January 2017,

Dear Sherman High School Students & Parents,

On behalf of the entire Sherman High School Faculty, we are proud to present the 2017-18 Course Guide. I’d like to take a moment to welcome our incoming freshmen students that will join the Bearcat Family during the 2017-18 school year and to congratulate our current Bearcats on a successful 2016-17 year and the excitement that awaits us next year.

The 2017-18 Course Guide highlights the various academic course offerings that are available to our freshmen through senior level students. The guide provides critical information on the endorsement tracks and credit requirements for our students to graduate. An example of our academic excellence includes our Advanced Placement (AP) Program, which provides an inclusive opportunity for students to challenge themselves with the rigor of college-level courses. This guide provides descriptions on our core and elective courses that students can select as they progress through SHS.

One hallmark of Sherman HS, in addition to the excellent academic course offerings, includes the opportunities for involvement in our Fine Arts, CTE, and Athletics Departments. I encourage all of our students to become involved in a school-related activity in their area(s) of interest and we have some of the very best directors, coaches, teachers, and sponsors in extracurricular activities in the state! Please consider Fine Arts, CTE, and/or Athletics in your schedule and graduation plan as you review this course guide.

The continued success of Sherman High School is due to the talent, hard work, and dedication of our students, staff, and families in this wonderful community! SHS is a special place and we are excited to finish the current year strong and for the upcoming 2017-18 school year. Go Bearcats!

Sincerely,

Chris Mogan
Principal – Sherman High School
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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SHERMAN HIGH SCHOOL COURSE GUIDE

2017-2018

GRADE CLASSIFICATION

<table>
<thead>
<tr>
<th>Grade</th>
<th>Units of Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th grade</td>
<td>0-4.5</td>
</tr>
<tr>
<td>10th grade</td>
<td>5-11.0</td>
</tr>
<tr>
<td>11th grade</td>
<td>11.5-17.5</td>
</tr>
<tr>
<td>12th grade</td>
<td>18.0 or more</td>
</tr>
</tbody>
</table>

*Students will be assigned to the proper grade level based on the number of documented credits earned as of Aug 1 and/or the semester break.*

STAAR / EOC TEST

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.

<table>
<thead>
<tr>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra 1</td>
</tr>
<tr>
<td>English I (combined reading/writing)</td>
</tr>
<tr>
<td>English II (combined reading/writing)</td>
</tr>
<tr>
<td>Biology</td>
</tr>
<tr>
<td>U. S. History</td>
</tr>
</tbody>
</table>

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 E1)

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 students 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/GT 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 either from Sherman ISD or from a previous school.
2. Many Pre-AP, AP, and GT courses may require summer assignments. All students should check with the teacher of the course about the summer assignment.
3. Students taking AP classes must take the AP Exam for those courses.

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

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

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 college instructors or, in some cases, a high school instructor who is an adjunct instructor of the college. In some cases, any of these courses may be 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 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 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. **College credit courses taken off the SHS campus do not receive additional GPA weighting.**

CORRESPONDENCE COURSES

A maximum of two credits of 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.
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 workplace while they are in high school. Students who complete the articulation plan can earn (articulated) college credit at the Grayson 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)
- Precision Metals Manufacturing
- Manufacturing Engineering

*Agreement subject to change from year to year

GRAYSON COLLEGE TECHNICAL DUAL-CREDIT PROGRAM

Junior and senior students have the opportunity to partner 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 courses.

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.

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 Deprechos Civiles de 1964, según enmienda; el Título IX de las Emmiendas en la Educación, de 1972, y la Sección 504 de la Ley de Rehabilitación de 1973, según enmienda.

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.
SHERMAN HIGH SCHOOL CLUBS/ORGANIZATIONS

3D Anti-Bullying
Advanced Culinary Arts
APA
Archery
Art League
Astronomy/Rocket Club
Business Professionals of America
Chamber Orchestra
Chess Club
Computer Science Club
Criminal Justice Club
Debate
Diamond Darlings
Fashion Club
FCCLA
FFA
HOSA
Key Club
Leo Club
Maroon Maniacs
Mens Choir
Mu Alpha Theta

Musical
Newspaper
NHS
NTHS
PALS
Reflections
Robotics/Engineering
Singsations
Skills USA
Spanish Club
Spanish NHS
Sports Medicine
SSA
START
String Orchestra
StuCo
TAFE
Technology Students Association
Varsity Choir
Women’s Choir
Yearbook
GRADUATION PLANS

All students entering 9th grade in the 2014-2015 school year and after are automatically under the requirements of the Foundation High School Program with Endorsement for graduation. A student may graduate under the Foundation High School Program without an endorsement, if, after the student’s sophomore year:

- The student and the student’s parent/guardian are advised by a school counselor of the specific benefits of graduating from high school with one or more endorsements, and
- The student’s parent/guardian files with a school counselor written permission, on a form adopted by the TEA, allowing the student to graduate under the Foundation High School Program without earning an endorsement.

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**FOUNDATION + ENDORSEMENTS**

(required to be eligible for general admission to a Texas public college or university)

- 4 credits **English** - English 1, 2, 3, 4
- 4 credits **Mathematics** - Algebra 1, Geometry, plus two credits in any advanced math course
- 4 credits **Science** - Biology, plus two credits in any advanced science course, plus one credit in IPC or in any additional advanced science course
- 3 credits **Social Studies** - U. S. History, World History, Government, Economics
- 2 credits of **Languages Other Than English**
- 1 credit **Physical Education**
- 1 credit **Fine Arts**
- 7 credits Electives, including at least two credits in at least one Endorsement

(Students and parents must pay close attention to all “Prerequisite” requirements.)

**DISTINGUISHED LEVEL OF ACHIEVEMENT**

(required to be eligible for automatic admission to a Texas public college or university)

- 4 credits **English** - English 1, 2, 3, 4
- 4 credits **Mathematics** - Algebra 1, Geometry, Algebra 2, plus one credit in any advanced math course
- 4 credits **Science** - Biology, plus two credits in any advanced science course, plus one credit in IPC or in any additional advanced science course
- 3 credits **Social Studies** - U. S. History, World History, Government, Economics
- 2 credits of **Languages Other Than English**
- 1 credit **Physical Education**
- 1 credit **Fine Arts**
- 7 credits Electives, including at least two credits in at least one Endorsement

(Students and parents must pay close attention to all “Prerequisite” requirements.)

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**Endorsements**

<table>
<thead>
<tr>
<th>STEM</th>
<th>Business &amp; Industry</th>
<th>Public Services</th>
<th>Arts &amp; Humanities</th>
<th>Multidisciplinary Studies</th>
</tr>
</thead>
</table>

*This endorsement is primarily for students that are new to Sherman ISD and may have courses from another district or state.*
# SHERMAN HIGH SCHOOL ENDORSEMENT/CAREER PATHWAY OPTIONS

## ARTS & HUMANITIES ENDORSEMENT

<table>
<thead>
<tr>
<th>Option 1:</th>
<th>Complete 2 Additional Soc. Stud. credits:</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ _________   ___   ___</td>
<td></td>
</tr>
<tr>
<td>□ _________   ___   ___</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option 2:</th>
<th>Complete both Level 3 &amp; 4 credits of same LOTE earned for foundation: (ie: Spanish 3 &amp; 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ _________   ___   ___</td>
<td></td>
</tr>
<tr>
<td>□ _________   ___   ___</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option 3:</th>
<th>Two additional LOTE credits:</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ _________   ___   ___</td>
<td></td>
</tr>
<tr>
<td>□ _________   ___   ___</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option 4:</th>
<th>Complete 4 fine arts credits in a coherent sequence within one or two fine art disciplines.</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ _________   ___   ___</td>
<td></td>
</tr>
<tr>
<td>□ _________   ___   ___</td>
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<td>□ _________   ___   ___</td>
<td></td>
</tr>
<tr>
<td>□ _________   ___   ___</td>
<td></td>
</tr>
</tbody>
</table>
# MULTIDISCIPLINARY STUDIES

## Option 1:
4X4 Plan
Complete 4 credits in each of the 4 core subject areas: **Must include Physics OR Chemistry**:

- English IV: __ __
- 4th Social Studies: __ __
- 4th Science: __ __
- 4th Math: __ __

## Option 2:
Complete 4 Dual credit courses to include one course in each core subject area:

- Math: __ __
- Science: __ __
- English: __ __
- Social Stud.: __ __

## Option 3:
Complete 4 advanced CTE courses within or across any of the endorsement areas.

- ____________ __ __
- ____________ __ __
- ____________ __ __
- ____________ __ __
CAREER AND TECHNOLOGY ENDORSEMENTS

BUSINESS & INDUSTRY ENDORSEMENT

Option 1:
Complete 4 CTE credits with 2 CTE credits within the same career cluster under the Business & Industry endorsement. Note: The final credit must be an advanced CTE course within the Business & Industry endorsement.

- __________     ____    ____
- __________     ____    ____
- __________     ____    ____

Business & Industry Advanced CTE in same Career Cluster as one of the courses above.
- __________     ____    ____

Option 2:
Complete 4 English elective credits to include three levels in one of the following areas: Newspaper, Yearbook, Debate (English IV counts as 1 of the 4)

- English IV     ____    ____
- __________     ____    ____
- __________     ____    ____
- __________     ____    ____

PUBLIC SERVICES ENDORSEMENT

Option 1:
Complete 4 CTE credits with 2 CTE credits within the same career cluster under the Public Services endorsement. Note: The final credit must be an advanced CTE course within the Public Services endorsement.

- __________     ____    ____
- __________     ____    ____
- __________     ____    ____

Public Services Advanced CTE in same Career Cluster as one of the courses above.
- __________     ____    ____
STEM (SCIENCE, TECHNOLOGY, ENGINEERING, & MATH) ENDORSEMENT

***Must complete Algebra II, Chemistry and Physics as part of the foundation plan.

☐ Algebra II __ __
☐ Physics __ __
☐ Chemistry __ __

Option 1:
Complete 4 CTE credits with 2 CTE credits within the same career cluster under the STEM endorsement. Note: The final credit must be an advanced CTE course within the STEM endorsement.

☐ ___________ __ __
☐ ___________ __ __
☐ ___________ __ __

(STEM) Advanced CTE in same Career Cluster as one of the courses above.

☐ ___________ __ __

Option 2:
Complete 2 additional Advanced Math credits for which Algebra II is a prerequisite or 2 additional Adv. Science credits:

☐ ___________ __ __
☐ ___________ __ __

Option 3:
Complete 3 credits using one of the following methods A,B, or C:

A: Complete 2 Adv. Math credits and 1 Adv. Science credits or
B: Complete 2 Adv. Science credits and 1 Adv. Math credit or
C: Complete 2 STEM CTE credits and 1 credit in either an Adv. Math or Adv. Science.

☐ ___________ __ __
☐ ___________ __ __
☐ ___________ __ __
ENGLISH

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 basic research skills.

PRE-AP ENGLISH 1
GRADE: 9
1 Year 1 Credit
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, AP 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.

G/T PRE-AP ENGLISH 1
GRADE: 9
1 Year 1 Credit
PREREQUISITE: Identified as Gifted/Talented
This course is an introduction to various authors and genres of American, British, and world literature. Studies will include grammar, oral and written composition, AP 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.

G/T HUMANITIES 1/PRE-AP ENGLISH 1
GRADE: 9
1 Year 1 Credit
PREREQUISITE: Identified as Gifted/Talented
G/T Humanities 1/Pre-AP English 1 and G/T Humanities 2/AP World History are courses that provide gifted students with opportunities not available through regular or advanced classes. The courses combine Pre-AP English 1 with AP World History in a two-year interdisciplinary spiral. The basic content is a historical study of the commonalities of the fine arts, including literature, the visual arts, architecture, and music. Students will learn and practice the craft of writing through various products, including AP style writing. Literature from a variety of world traditions will also be a key focus. Beginning in 2018-19, ninth and tenth grade students will sit in the same class while earning credit in separate courses; ninth graders will earn Pre-AP English 1 credit while tenth graders earn AP World History credit. At the conclusion of G/T Humanities 2, students can sit for the AP World History exam to possibly earn college credit. G/T Humanities does NOT fulfill the fine arts requirement for graduation and is not recognized as a fine arts course by TEA.

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.

PRE-AP ENGLISH 2
GRADE: 10
1 Year 1 Credit
English 2 Pre-AP is 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.

G/T PRE-AP ENGLISH 2
GRADE: 10
1 Year 1 Credit
PREREQUISITE: Identified as Gifted/Talented
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.

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. English 3 includes a formal research paper, SAT preparation, and development of critical-thinking skills and vocabulary.
PRE-AP ENGLISH 3
GRADE: 11  1 Year  1 Credit
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.

AP ENGLISH 3
GRADE: 11  1 Year  1 Credit
Advanced Placement English 3 is an introductory college-level course with an emphasis on English grammar and composition. 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.

GT/AP ENGLISH 3
GRADE: 11  1 Year  1 Credit
PREREQUISITE: Identified as Gifted/Talented
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. The class is intended to show the correlation of American history to American literature.

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.

COLLEGE ENGLISH
ENGL 1301 (FALL) & ENGL 1302 (SPRING) 3 credit hours each semester
GRADE: 12  1 Year  1 Credit
PREREQUISITE: Meet all requirements of Grayson College; must 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.
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.

AP ENGLISH 4
GRADE: 12  1 Year  1 Credit
Advanced Placement English 4 is an introductory college-level course with an emphasis on English literature and composition. 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.

G/T AP ENGLISH 4
GRADE: 12  1 Year  1 Credit
PREREQUISITE: Identified as Gifted/Talented
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.

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
GRADES: 10-12  1 Year  1 Credit
PREREQUISITE: Debate 1
Debate 2 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
GRADES: 11-12
PREREQUISITE: Debate 2
1 Year 1 Credit
Debate 3 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
PREREQUISITE: None
1 Semester (Fall) .5 Credit
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. It would be to the student’s advantage to have a personal camera for use inside and outside of the classroom as course-provided devices are limited.

PHOTOJOURNALISM 2
GRADES: 9-12
PREREQUISITE: Photojournalism 1
1 Semester (Spring) .5 Credit
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. It would be to the student’s advantage to have a personal camera for use inside and outside of the classroom as course-provided devices are limited.

JOURNALISM 1
GRADES: 9-12
PREREQUISITE: None
1 Year 1 Credit
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.

ADVANCED JOURNALISM/YEARBOOK PRODUCTION 1, 2, 3
GRADES: 10-12
PREREQUISITE: Journalism 1 or Photojournalism 1 & 2
1 Year 1 Credit
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.

ADVANCED JOURNALISM/NEWSPAPER PRODUCTION 1, 2, 3
GRADES: 10-12
PREREQUISITE: Journalism 1 or Photojournalism 1 & 2
1 Year 1 Credit
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 and completing deadlines.

PROFESSIONAL COMMUNICATIONS
GRADES: 9-12
PREREQUISITE: None
1 Semester (Fall or Spring) .5 Credit
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.

COLLEGE PREPARATORY ENGLISH LANGUAGE ARTS AND READING
GRADES: 12
PREREQUISITE: Counselor Approval
1 Year 1 Credit
This course is designed to increase the college readiness of current high school students in English Language Arts. This course covers the ten Student Learning Objectives (SLO’s) as defined by the state of Texas for indicating college readiness in English (Integrated Reading and Writing). In addition, this course aligns with the Texas College and Career Readiness Standards (CCRS) in the areas of writing, reading, and research. This course is also in compliance with multiple Texas Essential Knowledge and Skills (TEKS) for English Language Arts and Reading, specifically English III and English IV. This course provides foundation work in the areas of reading and writing for the student who intends to advance to college level work.
MATHEMATICS

ALGEBRA 1
GRADE: 9
PREREQUISITE: Successful completion of 8th Grade Math or demonstrated equivalent knowledge
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.

1 Year 1 Credit

PRE-AP ALGEBRA 1
GRADE: 9
PREREQUISITE: Successful completion of 8th Grade Math or demonstrated equivalent knowledge
Pre-AP Algebra I students will expand on concepts covered in regular Algebra I with an intense focus on high level application, problem solving, and higher order thinking processes. Students will also develop strategies that prepare them for future Advanced Placement math courses. There will be an emphasis on real-world applications and methods for solving problems using the graphing calculator.

1 Year 1 Credit

GEOMETRY
GRADE: 10-12
PREREQUISITE: Algebra 1 or Pre-AP Algebra 1
This course will cover topics involving plane, solid, and coordinate geometry by exploring proofs and formulas.

1 Year 1 Credit

PRE-AP GEOMETRY
GRADE: 9-11
PREREQUISITE: Algebra 1 or Pre-AP Algebra 1
This course will cover topics involving plane, solid, and coordinate geometry by exploring proofs and formulas. Students will expand on the preceding concepts with an intense focus on high level application, problem solving, and higher order thinking processes. Students will also develop strategies that prepare them for future Advanced Placement math courses.

1 Year 1 Credit

ALGEBRA 2
GRADE: 10-12
PREREQUISITE: 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.

1 Year 1 Credit

PRE-AP ALGEBRA 2
GRADE: 10-12
PREREQUISITE: Algebra 1 and Geometry
Pre-AP Algebra II expands on the concepts covered in regular Algebra II with an intense focus on high level application, problem solving, and higher order thinking processes. This course will prepare students for Pre-Calculus, Pre-AP Pre-Calculus, or Advanced Quantitative Reasoning. Students will also develop strategies that prepare them for future Advanced Placement math courses.

1 Year 1 Credit

MATHEMATICAL MODELS WITH APPLICATIONS
GRADE: 11
PREREQUISITE: 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 or have struggled with Algebra 1 and/or Geometry.

1 Year 1 Credit

ALGEBRAIC REASONING
GRADE: 11-12
PREREQUISITE: Algebra 1
In Algebraic Reasoning, students will broaden their knowledge of functions and relationships, including linear, quadratic, square root, rational, cubic, cube root, exponential, absolute value, and logarithmic functions. Functions will be studied through analysis and application that includes explorations of patterns and structure, number and algebraic methods, and modeling from data using tools that build to workforce and college readiness such as probes, measurement tools, and software tools, including spreadsheets.

1 Year 1 Credit

PRE-CALCULUS (EXCEL)
GRADE: 11-12
PREREQUISITE: Algebra 1, Geometry, Algebra 2
Precalculus (Excel) is a preparation for a college Calculus class. Precalculus includes topics of Advanced Algebra, Trigonometry and Analytic Geometry. Students will investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations, and use technology to build understanding, make connections between representations, and provide support in solving problems. The use of a graphing calculator is required for this course.

1 Year 1 Credit
**PRE-AP PRE-CALCULUS**

**GRADES:** 11-12
**PREREQUISITE:** Algebra 2

Pre-AP Precalculus is a preparation for AP Calculus. Pre-AP Precalculus includes topics of Advanced Algebra, Trigonometry and Analytic Geometry. Students will investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations, and use technology to build understanding, make connections between representations, and provide support in solving problems. The use of a graphing calculator is required for this course.

**COLLEGE ALGEBRA (FALL) & COLLEGE STATISTICS (SPRING)**

**MATH 1314 (FALL) & MATH 1342 (SPRING) 3 credit hours each semester**

**GRADES:** 11-12
**PREREQUISITE:** Algebra 2 and all requirements of Grayson College; must pay all tuition, fees, and books through Grayson College.

MATH 1314: Further study of quadratics; polynomial, rational, logarithmic and exponential functions; system of equations; progressions; sequences and series; matrices and determinants.

MATH 1342: Students will examine patterns and trends in data and use that information to make inferences about the data. Students will also work with applications of statistics and case studies in data analysis.

**FINANCIAL MATH**

**GRADE:** 11-12
**PREREQUISITE:** Algebra 1; Principles of Business, Finance, and Marketing (if used to satisfy CTE endorsement route)

Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, paper and pencil, and technology and techniques such as mental math, estimation, and number sense to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication. (This course is also listed in the Finance section.)

**MATHEMATICAL APPLICATIONS IN AGRICULTURE, FOOD, AND NATURAL RESOURCES**

**GRADE:** 11-12
**PREREQUISITE:** Algebra 1; Principles of Agriculture, Food, and Natural Resources (if used to satisfy CTE endorsement route)

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.

**STATISTICS AND BUSINESS DECISION MAKING**

**GRADE:** 11-12
**PREREQUISITE:** Algebra 2; Principles of Business, Marketing, and Finance (if used to satisfy CTE endorsement route)

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.)

**AP STATISTICS**

**GRADE:** 11-12
**PREREQUISITE:** Algebra 2

AP Statistics exposes students to four broad conceptual themes: exploring data, planning a study, anticipating patterns, and statistical inference. Students should have excellent algebraic and problem-solving skills. Extensive use of the graphing calculator to study statistical applications is emphasized. This course is a college-level course and is designed to prepare students for the College Board Advanced Placement Exams.

**ADVANCED QUANTITATIVE REASONING (AQR)**

**GRADE:** 12
**PREREQUISITE:** Algebra 1, Geometry and 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.
AP CALCULUS AB
GRADE: 12
PREREQUISITE: Pre-Calculus or Pre-AP Pre-Calculus
AP Calculus AB covers advanced mathematical topics including elementary differential and integral calculus. AP Calculus AB is approximately equivalent to a one-semester calculus course at the college level. This course is designed to prepare students for the College Board Advanced Placement Exam.

AP CALCULUS BC
GRADE: 12
PREREQUISITE: Pre-AP Pre-Calculus
AP Calculus BC covers advanced mathematical topics including elementary differential and integral calculus and their applications with polar, parametric, and vector functions. Additionally, applications of integral function, logistic models, polynomial approximations, and advanced sequences and series will be studied. AP Calculus BC is approximately equivalent to a two-semester calculus course at the college level. This course is designed to prepare students for the College Board Advanced Placement Exam. Students will move to Calculus AB if this course does not have sufficient enrollment numbers to make a class.

AP COMPUTER SCIENCE A
GRADES: 11-12
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. (This course is also listed in the Information Technology and Technology Applications sections.)

COLLEGE PREPARATORY MATHEMATICS
GRADES: 12
PREREQUISITE: Counselor Approval
This course is designed to increase the college readiness of current high school students in Mathematics. This course is also in compliance with multiple Texas Essential Knowledge and Skills (TEKS) for Mathematics, including Algebra 1, Algebra 2, and Geometry. Successful completion of the course and the final exam will result in student readiness for entry-level college Mathematics.
**SCIENCE**

**BIOLOGY**
GRADES: 9

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. A lab book may be required for formal lab write-ups.

**PRE-AP BIOLOGY**
GRADES: 9

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 may be required for formal lab write-ups.

**AP BIOLOGY**
GRADES: 10-12

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 for formal lab write-ups on laboratory investigations.

**COLLEGE BIOLOGY**

BIOI 1406 (FALL) & BIOI 1407 (SPRING)
GRADE: 12

PREREQUISITE: Biology, Chemistry, Physics and all requirements of Grayson College; must pay all tuition, fees, and books through Grayson

BIOI 1406: Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Study and examination of the concepts of cytology, reproduction, genetics, and scientific reasoning are included. Laboratory activities will reinforce these concepts.

BIOI 1407: An introductory survey of current biological concepts for students majoring in the sciences. The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Laboratory activities will reinforce study of these concepts.

**INTEGRATED PHYSICS AND CHEMISTRY**

GRADES: 9-10

PREREQUISITE: Counselor Recommendation

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. A lab book may be required for formal lab write-ups.

**CHEMISTRY**

GRADES: 10-12

PREREQUISITE: Biology and Algebra 1

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
PREREQUISITE: Biology and Algebra 1

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 may be required for formal lab write-ups.

AP CHEMISTRY

GRADES: 11-12
PREREQUISITE: Pre-AP Biology, Pre-AP Chemistry

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 for formal lab write-ups on laboratory investigations.

PHYSICS

GRADES: 11-12
PREREQUISITE: Biology, Chemistry and Algebra 1

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 may be required for formal lab write-ups.

PRINCIPLES OF TECHNOLOGY

GRADES: 11-12
PREREQUISITE: Biology, Chemistry and Algebra 1 (Credit cannot be earned for both POT and Physics)

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 experiments related to applied physics concepts.

PRE-AP PHYSICS

GRADES: 11-12
PREREQUISITE: Biology, Chemistry and Algebra 1

Pre-AP 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. Pre-AP Physics places emphasis on problem-solving and preparation for AP Physics. Students will use laboratory equipment and supplies to investigate basic physical phenomena. A lab book may be required for formal lab write-ups.

AP PHYSICS 1

GRADES: 11-12
PREREQUISITE: Biology, Chemistry and Algebra 1

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, 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 for formal lab write-ups on laboratory investigations.

AP PHYSICS 2

GRADES: 11-12
PREREQUISITE: Pre-AP Physics or AP Physics 1

This course will provide a comprehensive exploration of the physical and mathematical phenomena involved in fluid dynamics, thermodynamics, electricity/magnetism, optics, and topics in Modern Physics. 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 for formal lab write-ups on laboratory investigations.
AP PHYSICS C
GRADE: 12
PREREQUISITE: Pre-AP Physics or AP Physics 1 or AP Physics 2; REQUIRED 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 write-ups.

ADVANCED ANIMAL SCIENCE
GRADES: 11-12
PREREQUISITE: Biology, Chemistry and one additional science credit, Algebra 1, Geometry, Livestock Production; Principles of Agriculture, Food, and Natural Resources (if used to satisfy CTE endorsement route)
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. A lab book may be required for formal lab write-ups.

ANATOMY & PHYSIOLOGY OF HUMAN SYSTEMS
GRADES: 10-12
PREREQUISITE: Biology, Chemistry and one additional science credit
Students will study 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 is 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. A lab book may be required for formal lab write-ups.

ASTRONOMY
GRADE: 11-12
PREREQUISITE: Physics (May be taken concurrently with Counselor Approval)
In Astronomy, 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. A lab book may be required for formal lab write-ups.

ENGINEERING DESIGN AND PROBLEM SOLVING
GRADES: 11-12
PREQUISITES: Algebra 1, Geometry; Concepts of Engineering (if used to satisfy CTE endorsement route)
REQUIRED COREQUISITES: Algebra 2
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. A lab book may be required for formal lab write-ups.

ENVIRONMENTAL SYSTEMS
GRADES: 11-12
PREREQUISITE: Biology and Chemistry
In Environmental Systems, 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. A lab book may be required for formal lab write-ups.

AP ENVIRONMENTAL SCIENCE
GRADE: 11-12
PREREQUISITE: Biology and Chemistry
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. A lab book is required for formal lab write-ups on laboratory investigations.
FOOD SCIENCE
GRADES: 11-12
PREREQUISITE: Biology, Chemistry and one additional science credit; Principles of Hospitality and Tourism (if used to satisfy CTE endorsement route)
Food Science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public. 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. A lab book may be required for formal lab write-ups.

FORENSIC SCIENCE
GRADE: 11-12
PREREQUISITE: Biology, Chemistry; Principles of Law, Public Safety, Corrections, and Security (if used to satisfy CTE endorsement route)
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. A lab book may be required for formal lab write-ups.

MEDICAL MICROBIOLOGY
GRADES: 10-12
PREREQUISITE: Biology, Chemistry; Principles of Health Science (if used to satisfy CTE endorsement route)
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. A lab book may be required for formal lab write-ups.

PATHOPHYSIOLOGY
GRADES: 11-12
PREREQUISITE: Biology, Chemistry; Principles of Health Science (if used to satisfy CTE endorsement route)
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.
SOCIAL STUDIES

WORLD GEOGRAPHY
GRADE: 9—12  1 Year  1 Credit
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. (This course is not one of the required Social Studies courses, but may be taken as an elective for the Arts and Humanities Endorsement or the Multidisciplinary Studies Endorsement.)

PRE-AP WORLD GEOGRAPHY
GRADE: 9—12  1 Year  1 Credit
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 is not one of the required Social Studies courses, but may be taken as an elective for the Arts and Humanities Endorsement or the Multidisciplinary Studies Endorsement.)

AP HUMAN GEOGRAPHY
GRADES: 9-12  1 Year  1 Credit
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.

AP EUROPEAN HISTORY
GRADE: 9-12  1 Year  1 Credit
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.

WORLD HISTORY
GRADE: 10  1 Year  1 Credit
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
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.

AP WORLD HISTORY
GRADE: 10  1 Year  1 Credit
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.

G/T AP WORLD HISTORY
GRADE: 10  1 Year  1 Credit
PREREQUISITE: Identified as Gifted/Talented
GT/AP World History is divided into six major sections, covering the interactions of global civilizations. This course requires an extensive commitment of time and energy in outside reading and research, note-taking and review, and meeting assignment deadlines.

G/T HUMANITIES 2/PRE-AP ENGLISH 2
GRADE: 10  1 Year  1 Credit
PREREQUISITE: Identified as Gifted/Talented and G/T Humanities 1/Pre-AP English 1
See above course description for G/T Humanities 1/Pre-AP English. This course will not be available until 2018-19 as part two of the G/T Humanities class.
U.S. HISTORY
GRADE: 11
1 Year 1 Credit
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
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.

AP U.S. HISTORY
GRADE: 11
1 Year 1 Credit
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.

G/T AP U.S. HISTORY
GRADE: 11
1 Year 1 Credit
PREREQUISITE: Identified as Gifted/Talented
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.

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, 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 through Grayson
Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights.

COLLEGE ECONOMICS
ECON 2301
GRADE: 12
1 Semester .5 Credit
PREREQUISITE: Must meet Grayson College entrance requirements and pay all tuition, fees, and books through Grayson
An introduction to principles of macroeconomics is presented. Economic principles are studied within the historical framework of classical, Keynesian, monetarist and alternative models. Emphasis is given to national income determination, money and banking, and the role of monetary and fiscal policy in economic stabilization and growth. Other topics include international trade and finance.

AP MACROECONOMICS
GRADE: 12
Fall Semester .5 Credit
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.
AP U.S. GOVERNMENT AND POLITICS
GRADE: 12
Spring Semester .5 Credit
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.

PSYCHOLOGY
GRDES: 11-12
Fall Semester .5 Credit
PREREQUISITE: None
In Psychology, students study the science of behavior and mental processes. Students examine the full scope of the science of psychology such as the historical framework, methodologies, human development, motivation, emotion, sensation, perception, personality development, cognition, learning, intelligence, biological foundations, mental health, and social psychology.

SOCIOLOGY
GRDES: 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
GRDES: 11-12
Fall Semester .5 Credit
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.

AP PSYCHOLOGY
GRDES: 11-12
Spring Semester .5 Credit
PREREQUISITE: 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.
FINE ARTS

ART 1/INTRODUCTION TO ART
GRADES: 9-12
PREREQUISITE: None
1 Year 1 Credit
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
PREREQUISITE: None
1 Year 1 Credit
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. Students are required to furnish some of their own art supplies and materials.

ART 2
GRADES: 9-12
PREREQUISITE: Art 1
1 Year 1 Credit
Art 2 is a continuation of the study in art fundamentals introduced in Art 1. Students will further explore two and three dimensional work and continue the development of a portfolio for use in further art study. Students are required to furnish some of their own art supplies and materials.

ART 2 / STUDIO ART Pre-AP DRAWING / PAINTING
GRADES: 9-12
PREREQUISITE: Art 1
1 Year 1 Credit
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 are required to furnish some of their own art supplies and materials.

ADVANCED STUDIO ART / ART 3 PRE-AP
GRADES: 10-12
PREREQUISITE: Art 2
1 Year 1 Credit
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. Students are required to furnish some of their own art supplies and materials. Senior-level students are required to participate in the Senior Art Show held in the spring.

ADVANCED STUDIO ART / ART 4 PRE-AP
GRADES: 10-12
PREREQUISITE: Art 3 Pre-AP
1 Year 1 Credit
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. Students are required to furnish some of their own art supplies and materials. Senior-level students are required to participate in the Senior Art Show held in the spring.

AP STUDIO ART DRAWING PORTFOLIO
GRADES: 10-12
PREREQUISITE: Art 1 and 2
1 Year 1 Credit
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 are required to furnish some of their own art supplies and materials.
AP ART 2D DESIGN PORTFOLIO
GRADES: 10-12
PREREQUISITE: 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 are required to furnish some of their own art supplies and materials.

AP ART 3D DESIGN PORTFOLIO
GRADES: 10-12
PREREQUISITE: 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 are required to furnish some of their own art supplies and materials.

AP ART HISTORY
GRADES: 11-12
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.

AP MUSIC THEORY 1
GRADES: 11-12
PREREQUISITE: Demonstrated ability to read music
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.

BAND—WIND ENSEMBLE MARCHING BAND
GRADES: 9-12
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
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
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
PREREQUISITE: Audition
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
PREREQUISITE: Audition
This course teaches the techniques of color guard including flag, rifle, and sabre technique. 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. The color guard performs as part of the marching band. There are equipment and fee requirements.

BAND—DRUM LINE
GRADERS: 9-12
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.

MEN'S CHORALE
GRADERS: 9-12
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 historical periods. Choir members will develop solo and ensemble skills as well as a passion for music. Rehearsals and performances are required.

BEGINNER WOMEN'S CHOIR
GRADERS: 9-12
This ensemble is for women who have never taken a choir class before. 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 historical periods. Choir members will develop solo and ensemble skills as well as a passion for music. Rehearsals and performances are required.

JV WOMEN'S CHOIR
GRADERS: 9-12
PREREQUISITE: Audition
Selection for this choir is on the basis of an audition consisting of a solo performance and sight reading capability. 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 historical periods. Choir members will develop solo and ensemble skills as well as a passion for music. Rehearsals, performances, and competitions are required. Students in this ensemble must also compete in either All Region Solo Auditions or perform a solo at UIL Solo and Ensemble.

WOMEN'S VARSITY CHOIR
GRADERS: 9-12
PREREQUISITE: Audition
Selection for this choir is on the basis of an audition consisting of a solo performance and sight reading capability. 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 historical periods. Choir members will develop solo and ensemble skills as well as a passion for music. Rehearsals, performances, and competitions are required. Students in this ensemble must also compete in either All Region Solo Auditions or perform a solo at UIL Solo and Ensemble.

MIXED VARSITY CHOIR
GRADERS: 9-12
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. 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 historical periods. Choir members will develop solo and ensemble skills as well as a passion for music. Rehearsals, performances, and competitions are required. Students in this ensemble must also compete in either All Region Solo Auditions or perform a solo at UIL Solo and Ensemble.

APPLIED MUSIC
GRADERS: 9-12
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
PREREQUISITE: Audition
1 Year 1 Credit
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
PREREQUISITE: Audition
1 Year 1 Credit
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. This class has equipment and fee requirements.

TECHNIQUES ORCHESTRA
GRADES: 9-12
PREREQUISITE: Audition
1 Year 1 Credit
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
PREREQUISITE: None
1 Year 1 Credit
Theatre Arts 1 general areas of study include but are not exclusive to the following: performance skills of improvisation, pantomime, mime, voice and diction, stage movement and acting. Additional areas explored are history of the theatre and careers in theatre. Technical aspects discussed are design concepts of lighting, sound, scenery, props, makeup, costumes and publicity. All students will be involved in many performances, written and visual projects throughout the year.

THEATRE ARTS 2
GRADES: 10-12
PREREQUISITE: Theatre Arts 1
1 Year 1 Credit
Theatre Arts 2 is a continuation of Theatre Arts 1 with special emphasis on advanced acting styles and techniques and critical analysis of scripts and characters. Students will also continue their study of improvisation as it enhances character analysis, pantomime, mime, voice and diction, audition techniques and production techniques. All students will be involved in many performances, written and visual projects throughout the year.

THEATRE ARTS 3
GRADES: 10-12
PREREQUISITE: Theatre Arts 2
1 Year 1 Credit
Theatre Arts 3 is a continuation of Theater Arts 2 and will include topics such as contemporary and classical acting styles and techniques, exploration and analysis of representative plays from each period of history, history of film, puppetry, dance and masked theatre, playwriting and other specialize production techniques. All students will be involved in many performances, written and visual projects throughout the year.

THEATRE ARTS 4
GRADES: 10-12
PREREQUISITE: Theatre Arts 3
1 Year 1 Credit
Theatre Arts 4 is a continuation of Theater Arts 3 and will explore topics such as contemporary and classical acting styles and techniques, exploration and analysis of representative plays from each period of history, history of film, puppetry, dance and masked theatre, playwriting and other specialize production techniques at a much greater depth. All students will be involved in many performances, written and visual projects throughout the year.

TECHNICAL THEATRE 1
GRADES: 9-12
PREREQUISITE: None
1 Year 1 Credit
Technical Theatre 1 general areas of study include, but are not exclusive to the following: principles of costume, make-up, scenery, lighting and sound design and application, and general stagecraft skills. Additional areas explored are history of the theatre and careers in the theatre. Students will be involved in many design projects in each grading period and written projects and tests throughout the year. Students in Technical Theatre 1 are also required to attend all campus theatre productions.
TECHNICAL THEATRE 2
GRADERS: 9-12
PREREQUISITE: Technical Theatre 1
TECHNICAL THEATRE 2 is a continuation of Technical Theatre 1 with special emphasis on advanced theatre design, moderate to advanced stage craft skills, and stage management. Students will also continue their study of script analysis and begin working on period styles and architecture of specific time periods. Students will begin creating a portfolio of their design work. Students in Technical Theatre 2 are also required to attend all campus theatre productions.

TECHNICAL THEATRE 3
GRADERS: 9-12
PREREQUISITE: Technical Theatre 2
Areas of study in Technical Theatre 3 include stagecraft and design implementation. Emphasis will be placed on lab work, creation of technical theatre portfolio, leadership skills and exploration and analysis of play styles and history of architecture and costuming. All students will be involved in many projects, both written and visual, throughout the year. This class is designed for the student who wishes to seriously study and apply the theory of stage design. Students in Technical Theatre 3 are also required to attend all campus theatre productions.

TECHNICAL THEATRE 4
GRADERS: 9-12
PREREQUISITE: Technical Theatre 3
Areas of study in Technical Theatre 4 include advanced stagecraft and design implementation. Emphasis will be placed on lab work, creation of technical theatre portfolio, leadership skills and exploration and analysis of play styles and history of architecture and costuming. All students will be involved in many projects, both written and visual, throughout the year. This class is designed for the student who wishes to seriously study and apply the theory of stage design. Students in Technical Theatre 3 are also required to attend all campus theatre productions.

MUSICAL THEATRE 1
GRADERS: 9-12
PREREQUISITE: Audition
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.

MUSICAL THEATRE 2
GRADERS: 10-12
PREREQUISITE: Musical Theatre 1 and Audition
Musical Theatre 2 is a continuation of Musical Theatre 1. 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.

FLORAL DESIGN (CTE)
GRADERS: 9-12
PREREQUISITE: Principles of Agriculture, Food, & Natural Resources (if used to satisfy CTE endorsement route)
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 toward Floral Design certification. (This course is also eligible for Fine Arts credit.)
LANGUAGES OTHER THAN ENGLISH (LOTE)

FRENCH 1
GRADES: 9-12
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. 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.

PRE-AP 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.

PRE-AP FRENCH 3
GRADES: 11-12
PREREQUISITE: French 2 or Pre-AP 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.

AP FRENCH 4
GRADES: 11-12
PREREQUISITE: Pre-AP 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
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
PREREQUISITE: Latin 1
1 Year 1 Credit
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 2
GRADES: 9-12
PREREQUISITE: Latin 1
1 Year 1 Credit
Pre-AP Latin 2 reinforces and expands on skills acquired in Latin 1 while preparing students for Pre-AP Latin 3. Students will continue their study of basic Latin grammar and will continue to develop their vocabulary and reading skills through rigorous projects and composition. Students will be introduced to Latin literature and will explore its significance through ongoing study of Greco-Roman history, culture, and mythology. Pre-AP Latin 2 will also include continuing study of English derivatives and vocabulary building.
PRE-AP LATIN 3
GRADEs: 10-12
PREREQUISITE: Latin 2 or Pre-AP Latin 2
1 Year
1 Credit
At the beginning of the third year, another test will be administered a few days into the course. There will be only a brief rapid review before the test. 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
PREREQUISITE: Pre-AP Latin 3
1 Year
1 Credit
AP Latin 4 is the equivalent to a second-year college Latin course. Latin grammar will be reviewed as encountered in reading, and advanced grammar topics will be further explored. Roman culture, history and mythology will be integrated as required by the AP syllabus. This course is designed to prepare students for the AP Latin exam. Scansion of poetry, figures of speech in Latin poetry and background to the readings will be included, particularly as topics for special projects.

AMERICAN SIGN LANGUAGE 1
GRADEs: 9-12
1 Year
1 Credit
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
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
PREREQUISITE: ASL 2
Students of ASL 3 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 in ASL 3 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.

AMERICAN SIGN LANGUAGE 4
GRADEs: 12
PREREQUISITE: ASL 3
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.

SPANISH 1
GRADEs: 9-12
1 Year
1 Credit
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
GRADES: 9-12
PREREQUISITE: Spanish 1
1 Year 1 Credit
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
GRADES: 9-12
PREREQUISITE: Spanish 1
1 Year 1 Credit
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
GRADES: 10-12
PREREQUISITE: Spanish 2
1 Year 1 Credit
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
GRADES: 10-12
PREREQUISITE: Spanish 2
1 Year 1 Credit
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
GRADES: 11-12
PREREQUISITE: Spanish 3
1 Year 1 Credit
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.

AP SPANISH LITERATURE 5
GRADES: 11-12
PREREQUISITE: Pre-AP Spanish 3
1 Year 1 Credit
Students will read and analyze Spanish literature through the centuries, comparing different authors and styles.

SPANISH 1 AND 2 FOR SPANISH SPEAKERS
GRADES: 9-12
1 Year 2 Credits
1st sem=Span 1
2nd 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.
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 course 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
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.)

PHYSICAL EDUCATION
GRADES: 9-12
1 Semester .5 Credit
In Physical Education, students acquire the knowledge and skills for movement that provide the foundation for enjoyment, continued social development through physical activity, and access to a physically-active lifestyle. The student exhibits a physically-active lifestyle and understands the relationship between physical activity and health throughout the lifespan. Students will be required to dress out during Physical Education class. Students may take a combination of two semesters of the following courses to earn 1 full credit of PE.

COURSE OPTIONS FOR PHYSICAL EDUCATION:

Foundations of Personal Fitness
Foundations of Personal Fitness represents a new approach in physical education and the concept of personal fitness. The basic purpose of this course is to motivate students to strive for lifetime personal fitness with an emphasis on the health-related components of physical fitness. The knowledge and skills taught in this course include teaching students about the process of becoming fit as well as achieving some degree of fitness within the class. The concept of wellness, or striving to reach optimal levels of health, is the cornerstone of this course and is exemplified by one of the course objectives-students designing their own personal fitness program.

Adventure/Outdoor Education
Students enrolled in adventure outdoor education are expected to develop competency in outdoor education activities that provide opportunities for enjoyment and challenge. Emphasis is placed upon student selection of activities that also promote a respect for the environment and that can be enjoyed for a lifetime.

Aerobic Activities
Students in aerobic activities are exposed to a variety of activities that promote health-related fitness. A major expectation of this course is for the student to design a personal fitness program that uses aerobic activities as a foundation.

Individual Sports/Team Sports
Students in Individual Sports are expected to participate in a wide range of individual sports that can be pursued for a lifetime. The continued development of health-related fitness and the selection of individual sport activities that are enjoyable is a major objective of this course. Students enrolled in Team Sports are expected to develop health-related fitness and an appreciation for team work and fair play. Like the other high school physical education courses, Team Sports is less concerned with the acquisition of physical fitness during the course than reinforcing the concept of incorporating physical activity into a lifestyle beyond high school.

BASEBALL
GRADES: 9-12
1 Year 1 Credit
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.

BASKETBALL—GIRLS AND BOYS
GRADES: 9-12
1 Year 1 Credit
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.
FOOTBALL (Fall semester only for 12th grade)
GRADES: 9-12 1 Year 1 Credit
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.

GOLF-GIRLS AND BOYS
GRADES: 9-12 1 Year 1 Credit
PREREQUISITE: 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.

SOFTBALL
GRADES: 9-12 1 Year 1 Credit
Softball offers students the opportunity to develop the individual skills of base running and hitting, catching, and throwing the ball.

SOCCER-GIRLS AND BOYS
GRADES: 9-12 1 Year 1 Credit
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.

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. (This course does NOT satisfy the physical education credit required for graduation.)

SPORTS MEDICINE 2
GRADES: 10-12 1 Year 1 Credit
PREREQUISITE: Sports Medicine 1
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. (This course does NOT satisfy the physical education credit required for graduation.)

SWIMMING-GIRLS AND BOYS
GRADES: 9-12 1 Year 1 Credit
PREREQUISITE: Students must provide their own transportation
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.

TENNIS-GIRLS AND BOYS
GRADES: 9-12 1 Year 1 Credit
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.

VOLLEYBALL—GIRLS (Fall semester only for 12th grade)
GRADES: 9-12 1 Year 1 Credit
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. Workouts will begin before the school year starts.
DRILL TEAM
GRADES: 9-12

1 Semester (Fall) .5 credit
*1 Year (Fall & Spring Semester) .5 state credit & .5 local credit

PREREQUISITE: Spring Tryouts
The SHS Hi-Steppers Drill Team promotes school spirit and sportsmanship at athletic events and school activities. The Drill Team represents the high school in performances throughout the community, state, and nation and participates in various competitions. Performances may include pep rallies, football games, professional/semi-professional athletic events, competitions, community events, and stage shows. Areas of focus include: proper stretching, splits, and dance technique (kick, jazz, pom, hip-hop, lyrical, contemporary). Each student selected must be aware of the time commitment and be dedicated to individual and team improvement.*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
SHS cheerleading will emphasize curricular and extracurricular activities by promoting school spirit. Cheerleaders are involved in summer camps, pep rallies, games, community events and competitions. Membership is obtained through a tryout process during the spring and is based on skill, academics, discipline records, and the obtainment of current physical.*If taken for full year, only fall semester earns state credit. Spring semester is for local credit only.
TECHNOLOGY APPLICATIONS

DIGITAL COMMUNICATIONS IN THE 21ST CENTURY
GRADES: 9-12
PREREQUISITE: Principles of Information Technology (may be taken concurrently)
1 Year 1 Credit
Digital Communications in the 21st Century will prepare students for the societal demands of increased civic literacy, independent working environments, global awareness, and the mastery of a base set of analysis and communication skills. Students will be expected to design and present an effective product based on well-researched issues in order to thoughtfully propose suggested solutions to authoritative stakeholders. The outcome of the process and product approach is to provide students an authentic platform to demonstrate effective application of multimedia tools within the contexts of global communication and collaborative communities and appropriately share their voices to affect change that concerns their future.

GAME PROGRAMMING AND DESIGN
GRADES: 9-12
PREREQUISITE: Principles of Information Technology (may be taken concurrently)
1 Sem (Fall) 1/2 Credit
Game Programming and Design will foster student creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve 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: 9-12
PREREQUISITE: Principles of Information Technology (may be taken concurrently)
1 Sem (Spring) 1/2 Credit
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
PREREQUISITE: Algebra 1 and Principles of Information Technology or Computer Programming 1 Honors
1 Year 1 Credit
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 collaboratively 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.

AP COMPUTER SCIENCE A
GRADES: 11-12
PREREQUISITES: Algebra 1, Geometry, Algebra 2 and Computer Programming 1 Honors or AP Computer Science Principles
1 Year 1 Credit
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. (This course is also listed in the Mathematics and Technology Applications sections.)
OTHER ELECTIVES

PAL (PEER ASSISTANCE & LEADERSHIP)  
GRADE: 12  
1 Year  2 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.)

LIFE SKILLS PEER TUTOR  
GRDES: 9-12  
1 Year  1 Credit  

This class is now offered as a CTE course entitled Principles of Education & Training. (See p. 35 for details.)

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  
GRDES: 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 toward 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 toward OSHA Safety certification.

COLLEGE PREPARATORY ENGLISH LANGUAGE ARTS AND READING  
GRDES: 12  
1 Year  1 Credit  

PREREQUISITE: Counselor Approval  
This course is designed to increase the college readiness of current high school students in English Language Arts. This course covers the ten Student Learning Objectives (SLO’s) as defined by the state of Texas for indicating college readiness in English (Integrated Reading and Writing). In addition, this course aligns with the Texas College and Career Readiness Standards (CCRS) in the areas of writing, reading, and research. This course is also in compliance with multiple Texas Essential Knowledge and Skills (TEKS) for English Language Arts and Reading, specifically English III and English IV. This course provides foundation work in the areas of reading and writing for the student who intends to advance to college level work.

COLLEGE PREPARATORY MATHEMATICS  
GRDES: 12  
1 Year  1 Credit  

PREREQUISITE: Counselor Approval  
This course is designed to increase the college readiness of current high school students in Mathematics. This course is also in compliance with multiple Texas Essential Knowledge and Skills (TEKS) for Mathematics, including Algebra 1, Algebra 2, and Geometry. Successful completion of the course and the final exam will result in student readiness for entry-level college Mathematics.
CAREER & TECHNICAL EDUCATION: “LEARNING BY DOING”

CTE programs are designed to prepare our students for high-wage, high-skill, and high-demand careers after they graduate from high school. We want students to pursue their interests and discover the opportunities they may not have known about prior to taking their CTE courses. Our programs enable students to have one of three options: become certified or licensed in a particular skill, gain entry-level employment, and/or continue their education in post-secondary study. CTE courses fall under three Endorsements recognized by the State of Texas which satisfy requirements for graduation under the Foundations Program. Within each Endorsement are several Career Cluster pathways, which are similar to occupations, and students take a coherent sequence of courses that prepare him/her for the specific field.

Sherman ISD offers CTE courses in the following Career Clusters:

**Business and Industry**
- Advanced Journalism (Non-CTE)
- Agriculture, Food, and Natural Resources
- Arts, A/V Technology, and Communications
- Architecture and Construction
- Business Management and Administration
  - Finance
  - Hospitality and Tourism
- Information Technology
  - Manufacturing
  - Marketing

**Human Services**
- Education and Training
- Government and Public Administration
  - Health Science
  - Human Services
- Law, Public Safety, Corrections, and Security

**Science, Technology, Engineering and Math (STEM)**
- Science, Technology, Engineering, and Math

All programs offer Industry-Standard Certifications!
***ADVANCED JOURNALISM***

PHOTOJOURNALISM 1
GRADES: 9-12
PREREQUISITE: None
1 Semester (Fall) .5 Credit
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. It would be to the student’s advantage to have a personal camera for use inside and outside of the classroom as course-provided devices are limited.

PHOTOJOURNALISM 2
GRADES: 9-12
PREREQUISITE: Photojournalism 1
1 Semester (Spring) .5 Credit
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. It would be to the student’s advantage to have a personal camera for use inside and outside of the classroom as course-provided devices are limited.

JOURNALISM 1
GRADES: 9-12
PREREQUISITE: None
1 Year 1 Credit
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.

ADVANCED JOURNALISM/YEARBOOK PRODUCTION 1, 2, 3
GRADES: 10-12
PREREQUISITE: Journalism 1 or Photojournalism 1 & 2
1 Year 1 Credit
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.

ADVANCED JOURNALISM/NEWSPAPER PRODUCTION 1, 2, 3
GRADES: 10-12
PREREQUISITE: Journalism 1 or Photojournalism 1 & 2
1 Year 1 Credit
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.
### Animal Science

<table>
<thead>
<tr>
<th>Grade</th>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>9th Grade</td>
<td>Principles of Agriculture, Food, and Natural Resources</td>
</tr>
<tr>
<td>10th Grade</td>
<td>Wildlife Management</td>
</tr>
<tr>
<td>11th Grade</td>
<td>Livestock Production</td>
</tr>
<tr>
<td>12th Grade</td>
<td>Advanced Animal Science</td>
</tr>
</tbody>
</table>

**Electives**
- Professional Communications, Business Information Management

**Career Options**
- Agriculture Product Sales, Livestock Sales, Animal Facility Manager, Ranch Manager, Agriculture Consultant

**Certifications**
- OSHA CareerSafe, Elanco Fundamentals of Animal Science

### Plant Science

<table>
<thead>
<tr>
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<th>Course</th>
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</thead>
<tbody>
<tr>
<td>9th Grade</td>
<td>Principles of Agriculture, Food, and Natural Resources</td>
</tr>
<tr>
<td>10th Grade</td>
<td>Floral Design</td>
</tr>
<tr>
<td>11th Grade</td>
<td>Horticultural Science</td>
</tr>
<tr>
<td>12th Grade</td>
<td>Practicum in Agriculture, Food, and Natural Resources (2 Credits)</td>
</tr>
</tbody>
</table>

**Electives**
- Professional Communications, Business Information Management

**Career Options**
- Floral Designer, Greenhouse Supervisor, Retail Floral Sales, Cut Flower Processor/Supervisor

**Certifications**
- OSHA CareerSafe, Benz School Principles of Floral Design, Bayer Plant Science

### Agriculture Mechanics

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<tbody>
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<td>9th Grade</td>
<td>Principles of Agriculture, Food, and Natural Resources</td>
</tr>
<tr>
<td>10th Grade</td>
<td>Agriculture Mechanics &amp; Metal Technologies</td>
</tr>
<tr>
<td>11th Grade</td>
<td>Agriculture Facilities Design &amp; Fabrication</td>
</tr>
<tr>
<td>12th Grade</td>
<td>Practicum in Agriculture, Food, and Natural Resources (2 Credits)</td>
</tr>
</tbody>
</table>

**Electives**
- Professional Communications, Business Information Management

**Career Options**
- Welder, Estimator, Facilities Specialist, Shop Foreman

**Certifications**
- OSHA CareerSafe, AWS Welding

### Veterinary Medical Applications

<table>
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<tr>
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<tbody>
<tr>
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<td>Principles of Agriculture, Food, and Natural Resources</td>
</tr>
<tr>
<td>10th Grade</td>
<td>Livestock Production</td>
</tr>
<tr>
<td>11th Grade</td>
<td>Veterinary Medical Applications AND Advanced Animal Science</td>
</tr>
<tr>
<td>12th Grade</td>
<td>Practicum in Agriculture, Food, and Natural Resources (2 Credits)</td>
</tr>
</tbody>
</table>

**Electives**
- Professional Communications, Business Information Management

**Career Options**
- Vet Assistant, Vet Lab Tech

**Certifications**
- OSHA CareerSafe, Elanco Veterinary Medical Applications, Elanco Fundamentals of Animal Science
***AGRICULTURE, FOOD, & NATURAL RESOURCES***

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

**GRADES:** 9-12  
**PREREQUISITE:** None  
**1 Year**  
**1 Credit**

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.

**FLORAL DESIGN (CTE)**

**GRADES:** 9-12  
**PREREQUISITE:** Principles of Agriculture, Food, & Natural Resources (if used to satisfy CTE endorsement route)  
**1 Year**  
**1 Credit**

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 toward Floral Design certification. (This course is also eligible for Fine Arts credit.)

**AGRICULTURAL MECHANICS & METAL TECHNOLOGIES (CTE)**

**GRADES:** 10-12  
**PREREQUISITE:** Principles of Agriculture, Food, & Natural Resources  
**ADVANCED CTE COURSE**

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. Students will gain knowledge with regard to future career opportunities, the education and training required for field entry, and industry expectations and certifications.

**HORTICULTURAL SCIENCE (CTE)**

**GRADES:** 10-12  
**PREREQUISITE:** Principles of Agriculture, Food, & Natural Resources  
**ADVANCED CTE COURSE**

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 toward Private Pesticide Applicator License.

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

**GRADE:** 10-12  
**PREREQUISITE:** Algebra 1 and a 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.)

**LIVESTOCK PRODUCTION (CTE)**

**GRADES:** 10-12  
**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.
WILDLIFE, FISHERIES, AND ECOLOGY MANAGEMENT (CTE)
GRADES: 10-12
1 Year 1 Credit
PREREQUISITE: Principles of Agriculture, Food, & Natural Resources
**ADVANCED CTE COURSE**
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 toward Texas Hunter Safety certification.

ADVANCED ANIMAL SCIENCE (CTE)
GRADES: 11-12
1 Year 1 Credit
PREREQUISITE: Biology, Chemistry or IPC, Algebra 1 and Geometry; Principles of Agriculture, Food, and Natural Resources (if used to satisfy CTE endorsement route)
**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.

VETERINARY MEDICAL APPLICATIONS (CTE)
GRADES: 11-12
1 Year 1 Credit
PREREQUISITE: Livestock Production
**ADVANCED CTE COURSE**
To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills and technologies in a variety of settings. Topics covered in this course include, but are not limited to, veterinary practices as they relate to both large and small animal species.

PRACTICUM IN AGRICULTURE, FOOD, & NATURAL RESOURCES (CTE)
GRADE: 11-12
1 Year (2 periods) 2 Credits
PREREQUISITE: 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.
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<tr>
<td>Career Pathway</td>
<td>Architecture</td>
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**Suggested Course of Study**

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<tr>
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<td>Principles of Architecture OR Principles of Construction</td>
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<tr>
<td>10th</td>
<td>Architectural Design 1</td>
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<td>11th</td>
<td>Architectural Design 2 (2 periods)</td>
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<tr>
<td>12th</td>
<td>Practicum in Architectural Design (2 periods)</td>
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<tr>
<td>Electives</td>
<td>Professional Communications, Business Information Management</td>
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**Career Options**

- Civil Engineering Technologist, Cost Estimator, Architectural Design Assistant, Drafter

**Certifications**

- OSHA CareerSafe, OSHA General Industry

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<td>Career Pathway</td>
<td>Building Maintenance (Building Engineering)</td>
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</tr>
<tr>
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**Career Options**

- Apartment Maintenance Technician, Building Engineer, Industry Maintenance Technician

**Certifications**

- OSHA CareerSafe, OSHA General Industry, NCCER, Building Maintenance Technician

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<td>Career Pathway</td>
<td>Building Maintenance (HVAC-R)</td>
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**Suggested Course of Study**

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<td>10th</td>
<td>Building Maintenance Technology 1 (2 periods)</td>
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<tr>
<td>11th</td>
<td>Heating, Ventilation, Air-Conditioning, and Refrigeration</td>
</tr>
<tr>
<td>12th</td>
<td>Practicum in Construction Technology (2 periods)</td>
</tr>
<tr>
<td>Electives</td>
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</table>

**Career Options**

- Apartment Maintenance Technician, HVAC-R Technician, Estimator, Job Foreman

**Certifications**

- OSHA CareerSafe, OSHA General Industry, NCCER, Building Maintenance Technician

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</table>

**Career Options**

- Construction Technician, Construction Foreman, Estimator

**Certifications**

- OSHA CareerSafe, OSHA General Industry, NCCER
PRINCIPLES OF ARCHITECTURE (CTE)  
**GRADE:** 9-12  
1 Year 1 Credit  
**PREREQUISITE:** None  
This course provides an overview to the architectural 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 toward being certified in the Chief Architect computerized drafting program.

PRINCIPLES OF CONSTRUCTION (CTE)  
**GRADE:** 9-12  
1 Year 1 Credit  
**PREREQUISITE:** None  
This course provides an overview to the construction fields. 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 toward being certified in the (NCCER) National Center for Construction Education and Research.

ARCHITECTURAL DESIGN 1 (CTE)  
**GRADE:** 10-12  
1 Year 1 Credit  
**PREREQUISITE:** Principles of Architecture or Principles of Construction  
**ADVANCED CTE COURSE**  
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 blueprints will be completed, both independently and collaboratively. Students will assemble an architectural design. Students will be working toward Chief Architect computerized drafting program certification.

BUILDING MAINTENANCE TECHNOLOGY 1 (CTE)  
**GRADE:** 10-12  
1 Year (2 periods) 2 Credits  
**PREREQUISITE:** Principles of Architecture or Principles of Construction  
**ADVANCED CTE COURSE**  
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.

CONSTRUCTION TECHNOLOGY 1 (CTE)  
**GRADE:** 10-12  
1 Year (2 periods) 2 Credits  
**PREREQUISITE:** Principles of Architecture or Principles of Construction  
**ADVANCED CTE COURSE**  
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.
HEATING, VENTILATION, AIR-CONDITIONING, & REFRIGERATION (HVAC-R) (CTE)

GRADES: 10-12
PREREQUISITE: Building Maintenance Technology 1
**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
PREREQUISITE: Principles of Architecture or Principles of Construction or Architectural Design 1, Algebra I and English 1
**ADVANCED CTE COURSE**
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 toward Chief Architect Certified Apprentice certification and AAFCS Pre Professional Certification in Interior Design.

ARCHITECTURAL DESIGN 2 (CTE)

GRADES: 11-12
PREREQUISITE: Architectural Design 1
**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.

BUILDING MAINTENANCE TECHNOLOGY 2 (CTE)

GRADES: 11-12
PREREQUISITE: Building Maintenance Technology
*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 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.

CONSTRUCTION TECHNOLOGY 2 (CTE)

GRADES: 11-12
PREREQUISITE: Construction Technology 1
**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.

INTERIOR DESIGN 2 (CTE)

GRADES: 11-12
PREREQUISITE: Interior Design 1, Geometry, and English II
**ADVANCED CTE COURSE**
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: 12
PREREQUISITE: Architectural Design 2
**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 TECHNOLOGY (CTE)
GRADE: 12
PREREQUISITE: Construction Technology 2
**ADVANCED CTE COURSE**
Practicum in Construction Technology is an occupationally specific course designed to provide technical and project-based instruction in construction technology and project management. Safety and career opportunities are included in addition to work ethics, codes/laws and regulations.

PRACTICUM IN INTERIOR DESIGN (CTE)
GRADE: 12
PREREQUISITE: Interior Design 2
**ADVANCED CTE COURSE**
This is an occupationally-specific course designed to provide classroom technical instruction. Job-specific skilled training is provided through the use of laboratory training or training plans by local training sponsors in areas compatible with identified career goals in interior design. In addition, students are expected to develop knowledge and skills in housing, furnishings, and equipment construction or management/services.
## Endorsement Business and Industry
### Cluster Arts, Audio/Video Technology & Communication
#### Career Pathway Animation

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#### Career Options
- 3D Modeler, Animator, Animation Director, Rigger, Effects Animator, Storyboard Artist, Texture Artist

#### Certifications
- OSHA CareerSafe, AutoDesk Maya Certified User, AutoDesk Maya Certified Professional

## Endorsement Business and Industry
### Cluster Arts, Audio/Video Technology & Communication
#### Career Pathway Commercial Photography

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#### Career Options
- Photography Assistant, Photographer, Photo Retoucher, Photo Studio Manager

#### Certifications
- OSHA CareerSafe, Adobe Certified Associate in Photoshop

## Endorsement Business and Industry
### Cluster Arts, Audio/Video Technology & Communication
#### Career Pathway Fashion Design

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#### Career Options
- Clothing Designer, Merchandiser, Buyer, Market Analyst, Fashion Journalist, Sales Associate

#### Certifications
- OSHA CareerSafe

## Endorsement Business and Industry
### Cluster Arts, Audio/Video Technology & Communication
#### Career Pathway Graphic Design and Illustration

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#### Career Options
- Graphic Designer, Advertising Artist, Advertising Art Director, Illustrator, Production Designer

#### Certifications
- OSHA CareerSafe, Adobe Certified Associate in Illustrator
***ARTS, AUDIO/VIDEO TECHNOLOGY & COMMUNICATION***

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

**GRADES:** 9-12

**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.

**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.

**ANIMATION 1 (CTE)**

**GRADES:** 10-12

**PREREQUISITE:** 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 toward the completion of a few basic animated short movies.

**AUDIO/VIDEO PRODUCTION 1 (CTE)**

**GRADES:** 10-12

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

**ADVANCED CTE COURSE**

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.

**COMMERCIAL PHOTOGRAPHY 1 (CTE)**

**GRADES:** 10-12

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

**ADVANCED CTE COURSE**

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.
**FASHION DESIGN 1 (CTE)**
GRADES: 10-12 1 Year 1 Credit
PREREQUISITE: **ADVANCED CTE COURSE**
Tourism or Principles of Human Services
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 tye-dye, design a t-shirt, and sew a project.

**GRAPHIC DESIGN & ILLUSTRATION 1 (CTE)**
GRADES: 10-12 1 Year 1 Credit
PREREQUISITE: **ADVANCED CTE COURSE**
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.

**ANIMATION 2 WITH LAB (CTE)**
GRADES: 11-12 1 Year (2 periods) 2 Credits
PREREQUISITE: 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 toward 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.

**AUDIO/VIDEO PRODUCTION 2 WITH LAB (CTE)**
GRADES: 11-12 1 Year (2 periods) 2 Credits
PREREQUISITE: 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 qualify 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.

**COMMERCIAL PHOTOGRAPHY 2 WITH LAB (CTE)**
GRADES: 11-12 1 Year 1 Credit
PREREQUISITE: 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.

**GRAPHIC DESIGN & ILLUSTRATION 2 WITH LAB (CTE)**
GRADES: 11-12 1 Year (2 periods) 2 Credits
PREREQUISITE: 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 toward 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.

**FASHION DESIGN 2 WITH LAB (CTE)**
GRADES: 11-12 1 Year (2 periods) 2 Credits
PREREQUISITE: 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 ANIMATION (CTE)**
GRADES: 12
PREREQUISITE: Animation 2
**ADVANCED CTE COURSE**
Students in Practicum in Animation build on concepts learned in Animation 2. Students are expected to develop an understanding of the Animation industry with a focus on applying pre-production, production, and post-production animated products in a professional environment. Instruction will be delivered through lab-based classroom experiences and career preparation opportunities.

**PRACTICUM IN AUDIO/VIDEO PRODUCTION (CTE)**
GRADES: 12
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.

**PRACTICUM IN GRAPHIC DESIGN & ILLUSTRATION (CTE)**
GRADES: 12
PREREQUISITE: 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.

**PRACTICUM IN COMMERCIAL PHOTOGRAPHY (CTE)**
GRADES: 12
PREREQUISITE: 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.

**PRACTICUM IN FASHION DESIGN (CTE)**
GRADES: 11-12
PREREQUISITE: 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**

**Endorsement** Business and Industry  
**Cluster** Business Management and Administration  
**Career Pathway** Business Administration  
**Suggested Course of Study**

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<tr>
<td>Electives</td>
<td>Accounting 1, Principles of IT</td>
</tr>
<tr>
<td>Career Options</td>
<td>Office Manager, Bookkeeper, Data Entry Specialist</td>
</tr>
<tr>
<td>Certifications</td>
<td>OSHA CareerSafe, Microsoft Office User Specialist - Word, Excel</td>
</tr>
</tbody>
</table>

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**Endorsement** Business and Industry  
**Cluster** Business Management and Administration  
**Career Pathway** Information Systems  
**Suggested Course of Study**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>Principles of Business, Marketing, and Finance OR any other CTE Principles course</td>
</tr>
<tr>
<td>10th</td>
<td>Business Information Management 1</td>
</tr>
<tr>
<td>11th</td>
<td>Business Information Management 2</td>
</tr>
<tr>
<td>12th</td>
<td>Practicum in Business Management (2 periods)</td>
</tr>
<tr>
<td>Electives</td>
<td>Professional Communications, Principles of IT</td>
</tr>
<tr>
<td>Career Options</td>
<td>Data Entry Specialist, Technology Coordinator, Data Analyst</td>
</tr>
<tr>
<td>Certifications</td>
<td>OSHA CareerSafe, Microsoft Office User Specialist - Word, Excel, PowerPoint, Access</td>
</tr>
</tbody>
</table>

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**Endorsement** Business and Industry  
**Cluster** Business Management and Administration  
**Career Pathway** Management  
**Suggested Course of Study**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>Principles of Business, Marketing, and Finance OR any other CTE Principles course</td>
</tr>
<tr>
<td>10th</td>
<td>Business Law OR Global Business AND Professional Communications</td>
</tr>
<tr>
<td>11th</td>
<td>Business Management (2 periods)</td>
</tr>
<tr>
<td>12th</td>
<td>Practicum in Business Management (2 periods)</td>
</tr>
<tr>
<td>Electives</td>
<td>Business Information Management, Practicum in IT</td>
</tr>
<tr>
<td>Career Options</td>
<td>Office Manager, Billing Specialist, Sales Representative</td>
</tr>
<tr>
<td>Certifications</td>
<td>OSHA CareerSafe</td>
</tr>
</tbody>
</table>

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**PRINCIPLES OF BUSINESS, MARKETING & FINANCE (CTE)**  
**GRADES:** 9-12  
**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  
**PREREQUISITE:** Principles of Business, Marketing, and Finance  
**ADVANCED CTE COURSE**  
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 toward Microsoft Office Power Point and Word certifications.

### BUSINESS LAW (CTE)
**GRADES:** 10-12  
**PREREQUISITE:** 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.

### GLOBAL BUSINESS (CTE)
**GRADES:** 10-12  
**PREREQUISITE:** Principles of Business, Marketing & Finance  
**ADVANCED CTE COURSE**  
Global business is designed for students to analyze global trade theories, international monetary systems, trade policies, politics, and laws related to global business as well as cultural issues, logistics, and international human resource management.

### BUSINESS INFORMATION MANAGEMENT 2 (CTE)
**GRADES:** 11-12  
**PREREQUISITE:** 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 toward Microsoft Office Power Point, Word, Excel & Access certifications.

### BUSINESS MANAGEMENT WITH LAB (CTE)
**GRADES:** 11-12  
**PREREQUISITE:** 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 toward OSHA safety certification.

### PRACTICUM IN BUSINESS MANAGEMENT (CTE)
**GRADE:** 11-12  
**PREREQUISITE:** 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 toward OSHA safety certification.
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.

**ACCOUNTING 1 (CTE)**

**Endorsement** Business and Industry  
**Cluster** Finance  
**Career Pathway** Accounting

**Suggested Course of Study**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>Principles of Business, Marketing, and Finance</td>
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<tr>
<td>10th</td>
<td>Accounting 1</td>
</tr>
<tr>
<td>11th</td>
<td>Accounting 2</td>
</tr>
<tr>
<td>12th</td>
<td>Statistics and Business Decision Making</td>
</tr>
<tr>
<td>Electives</td>
<td>Professional Communications, Business Information Management</td>
</tr>
</tbody>
</table>

**Career Options** Accountant, Accounting Assistant, Auditor, Bookkeeper, Account Manager  
**Certifications** OSHA CareerSafe, Microsoft Office User Specialist - Excel

**BANKING AND FINANCIAL SERVICES (CTE)**

**Endorsement** Business and Industry  
**Cluster** Finance

**Suggested Course of Study**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>Principles of Business, Marketing, and Finance</td>
</tr>
<tr>
<td>10th</td>
<td>Money Matters OR Banking and Financial Services AND Professional Communications</td>
</tr>
<tr>
<td>11th</td>
<td>Financial Math</td>
</tr>
<tr>
<td>12th</td>
<td>Statistics and Business Decision Making</td>
</tr>
<tr>
<td>Electives</td>
<td>Business Information Management</td>
</tr>
</tbody>
</table>

**Career Options** Bank Teller, Finance Assistant, Office Manager  
**Certifications** OSHA CareerSafe
**MONEY MATTERS (CTE)**

**GRADES:** 10-12

**PREREQUISITE:** Principles of Business, Marketing, & Finance

1 Year 1 Credit

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.

**ACCOUNTING 2 (CTE)**

**GRADES:** 11-12

**PREREQUISITE:** 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.

**FINANCIAL MATHEMATICS (CTE)**

**GRADE:** 11-12

**PREREQUISITE:** Algebra 1 and Principles of Business, Finance, and Marketing (if used to satisfy CTE endorsement route)

**ADVANCED CTE COURSE**

Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, paper and pencil, and technology and techniques such as mental math, estimation, and number sense to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication. (This course is also listed in the Mathematics section.)

**STATISTICS AND BUSINESS DECISION MAKING (CTE)**

**GRADES:** 11-12

**PREREQUISITE:** Algebra 2 and Principles of Business, Marketing, and Finance (if used to satisfy CTE endorsement route)

**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.)
### Endorsement | Business and Industry
---|---
### Cluster | Hospitality and Tourism
### Career Pathway | Culinary Arts/Restaurant Management
### Suggested Course of Study
#### 9th Grade  | Principles of Hospitality and Tourism OR Principles of Human Services
#### 10th Grade | Introduction to Culinary Arts
#### 11th Grade | Culinary Arts (2 periods)
#### 12th Grade | Food Science
### Electives  | Professional Communications, Business Information Management
### Career Options | Restaurant Manager, Caterer, Banquet Manager, Kitchen Manager
### Certifications | OSHA CareerSafe, ServSafe, Food Handler, Food Manager

**Endorsement | Business and Industry
---|---
### Cluster | Hospitality and Tourism
### Career Pathway | Professional Culinary Arts
### Suggested Course of Study
#### 9th Grade  | Principles of Hospitality and Tourism
#### 10th Grade | Culinary Arts (2 periods)
#### 11th Grade | Advanced Culinary Arts (2 periods)
#### 12th Grade | Practicum in Culinary Arts (2 periods)
### Electives  | Professional Communications, Business Information Management
### Career Options | Executive Chef, Specialty Chef, Cook, Kitchen Manager
### Certifications | OSHA CareerSafe, ServSafe, Food Handler, Food Manager

### ***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.

**INTRODUCTION TO CULINARY ARTS (CTE)**

| GRADES: 10-12 | 1 Year | 1 Credit |
---|---|---|
### PREREQUISITE: Principles of Hospitality & Tourism
**ADVANCED CTE COURSE**
Introduction to Culinary Arts will emphasize the principles of planning, organizing, staffing, and controlling the management of a variety of food service operations. The course will provide insight into restaurant operations, food production skills, and hospitality skills. 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.

**CULINARY ARTS (CTE)**

| GRADES: 10-12 | 1 Year (2 periods) | 2 Credits |
---|---|---|
### 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.
ADVANCED CULINARY ARTS (CTE)  
**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 SCIENCE (CTE)  
**ADVANCED CTE COURSE**  
Food Science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public. 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. A lab book may be required for formal lab write-ups.

PRACTICUM IN CULINARY ARTS (CTE)  
**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.
**PRINCIPLES OF INFORMATION TECHNOLOGY (CTE)**

**GRADES:** 9-12

**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.

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**Endorsement** | Business and Industry  
**Cluster** | Information Technology  
**Career Pathway** | **Hardware and Network Support**

| **Suggested Course of Study** |  
| **9th Grade** | Principles of Information Technology  
| **10th Grade** | Computer Maintenance  
| **11th Grade** | Networking  
| **12th Grade** | Computer Technician Practicum (2) or Practicum in Information Technology (2)  
| **Electives** | Professional Communications, Business Information Management  

| **Career Options** | Help Desk Analyst, Computer/Network Technician, Systems Analyst, Help Desk Supervisor  
| **Certifications** | CompTIA IT Fundamentals, A+, Network+, ITIL Foundation  

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**Endorsement** | Business and Industry  
**Cluster** | Information Technology  
**Career Pathway** | **Software Development**

| **Suggested Course of Study** |  
| **9th Grade** | Principles of Information Technology  
| **10th Grade** | Computer Programming 1 Honors  
| **11th Grade** | Computer Programming 2 Honors OR AP Computer Science  
| **12th Grade** | Practicum in Information Technology (2 periods)  
| **Electives** | Professional Communications, Business Information Management  

| **Career Options** | Computer Programmer, Business Analyst, Software Engineering Technician  
| **Certifications** | IC3, CompTIA IT Fundamentals, Oracle Certified Associate - Java SE  

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**Endorsement** | Business and Industry  
**Cluster** | Information Technology  
**Career Pathway** | **Web Development/Cybersecurity**

| **Suggested Course of Study** |  
| **9th Grade** | Principles of Information Technology  
| **10th Grade** | Digital Media  
| **11th Grade** | Web Technologies  
| **12th Grade** | Practicum in Information Technology (2 periods)  
| **Electives** | Professional Communications, Business Information Management  

| **Career Options** | Web Developer, Security Analyst, Webmaster  
| **Certifications** | IC3, CompTIA Security+  

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**///INFORMATION TECHNOLOGY///**
**DIGITAL MEDIA (CTE)**

**PREREQUISITE:** Principles of Information Technology

**ADVANCED CTE COURSE**

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)**

**PREREQUISITE:** Principles of Information Technology

**ADVANCED CTE COURSE**

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.

**COMPUTER PROGRAMMING 1 HONORS (CTE)**

**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 toward IC3 Internet Core Certification.

**COMPUTER PROGRAMMING 2 HONORS (CTE)**

**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 toward IC3 Internet Core Certification and Oracle Java Associate certification.

**NETWORKING (CTE)**

**PREREQUISITE:** 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)**

**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 toward Adobe Dreamweaver certification.
**PRACTICUM IN INFORMATION TECHNOLOGY (IT) (CTE)**

**GRADES: 12**

**PREREQUISITE:** Minimum of two credits from the courses in the Information Technology cluster

**1 Year (2 periods) 2 Credits**

**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.

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**COMPUTER TECHNICIAN PRACTICUM (CTE)**

**GRADES: 12**

**PREREQUISITE:** Computer Maintenance

**1 Year (2 periods) 2 Credits**

**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.
<table>
<thead>
<tr>
<th>Endorsement</th>
<th>Business and Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Career Pathway</td>
<td>Advanced Manufacturing Systems (Dual-Credit)</td>
</tr>
</tbody>
</table>

**Suggested Course of Study**

<table>
<thead>
<tr>
<th>Grade</th>
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</tr>
</thead>
<tbody>
<tr>
<td>9th Grade</td>
<td>Principles of Manufacturing OR Principles of AFNR OR Principles of Construction</td>
</tr>
<tr>
<td>10th Grade</td>
<td>Manufacturing Engineering Technology 1 AND Metal Fabrication and Machining 1 (3 periods at Grayson)</td>
</tr>
<tr>
<td>11th Grade</td>
<td>Manufacturing Engineering Technology 2 AND Metal Fabrication and Machining 2 (3 periods at Grayson)</td>
</tr>
<tr>
<td>12th Grade</td>
<td>Professional Communications, Business Information Management</td>
</tr>
</tbody>
</table>

**Career Options**

- Manufacturing Specialist, Production Supervisor, Line Technician, Shop Foreman

**Certifications**

- OSHA CareerSafe, OSHA General Industry, Grayson Basic Manufacturing and Advanced Manufacturing Cert

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<tbody>
<tr>
<td>Cluster</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Career Pathway</td>
<td>Industrial Maintenance (Dual-Credit)</td>
</tr>
</tbody>
</table>

**Suggested Course of Study**

<table>
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<th>Grade</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th Grade</td>
<td>Principles of Manufacturing OR Principles of AFNR OR Principles of Construction</td>
</tr>
<tr>
<td>10th Grade</td>
<td>Ag Mechanics and Metal Technologies</td>
</tr>
<tr>
<td>11th Grade</td>
<td>Precision Metals Manufacturing (2 periods)</td>
</tr>
<tr>
<td>12th Grade</td>
<td>Practicum in Manufacturing AND Extended Practicum in Manufacturing (3 periods at Grayson)</td>
</tr>
<tr>
<td>Electives</td>
<td>Professional Communications, Business Information Management</td>
</tr>
</tbody>
</table>

**Career Options**

- Industrial Maintenance Specialist, Line Lead, Industrial Technician, Maintenance Supervisor

**Certifications**

- OSHA CareerSafe, OSHA General Industry, Grayson Industrial Maintenance Cert

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<table>
<thead>
<tr>
<th>Endorsement</th>
<th>Business and Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Career Pathway</td>
<td>Welding (Dual-Credit)</td>
</tr>
</tbody>
</table>

**Suggested Course of Study**

<table>
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</thead>
<tbody>
<tr>
<td>9th Grade</td>
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</tr>
<tr>
<td>10th Grade</td>
<td>Ag Mechanics and Metal Technologies</td>
</tr>
<tr>
<td>11th Grade</td>
<td>Introduction to Welding AND Welding 1 (3 periods at Grayson)</td>
</tr>
<tr>
<td>12th Grade</td>
<td>Welding 2 with Lab (3 periods at Grayson)</td>
</tr>
<tr>
<td>Electives</td>
<td>Professional Communications, Business Information Management</td>
</tr>
</tbody>
</table>

**Career Options**

- Welder, Welding Inspector, Shop Foreman

**Certifications**

- OSHA CareerSafe, OSHA General Industry, AWS
**MANUFACTURING**

**PRINCIPLES OF MANUFACTURING (CTE)**
GRADES: 9-12
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 1 (CTE)**
GRADES: 10-12
PREREQUISITE: Principles of Manufacturing or Principles of Architecture and Construction or Principles of Agriculture, Food, and Natural Resources

**ADVANCED CTE COURSE**
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.

**MANUFACTURING ENGINEERING TECHNOLOGY 1 & METAL FABRICATION/MACHINING 1 (CTE)**
GRADES: 11-12
PREREQUISITE: Precision Metal Manufacturing 1

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.

**MANUFACTURING ENGINEERING TECHNOLOGY 1 & METAL FABRICATION/MACHINING 2 (CTE)**
GRADES: 12
PREREQUISITE: Advanced Precision Metal Manufacturing

In Manufacturing Engineering 2, students gain additional 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.

**INTRODUCTION TO WELDING & WELDING 1 (CTE)**
GRADES: 11-12
PREREQUISITE: Precision Metal Manufacturing (preferred) or 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. 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.
**WELDING 2 WITH LAB (CTE)**

**GRADES: 12**

**PREREQUISITE:** Introduction to Welding & Welding 1

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.

**PRACTICUM IN MANUFACTURING & EXTENDED PRACTICUM IN MANUFACTURING (CTE)**

**GRADES: 12**

**PREREQUISITE:** Precision Metal Manufacturing (preferred) or Principles of Manufacturing or Principles of Architecture and Construction or Principles of Agriculture, Food, and Natural Resources and IMT Application Process

Students will participate in the Grayson College Industrial Maintenance Technology 1-year certificate program. Students will learn basic machine troubleshooting, logic controllers, and basic electronics during classwork at Grayson College. Students will be on-site at a local manufacturer one day per week for on-the-job training.
PRINCIPLES OF BUSINESS, MARKETING & FINANCE (CTE)
GRADES: 9-12
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.

ADVERTISING (CTE)
GRADES: 10-12
PREREQUISITE: Principles of Business, Marketing & Finance
**ADVANCED CTE COURSE**
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
PREREQUISITE: Principles of Business, Marketing & Finance
**ADVANCED CTE COURSE**
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.
FASHION MARKETING (CTE)  
GRADES: 10-12  
PREREQUISITE: Principles of Business, Marketing & Finance  
**ADVANCED CTE COURSE**  
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.

SPORTS AND ENTERTAINMENT MARKETING (CTE)  
GRADES: 10-12  
PREREQUISITE: Principles of Business, Marketing & Finance  
**ADVANCED CTE COURSE**  
Sports and Entertainment Marketing will provide students with a thorough understanding of the marketing concepts and theories that apply to sports and entertainment. The areas this course will cover include basic marketing concepts, publicity, sponsorship, endorsements, licensing, branding, event marketing, promotions, and sports/entertainment marketing strategies.

ADVANCED MARKETING (CTE)  
GRADES: 11-12  
PREREQUISITE: Principles of Business, Marketing & Finance and two additional semester courses from the Marketing career cluster  
**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.

PRACTICUM IN MARKETING (CTE)  
GRADES: 12  
PREREQUISITE: Advanced Marketing  
**ADVANCED CTE COURSE**  
Pacticum in Marketing is a continuation of Advanced Marketing. Students will be responsible for creating and implementing projects and marketing tasks 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. Students will be responsible for direction of The Claw school store.
***EDUCATION & TRAINING***

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

**GRADES:** 9-12

**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 the 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

**PREREQUISITE:** Principles of Education & Training or Principles of Human Services

**ADVANCED CTE COURSE**

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.

**INSTRUCTIONAL PRACTICES (Teaching Interns 1) (CTE)**

**GRADES:** 10-12

**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 toward CPR/First Aid, start AAFCS Pre Professional Certification in Education, and start Educational Aide certifications.
PRACTICUM IN EDUCATION AND TRAINING (Teaching Interns 2) (CTE)

GRADE: 11-12
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 toward CPR/First Aid, AAFCS Pre Professional Certification in Education, and Educational Aide certifications.

PRACTICUM IN EDUCATION AND TRAINING 2 (CTE)

GRADE: 12
PREREQUISITE: 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 toward CPR/First Aid, AAFCS Pre Professional Certification in Education, and Educational Aide certifications.
***GOVERNMENT & PUBLIC ADMINISTRATION***

**PRINCIPLES OF GOVERNMENT & PUBLIC ADMINISTRATION (CTE)**
GRADERS: 9-11
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)**
GRADERS: 10-12
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)**
GRADERS: 11-12
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)**
GRADERS: 11-12
PREREQUISITE: Political Science 1
**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
PREREQUISITE: Political Science 1
**ADVANCED CTE COURSE**
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
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 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.
### Endorsement: Human Services  
#### Cluster: Health Science  
#### Career Pathway: Health Science Studies

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<tr>
<th>Grade</th>
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<tbody>
<tr>
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<td>10th</td>
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<td>11th</td>
<td>Health Science Theory AND Anatomy &amp; Physiology</td>
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<tr>
<td>12th</td>
<td>Practicum in Health Science 1 (2 periods)</td>
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#### Electives:  
- Professional Communications, Business Information Management

#### Career Options:  
- Medical Assistant, Medical Office Manager, Health Science Student

#### Certifications:  
- American Heart Association First Aid and CPR for Healthcare Providers

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### Endorsement: Human Services  
#### Cluster: Health Science  
#### Career Pathway: Clinical Care (Dual-Credit)

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<tr>
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<tr>
<td>10th</td>
<td>Medical Terminology AND Health Science Theory</td>
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<tr>
<td>11th</td>
<td>Practicum in Health Science 1 (2 periods)</td>
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<tr>
<td>12th</td>
<td>Practicum in Health Science 2 (2 periods)</td>
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</tbody>
</table>

#### Electives:  
- Professional Communications, Business Information Management

#### Career Options:  
- Nurse's Aide, Patient Care Technician, Medical Office Manager, LVN or RN Health Science Student

#### Certifications:  
- American Heart Association First Aid and CPR for Healthcare Providers, CNA, PCT, Phlebotomy

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### Endorsement: Human Services  
#### Cluster: Health Science  
#### Career Pathway: Medical Lab Prep

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<td>Health Science Theory AND Pathophysiology</td>
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<tr>
<td>12th</td>
<td>Medical Microbiology AND Practicum in Health Science 1 (2 periods)</td>
</tr>
</tbody>
</table>

#### Electives:  
- Professional Communications, Business Information Management

#### Career Options:  
- Medical Lab Assistant, Medical Lab Technologist Trainee, Lab Supervisor

#### Certifications:  
- American Heart Association First Aid and CPR for Healthcare Providers

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### Endorsement: Human Services  
#### Cluster: Health Science  
#### Career Pathway: Pharmacy Technician

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<td>12th</td>
<td>Practicum in Health Science 1 (2 periods)</td>
</tr>
</tbody>
</table>

#### Electives:  
- Professional Communications, Business Information Management

#### Career Options:  
- Pharmacy Assistant, Pharmacy Cashier, Medication Aide, Pharmacy Supervisor

#### Certifications:  
- American Heart Association First Aid and CPR for Healthcare Providers, Pharmacy Technician
**HEALTH SCIENCE**

**PRINCIPLES OF HEALTH SCIENCE (CTE)**
GRADES: 9-11  
PREREQUISITE: None  
1 Year 1 Credit  
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.

**ANATOMY & PHYSIOLOGY OF HUMAN SYSTEMS (CTE)**
GRADES: 10-12  
PREREQUISITE: Biology, Chemistry and one additional science credit  
1 Year 1 Credit  
**ADVANCED CTE COURSE**
Students will study 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 is 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. A lab book may be required for formal lab write-ups. May be used as a 4th year science.

**HEALTH SCIENCE THEORY (CTE)**
GRADE: 10-12  
PREREQUISITE: Principles of Health Science and Biology or concurrent  
1 Year 1 Credit  
**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.

**MEDICAL MICROBIOLOGY (CTE)**
GRADES: 10-12  
PREREQUISITE: Biology, Chemistry, Physics (concurrent)  
1 Year 1 Credit  
**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.)

**MEDICAL TERMINOLOGY (CTE)**
GRADES: 10-12  
PREREQUISITE: Principles of Health Science  
1 Year 1 Credit  
**ADVANCED CTE COURSE**
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.

**PATHOPHYSIOLOGY (CTE)**
GRADES: 11-12  
PREREQUISITE: Biology, Chemistry, Physics (concurrent)  
1 Year 1 Credit  
**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.)
PHARMACOLOGY (CTE)
GRADE: 11-12
PREREQUISITE: Principles of Health Science, Biology, Chemistry
**ADVANCED CTE COURSE**
Pharmacology is a study of how natural and synthetic agents such as drugs affect biological systems. Knowledge of the properties of therapeutic agents is vital in providing quality health care.

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. Some students will also receive training in Pharmacy Technician studies.

PRACTICUM IN HEALTH SCIENCE 2 (CTE)
GRADE: 12
PREREQUISITE: Practicum in Health Science 1
**ADVANCED CTE COURSE**
Practicum in Health Science 2 is a continuation of Practicum in Health Science 1. This course is designed to provide for the advancement 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. Students will also have the opportunity to earn credentials at Grayson College as a Certified Nurse’s Aide and Patient Care Technician (with Phlebotomy certification.)
***HUMAN SERVICES***

**PRINCIPLES OF HUMAN SERVICES (CTE)**

**GRADES:** 9-12

**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.
**CHILD DEVELOPMENT (CTE)**
GRADES: 10-12
PREREQUISITE: Principles of Human Services or Principles of Education & Training
**ADVANCED CTE COURSE**
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
PREREQUISITE: Principles of Human Services or Principles of Education & Training
**ADVANCED CTE COURSE**
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.

**COUNSELING AND MENTAL HEALTH (CTE)**
GRADES: 10-12
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.

**INTERPERSONAL STUDIES (CTE)**
GRADES: 10-12
PREREQUISITE: Principles of Human Services or Principles of Education & Training
**ADVANCED CTE COURSE**
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.

**LIFETIME NUTRITION AND WELLNESS (CTE)**
GRADES: 10-12
PREREQUISITE: Principles of Hospitality & Tourism or Principles of Human Services, or Principles of Health Science
**ADVANCED CTE COURSE**
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.

**FAMILY AND COMMUNITY SERVICES/FCCLA LEADERSHIP**
GRADE: 11-12
PREREQUISITE: Application Process
**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 the 3D curriculum and character education program enhancing students’ organizational and leadership skills and characteristics. Students are expected to be members of Family, Career and Community Leaders of America and are to participate in other leadership or extracurricular activities.

**COSMETOLOGY 1 (CTE)**
GRADE: 11-12
PREREQUISITE: Principles of Human Services
**ADVANCED CTE COURSE**
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. Students are expected to have transportation arrangements since this class is held at Grayson College.
COSMETOLOGY 2 (CTE)
GRADE: 12
PREREQUISITE: Cosmetology 1
**ADVANCED CTE COURSE**
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. Students are expected to have transportation arrangements since this class is held at Grayson College.
PRINCIPLES OF LAW, PUBLIC SAFETY, CORRECTIONS, & SECURITY (CTE)

GRADERS: 9-12

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

GRADERS: 10-12

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

GRADERS: 11-12

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
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
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: 11-12
PREREQUISITE: Biology, Chemistry; Principles of Law, Public Safety, Corrections, and Security (if used to satisfy CTE endorsement route)
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. A lab book may be required to be kept for formal lab write-ups.
PRINCIPLES OF APPLIED ENGINEERING (CTE)
GRADES: 9-12
PREREQUISITE: None
1 Year 1 Credit
Principles of Applied Engineering 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 1 (CTE)
GRADES: 10-12
PREREQUISITE: Principles of Applied Engineering
1 Year 1 Credit
**ADVANCED CTE COURSE**
Students enrolled in this course will demonstrate knowledge and skills of the process of design as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software applications to complete assignments and projects. Through implementation of the design process, students will transfer advanced academic skills to component designs. Additionally, students explore career opportunities in engineering, technology, and drafting and what is required to gain and maintain employment.
ROBOTICS 1 (CTE)  
GRADES: 10-12  
PREREQUISITE: Principles of Applied Engineering  
**ADVANCED CTE COURSE**  
Students enrolled in this course will demonstrate knowledge and skills necessary for the robotic and automation industry. Through implementation of the design process, students will transfer advanced academic skills to component designs in a project-based environment. Students will build prototypes or use simulation software to test their designs. Additionally, students explore career opportunities, employer expectations, and educational needs in the robotic and automation industry. Students are encouraged to participate in Robotics competition each year.

ENGINEERING DESIGN AND PRESENTATION 2 (CTE)  
GRADES: 11-12  
PREREQUISITE: Engineering Design and Presentation 1  
**ADVANCED CTE COURSE**  
This course will provide students the opportunity to master computer software applications in a variety of engineering and technical fields. This course further develops the process of engineering thought and application of the design process.

ENGINEERING DESIGN AND PROBLEM SOLVING  
GRADES: 11-12  
PREQUISITES: Algebra 1, Geometry; Principles of Applied Engineering (if used to satisfy CTE endorsement route)  
**ADVANCED CTE COURSE**  
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. A lab book may be required for formal lab write-ups.

PRINCIPLES OF TECHNOLOGY  
GRADES: 11-12  
PREREQUISITE: Biology, Chemistry and Algebra 1 (Credit cannot be earned for both POT and Physics)  
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 experiments related to applied physics concepts.

PRACTICUM IN STEM (CTE)  
GRADE: 12  
PREREQUISITE: Principles of Applied Engineering and one additional CTE STEM credit  
**ADVANCED CTE COURSE**  
The practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.
### Sherman ISD 4 Year Distinguished Graduation Plan Worksheet

**Sherman ISD Foundation Distinguished Graduation Plan includes Endorsement requirements:**

- **4th Credit in Math & 4th Credit in Science**

<table>
<thead>
<tr>
<th>English Language Arts – 4 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ English I</td>
</tr>
<tr>
<td>☐ English II</td>
</tr>
<tr>
<td>☐ English III</td>
</tr>
<tr>
<td>☐ Adv. English</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics – 4 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Algebra I</td>
</tr>
<tr>
<td>☐ Geometry</td>
</tr>
<tr>
<td>☐ Algebra II</td>
</tr>
<tr>
<td>☐ Adv. Math</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Studies – 3 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ World History</td>
</tr>
<tr>
<td>☐ US History</td>
</tr>
<tr>
<td>☐ Government (.5)</td>
</tr>
<tr>
<td>☐ Economics (.5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Science – 4 Credits (Biology is req. for grad.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Biology</td>
</tr>
<tr>
<td>☐ Chemistry or Adv. Sci.</td>
</tr>
<tr>
<td>☐ Physics or Adv. Sci.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Foreign Language – 2 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Year 1</td>
</tr>
<tr>
<td>☐ Year 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fine Arts – 1 Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ (Lvl 1)</td>
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</table>

<table>
<thead>
<tr>
<th>Physical Education – 1 Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ (Lvl 1)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives-7 Credits Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MUST FOLLOW ENDORSEMENT REQUIREMENTS</strong></td>
</tr>
</tbody>
</table>

If following the **Business & Industry** or **Public Services** endorsement: Out of the 7 required electives, students must complete 4 CTE credits of which 2 must be in the same career cluster with the final course qualifying as an advanced CTE course. The remaining 3 electives credits may be CTE or Non-CTE.

<table>
<thead>
<tr>
<th><strong>Business &amp; Industry Advanced CTE in same Career Cluster</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 1.</td>
</tr>
<tr>
<td>☐ 2.</td>
</tr>
<tr>
<td>☐ 3.</td>
</tr>
<tr>
<td>☐ 4.</td>
</tr>
<tr>
<td>☐ 5.</td>
</tr>
<tr>
<td>☐ 6.</td>
</tr>
<tr>
<td>☐ 7.</td>
</tr>
</tbody>
</table>

### Multidisciplinary Studies: (3 Options)

**Option 1: 4X4 Plan**
Complete 4 credits in each of the 4 core subject areas: **Must include Physics OR Chemistry**:

- English IV
- 4th Social Studies
- 4th Science
- 4th Math

**Option 2:**
Complete 4 Dual credit courses to include one course in each core subject area:

- Math:
- Science:
- English:
- Social Stud.:

**Option 3:**
Complete 4 advanced CTE courses within or across any of the endorsement areas.

<table>
<thead>
<tr>
<th><strong>Arts and Humanities: (4 Options)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 1.</td>
</tr>
<tr>
<td>☐ 2.</td>
</tr>
<tr>
<td>☐ 3.</td>
</tr>
<tr>
<td>☐ 4.</td>
</tr>
</tbody>
</table>

### STEM (3 Options)

- Science, Technology, Engineering & Math
  - Must complete Algebra II, Chemistry and Physics as part of the foundation plan.
  - Algebra II
  - Physics
  - Chemistry
  - AND: Choose an Option: 1, 2, or 3
  - **Option 1:** Complete 4 CTE credits with 2 CTE credits within the same career cluster under the STEM endorsement. Note: The final credit must be an advanced CTE course within the STEM endorsement.

<table>
<thead>
<tr>
<th><strong>Public Services: (1 Option)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 1.</td>
</tr>
</tbody>
</table>

### Business & Industry: (2 Options)

**Option 1:**
Complete 4 CTE credits with 2 CTE credits within the same career cluster under the Business & Industry endorsement. Note: The final credit must be an advanced CTE course within the Business & Industry endorsement.

| ☐ 1.                            |
| ☐ 2.                            |
| ☐ 3.                            |

**Business & Industry Advanced CTE in same Career Cluster as one of the courses above.**

| ☐ 1.                            |

---

If following the **Business & Industry** or **Public Services** endorsement: Out of the 7 required electives, students must complete 4 CTE credits of which 2 must be in the same career cluster with the final course qualifying as an advanced CTE course. The remaining 3 electives credits may be CTE or Non-CTE.

**Endorsements (Career Pathways):**
Complete Requirements in left column with at least 1 option below.

- **STEM**
- **Business & Industry**
- **Arts & Humanities**
- **Public Services**
- **Multidisciplinary**
Student Name: ___________________________ ID: _______ Expected Graduation Date: _________

Assessments Required for Graduation:  ☐ English I: Reading & Writing (9th Grade)  ☐ Biology (9th / 10th Grade)
☐ Algebra I (9th Grade)  ☐ English II: Reading & Writing (10th Grade)  ☐ US History (11th Grade)

### Outstanding Performance(s) in:
- [ ] Dual Credit: 12 hours > 3.0
- [ ] Advanced Technical Credit (ATC)
- [ ] Earn a nationally or internationally recognized industry certification.
- [ ] Earn an Associate’s degree
- [ ] Advanced Placement Exams: Minimum Score > 3

### Test Scores:
- [ ] PSAT - (National Merit Recognitions)
- [ ] ACT-PLAN – College Readiness Benchmark
- [ ] SAT – CR and Math 1250
- [ ] ACT – Composite (w/o writing) 28

### Bilingualism and Biliteracy:
- **English Language Learners Only:**
  - *must satisfy both of the following:*
    - [ ] Participated in and met the Exit criteria for bilingual or English as a second language (ESL) program.
    - [ ] Scored at the Advanced High Level on the Texas English Language Proficiency Assessment (TELPAS).
- **Non-English Language Learners:**
  - *Must satisfy both of the following:*
    - [ ] Maintain a 3.0 (4pt scale) in all required ELA courses
    - [ ] Satisfy one of the following:
      - A. Complete 3 credits in the same foreign language with a minimum of a 3.0.
      - B. Score a 3 or higher on an AP exam in a language other than English.
      - C. Score Intermediate High or its equivalent on a national assessment of language proficiency in a language other than English.

### Performance Acknowledgement (Optional)

### Important Assessments

#### Advanced Placement (AP) Exams:
- **Test:**
- **Score:**
  - ________________
  - ________________
  - ________________
  - ________________

#### Post-Secondary Assessments:
- **PSAT:**
  - [ ] 10th grade Score: __________
  - [ ] 11th grade Score: __________
- **SAT:**
  - [ ] 1st attempt (11th Grade)
    - Date: ______ Score: ______
  - [ ] 2nd attempt (12th Grade)
    - Date: ______ Score: ______
- **ACT:**
  - [ ] 1st attempt (11th Grade)
    - Date: ______ Score: ______
  - [ ] 2nd attempt (12th Grade)
    - Date: ______ Score: ______
- **College Readiness – TSI**
  - [ ] Math Score: __________
  - [ ] Reading Score: __________
  - [ ] Writing Score: __________

### Post-Secondary Planning

#### College Visit Days:
- **11th Grade:** (2 Excused Absences)
  - College:
    - 1. ______ Date: ______
    - 2. ______ Date: ______
- **12th Grade:** (2 Excused Absences)
  - College:
    - 1. ______ Date: ______
    - 2. ______ Date: ______

#### Senior Conference with Counselor:
- Date: ______ Time: ______

### Post-Secondary Applications to consider:
- [ ] Community College
- [ ] Apply Texas Application
- [ ] Common Application
- [ ] Military Recruiter
- [ ] Technical School
- [ ] Internships

### Financial Aid
- [ ] FAFSA/TAFSA
- [ ] CSS Profile
- [ ] Scholarships
- [ ] Loans

### Getting Involved!

#### Extracurricular Activities:
- [ ] UIL Competition
- [ ] AG Competition
- [ ] Student Council
- [ ] Cheerleading/Drill Team
- [ ] Band/Flag Core
- [ ] Clubs
- [ ] Job Shadow
- [ ] Volunteer
- [ ] Other: __________________________

### Student Goals

#### Top 3 Career Interests:
1. __________________
2. __________________
3. __________________
4. __________________

#### Top 5 Post-Secondary Schools/Programs:
1. __________________
2. __________________
3. __________________
4. __________________
5. __________________

### Awards/Honors:

---

Student Signature: ___________________________ Date: __________

Parent Signature: ___________________________ Date: __________