grayson College if you continue on with the HVAC classes there. Students can earn EPA, OSHA, AND NCCER certifications.

INTERIOR DESIGN 1 (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Principles of Architecture & Construction, Algebra I and English 1**

Interior Design is a technical course that addresses psychological, physiological, and sociological needs of individuals by enhancing the environments in which they live and work. Individuals use knowledge and skills related to interior and exterior environments, construction, and furnishings to make wise consumer decisions, increase productivity, and compete in industry. Students learn to use Chief Architect. Students will be working towards Chief Architect Certified Apprentice certification and AAFCS Pre Professional Certification in Interior Design.

INTERIOR DESIGN 2 (CTE)

GRADES: 11-12

1 Year (2 periods)**2 Credits**PREREQUISITE: **Interior Design 1**

Advanced Interior Design is a technical laboratory course that includes the knowledge of the employability characteristics, principles, processes, technologies, communication, tools, equipment, and materials related to interior spatial design.

PRACTICUM IN ARCHITECTURAL DESIGN (CTE)

GRADE: 11-12

1 Year (2 periods)**2 Credits**PREREQUISITE: **Minimum of two credits from the courses in the Architecture & Construction cluster******ADVANCED CTE COURSE****

Practicum in Architectural Design is an occupationally specific course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study.

PRACTICUM IN CONSTRUCTION MANAGEMENT (CTE)

GRADE: 11-12

1 Year (2 periods)**2 Credits**PREREQUISITE: **Minimum of two credits from the courses in the Architecture & Construction cluster******ADVANCED CTE COURSE****

Practicum in Architectural Design is an occupationally specific course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study.

*****ARTS, AUDIO/VIDEO TECHNOLOGY & COMMUNICATION*******PRINCIPLES OF ARTS, AUDIO / VIDEO TECHNOLOGY, & COMMUNICATIONS (CTE)**

GRADES: 9-12

1 Year**1 Credit**

PREREQUISITE: None

This course explores several careers that fall within the Arts, A/V Technology and Communications cluster. Students will learn about available jobs and what is required for this type of career. Students need to have a good understanding of computer programs and will learn graphics programs, such as Flash, Photoshop, Audacity, and others. Students will also learn how to write for types of communications industries.

AUDIO / VIDEO PRODUCTION 1 (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Principles of Arts, Audio/Video Technology, and Communications**

If you want to learn to produce studio-style television and audio products, Audio/Video Production covers the ins and outs of producing videos for television and radio. This 1-credit course starts out with the basics by covering the history of the television and audio industry and key terms that TV stations and production studios use in the day-to-day business operations. After taking this class, you will know how to create high quality TV commercials beginning with storyboarding and scriptwriting all the way to editing and special effects. This course also covers on-screen and vocal presentation. This class is hands-on, providing experience on professional audio and video equipment. This course prepares you for a career in the entertainment industry.

AUDIO / VIDEO PRODUCTION 2 (CTE)

GRADES: 10-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Audio/Video Production 1******ADVANCED CTE COURSE****

If you are ready to take your productions to the next step, this class is for you. You will gain experience in producing a daily, live program including video playback, technical directing and live camera operation. You will learn the importance of meeting deadlines, working within time constraints and what it takes to create a professional product. Students will take basic audio / video productions and add special effects and put into practice the technical skills it takes to create high quality productions you can be proud of. Hone your skills with Final Cut Pro, Adobe Premier and Photoshop, the industry standard in video production. And when you think you know enough, take the test that will make you professionally certified, giving you a head start to a great job. If you are serious about pursuing a career in the television, film or radio industry, then make sure you take this course.

PRACTICUM IN AUDIO/VIDEO PRODUCTION (CTE)

GRADES: 11-12

1 Year 2 Credits
(2 periods plus outside AV projects)PREREQUISITE: **Audio/Video Production 2******ADVANCED CTE COURSE****

The Practicum in Audio/Video Production is for the student interested in really applying skills learned and to explore the operation and management of a professional production facility. Learn how to set up and connect essential equipment that makes a TV or radio station operational. Develop skills for communication and interaction with clients. This class is designed for juniors or seniors, and students must meet the prerequisite requirements.

ANIMATION 1 (CTE)

GRADES: 10-12

1 Year 1 CreditPREREQUISITE: **Principles of Arts, Audio/Video Technology, and Communications**

Animation 1 is a project-based course designed to prepare the student for a career in the motion graphics industry. The focus of the first-year Animation course is on modeling 2D and 3D objects within scenes, animating the objects and completing basic scenes for simple animated stories. The first semester introduces the students to the modeling and animation process by using industry standard software programs, as well as the basic techniques required to confidently use them. During the second semester, students become more proficient in modeling and animating, learn more advanced techniques, and work towards the completion of a few basic animated short movies.

ANIMATION 2 (CTE)

GRADES: 10-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Animation 1******ADVANCED CTE COURSE****

The Animation 2 course is a two-hour project-based class designed to sharpen the skills learned during the previous year and develop additional skills, such as complex modeling and animation, rigging, dynamics, lighting, storyboarding and rendering. During the second semester, students work towards completing one or more complex animated short movies, either independently or as a group. After successful completion of the two years of animation study, the students will be prepared to earn Autodesk Maya certification, a giant step forward for anyone seeking a future in the animation/motion graphics industry.

GRAPHIC DESIGN & ILLUSTRATION 1 (CTE)

GRADES: 10-12

1 Year 1 CreditPREREQUISITE: **Principles of Arts, Audio/Video Technology, and Communications**

This course is a project-based course that is an introduction to the world of visual communication. Graphic design is everywhere in magazines, TV, movies, billboards, books, and so on. Students will learn the important concepts necessary to communicate effectively and in dynamic ways that grab people's attention and interest. Many important principles of art will also be applied, while also learning how to confidently use industry standard software programs.

GRAPHIC DESIGN & ILLUSTRATION 2 (CTE)

GRADES: 10-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Graphic Design & Illustration 1******ADVANCED CTE COURSE****

Graphic Design & Illustration 2 is a two-hour project-based class designed to sharpen the skills learned during the previous year and develop proficiency in additional industry standard software programs. Advanced students work independently towards completing learning tutorials and demonstrating mastery through creative projects, such as posters, logos, brochures, and other print media. After successful completion of the two years of graphic design study, the students will be prepared to earn Adobe certification, a giant step forward for anyone seeking a future in the graphic arts industry.

PRACTICUM IN GRAPHIC DESIGN & ILLUSTRATION (CTE)

GRADES: 11-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Animation 2 or Graphic Design & Illustration 2******ADVANCED CTE COURSE****

Careers in animation, graphic design and illustration span all aspects of the advertising and visual communications industry. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop a technical understanding of the industry with a focus on skill proficiency. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

COMMERCIAL PHOTOGRAPHY 1 (CTE)

GRADES: 10-12

1 Year 1 CreditPREREQUISITE: **Principles of Arts, Audio/Video Technology, and Communications or Photojournalism 1 & 2**

For the shutterbugs! For students who love to take pictures but want to take it to the next level – commercial photography covers everything from setting up a shot to delivering the finished product in a competitive market. Students will develop knowledge of different types of cameras and lenses and their applications to photography. They will also develop the knowledge and skills necessary to analyze customer needs and preferences, apply the principles of art to photographs, and develop photographs using a variety of production processes.

COMMERCIAL PHOTOGRAPHY 2 (CTE)

GRADES: 10-12

1 Year 1 CreditPREREQUISITE: **Commercial Photography 1******ADVANCED CTE COURSE****

Commercial Photography 2 develops advanced skills and knowledge in commercial photography projects. Students' knowledge will increase in creating photographs for defined purposes, applying elements and principles of design to projects, choosing appropriate camera equipment for projects, and selecting appropriate production processes for the finished product.

PRACTICUM IN COMMERCIAL PHOTOGRAPHY (CTE)

GRADES: 11-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Commercial Photography 2******ADVANCED CTE COURSE****

This practicum provides students with the highest level information necessary to work in the commercial photography industry. Students have the opportunity to utilize their skills in real world applications and gain real-world, hands-on experience with industry standard equipment.

PROFESSIONAL COMMUNICATIONS (Speech)

GRADES: 9-12

1 Semester .5 Credit

PREREQUISITE: None

Students will understand and develop skills in oral communication, which is fundamental to all other learning and to all levels of human interaction. Students will understand concepts and processes involved in sending and receiving oral messages, evaluating, and using nonverbal communication and listening for a variety of purposes.

FASHION DESIGN 1 (CTE)

GRADES: 10-12

1 Year 1 CreditPREREQUISITE: **Principles of Arts, Audio/Video Technology, and Communications**

Careers in fashion span all aspects of the textile and apparel industries. Students will be expected to develop an understanding of fashion and the textile and apparel industries. Students will tie dye, design a t-shirt, and sew a project.

FASHION DESIGN 2 (CTE)

GRADES: 10-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Fashion Design 1******ADVANCED CTE COURSE****

Careers in fashion span all aspects of the textile and apparel industries. Students will be expected to develop an advanced understanding of fashion, with an emphasis on design and production.

PRACTICUM IN FASHION DESIGN (CTE)

GRADES: 11-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Fashion Design 2******ADVANCED CTE COURSE****

Instruction will be delivered through lab-based classroom experiences and career preparation opportunities. Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an advanced technical understanding of the business aspects of fashion, with emphasis on promotion and retailing.

*****BUSINESS MANAGEMENT & ADMINISTRATION*****

PRINCIPLES OF BUSINESS, MARKETING & FINANCE (CTE)

GRADES: 9-12

1 Year1 Credit

PREREQUISITE: None

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

BUSINESS INFORMATION MANAGEMENT 1 (CTE)

GRADES: 10-12

1 Year1 CreditPREREQUISITE: **Principles of Business, Marketing, and Finance**

Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop spreadsheets, formulate databases, and make electronic presentations using appropriate software. Students will be working towards Microsoft Office Power Point and Word certifications.

BUSINESS INFORMATION MANAGEMENT 2 (CTE)

GRADES: 10-12

1 Year1 CreditPREREQUISITE: **Business Information Management 1**

ADVANCED CTE COURSE

This lab course provides advanced technology skills in Microsoft Office, which is required to pass the Microsoft Office Specialist (MOS) certification exam. Since Microsoft certifications are nationally known benchmarks, any of these certification programs will greatly benefit the student when applying for college and/or employment. This course is accepted by many major universities for their computer requirement toward graduation. Students will be working towards Microsoft Office Power Point, Word, Excel & Access certifications.

BUSINESS LAW (CTE)

GRADES: 11-12

1 Year1 CreditPREREQUISITE: **Principles of Business, Marketing & Finance**

ADVANCED CTE COURSE

Students analyze the social responsibility of business and industry regarding the significant issues relating to the legal environment, business ethics, torts, contracts, negotiable financial instruments, personal property, sales, warranties, business organizations, concept of agency and employment, and real property.

BUSINESS MANAGEMENT (CTE) – Student Aide

GRADES: 11-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Principles of Business, Marketing & Finance or Business Information Management 1**

ADVANCED CTE COURSE

This course is designed to provide a basic understanding of the essential elements of management. Students evaluate the primary functions of management and leadership, such as organizing, staffing, directing, and leading in business. Students will explore the importance of quality work and teamwork and focus on communication, problem solving, decision making, and conflict resolution. Students will be introduced to work related situations that will foster the management skills necessary for a successful future. This course is required for first-year student aides. Students will be working towards OSHA safety certification.

PRACTICUM IN BUSINESS MANAGEMENT (CTE) – Student Aide

GRADE: 11-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Business Management**

ADVANCED CTE COURSE

This course uses a work-based learning instructional arrangement that combines classroom instruction with unpaid employment/volunteer experiences. Students will gain knowledge and skills in a variety of office and educational settings. Students will be working towards OSHA safety certification.

*****EDUCATION & TRAINING*****

PRINCIPLES OF EDUCATION & TRAINING "PEER Tutor Class" (CTE)

GRADES: 9-12

1 Year1 Credit

PREREQUISITE: None

The Principles of Education and Training course is designed to introduce learners to the various careers available within the education and training cluster. Students use self-knowledge and educational and career information to analyze various careers within education and training cluster. Students will also gain an understanding of the basic knowledge and skills essential to careers within the education and training cluster. Students will develop a graduation plan that leads to a specific career choice in the student's interest area. The student will work as a Peer Tutor.

HUMAN GROWTH & DEVELOPMENT (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Principles of Education & Training or Principles of Human Services**

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

LIFETIME NUTRITION AND WELLNESS (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Principles of Hospitality & Tourism or Principles of Human Services, or Principles of Health Science**

This laboratory course allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers related to hospitality and tourism, education and training, human services, and health sciences. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

CHILD GUIDANCE (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Principles of Human Services or Principles of Education & Training**

This technical laboratory course addresses the knowledge and skills related to child growth 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, strengthen a culturally diverse society, and pursue careers related to the care, guidance, and education of children, including those with special needs.

INTERPERSONAL STUDIES (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Principles of Human Services or Principles of Education & Training**

This course examines how the relationships between individuals and among family members significantly affect the quality of life. Students use knowledge and skills in family studies and human development to enhance personal development, foster quality relationships, promote wellness of family members, manage multiple adult roles, and pursue careers related to counseling and mental health services.

INSTRUCTIONAL PRACTICES (Teaching Interns 1) (CTE)

GRADES: 10-12

1 Year (2 periods)**2 Credits**PREREQUISITE: **Principles of Education & Training******ADVANCED CTE COURSE****

Instructional Practices 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, and develop materials for educational environments. Students will be working towards CPR/First Aid, start AAFCS Pre Professional Certification in Education, and start Educational Aide certifications. **Students are expected to have transportation to/from training sites.**

PRACTICUM IN EDUCATION AND TRAINING (Teaching Interns 2) (CTE)

GRADES: 11-12

1 Year (2 periods)**2 Credits**PREREQUISITE: **Instructional Practices******ADVANCED CTE COURSE****

Practicum in Education and Training is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel. Students will be working towards CPR/First Aid, AAFCS Pre Professional Certification in Education, and Educational Aide certifications. **Students are expected to have transportation to/from training sites.**

PRACTICUM IN EDUCATION AND TRAINING 2 (CTE)

GRADE: 12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Practicum in Education & Training******ADVANCED CTE COURSE****

Practicum in Education and Training is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel. Students will be working towards CPR/First Aid, AAFCS Pre Professional Certification in Education, and Educational Aide certifications. **Students are expected to have transportation to/from training sites.**

*****FINANCE*******PRINCIPLES OF BUSINESS, MARKETING & FINANCE (CTE)**

GRADES: 9-12

1 Year 1 Credit

PREREQUISITE: None

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

MONEY MATTERS (CTE)

GRADES: 10-12

1 Year 1 CreditPREREQUISITE: **Principles of Business, Marketing, & Finance**

If you don't take control of your money, someone else will! Why learn to manage your money? You don't have that much anyway, right? Wrong! In Money Matters, you will learn to take control of your money. You'll learn skills that will help you right now and prepare you for a successful financial future. You will learn the importance of personal money management by developing a budget, by reading and reconciling a bank statement, by interpreting a pay stub, by obtaining and using credit wisely. In addition, you will be given instruction on obtaining financial help for college and other post-secondary training (as required by HB 2662), preparing personal income tax forms, and protecting yourself against identity theft. All these objectives will be met through classroom discussion, professional speakers, "real-life" simulations, and trips to the Federal Reserve Bank and the Bureau of Engraving and Printing.

BANKING AND FINANCIAL SERVICES (CTE)

GRADES: 10-12

Spring Semester .5 CreditPREREQUISITE: **Principles of Business, Marketing & Finance**

This course provides an introduction to banking services and financial institutions. Students examine the principles of banking transactions and the various services of a bank, teller operations, customer service, business math, banking history and regulations, lending, credit, insurance, financial planning, and also look at the function of the Federal Reserve. A wide variety of career opportunities exist within the field of Banking and Financial-related Services. Typical entry-level positions are bank teller, loan officer, credit authorizer/checker, credit clerk, account representative, brokerage clerk, insurance sales, debt collector, customer service representative, personal banking representative, and gaming cage workers. All of these career titles are listed as high demand occupations.

ACCOUNTING 1 (CTE)

GRADES: 10-12

1 Year 1 CreditPREREQUISITE: **Principles of Business, Marketing & Finance**

Students investigate the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students reflect on the knowledge as they engage in the process of recording, classifying, summarizing, analyzing, and communicating accounting information. Students formulate and interpret financial information for use in management decision making. Accounting develops the knowledge, skills, and attitudes necessary for individuals to conduct personal business or to further an education in the field of accounting. Students complete practice sets or simulations, use calculators, and process some data electronically. Students will be working towards Concepts of Finance certification.

ACCOUNTING 2 (CTE)

GRADES: 11-12

1 Year 1 CreditPREREQUISITE: **Accounting 1******ADVANCED CTE COURSE****

Students continue the investigation of the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students reflect on this knowledge as they engage in various managerial and cost accounting activities. Students formulate and interpret financial information for use in management decision making. Accounting 2 is designed for students interested in studying accounting at the postsecondary level or entering the workforce.

STATISTICS AND BUSINESS DECISION MAKING (CTE)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Algebra 2 and Principles of Business, Marketing, and Finance******ADVANCED CTE COURSE****

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

(This course may meet the requirements for the fourth math credit and is also listed in the Mathematics section.)

*****GOVERNMENT & PUBLIC ADMINISTRATION*******PRINCIPLES OF GOVERNMENT & PUBLIC ADMINISTRATION (CTE)**

GRADES: 9-11

1 Year**1 Credit**

PREREQUISITE: None

This course introduces students to foundations of governmental functions and career opportunities within the United States. Student will examine governmental documents such as the United States Constitution and the Bill of Rights.

POLITICAL SCIENCE 1 (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Principles of Government & Public Administration**

This course will familiarize the student with political theory through the study of governments; public policies; and political processes, systems, and behavior.

POLITICAL SCIENCE 2 (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Political Science 1******ADVANCED CTE COURSE****

This course uses a variety of methodological approaches to examine the process, systems, and political dynamics of the United States and other nations. The dynamic component of this course includes current United States and world events.

REVENUE, TAXATION, & REGULATION (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Principles of Government & Public Administration******ADVANCED CTE COURSE****

This course is an overview of law and investigative principles and follows agency procedures to examine evidence and ensure revenue compliance. In addition, students learn to facilitate clear and positive communication with taxpayers and become familiar with data analysis systems and revenue-related financial problems. The student prepares to enforce legal compliance and regulatory standards.

PLANNING AND GOVERNANCE (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Principles of Government & Public Administration**

This course provides the opportunity for students to formulate plans and policies to meet social, economic, and physical needs of communities.

PRACTICUM IN LOCAL, STATE, & FEDERAL GOVERNMENT (CTE)

GRADE: 12

1 Year**1 Credit**PREREQUISITE: **One of the following: Planning & Governance, Political Science 1, or****Revenue, Taxation and Regulation******ADVANCED CTE COURSE****

In this course, students will concurrently learn advanced concepts of political science in the classroom setting. In addition, students will apply technical skills pertaining to government and public administration in a direct mentorship by individuals in professional settings such as government, public management and administration, national security, municipal planning, foreign service, revenue, taxation, and regulation.

*****HEALTH SCIENCE*******PRINCIPLES OF HEALTH SCIENCE (CTE)**

GRADES: 9-11

PREREQUISITE: None

Principles of health science: The students are exposed to the health care system by investigating the history of medicine, safety practices used by medical professionals, communication skills, ethics, and leadership skills, including the use of parliamentary procedure. Students learn about preventive medicine, as well as participating in career planning and developing life skills. Students also begin building their foundation in medical terminology and basic anatomy. By studying the historical context from which current medical practice evolved, the students develop an appreciation and understanding of technical advances and the human dimension in the biomedical field. The students are taught to view the health care system as consumers as well as potential health care professionals.

1 Year**1 Credit****MEDICAL TERMINOLOGY (CTE)**

GRADES: 10-12

PREREQUISITE: **Principles of Health Science**

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

1 Year**1 Credit****HEALTH SCIENCE (CTE)**

GRADE: 10-12

PREREQUISITE: **Principles of Health Science and Biology or concurrent******ADVANCED CTE COURSE****

This course familiarizes the student with the multitude of careers in the health care system. Students receive instruction in anatomy, physiology, medical terminology, recognition of vital signs, and employability skills culminating in certification in first aid and cardiopulmonary resuscitation with the AED.

1 Year**1 Credit****PRACTICUM IN HEALTH SCIENCE 1 (CTE)**

GRADE: 11-12

PREREQUISITE: **Principles of Health Science, Biology, and Health Science******ADVANCED CTE COURSE****

This course is designed to provide for the development of multi-occupational knowledge and skills related to a variety of health careers. Students will have hands-on experiences in clinical settings for continued knowledge and skill development. Training in Professional CPR, Bloodborne Pathogens, Aseptic Technique, Home Hospice Volunteer Training and Certification, Sexual Harassment, Ethics, basic anatomy and physiology, Medical Terminology, meet the required TB Test and pass a urine analysis, with parental approval receive a flu vaccine before hospital assignments, receive volunteer training for a local hospital and pass an exam. Learn to take vitals and use proper protective equipment. **Students are expected to have transportation to/from training sites.**

1 Year (2 periods) 2 Credits**PRACTICUM IN HEALTH SCIENCE 2 (Pharmacy Technician) (CTE)**

GRADE: 12

PREREQUISITE: **Principles of Health Science, Biology, and Health Science******ADVANCED CTE COURSE****

The Pharmacy Technician or Pharmacy Technician Trainee will have to pass written exams, including mathematics used in pharmacy calculations, and demonstrate proper technique in preparing compounded sterile products. A structured program designed to meet the requirements of the Texas State Board of Pharmacy for Pharmacy Technicians. **Students are expected to have transportation to/from training sites.**

1 Year (2 periods) 2 Credits**ANATOMY & PHYSIOLOGY (CTE)**

GRADES: 11-12

PREREQUISITE: **Biology, Chemistry, Physics (concurrent)******May qualify as an ADVANCED CTE COURSE****

This is an intensive course that will give the student a basic understanding in the following biological topics: the structure, function, characteristics and location of epithelial, connective, muscular and nervous tissue; the integumentary system and how it functions in temperature control; the skeletal system and how it functions to protect and help the body move; the muscular system and how it helps the body move and produce heat, the digestive system and the manner in which nutrients are broken down and absorbed; the circulatory system and how gases are exchanged; the excretory system and the manner in which the blood is cleansed; the nervous system and how organisms interact with the environment; the sense organs and how sight and hearing occur; the skeletal system and how the parts function to allow body movement; the reproductive system; the lymphatic system and how it provides immunity; and the endocrine system and how hormones are involved in control of the body.

(This course may also be eligible for the 4th Science credit, provided the specific Science course prerequisites are completed.)

1 Year**1 Credit**

MEDICAL MICROBIOLOGY (CTE)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, Physics (concurrent)**

May qualify as an ADVANCED CTE COURSE

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 may also be eligible for the 4th Science credit, provided the specific Science course prerequisites are completed.)

PATHOPHYSIOLOGY (CTE)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, Physics (concurrent)**

May qualify as an ADVANCED CTE COURSE

This course introduces the student to the pathophysiologic disruptions in the normal body functioning in individuals across the lifespan; assessment and analysis of objective and subjective manifestations of common health problems resulting from environmental, genetic and stress-related maladaptations are analyzed. Diagnostic assessments are discussed for each disease process. Alternative medical and pharmacological management is briefly discussed for selected disease processes. (This course may also be eligible for the 4th Science credit, provided the specific Science course prerequisites are completed.)

*****HOSPITALITY & TOURISM*******PRINCIPLES OF HOSPITALITY & TOURISM (CTE)**

GRADES: 9-12

1 Year**1 Credit**

PREREQUISITE: None

The hospitality and tourism industry encompasses lodging; travel and tourism; recreation, amusement attractions, and resorts; and restaurants and food service. The hospitality and tourism industry maintains the largest national employment base in the private sector. Students use knowledge and skills that meet industry standards to function effectively in various positions within this multifaceted industry. Students are encouraged to participate in extended learning experiences such as Family, Career and Community Leaders of America (FCCLA) and other leadership or extracurricular organizations. Students may earn 3 hours of college credit at Grayson College.

CULINARY ARTS 1(CTE)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Principles of Hospitality & Tourism**

ADVANCED CTE COURSE

Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification; this course is a laboratory-based class in which students will participate in hands on cooking labs. Students are encouraged to obtain the Grayson County food handlers permit (\$20 fee paid to the county) and ServSafe National sanitation certification (\$40 fee may be required for the testing). Students are also encouraged to participate in leadership and competition through Family, Career & Community Leaders of America. 3 hours of college credit at Grayson College may be earned by passing a skills test and a written test.

PRACTICUM IN CULINARY ARTS 1(CTE)

GRADES: 11-12

1 Year (2 periods)**2 Credits**PREREQUISITE: **Culinary Arts 1**

ADVANCED CTE COURSE

The practicum class is responsible for preparing and serving the food offered to faculty and staff in the Bearcat Bistro. Catering events are prepared and served through this class as well. Field trips are also offered to other food service venues and food related career fields. This course provides occupationally specific opportunities for students to work in a learning experience that combines classroom instruction with actual business and industry career experiences. Students are taught employability skills, which include job-specific skills applicable to their training plan, job interview techniques, communication skills, financial and budget activities, and human relations. Instruction may be through school-based labs, work-based, mentoring and job shadowing. Students are required to participate in competition through Family, Career & Community Leaders of America. Students will be required to obtain the Grayson County food handlers permit (\$20 fee paid to the county) and ServSafe National sanitation certification (\$40 fee may be required for the testing). Students may also earn 2 hours of college credit at Grayson College by passing the ServSafe National exam.

FOOD CHEMISTRY (CTE)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Biology, Chemistry, Physics**

ADVANCED CTE COURSE

Food Chemistry is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public. Students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students will gain an understanding of the nature of science, scientific inquiry, science and social ethics, and science systems and models. (This course may also be eligible for the 4th Science credit, provided the specific Science course prerequisites are completed.)

*****HUMAN SERVICES*******PRINCIPLES OF HUMAN SERVICES (CTE)**

GRADES: 9-12

1 Year **1 Credit**

PREREQUISITE: None

This laboratory course covers interpersonal studies, counseling and mental health, child development, lifetime nutrition and wellness, dollars and sense, architecture and construction, interior design, arts, A/V technology and communications and fashion design. Leadership skills are addressed with several hands-on projects that will require small equipment and supplies. Adequate time will be given to acquire supplies.

LIFETIME NUTRITION AND WELLNESS (CTE)

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Principles of Hospitality & Tourism or Principles of Human Services, or Principles of Health Science**

This laboratory course allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers related to hospitality and tourism, education and training, human services, and health sciences. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

CHILD DEVELOPMENT (CTE)

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Principles of Human Services or Principles of Education & Training**

This technical laboratory course introduces the knowledge and skills related to child growth and development to equip individuals in areas to develop positive relationships with children and effective parenting and caregiver skills. Individuals use these skills to promote the well-being and healthy development of children, strengthen families in a culturally diverse society, and pursue careers related to the care and education of children. Specific topics of study are prenatal care and development, infancy, toddler, preschool, and school-age children, care and protection of children and career preparation. Students will be required to purchase supplies for various projects.

CHILD GUIDANCE (CTE)

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Principles of Human Services or Principles of Education & Training**

This technical laboratory course addresses the knowledge and skills related to child growth 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, strengthen a culturally diverse society, and pursue careers related to the care, guidance, and education of children, including those with special needs.

HUMAN GROWTH & DEVELOPMENT (CTE)

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Principles of Education & Training or Principles of Human Services**

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

INTERPERSONAL STUDIES (CTE)

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Principles of Human Services or Principles of Education & Training**

This course examines how the relationships between individuals and among family members significantly affect the quality of life. Students use knowledge and skills in family studies and human development to enhance personal development, foster quality relationships, promote wellness of family members, manage multiple adult roles, and pursue careers related to counseling and mental health services.

COUNSELING AND MENTAL HEALTH (CTE)

GRADES: 10-12

1 Year **1 Credit**PREREQUISITE: **Child Development or Child Guidance******ADVANCED CTE COURSE****

Students model the knowledge and skills necessary to pursue a counseling and mental health career through simulated environments. Students are expected to apply knowledge of ethical and legal responsibilities, limitations, and the implications of their actions. Professional integrity in counseling and mental health care is dependent on acceptance of ethical and legal responsibilities.

FAMILY AND COMMUNITY SERVICES (CTE)

GRADES: 11-12

1 Year **1 Credit**PREREQUISITE: **Child Development or Child Guidance******ADVANCED CTE COURSE****

This laboratory-based course is designed to involve students in realistic and meaningful community-based activities through direct service experiences. Students are provided opportunities to interact and provide services to individuals, families, and the community through community or volunteer services. Emphasis is placed on developing and enhancing organizational and leadership skills and characteristics.

3D/FCCLA LEADERSHIP/FAMILY AND COMMUNITY SERVICES

GRADE: 11-12

1 Year .5 or 1 CreditPREREQUISITE: **Application Process**

This laboratory-based course is designed to involve students in realistic and meaningful community-based activities through direct service experiences. Students are provided opportunities to interact and provide services to individuals, families, and the community through community or volunteer services. Emphasis is placed on developing and enhancing the 3D curriculum and character education program enhancing students' organizational and leadership skills and characteristics. Students are required to be members of Family, Career and Community Leaders of America and are to participate in other leadership or extracurricular activities such as the development and implementation of 3D.

COSMETOLOGY 1 (CTE) DUAL-CREDIT

GRADES: 11-12

1 Year (3 periods) 3 CreditsPREREQUISITE: **Must meet all requirements of Grayson College and pay all tuition, fees, and books through Grayson**

Students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job-specific training for employment in cosmetology careers. Instruction includes sterilization and sanitation procedures, haircare, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Analysis of career opportunities, requirements, expectations, and development of workplace skills are included.

COSMETOLOGY 2 (CTE) DUAL-CREDIT

GRADES: 12

1 Year (3 periods) 3 CreditsPREREQUISITE: **Cosmetology 1 and must meet all requirements of Grayson College and pay all tuition, fees, and books through Grayson.**

Students review academic knowledge and skills related to cosmetology. This course is designed to provide advanced training for employment in cosmetology careers. Instruction includes advanced training in sterilization and sanitation processes, haircare, nail care, and skin care and meets the Texas Department of Licensing and Regulation requirements for licensure upon passing the state examination. Students apply, combine, and justify knowledge and skills to a variety of settings and problems.

*****INFORMATION TECHNOLOGY*******PRINCIPLES OF INFORMATION TECHNOLOGY (CTE)**

GRADES: 9-12

1 Year 1 Credit

PREREQUISITE: None

This course introduces students to the field of technology and gives students the basic knowledge required to improve employability skills. The course introduces the skills necessary for professional software programs such as word processing, spreadsheets, web design, desktop publishing, and digital photography.

DIGITAL AND INTERACTIVE MEDIA (CTE)

GRADES: 10-12

1 Year 1 CreditPREREQUISITE: **Principles of Information Technology**

Through the study of digital and interactive media and its application in information technology, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve a problem. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication and reasoning skills and apply them to the information technology environment.

COMPUTER MAINTENANCE (CTE)

GRADES: 10-12

1 Year 1 CreditPREREQUISITE: **Principles of Information Technology**

Computer Maintenance is a course that teaches students the in-depth methods and skills used to troubleshoot and remedy computer problems. Students will learn principles of computer maintenance as well as basic skills in electronics and computer hardware theory. Students will gain hands-on experience troubleshooting, configuring, and installing computer systems. Students will assist the Campus Tech Coordinator with routine technology work orders.

NETWORKING (CTE)

GRADES: 11-12

1 Year 1 CreditPREREQUISITE: **Computer Maintenance******ADVANCED CTE COURSE****

Networking teaches students practical networking skills that can be used in the IT industry. Students will also focus on secure communication channels and data integrity. Students will gain hands-on experience building and installing networks and network components. Students will assist the Campus Tech Coordinator with routine technology/work orders.

WEB TECHNOLOGIES (CTE)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITE: **Digital Media******ADVANCED CTE COURSE****

This course will focus on the design process for advanced web page development, analyzing and organizing content with an introduction to interface design and information architecture to facilitate communication. Students will be involved in project-based learning in conjunction with an SHS faculty member to design and develop multimedia educational projects. In addition, students in this class will be responsible for the development of web content and the maintenance of the SHS web site. Students will be working towards Adobe Dreamweaver certification.

COMPUTER PROGRAMMING 1 HONORS (CTE)

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Principles of Information Technology and Algebra 1******ADVANCED CTE COURSE****

Computer Programming 1 Honors is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals, recursion and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue on to Advanced Computer Programming 2 or AP Computer Science A. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. Students will be working towards IC3 Internet Core Certification.

COMPUTER PROGRAMMING 2 HONORS (CTE)

GRADES: 11-12

1 Year**1 Credit**PREREQUISITES: **Computer Programming 1 Honors******ADVANCED CTE COURSE****

Advanced Computer Programming 2 Honors is a programming course that will build upon the topics addressed in Computer Programming 1 Honors. Object-oriented components in the language of Java will be stressed. Other topics include decision making, looping, arrays, inheritance, interfaces, abstract classes, Java collections, sorting, searching, and corresponding labs. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. Students will be working towards IC3 Internet Core Certification and Oracle Java Associate certification.

AP COMPUTER SCIENCE A

GRADES: 11-12

1 Year**1 Credit**PREREQUISITES: **Algebra 1, Geometry, Algebra 2 and Computer Programming 1 or Computer Science Principles**

AP Computer Science A is a programming course designed to cover the Advanced Placement Computer Science Exam topics. The curriculum will build upon the topics addressed in Computer Programming 1 Honors. Object-oriented components in the language of Java will be stressed. Other topics include decision making, looping, arrays, inheritance, interfaces, abstract classes, Java collections, sorting, searching, and corresponding labs. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. **Students will be prepared for and must take the AP Computer Science A Exam.** (This course is also listed in the Mathematics and Technology Applications sections.)

PRACTICUM IN INFORMATION TECHNOLOGY (IT) (CTE)

GRADES: 11-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Minimum of two credits from the courses in the Information Technology cluster******ADVANCED CTE COURSE****

This course is a research-intensive Information Technology course. Students apply knowledge learned in previous information technology courses and apply them to real-world scenarios, focusing on industry best-practices and project management techniques. Emphasis will be put on application programming with C++ and Java as well as software engineering. As a capstone project, students will develop a professional portfolio documenting programs and projects for use in higher education or industry.

COMPUTER TECHNICIAN (CTE)

GRADES: 11-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Computer Maintenance******ADVANCED CTE COURSE****

Students gain knowledge and skills in the area of computer technologies, including advanced knowledge of electrical and electronic theory, computer principles, and components related to the installation, diagnosis, service, and repair of computer-based technology systems. Students will reinforce, apply, and transfer their knowledge and skills to a variety of settings and problems. Proper use of analytical skills and application of information technology concepts and standards are essential to prepare students for success in a technology-driven society. The critical thinking, information technology experience, and product development may be conducted either in a classroom setting with an instructor, with an industry mentor, or both. Students will assist the Campus Technology Specialist with end-user support.

*****LAW, PUBLIC SAFETY, CORRECTIONS, & SECURITY*****

PRINCIPLES OF LAW, PUBLIC SAFETY, CORRECTIONS, & SECURITY (CTE)

GRADES: 9-12

1 Year

1 Credit

PREREQUISITE: None

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, private security, and protective agencies of fire and emergency services. This course also provides students with an overview of the skills necessary for careers in law enforcement, fire service, security, and corrections.

LAW ENFORCEMENT 1

GRADES: 10-12

1 Year

1 Credit

PREREQUISITE: **Principles of Law, Public Safety, Corrections, and Security**

This course is an overview of the history, organization, and functions of local, state, and federal law enforcement. This course includes the role of constitutional law, the United States legal system, criminal law, law enforcement terminology, and the classification and elements of crime.

LAW ENFORCEMENT 2

GRADES: 11-12

1 Year

1 Credit

PREREQUISITE: **Law Enforcement 1**

****ADVANCED CTE COURSE****

This course provides the knowledge and skills necessary to prepare for a career in law enforcement. This course includes the ethical and legal responsibilities, operation of police and emergency telecommunication equipment, and courtroom testimony.

COURT SYSTEMS AND PRACTICES

GRADES: 11-12

1 Year

1 Credit

PREREQUISITE: **Law Enforcement 1**

****ADVANCED CTE COURSE****

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

PRACTICUM IN LAW, PUBLIC SAFETY, CORRECTIONS, & SECURITY

GRADES: 11-12

1 Year

2 Credits

PREREQUISITE: **Law Enforcement 1**

****ADVANCED CTE COURSE****

The Practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Law, Public Safety, Corrections, and Security career cluster.

FORENSIC SCIENCE

GRADE: 12

1 Year

1 Credit

PREREQUISITE: **Biology, Chemistry, and Physics**

****ADVANCED CTE COURSE****

Forensic Science is a course that uses a structured and scientific approach to the investigation of crimes of assault, abuse and neglect, domestic violence, accidental death, homicide and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes, such as fingerprint analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for Forensic Science. (This course may also be eligible for the 4th Science credit provided specific Science course prerequisites are completed.)

*****MANUFACTURING*******PRINCIPLES OF MANUFACTURING (CTE)**

GRADES: 9-12

1 Year**1 Credit**

PREREQUISITE: None

In Principles of Manufacturing, students gain knowledge and skills in the application, design, production, and assessment of products, services, and systems and how those knowledge and skills are applied to manufacturing. Knowledge and skills in the proper application of principles of manufacturing, the design of technology, the efficient production of technology, and the assessment of the effects of manufacturing production technology prepare students for success in the modern world. The study of manufacturing technology allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings in a manufacturing setting. In addition to general academic and technical knowledge and skills, students gain an understanding of career opportunities available in manufacturing and what employers require to gain and maintain employment in these careers.

PRECISION METAL MANUFACTURING (CTE)

GRADES: 10-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Principles of Manufacturing or Principles of Architecture and Construction or Principles of Agriculture, Food, and Natural Resources**

Rapid advances in technology have created new career opportunities and demands in many industries. Precision Metal Manufacturing provides the knowledge, skills, and technologies required for employment in metal technology systems. This course may also address a variety of materials in addition to metal such as plastics, ceramics, and wood. Students develop knowledge of the concepts and skills related to these systems to apply them to personal and career development. This course supports integration of 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. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for success. College credit for TECM 1303 and MCHN 1320 will be articulated upon completion of the course with an 80 or above. These courses will count as part of the Grayson College Basic/Advanced Manufacturing Technician Certificate.

ADVANCED PRECISION METAL MANUFACTURING (CTE) DUAL-CREDIT

GRADES: 11-12

1 Year (3 periods) 3 CreditsPREREQUISITE: **Precision Metal Manufacturing and must meet all requirements of Grayson College and pay all tuition, fees, and books through Grayson.**

This course is designed to enhance the technical knowledge and skills learned in Precision Metal Manufacturing by allowing students the opportunity to explore career preparation that has resulted from the rapid advances in technology and career demands in high-skill, high-wage opportunities. Advanced Precision Metal Manufacturing provides the knowledge, skills, and technologies required for employment in a globally competitive manufacturing environment. This course may also address a variety of materials in addition to metal such as plastics, ceramics, and wood. Students need to develop concepts and skills related to this system in order to apply them to personal and professional development. Career and technical education supports the integration of academic and career and technical knowledge and skills. Students must have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success. This course will count as part of the Grayson College Basic/Advanced Manufacturing Technician Certificate.

MANUFACTURING ENGINEERING (CTE) DUAL-CREDIT

GRADES: 12

1 Year (3 periods) 3 CreditsPREREQUISITE: **Advanced Precision Metal Manufacturing and must meet all requirements of Grayson College and pay all tuition, fees, and books through Grayson**

In Manufacturing Engineering, students gain knowledge and skills in the application, design, production, and assessment of products, services, and systems and how those knowledge and skills are applied to manufacturing. Knowledge and skills in the proper application of Manufacturing Engineering, the design of technology, efficient manufacturing technology, and the assessment of the effects of production technology prepare students for success in the global economy. The study of Manufacturing Engineering allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings in a manufacturing setting. This course will count as part of the Grayson College Basic/Advanced Manufacturing Technician Certificate.

WELDING (CTE) DUAL-CREDIT

GRADES: 11-12

1 Year (3 periods) 3 Credits

PREREQUISITE: **Precision Metal Manufacturing (preferred) or Principles of Manufacturing or Principles of Architecture and Construction or Principles of Agriculture, Food, and Natural Resources and must meet all requirements of Grayson College and pay all tuition, fees, and books through Grayson**

Rapid advances in technology have created new career opportunities and demands in many industries. Welding provides the knowledge, skills, and technologies required for employment in metal technology systems. Students develop knowledge and skills related to this system and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success.

ADVANCED WELDING (CTE) DUAL-CREDIT

GRADES: 12

1 Year (3 periods) 3 Credits

PREREQUISITE: **Welding and must meet all requirements of Grayson College and pay all tuition, fees, and books through Grayson**

Advanced Welding builds on knowledge and skills developed in Welding. Students will develop advanced welding concepts and skills as they relate to personal and career development. This course integrates academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

*****MARKETING*******PRINCIPLES OF BUSINESS, MARKETING & FINANCE (CTE)**

GRADES: 9-12

1 Year 1 Credit

PREREQUISITE: None

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

FASHION MARKETING (CTE)

GRADES: 10-12

1 Semester .5 CreditPREREQUISITE: **Principles of Business, Marketing & Finance**

Fashion Marketing is designed to provide students with knowledge of the various business functions in the fashion industry. Students in Fashion Marketing will gain a working knowledge of promotion, textiles, merchandising, mathematics, selling visual merchandising, and career opportunities.

ADVERTISING (CTE)

GRADES: 10-12

Fall Semester .5 CreditPREREQUISITE: **Principles of Business, Marketing & Finance**

If you want to learn how to package yourself for success, sell any type of product or service, or serve all kinds of customers, then marketing may be the right choice for you. This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness.

ENTREPRENEURSHIP (CTE)

GRADES: 10-12

Spring Semester .5 CreditPREREQUISITE: **Principles of Business, Marketing & Finance**

Entrepreneurship is a course designed to introduce students to the process of establishing a small business. Concepts introduced will be applied and practiced. Students will design, develop, and implement a business plan. Using a virtual business simulation, they will manage all aspects of a business and integrate business practices.

MARKETING DYNAMICS (CTE)

GRADES: 11-12

1 Year (2 periods) 2 CreditsPREREQUISITE: **Principles of Business, Marketing & Finance******ADVANCED CTE COURSE****

Marketing is a series of dynamic activities that focus on the customer to generate a profitable exchange. Students gain knowledge and skills that help them to be proficient in one or more of the marketing functional areas associated with distribution, financing, marketing information management, pricing, product planning, promotion, purchasing, risk management, and selling skills. Students integrate skills from academic subjects, information technology, interpersonal communication, and management training to make responsible decisions. This course may include paid or unpaid career preparation experience.

*****SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM)*****

CONCEPTS OF ENGINEERING AND TECHNOLOGY (CTE)

GRADES: 9-12

1 Year1 Credit

PREREQUISITE: None

Concepts of Engineering and Technology provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will use a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields and will be able to make informed decisions regarding a coherent sequence of subsequent courses. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.

ENGINEERING DESIGN AND PRESENTATION (CTE)

GRADES: 10-12

1 Year1 CreditPREREQUISITE: **Concepts of Engineering and Technology**

Concepts of Engineering and Technology provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will use a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields and will be able to make informed decisions regarding a coherent sequence of subsequent courses. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.

ENGINEERING DESIGN AND PROBLEM SOLVING (CTE)

GRADES: 11-12

1 Year1 CreditPREREQUISITES: **Algebra 1, Geometry, Biology, Chemistry**COREQUISITES: **Algebra 2, Physics**

Engineering Design and Problem Solving utilizes the Engineering Process to identify needs and come up with solutions to problems. Solutions can include products, techniques, structures, and processes. Whereas science aims for understanding the natural world, engineering seeks to shape the world by meeting human needs and wants. Students will explore real-world problems in the course and use skills and concepts learned in previous mathematics and science courses to justify solutions from multiple designs. Students will also gain experience with robotics and simple programming techniques. (This course may also be eligible for the 4th Science credit, provided the specific Science course prerequisites are completed.)

OTHER ELECTIVES

PAL (PEER ASSISTANCE & LEADERSHIP)

GRADE: 12

1 Year2 Credits(1 State Credit + 1 Local Credit)PREREQUISITE: **Application, nomination, evaluation and interview**

The PAL program is a peer helping program. Students are trained to work with other students, usually from middle schools or elementary schools. The course emphasizes the development of communication skills, leadership skills and self-esteem. (This course requires 2 class periods.)

STUDENT AIDE

GRADE: 11-12

1 Year (2 periods) 2 Credits

This class is now offered as a CTE course entitled Business Management (1st year taken) or Practicum in Business Management (2nd year taken). A Student Aide may be placed in an office, in the library, or with a teacher/department.

CAREER PREPARATION 1

GRADES: 11-12

1 Year (1 period plus 15 work hours at place of employment)3 Credits

PREREQUISITE: None

Career Preparation 1 provides opportunities for students to participate in a learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. This instructional arrangement should be an advanced component of a student's individual program of study. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Career Preparation is relevant, rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. Students will be working towards OSHA Safety certification.

CAREER PREPARATION 2

GRADE: 12

1 Year (1 period plus 15 work hours at place of employment)**3 Credits**PREREQUISITE: **Career Preparation 1**

Career Preparation 2 develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved business and industry training area. Students will develop skills for lifelong learning, employability, leadership, management, work ethics, safety, and communication as a group; however, each student will have an individual training plan that will address job-specific knowledge and skills. Approved training sponsors will provide paid occupational training for a student. The training sponsor will assist the teacher in providing the necessary knowledge and skills for each student's specific career preparation. Students will be working towards OSHA Safety certification.

OTHER ELECTIVES – TECHNOLOGY APPLICATIONS**GAME PROGRAMMING AND DESIGN**

GRADES: 10-12

1 Sem (Fall)**0.5 Credit**PREREQUISITE: **Principles of Information Technology**

Game Programming and Design will foster student creativity and innovation by presenting students with opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve gaming problems. Through data analysis, students will include the identification of task requirements, plan search strategies, and use programming concepts to access, analyze, and evaluate information needed to design games. By acquiring programming knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will create a computer game that is presented to an evaluation panel.

MOBILE APPLICATION DEVELOPMENT

GRADES: 10-12

1 Sem (Spring)**0.5 Credit**PREREQUISITE: **Principles of Information Technology**

Mobile Application Development will foster students' creativity and innovation by presenting opportunities to design, implement, and deliver meaningful projects using mobile computing devices. Students will collaborate with one another, their instructor, and various electronic communities to solve problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use software development concepts to access, analyze, and evaluate information needed to program mobile devices. By using software design knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of mobile application development through the study of development platforms, programming languages, and software design standards.

AP COMPUTER SCIENCE PRINCIPLES

GRADES: 10-12

1 Year**1 Credit**PREREQUISITE: **Algebra 1 and Principles of Information Technology or Computer Programming 1 Honors**

Computer Science Principles is intended as a first course for students beginning to study computer science theory. Students will learn about the computing tools that are used every day. Students will foster their creativity and innovation through opportunities to design, implement, and present solutions to real-world problems. Students will collaborate and use computer science concepts to access, analyze, and evaluate information needed to solve problems. Students will learn the problem-solving and reasoning skills that are the foundation of computer science. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will gain an understanding of the principles of computer science through the study of technology operations and concepts.

Students will be prepared for and must take the AP Computer Science Principles Exam.

AP COMPUTER SCIENCE A

GRADES: 11-12

1 Year**1 Credit**PREREQUISITES: **Algebra 1, Geometry, Algebra 2 and Computer Programming 1**

AP Computer Science A is a programming course designed to cover the Advanced Placement Computer Science Exam topics. The curriculum will build upon the topics addressed in Computer Programming 1 Honors. Object-oriented components in the language of Java will be stressed. Other topics include decision making, looping, arrays, inheritance, interfaces, abstract classes, Java collections, sorting, searching, and corresponding labs. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. **Students will be prepared for and must take the AP Computer Science A Exam.** (This course is also listed in the Mathematics and Technology Applications sections.) (This course may also be eligible for the 4th Math credit, provided the specific Science course prerequisites are completed.)

NOTES