## Farmersville ISD ACADEMIC PLANNING culpe 2023-2024

## Leadership Oriented

- Leads positivity regardless of position or title
- Demonstrates initiative and has a propensity to take action
- Is motivated towards continual improvement
- Can turn vision into reality through influence, planning, and perseverance
- Understands good leaders first must learn how to be good followers


## Effective Communicator

- Communicates with confidence in a variety of mediums including, speaking, writing, and technology
- Effectively operates within teams
- Digitally fluent and respectful in the use of social media
- Values others ideas and voices through listening and empathizing


## Community Minded

- Understands the importance of and participates in the democratic process
- Seeks to be generous with their time and resources.
- Values freedom, democracy, the constitution, and those who willingly protect it
- Committed to making positive contributions in all spheres of influence
- Develops meaningful and lasting relationships
- Treats other the way they want to be treated.
- Has a vision and a plan for life after graduation


## Character Strong

- Believes character traits such as honesty, integrity, gratitude, generosity, humility, and dependability are foundational to everything else
- Values hard work and its correlation to success
- Confronts challenges as opportunities and demonstrates perseverance and resilience


## Table of Contents

Purpose of the Academic Planning Guide ..... 4
9th Grade Checklist ..... 5
10th Grade Checklist ..... 6
11th Grade Checklist ..... 7
12th Grade Checklist ..... 8
Graduation Requirements, Endorsements, \& Distinctions ..... 9
Class of 2024, 2025, 2026, and 2027 Graduation Requirements ..... 9
Endorsements ..... 10
Graduation Distinctions ..... 10
Distinguished Level of Achievement. ..... 10
Performance Acknowledgements ..... 10
Honors Recognition ..... 10
Top Ten Percent ..... 10
Valedictorian \& Salutatorian ..... 10
Ranking for Early Graduates ..... 11
INDIVIDUAL CAREER \& ACADEMIC PLAN ..... 11
CAREER \& TECHNICAL EDUCATION PROGRAM OF STUDY COMPLETION ..... 11
CAREER \& TECHNICAL EDUCATION PROGRAM OF STUDY \& ..... 12
GRADUATION ENDORSEMENT ALIGNMENT ..... 12
GRADE LEVEL CLASSIFICATION ..... 14
CLASS RANK ..... 14
COURSE WEIGHTS FOR GPA CALCULATION ..... 15
WEIGHTED GPA COURSES ..... 15
COURSES NOT CALCULATED INTO GPA ..... 16
TRANSFER CREDIT ..... 16
HIGH SCHOOL COURSES END OF COURSE ASSESSMENTS ..... 16
COLLEGE AND UNIVERSITY ADMISSIONS ..... 16
SAT/ACT (SCHOLASTIC APTITUDE TEST AND AMERICAN COLLEGE TEST) ..... 17
PSAT (NATIONAL MERIT SCHOLARSHIP PROGRAM) ..... 17
SAT/ACT PREP ..... 17
TSIA (TEXAS SUCCESS INITIATIVE ASSESSMENT) ..... 17
NON-SCHEDULED PERIODS (EARLY RELEASE/LATE ARRIVAL) ..... 18
FINANCIAL AID FOR COLLEGE (FAFSA) ..... 18
THE TEXAS GRANT ..... 18
STUDENT ATHLETES ..... 18
DUAL CREDIT ..... 19
DUAL CREDIT ADMISSION CRITERIA ..... 19
WITHDRAWAL OR FAILURE OF DUAL CREDIT COURSES ..... 19
FARMERSVILLE HIGH SCHOOL ASSOCIATE OF SCIENCE DEGREE PLAN ..... 20
ADVANCED PLACEMENT \& HONORS CLASSES ..... 21
AP \& HONORS ADMISSION CRITERIA ..... 21
AP \& DUAL CREDIT TRANSFERABILITY ..... 21
COURSE DESCRIPTIONS ..... 22
ENGLISH LANGUAGE ARTS ..... 22
MATHEMATICS ..... 24
SCIENCE ..... 26
SOCIAL STUDIES ..... 29
FINE ARTS ..... 31
FOREIGN LANGUAGE ..... 33
PHYSICAL EDUCATION ..... 35
SPEECH ..... 35
CAREER AND TECHNICAL EDUCATION. ..... 36
BUSINESS MANAGEMENT ..... 45
DESIGN \& MULTIMEDIA ARTS ..... 50
ENGINEERING ..... 56
HEALTHCARE THERAPEUTIC ..... 60
WORK BASED LEARNING \& PRACTICUM EXPERIENCES ..... 66

## Purpose of the Academic Planning Guide

This guide has been prepared to allow you to select your courses for each year of high school. Farmersville ISD hopes that you will view your time at FHS as an opportunity to explore future career options and prepare yourself for success.

Your counselor is ready to assist you in developing and routinely evaluating your individual career and academic plan (ICAP). The ICAP will include your four-year high school plan including your choice of an exciting Career and Technical Education (CTE) program of study which will lead to a graduation endorsement. We want to encourage all farmers to begin to think about life after high school and choose a program of study that is related to your interest in a particular career.

A CTE program of study is a high school and post-secondary educational plan developed around a national career cluster that helps learners prepare for a career. A program of study is sequential and based on regional industry expectations and skill standards. Students can take classes in high school that will prepare them for college or job training, and their future career. Farmersville ISD CTE Programs of Study include Animal Science, Applied Agricultural Engineering, Business Management, Design \& Multimedia Arts, Digital Communications, Engineering, Healthcare Therapeutic (Medical Assisting), and Plant Science. Furthermore, the Business Management, Engineering, and Healthcare Therapeutic programs of study include dual credit through our partnership with Collin College. All CTE programs of study lead to the completion of one or more graduation endorsements such as Business \& Industry, Arts \& Humanities, STEM, or Human Services.

In alignment with our mission, FISD students will be prepared to fulfill their potential and dream big. This requires that students are not only prepared but equipped with the knowledge and plan for their next steps after high school. The guidance and counseling department is here for students and families to provide resources in career exploration and college planning. Students will graduate with a vision for life after graduation including a career choice and the steps required to achieve it. For the most up to date information and resources, please visit http://www.farmersvilleisd.net/counselors.

FISD Administration retains authority to modify or adjust all policies in this handbook.

## 4 Year College \& Career Readiness Plan

9th Grade Checklist
Freshman year, you will want to find out all of the things your school has to offer, become involved in activities, create your goals, and get off to the right start. We are here to help.
$\left.\left.\begin{array}{|l|l|}\hline \text { Fall } & \begin{array}{l}\text { Get involved } \\ \text { Extracurricular activities (both school and non-school sponsored) are an important part of } \\ \text { high school. Make the effort to get involved with groups, clubs, or teams that interest you. } \\ \text { These activities are fun, make you a well- rounded student, and help create your resume of } \\ \text { experiences for postsecondary applications. A complete list of clubs and organizations can } \\ \text { be found on the school websites. } \\ \text { Make the grade } \\ \text { Get off to a good start with your grades because they will impact your grade point average } \\ \text { (GPA) and class rank. Although college seems like a long way off right now, grades really } \\ \text { do count toward college admissions and scholarships. } \\ \text { At this stage in the game, you are laying the foundation for your high school career. } \\ \text { Freshman year is a time to establish your academic and extracurricular credentials. You } \\ \text { should also begin to explore options for your career or further education. }\end{array} \\ \hline \text { Winter } & \begin{array}{l}\text { Meet your counselor } \\ \text { Your counselor is ready and willing to help you make sense of your college and career } \\ \text { options. As soon as you can, set up a meeting to talk about your plans for high school and } \\ \text { the future. }\end{array} \\ \hline \begin{array}{l}\text { Explore your interests and possible careers } \\ \text { Discuss your skills and interests with your school counselor and take advantage of numerous } \\ \text { Career and Technical Education (CTE) opportunities at your school and at Farmersville High } \\ \text { School. }\end{array} \\ \hline \text { Spring/Summer } & \begin{array}{l}\text { Build your credentials }\end{array} \\ \text { Keep track of academic and extracurricular awards, community service achievements, and } \\ \text { anything else you participate in so it will be easier to remember later. It will come in handy } \\ \text { when you want to highlight your accomplishments-such as when you are filling out } \\ \text { college applications or creating a resume. } \\ \text { Start learning about colleges and careers } \\ \text { Look at the college and career information available in your counselor's office, school, and } \\ \text { public libraries. Use the internet to check out college and career websites. You may even } \\ \text { want to start a list of colleges that might interest you. }\end{array}\right\} \begin{array}{l}\text { Make summer count } \\ \text { There are plenty of ways to have fun and build your credentials during the summer such as } \\ \text { volunteering, getting a job, or signing up for an enrichment program. }\end{array}\right\}$

## 10th Grade Checklist

Sophomore year, you will want to stay on track with your high school classes and activities and begin to narrow down the plan for your future.

|  | Take a practice PSAT <br> Taking the PSAT as a sophomore will help prepare you for the real thing next year. Farmersville <br> ISD administers the PSAT to all 10 |
| :--- | :--- |
| Fall and 11th graders. |  |
|  | Stay on track with your courses <br> Work with your school counselor to make sure you are enrolled in the courses you need to <br> prepare you for college or a career. <br> Begin learning about the college admissions process <br> Get familiar with general college entrance requirements. The school counselor's office, the <br> library, college websites, and advice articles are all good sources of information. |
| Winter | Continue exploring potential careers <br> Explore your college options in more detail-research possible careers to learn about the tasks, <br> education, and training necessary for each occupation. |
| Take on new roles <br> Stay involved with your extracurricular activities and work toward leadership positions in the <br> activities you like best. Become involved in community service and other volunteer activities. <br> Build your postsecondary resume. |  |
| Practice your writing <br> You will need good writing skills no matter what path you pursue, so work on those skills now <br> to be prepared. Find a teacher or another adult who can advise and encourage you to write <br> well. |  |
| Spring/Summer | Get advice from your counselor <br> Meet with your school counselor to make sure you are staying on track. You can also discuss <br> your PSAT scores and ask about postsecondary enrollment options and Advanced Academics <br> courses. |
| Keep your grades up <br> It is so important to remain focused on doing well in your classes. Remember that your grades <br> affect your GPA and class rank-two factors that colleges consider in the admissions process. |  |
| Contact colleges that interest you |  |
| Write to schools and ask for more information about their academic requirements and any |  |
| programs or activities that you are interested in. It is especially important to start this process |  |
| now if you think you want to attend a military academy. |  |

## 11th Grade Checklist

Junior year is a key year in the college planning process because you will be taking standardized tests, narrowing down your college list, and learning more about financial aid. In addition, you should stay involved in your high school courses and activities.

|  | Take the PSAT <br> Taking the PSAT qualifies you for the National Merit Scholarship Program, which means you could <br> earn money for college. In addition, it is a good way to practice for the ACT and/or SAT. <br> Farmersville ISD offers the PSAT to all 10 and $11^{\text {th }}$ graders and provides the SAT to all 11 th <br> graders in the spring of their junior year. <br> Evaluate your postsecondary options <br> Now is the time to follow a more specific path. Decide whether you want to pursue full-time <br> employment, further education or training (such as a vocational-technical school, career college, <br> or two-year or four-year college), or a military career. If you are interested in attending a military <br> academy, talk to your school counselor about starting the application process now. <br> Make a college list <br> Your list of colleges should include schools that meet your most important criteria (for example, <br> size, location, cost, academic majors, or special programs). Consider each of these factors <br> according to their importance to you and develop a preliminary ranking of the schools on your list. <br> Make sure you are meeting any special NCAA requirements <br> If you want to play Division I or II sports in college, start the certification process and check with <br> your counselor to make sure you are taking a core curriculum that meets NCAA requirements. |
| :--- | :--- |
| Summer | Begin narrowing down your college choices <br> Make sure you have all the information you need about the colleges you are interested in (entrance <br> requirements, tuition, room and board costs, course offerings, student activities, financial aid, etc.). <br> Then, begin comparing the schools by the factors that are most important to you and rank your <br> choices. <br> Take standardized tests <br> Performance on the SAT or ACT is one of the most important criteria for college admission. <br> Register for and take the ACT or SAT. Be sure you have requested (either by mail or online) that <br> your test scores be sent to the colleges of your choice. Farmersville ISD offers the PSAT to all <br> 10th and 11th graders and provides the SAT to all 11th graders in the spring of their junior year. <br> Prepare a challenging schedule for senior year <br> Meet with your counselor to determine which classes you will take next year and to make sure |
| you are on track for graduation. Colleges do consider your senior year courses and grades, so |  |
| stick with a schedule that challenges you. |  |

## 12th Grade Checklist

Senior year is often an extremely busy time with schoolwork, activities, and special events. Be sure to stay on track with your college admissions process. Get organized, be aware of deadlines, and do not procrastinate.

|  | Finalize your college list <br> When applying to colllege, use the information you have gathered from college visits, interviews, and <br> your own research. It is okay to apply to colleges that you think will be more difficult to get accepted. <br> It is also important to put a few safety schools (where you are sure you will get in) on your list. Talk to <br> counselors, teachers, and parents about your final choices. <br> Submit financial aid forms <br> No matter your family's income level, the FAFSA/TASFA is your main priority for financial aid <br> purposes as it will determine how much you are expected to pay toward your college expenses. The <br> FAFSA/TAFSA form is required per House Bill 3 to meet graduation requirements. Students who <br> wish to submit an opt-out form need to see their high school counselor. More information can be <br> found at College for All Texans. <br> Take standardized tests <br> Register for and take the ACT and sAT. <br> Re sure you have requested your test scores be sent to the colleges of your choice. <br> Keep track of deadlines <br> You will be filling out many forms this year, so it is important to know which form is due when. Make a <br> calendar showing the application deadlines for admission, financial aid, and scholarships. Please <br> refer to the Farmersville ISD Local Scholarship deadline criteria. <br> Ask for letters of recommendation <br> Give letter of recommendation forms to the teachers you have chosen, along with stamped, <br> addressed envelopes (if needed) so your teachers can send them directly to the colleges. Be sure to <br> fill out your name and address and the school name on each form. Discuss your goals and ambitions <br> with your teachers so they will be more prepared to write about you. Be sure to write a thank you note <br> to each individual who recommended you. <br> Complete applications <br> Finish the application forms for your schools of interest. Proofread your applications and make extra <br> copies before you send them. Make sure you and your school's counseling office have sent all <br> necessary materials, including test scores, recommendations, transcripts, and application essays. <br> You should plan to get all this done before winter break so you will not be rushing to make deadlines. |
| :--- | :--- |
| Transcripts: |  |
| To request an official transcript for a college application, please email FHS Counselor, Jill Cooper |  |
| icooper@farmersvilleisd.org. |  |

## Graduation Requirements, Endorsements, \& Distinctions

Students shall graduate under the Foundation with Endorsement Plan and complete at least 26 credits. Students who begin grade 9 in the 2021-2022 school year or later are required to complete 28.0 credits. A student, after their sophomore year, may qualify for the Foundation Plan in which they will need 24 credits to graduate (see counselor for more information). All units for graduation shall be earned in grades 7-12. All graduates are awarded the same type of diploma. The Academic Achievement Record (transcript), rather than the diploma, records individual accomplishments, achievements, and courses completed.

Class of 2024, 2025, 2026, and 2027 Graduation Requirements

| Discipline | Foundation HSP* | Foundation HSP with Endorsements Class of 2024 | Foundation HSP with Endorsement Class of 2025, 2026, 2027 |
| :---: | :---: | :---: | :---: |
| English Language Arts | Four Credits <br> - English I <br> - English II <br> - English III <br> - Approved 4th English Course | Four Credits <br> - English I <br> - English II <br> - English III <br> - Approved 4th English Course | Four Credits <br> - English I <br> - English II <br> - English III <br> - Approved 4th English Course |
| Mathematics | Three Credits <br> - Algebra 1 <br> - Geometry <br> - Approved Advanced Math Course | Four Credits <br> - Algebra 1 <br> - Geometry <br> - Algebra 2 and <br> - Financial Math or <br> - Pre-Calculus or AP Pre-Calculus or <br> - AP Calculus or <br> - Approved Advanced Math Course | Four Credits <br> - Algebra 1 <br> - Geometry <br> - Algebra 2 and <br> - Financial Math or <br> - Pre-Calculus or AP Pre-Calculus or <br> - AP Calculus or <br> - Approved Advanced Math Course |
| Science | Three Credits <br> Biology Chemistry Advanced Science Course | Four Credits <br> - Biology <br> - Chemistry <br> - Physics or AP Physics or Principles of Technology <br> - Advanced Science Course | Four Credits <br> - Special Topics in Science or Honors Biology <br> - Biology <br> - Chemistry <br> - Physics or AP Physics or Principles of Technology <br> - Advanced Science Course |
| Social Studies | Three Credits <br> - World Geography or World History <br> - US History <br> - Government/Economics | Three Credits <br> - World Geography or World History <br> - US History <br> - Government/Economics | Three Credits <br> - World Geography or AP Human Geography or World History <br> - US History <br> - Government/Economics |
| Languages other than English | Two Credits from the same language | Two Credits from the same language | Two Credits from the same language |
| Physical Education | One Credit | One Credit | One Credit |
| Fine Arts | One Credit | One Credit | One Credit |
| Speech | One Half Credit ** | One Half Credit ** | One Half Credit** |
| Money Matters | One Half Credit ** | One Half Credit ** | One Half Credit** |
| BIM I or II | One Credit** |  | One Credit** |
| Electives | 5 Credits | 6 Credits | 7 credits |
| Total | 24 | 26 | 28 |

*Students cannot change to the Foundation (24 credits) until after their sophomore year, and only with administrator and parent approval. This plan is not recommended and only for extenuating circumstances.
**Local graduation requirement. District may waive local requirements in extenuating circumstances.

## Endorsements

Students will be able to earn one or more endorsements as part of their graduation requirements. Endorsements consist of a series of courses grouped together by interest or skill set. They provide students with in-depth knowledge of a subject area. Students shall specify in writing an endorsement the student intends to earn upon entering grade 9 .

## Graduation Distinctions

## Distinguished Level of Achievement

- Required for a student to be in the top $10 \%$ to gain automatic acceptance for Texas public college admissions
- A total of four credits in math, including Algebra 2
- A total of four credits in science
- Completion of curriculum requirements for at least one endorsement


## Performance Acknowledgements

- 12 college credits with at least a B average
- Associates Degree while in high school
- Outstanding performance in bilingualism and bi-literacy
- Score of 3 or above on an AP test or 4 or above on an IB exam
- Outstanding performance on the PSAT, the ACT-Plan, the SAT or the ACT
- Earning a nationally or internationally recognized business or industry certification or license.


## Honors Recognition

To be recognized for District scholastic honors, students shall be required to maintain a numerical average of 90 or more during the high school program, excluding the last six weeks of the senior year. [EIC LOCAL]

## Top Ten Percent

All students whose grade point averages make up the top ten percent of the graduating class and qualify for automatic admission under Education Code 51.803 shall be recognized. Eligibility standards required for the local procedure for determining valedictorian and salutatorian (or other local honor positions) shall not apply to the procedure for determining the top ten percent. The GPA shall be reported on the student's transcript and made available in accordance with the application deadline for the college or university when requested by the student. [See EIC(LEGAL)]

Valedictorian \& Salutatorian
The honor of valedictorian shall be given to the senior student making the highest numerical average. The honor of salutatorian shall be given to the senior student making the next highest numerical average.

To be eligible for valedictorian or salutatorian honors, a student shall have been continuously enrolled in the District high school for four consecutive semesters preceding graduation.

To qualify to give the valedictorian or salutatorian speech, a student shall not have engaged in any serious violation of the Student Code of Conduct, including removal to an AEP, a three-day suspension, or expulsion during his or her last two semesters.

In cases of a tie in weighted grade averages among the top ranking students, the following methods shall be used to determine who shall be recognized as salutatorian or valedictorian:

1. Computing the weighted grade average to a sufficient number of decimal places until the tie is broken;
2. However, if a tie still remains, the student with the highest numerical grade average of all $A P$ courses taken shall be the valedictorian. [EIC LOCAL]

Ranking for Early Graduates
A student who completes the high school program requirement in fewer than four years shall be ranked in the class with which he or she actually graduates. [EIC LOCAL]

## INDIVIDUAL CAREER \& ACADEMIC PLAN

Farmersville ISD believes that the curricula of the 21 st century should combine rigorous academics with relevant career education. When schools integrate academic and technical education, students can see the "usefulness" of what they are learning. The system also facilitates a seamless transition from secondary to post-secondary opportunities.

The Texas Education Agency Division of College, Career, and Military Preparation previously engaged members of the workforce, secondary education, and higher education to advise on the development of Career and Technical Education Programs of Study, including coherent sequences of courses, industrybased certifications, and work-based learning to ensure students are prepared for in-demand, high-skill, and high-wage careers in Texas.

The Individual Career and Academic Plan (or ICAP) is a multi-year process that intentionally guides students and families in the exploration of career, academic, and post-secondary opportunities. With the support of adults, students develop the awareness, knowledge, attitudes, and skills to create their own meaningful and powerful pathways to be career and college ready.

Farmersville ISD offers a range of programs of study from several different Career Clusters. Career Cluster is a grouping of occupations and broad industries based on commonalities. These programs of study represent a recommended sequence of coursework based on a student's interest or career goal that will also help them in achieving an endorsement upon graduation. As students begin the courses included in the CTE Program of Study, they can be assured that completion of this program of study will also lead to earning a graduation endorsement.

## CAREER \& TECHNICAL EDUCATION PROGRAM OF STUDY COMPLETION

For a student to earn a CTE Program of Study Completer Indicator, they must take and earn credit for 3 or more CTE courses for 4 or more credits within a single CTE program of study. At least one of these courses must be a level 3 or level 4 course. Students who complete four credits in math, 4 credits in science, and complete a CTE program of study will earn one or more graduation endorsements. Endorsements may be determined with successful completion of specific advanced academic courses.

## CAREER \& TECHNICAL EDUCATION PROGRAM OF STUDY \& GRADUATION ENDORSEMENT ALIGNMENT

| PROGRAM OF STUDY | ENDORSEMENT OPTIONS | ENDORSEMENT REQUIREMENTS |
| :---: | :---: | :---: |
| A student may earn an endorsement by successfully completing: <br> - Curriculum requirements for the endorsement <br> - Four credits in math <br> - Four credits in science <br> - Two additional elective credits. |  |  |
| - Animal Science <br> - Applied Agricultural Engineering <br> - Engineering <br> - Healthcare Therapeutic | STEM | Successfully complete a sequence of courses in one of the following areas or a combination of courses from no more than two areas <br> - CTE STEM courses or an approved STEMrelated Program of Study* <br> - Mathematics must include Algebra II and 4th Math Class must list Algebra II as a prerequisite <br> - Science must include biology, chemistry, \& physics <br> - Algebra II, chemistry, and physics |
| - Animal Science <br> - Business Management <br> - Design \& Multimedia Arts <br> - Digital Communications | Business and Industry | - A coherent sequence of four (4) credits in CTE. At least two courses must come from the same career cluster with at least one advanced CTE course and <br> - The final course must be selected from one of the following career clusters: Agriculture, Architecture/Construction, Arts A/V, Business Management, Finance, Hospitality, Information Technology, Manufacturing, Marketing, Transportation, Energy, or Career Prep. |
| - Healthcare Therapeutic (Medical Assisting) | Public Service | Successfully complete a sequence of courses in one of the following areas: <br> - CTE public-service-related Programs of Study* <br> - Human services <br> - Law, public safety, corrections, and security <br> - Health science <br> - Education and training <br> - Government and public administration <br> - Junior Reserve Officer Training Corps (JROTC) <br> - A coherent sequence of four (4) courses in CTE. At least two courses must come from the same career cluster with at least one advanced CTE course and <br> - The final course must be selected from career cluster Education \& Training, <br> Government/Public Admin, Health Science, Human Services, Law/Public Safety, or Career Prep. |


| Design \& Multimedia Arts | Arts \& Humanities | Successfully complete one of the following: <br> - Two levels each in two languages other than English (LOTE) <br> Four levels in the same LOTE <br> Courses from one or two disciplines in: <br> - Fine Arts (music, theater, art, dance, or film) <br> - English electives not included in the business and industry endorsement <br> Social studies |
| :---: | :---: | :---: |
|  | Multidisciplinary Studies | Successfully complete one of the following: <br> Four advanced courses that prepare a student to enter the workforce successfully or postsecondary education without remediation <br> - Four credits in each foundation subject area, including chemistry and/ or physics and English IV or a comparable Advanced Placement (AP) or International Baccalaureate (IB) English course <br> - Four credits in AP, IB, or dual credit courses selected from English, mathematics, science, social studies, economics, LOTE or fine arts |

## GRADE LEVEL CLASSIFICATION

Grade level classification will be based upon the number of credits successfully completed. Grade level classifications require the following earned credits:

| 10th Grade | 7 Credits |
| :--- | :--- |
| 11th Grade | 14 Credits |
| 12th Grade | 21 Credits |

Classification is determined at the end of the year or after summer school. Students must conform to the classification to participate in class activities or events.

## CLASS RANK

High School rank for students seeking automatic admission to a general teaching institution on the basis of their class rank is determined and reported as follows:

Class rank shall be based on the end of the eleventh grade, middle of the twelfth grade, or at high school graduation, whichever is most recent at the application deadline.

A student who completes the high school program requirement in fewer than four years shall be ranked in the class with which he/she actually graduates.

For graduating seniors, determination of final class rank, honor graduate, valedictorian, and salutatorian, shall be calculated at the end of the 5th six-weeks of the student's senior year. For dual credit courses, the final grade of the class may be used if available. If not, the mid-term grade will be used.

COURSE WEIGHTS FOR GPA CALCULATION

| Numerical Grade | Weighted GPA | Non-Weighted GPA |
| :---: | :---: | :---: |
| 105 | 5.00 |  |
| 104 | 4.95 |  |
| 103 | 4.90 |  |
| 102 | 4.85 |  |
| 101 | 4.80 |  |
| 100 | 4.75 | 4.0 |
| 99 | 4.70 | 3.96 |
| 98 | 4.65 | 3.92 |
| 97 | 4.60 | 3.88 |
| 96 | 4.55 | 3.84 |
| 95 | 4.50 | 3.80 |
| 94 | 4.45 | 3.76 |
| 93 | 4.40 | 3.72 |
| 92 | 4.35 | 3.68 |
| 91 | 4.30 | 3.64 |
| 90 | 4.25 | 3.60 |
| 89 | 4.20 | 3.56 |
| 88 | 4.15 | 3.52 |
| 87 | 4.10 | 3.48 |
| 86 | 4.05 | 3.44 |
| 85 | 4.00 | 3.40 |
| 84 | 3.95 | 3.36 |
| 83 | 3.90 | 3.32 |
| 82 | 3.85 | 3.28 |
| 81 | 3.80 | 3.24 |
| 80 | 3.75 | 3.20 |
| 79 | 3.70 | 3.16 |
| 78 | 3.65 | 3.12 |
| 77 | 3.60 | 3.08 |
| 76 | 3.55 | 3.04 |
| 75 | 3.50 | 3.00 |
| 74 | 3.45 | 2.96 |
| 73 | 3.40 | 2.92 |
| 72 | 3.35 | 2.88 |
| 71 | 3.30 | 2.84 |
| 70 | 3.25 | 2.80 |
| 69 | 0.00 | 0.00 |

## WEIGHTED GPA COURSES

The following courses shall receive an additional 5 points added to the final six-week grade. This is calculated prior to the weighting of the GPA.

- AP Courses
- Honors Courses
- Approved Dual Credit Courses


## COURSES NOT CALCULATED INTO GPA

- Credit by Exam
- Local Credit (i.e. Aide positions, Driver's Education, SAT Prep Classes, etc.)
- Distance Learning (Remote instruction taught by FISD instructors and approved dual credit courses taught "online" are factored into GPA/Class Rank)
- College courses that are not approved dual credit courses


## TRANSFER CREDIT

A student who transfers into the District high school with higher-level course credits shall receive similar credits counted toward the GPA according to the list of higher-level courses offered in the District and the grade point scale used for credit earned in the District.

Students transferring into the District shall receive the numerical grade that was earned in courses at another school. Letter grades shall be recorded as follows:

Conversion Scale A=95; B = 85; C = 75; D = 70; $F=60$ [EIC LOCAL]

## HIGH SCHOOL COURSES END OF COURSE ASSESSMENTS

STAAR end-of-course (EOC) assessments are administered for the following courses

- Algebra I
- Biology
- English I
- U.S. History
- English II

Satisfactory performance on the applicable assessments is required for graduation, unless waived or substituted as allowed by state law and rules.

There are three testing windows during the year in which a student may take an EOC assessment. The windows occur in the fall, spring, and summer months. If a student does not meet satisfactory performance, the student will have opportunities to retake the assessment.

STAAR Alternate 2 is available for eligible students receiving special education services who meet certain criteria established by the state as determined by the student's ARD committee.

An admission, review, and dismissal (ARD) committee for a student receiving special education services will determine whether successful performance on the EOC assessments will be required for graduation within the parameters identified in state rules and the student's personal graduation plan (PGP).
[See Student Handbook]
COLLEGE AND UNIVERSITY ADMISSIONS
For two school years following graduation, a district student who graduates as valedictorian or in the top ten percent of his or her class is eligible for automatic admission into four-year public universities and colleges in Texas if the student:

- Completes the distinguished level of achievement under the foundation graduation program. A student must graduate with at least one endorsement and must have taken Algebra II as one of the four required math courses; or
- Satisfies the College Readiness Benchmarks on the SAT or ACT.
- The student is ultimately responsible for meeting the admission requirements of the university or college, including timely submission of a completed application.
- Should a college or university adopt an admissions policy that automatically accepts the top 25 percent of a graduating class, the provisions above will also apply to a student ranked in the top 25 percent of his or her class.

The University of Texas at Austin may limit the number of automatically admitted students to 75 percent of the University's enrollment capacity for incoming resident freshmen. During the summer and fall terms and spring term, the University will admit the top six percent of a high school's graduating class who meet the above requirements. Additional applicants will be considered by the University through a holistic review process.
[See Student Handbook]

## SAT/ACT (SCHOLASTIC APTITUDE TEST AND AMERICAN COLLEGE TEST)

Many colleges require either the American College Test (ACT) or the Scholastic Aptitude Test (SAT) for admission. These assessments are usually taken at the end of the junior year and taken again in the summer or fall of the senior year. Students are encouraged to talk with their high school counselor to learn about these assessments and determine the appropriate examination to take. The Preliminary SAT (PSAT) and ACT-Aspire are the corresponding preparatory and readiness assessments for the SAT and ACT. Information about registration, dates, and cost can be obtained from your high school counselor or www.SAT.org and www.ACT.org. For test registration, the Farmersville High School code is 442-370.

## PSAT (NATIONAL MERIT SCHOLARSHIP PROGRAM)

The Preliminary SAT (PSAT)/National Merit Scholarship Qualifying Test (NMSQT) is a multiple-choice standardized test administered by the College Board and National Merit Scholars Corporation (NMSC). This test is administered to all FISD 11th graders free of charge.

Of the nearly 1.6 million student entrants each year, about 50,000 with the highest PSAT/NMSQT selection index scores qualify for recognition by the National Merit Scholarship Corporation's (NMSC) National Merit Scholarship Program. Students who take the PSAT their junior year are automatically entered into the National Merit Scholarship Program. More information is available at the National Merit Scholarship Program website.

## SAT/ACT PREP

Students have access to free online practice tests for the SAT at https://sat.collegeboard.org/practice and https://www.khanacademy.org/sat and at http://actstudent.org/onlineprep/ for ACT. For the most up to date information and resources, please visit http://www.farmersvilleisd.net/counselors.

## TSIA (TEXAS SUCCESS INITIATIVE ASSESSMENT)

Prior to enrollment in a Texas public college or university, most students must take a standardized test called the Texas Success Initiative Assessment (TSIA). The TSIA assesses the reading, mathematics, and writing skills that freshmen-level students need to perform effectively as undergraduates in Texas public colleges and universities. This assessment may also be required before a student enrolls in a dual credit course offered through the district.

All Farmersville High School students will take the TSIA. Students who do not pass the TSIA by the end of their Junior year will be required to take College Prep English and/or College Prep Math their senior year. For more information on the TSIA or to download a TSIA study app, go to https://accuplacer.collegeboard.org/students/prepare-for-accuplacer/tsia-texas-success-initiative-assessment.

For more test prep resources and college entrance exam information, please visit the FISD guidance and counseling website.

## NON-SCHEDULED PERIODS (EARLY RELEASE/LATE ARRIVAL)

Seniors on track to graduate may be granted up to two non-scheduled periods if the student is a CTE completer and meets indicators for college, career, and military readiness as defined by TEA. These indicators are subject to change. For the most recent updates, please visit the TEA website or see the high school counselor. These include:

CTE Completer

- Earn four or more credits in three or more courses in the same program of study.

CCMR Readiness

- Complete a CTE program of study; and, successfully earn a Texas Education Agency Approved Industry Based Certification related to that program of study
- Earn a score of 3 or Higher on ANY Advanced Placement Test;
- Successfully earn a minimum of 3 Hours of College Credit in an English or Math Course; or
- Successfully earn 9 Hours of College Credit in ANY Discipline.
- Meet TSI criteria (SAT/ACT/TSIA/College Prep course) in reading and mathematics

Non-scheduled periods are not intended to prevent students from finishing their fourth year of extra-curricular activities such as band, athletics, etc. Non-scheduled periods are different from Work-Based Learning (Work Release), please see Work-Based Learning in this document for more details.

Administration may waive the above requirements as needed.

## FINANCIAL AID FOR COLLEGE (FAFSA)

The first and most important step in getting help to pay for college is completing the Free Application for Federal Student Aid (FAFSA). Students and parents of students in their final year of high school must understand the importance of applying for financial aid as soon as possible after October $1^{\text {st }}$ and every year thereafter as long as they are enrolled in college. There are scholarships, grants, work-study jobs, and loans available to students through the completion of the FAFSA application at https://studentaid.gov/h/apply-for-aid/fafsa.

## THE TEXAS GRANT

The state legislature established the TEXAS (Towards Excellence, Access and Success) Grant to make sure that well-prepared high school graduates with financial need could go to college. For more information, go to College For All Texans or call 888-311-8881.

## STUDENT ATHLETES

If you are planning to participate in college athletics, it is your responsibility to register and be certified by the National Collegiate Athletic Association Eligibility Center (NCAA) for Division 1, 2, and 3 and the National Association of Intercollegiate Athletics (NAIA) after completion of your junior year in high school.

The linked websites contain the NCAA and NAIA initial eligibility requirements for all prospective student athletes at all member institutions. You and your parents/guardians must know the rules for eligibility as a student athlete and plan your high school courses accordingly. For more information, reference the following websites: NCAA or NAIA.

## DUAL CREDIT

Farmersville ISD has partnered with Collin College to offer dual credit courses to our students. Dual credit allows students to earn both high school and college credit for the same course.

Farmersville ISD covers the costs of tuition, books, and fees for approved dual credit courses taken through Collin College. Only courses listed in the academic planning guide or approved by administration will be covered by FISD.

## DUAL CREDIT ADMISSION CRITERIA

The opportunity to take dual credit courses is available to all FISD students that:

1. Meet minimum standards on the Texas Success Initiative Assessment (TSIA) or earn an exemption/waiver through an alternate assessment.
2. Fulfill all Collin College admission criteria including timely submission of required documentation and forms.
3. Have an 85 or better average in core subjects.
4. Have 95 percent or greater attendance.
5. Does not have significant discipline history.

Any FISD local requirement may be waived at the discretion of FISD administration. For more information about dual credit, please see your high school counselor. Qualifying students may begin the program at any grade level.

## WITHDRAWAL OR FAILURE OF DUAL CREDIT COURSES

If a student fails a dual credit course ( $<70 \%$ ) or withdraws from a dual credit course, the student will be placed on probation.

Students who fail or withdraw from two or more dual credit courses will be removed from the dual credit program. In order to be readmitted to the dual credit program or taken off probation, a student must take and pass the same dual credit course they failed at their own expense.

Students who withdraw without administrative approval will be required to re-enroll in the course at their own expense before re-entering the dual credit program.
Students who are removed from the regular school setting and/or assigned to an alternative educational placement may be required to drop the dual credit courses and incur any penalties associated with dropping. A student no longer allowed to attend school in the regular education setting will not be permitted to continue their face-to-face dual credit courses. In this situation, it is at the discretion of Collin College whether a student may switch from face-to-face to a virtual course.

## FARMERSVILLE HIGH SCHOOL ASSOCIATE OF SCIENCE DEGREE PLAN

| COURSE CODE | COLLEGE COURSE | HIGH SCHOOL COURSE | SEM. | YEAR | $\begin{gathered} \text { HS } \\ \text { CREDIT } \end{gathered}$ | COLLEGE HOURS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUC 1300 | Learning Framework | Principles of Education | Fall | 9th | 1 | 3 |
| MUSI 1310 | American Music | Music Studies | Spring | 9th | 1 | 3 |
| SPCH 1321 |  <br> Professional Communication | Professional Communications | Spring | 9th | . 5 | 3 |
| BUSI 1301 | Business Principles | Principles of Business | Fall | 10th | 1 | 3 |
| BCIS 1305 | Business Computer Applications | Business Information Management I | Spring | 10th | 1 | 3 |
| BUSI 1307 | Personal Finance | Money Matters | Fall | 10th | . 5 | 3 |
| GOVT 2306 | Texas Government | Texas Government (Special Topics) | Spring | 10th | . 5 | 3 |
| HIST 1301 | US History I | US History Studies Since 1877 | Fall | Junior | . 5 | 3 |
| ENGL 1301 | Composition I | English III | Fall | Junior | . 5 | 3 |
| GOVT 2305 | Federal Government | US States Government | Fall | Junior | . 5 | 3 |
| HIST 1302 | US History II | US History Studies Since 1877 | Spring | Junior | . 5 | 3 |
| ENGL 1302 | Composition II | English III | Spring | Junior | . 5 | 3 |
| ECON 2301 | Principles of Macroeconomics | Economics | Spring | Junior | . 5 | 3 |
| MATH 1314 | College Algebra + | Ind Study in Math | Fall | Senior | . 5 | 3 |
| ENGL 2327 | American Literature I | English IV | Fall | Senior | . 5 | 3 |
| BIOL 1406 | Biology for Science Majors I* | Scientific Research \& Design | Fall | Senior | . 5 | 4 |
| MATH 1342 | Elementary Statistical Methods + | Ind Study in Math | Spring | Senior | . 5 | 3 |
| ENGL 2328 | American Literature II | English IV | Spring | Senior | . 5 | 3 |
| BIOL 1407 | Biology for Science Majors II* | Sci. Research \& Design | Spring | Senior | . 5 | 4 |

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## ADVANCED PLACEMENT \& HONORS CLASSES

Advanced Placement courses provide college-level coursework for high school students who are ready and willing to do college-level work while in high school. AP courses follow the content and curricular objectives established by the College Board. Colleges and universities have the option of accepting AP exam scores for college credit.

Each teacher's AP course syllabus is submitted and approved by the College Board. Furthermore, all AP courses are weighted in the calculation of grade point average. By taking AP exams each May, students may earn AP Scholar Awards, which recognize student success and achievement in AP courses and on AP Exams.

## All students enrolled in AP courses are expected to take the College Board AP exam for that course in May of the enrolled school year.

Below is a list of potential AP courses that FISD may offer:

- AP Art III \& IV
- AP Pre-Calculus
- AP Calculus
- AP English III (Language \& Composition)
- AP Environmental Science
- AP Human Geography
- AP Physics I \& II
- AP Spanish IV (Spanish Language)
- AP Spanish V (Spanish Literature)
- AP World History

The AP courses offered are designed to supplement the dual credit associate degree program. Honors courses are the precursor for dual credit and AP courses and are designed to prepare students for the level of rigor required to be successful. Honors courses are offered beginning in upper elementary/junior high through high school until a student takes either the AP or dual credit equivalent.

AP course offerings are subject to meeting minimum enrollment criteria and may not be offered every year.

## AP \& HONORS ADMISSION CRITERIA

It is recommended that students have an 85 or better average in core subjects in order to take honors or AP courses. Exceptions may be granted for students who demonstrate the initiative and desire to push themselves beyond their current level of achievement. In such cases, parental support is highly encouraged and administrative approval is required.

## AP \& DUAL CREDIT TRANSFERABILITY

AP and dual credit courses are often transferable, especially between public colleges and universities in Texas. Students and families are encouraged to check with their college/university and degree plan of choice to determine the transferability of each course. The Texas Common Course Number System website also allows students and families to compare the transferability of courses from one Texas school to another.

# COURSE DESCRIPTIONS 

## ENGLISH LANGUAGE ARTS

## English I

## Recommended Grade Placement: 9 <br> Credit(s): 1 <br> Prerequisite: None

Students in English I continue to increase and refine their communication skills. They are expected to plan, draft, and complete written compositions on a regular basis. Students edit their papers for clarity and the correct use of the conventions and mechanics of written English and revise for organization, coherence, and voice. They practice all forms of writing, with emphasis being placed on organizing and supporting logical arguments. English I students read extensively in multiple genres from world literature. They learn literary forms and terms associated with selections being read.

## English I (Honors) <br> Recommended Grade Placement: 9 <br> Credit(s): 1 <br> Prerequisites: AP \& Honors Admission Criteria

This course is designed to cover all of the learning objectives in English I while providing greater depth in language arts skills. Students will read extensively both inside and outside class and literary analysis skills will be emphasized. A greater depth of study of the English language and more extensive and abundant practice in writing a variety of wellformed sentences and paragraphs supplement the study of literature.

## Dual Credit Learning Framework (EDUC 1300) Recommended Grade Placement: 9 <br> Credit(s): 1 <br> Prerequisite: Dual Credit Admission Criteria

A study of the: 1) research and theory in the psychology of learning, cognition, and motivation; 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners.

## English II <br> Recommended Grade Placement: 10

Credit(s): 1
Prerequisite: English I
Students in English II continue to increase and refine their communication skills. They are expected to plan, draft, and complete written compositions on a regular basis. Students edit their papers for clarity and the correct use of the conventions and mechanics of written English and revise for organization, coherence, and voice. They practice all forms of writing, with an emphasis on personal forms of writing, which may include a response to literature, a reflective essay, or an autobiographical narrative. English II students read extensively in multiple genres from world literature. They learn literary forms and terms associated with selections being read.

## English II (Honors) <br> Recommended Grade Placement: 10 <br> Credit(s): 1 <br> Prerequisite: English I, AP \& Honors Admission Criteria

Since the student enrolled in this course has already achieved a degree of fluency in writing clearly and effectively, the language and composition study during the year is supplemented with advanced composition study based upon literary themes. Students will read extensively both inside and outside class and literary analysis skills will be emphasized. The enhanced curriculum will prepare students to be successful in future dual credit courses, as well as post-secondary success.

## English III <br> Recommended Grade Placement: 11 <br> Credit(s): 1 <br> Prerequisite: English II

Students in English III continue to increase and refine their communication skills. They are expected to plan, draft, and complete written compositions on a regular basis. Students edit their papers for clarity and the correct use of the conventions and mechanics of written English and revise for organization, coherence, and voice. They practice all forms of writing, with an emphasis on business forms of writing such as the report, the business memo, the narrative of a procedure, the summary or abstract, and the resume. English III students read extensively in multiple genres from world literature. They learn literary forms and terms associated with selections being read.

## Dual Credit English III (ENGL 1301/1302)

## Recommended Grade Placement: 11

## Credit(s): 1

Prerequisite: English II, Dual Credit Admission Criteria
(ENGL 1301) Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis.
(ENGL 1302) Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions.

## English IV <br> Recommended Grade Placement: 12 <br> Credit(s): 1 <br> Prerequisite: English III

Students in English IV continue to increase and refine their communication skills. They are expected to plan, draft, and complete written compositions on a regular basis. Students edit their papers for clarity and the correct use of the conventions and mechanics of written English and revise for organization, coherence, and voice. In English IV, students are expected to write in a variety of forms, including business, personal, literary and persuasive texts. English IV students read extensively in multiple genres from British literature and other world literature. Students learn literary forms and terms associated with selections being read, and they interpret the possible influences of the historical context on a literary work.

## English IV - CP <br> Recommended Grade Placement: 12 <br> Credit(s): 1 <br> Prerequisite: English III

Students will learn to investigate academic texts, construct supported interpretations and arguments for an authentic audience, and acquire academic habits of thought. Reading instruction will focus on developing critical reading skills for comprehension, interpretation, and analysis. Students who have been unsuccessful in meeting college ready standards for English/Language Arts, and successfully complete this class, may earn a CCMR indicator for ELAR. Additionally, these students may be eligible for a TSI waiver to enroll in ENGL 1301.

> Dual Credit English IV (ENGL 2327/2328)
> Recommended Grade Placement: 12
> Credit(s): 1
> Prerequisite: English III, Dual Credit Admission Criteria
> (ENGL 2327)A survey of American literature from the period of exploration and settlement through the Civil War.
> Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.
> (ENGL 2328) A survey of American literature from the Civil War to the present.
> Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.

## MATHEMATICS

## Algebra I

## Recommended Grade Placement: 9

## Credit(s): 1

## Prerequisite: None

Algebra 1 begins with a review of signed numbers and the properties of real numbers then proceeds to the study of equations, equalities and inequalities in one variable, exponents, polynomials and factoring. The course emphasizes basic algebraic reasoning processes by stressing the solution of practical word problems. At least one-third of the course deals with functions, graphing of linear equations, solutions of systems of equations, radicals, quadratics, and algebraic fractions.

## Geometry

## Recommended Grade Placement: 9-10

Credit(s): 1
Prerequisite: Algebra I
Geometry is designed to develop an understanding of the basic structure of plane and space geometry, proficiency in demonstrating formal proofs, and the ability to apply problem solving techniques to geometric situations. The goals of this course include the following: to develop deductive thinking, to gain insight into the construction of mathematical models, to prepare a foundation for further study of mathematics, and to acquire a systematically organized body of geometric knowledge of physical space. Topics of triangles, polygons, similarity, congruence, parallels, coordinate geometry, circles, polyhedrons, areas, and volumes are covered.

## Geometry (Honors)

## Recommended Grade Placement: 9-10

Credit(s): 1

## Prerequisite: Algebra I, AP \& Honors Admission Criteria

This course is designed to develop an understanding of plane geometry, proficiency in demonstrating formal proofs and the ability to apply problem solving techniques to geometric models. More emphasis is placed on higher level thinking skills and independent thinking. Strong Algebra skills and excellent study habits are required.

## Algebra II <br> Recommended Grade Placement: 10-11 <br> Credit(s): 1 <br> Prerequisite: Geometry

Algebra II provides a third math credit for graduation and is required for the STEM Endorsement. This course continues to build upon Algebra I by extending work in linear, quadratic, and exponential functions and solving square root, cube root, and absolute value equations. Students will also explore square root, rational, cubic, cube root, absolute value and logarithmic functions. A student may not earn the distinguished level of achievement or be eligible for automatic admission to a Texas public college or university as an undergraduate student if the student does not successfully complete high school Algebra II.

## Algebra II (Honors)

Recommended Grade Placement: 10-11

## Credit(s): 1

Prerequisite: Geometry, AP \& Honors Admission Criteria
Honors Algebra II is a rigorous mathematics course that builds on Algebra I by extending the analysis of linear, quadratic, and exponential functions to square root, rational, cubic, cube root, absolute values and logarithmic functions. Students will use advanced symbolic manipulation skills to solve square root, cube root, and absolute value equations. This course will prepare students for Honors Precalculus and AP Calculus.

## Precalculus <br> Recommended Grade Placement: 11-12 <br> Credit(s): 1 <br> Prerequisite: Algebra II

This course will extend topics previously covered in Algebra II and Geometry. The course will take an analytic view of the structures of mathematics through the study of functions and the properties of limits and continuity. Trigonometry topics will be covered in the first semester of this course. Upon completion of BOTH semesters of this course, students will be prepared to enroll in Calculus.

## AP Precalculus <br> Recommended Grade Placement: 11 <br> Credit(s): 1 <br> Prerequisite: Algebra II, AP \& Honors Admission Criteria

AP Precalculus covers the same topics as Precalculus, however more emphasis is placed on theoretical demonstrations and broader applications. This course will extend topics previously covered in Algebra II and Geometry. This course will take an analytic view of the structures of mathematics through the study of functions and the properties of limits and continuity. Trigonometry topics will be covered. This course is designed to prepare students for the AP program and may require extra hours of study per week. All students taking an AP course are expected to take the AP exam.

## Dual Credit Technical Algebra \& Trigonometry (TECM 1343) <br> Recommended Grade Placement: 11 <br> Credit(s): 1 <br> Prerequisite: Algebra II, Dual Credit Admission Criteria <br> Algebraic and trigonometric applications used in technical/industrial settings. Lab required. 3 credit hours. (W)

## College Prep Math

Recommended Grade Placement: 12

## Credit(s): 1

Prerequisite: Algebra II
This course, developed in conjunction with Collin College, combines the elements of the two Developmental Math courses at Collin College. It is intended for students that are not likely to be TSIA eligible for credit bearing courses upon exiting high school so that they can gain the foundational knowledge in math that would allow them to enter into College Algebra upon graduation from high school. Students who have been unsuccessful in meeting college ready standards for Math, and successfully complete this class, may earn a CCMR indicator for Math. Additionally, these students may be eligible for a TSI waiver to enroll in a college level math course.

## Financial Math <br> Recommended Grade Placement: 12 <br> Credit(s): 1 <br> Prerequisite: Algebra II

Financial Mathematics is a course about personal money management. Students will apply critical-thinking skills to analyze personal financial decisions based on current and projected economic factors. This will be a required $4^{\text {th }}$ year math course for students in the class of 2025 and later who are not taking precalculus or calculus as a senior.

## AP Calculus

## Recommended Grade Placement: 12

## Credit(s): 1

## Prerequisite: Precalculus, AP \& Honors Admission Criteria

AP Calculus is a college level course. It is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multirepresentational approach to calculus, with concepts, results and problems being expressed graphically, numerically, analytically and verbally. This course is designed to prepare students for the AP program and may require extra hours of study per week. All students taking an AP course are expected to take the AP exam.

## Dual Credit College Algebra (MATH 1314) <br> Recommended Grade Placement: 12 <br> Credit(s): 1 <br> Prerequisite: Precalculus, Dual Credit Admission Criteria

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.
Graphing calculator required.

## SCIENCE

## Specialized Topics in Science <br> Recommended Grade Placement: 9

Credit(s): 1
Prerequisite: None
In Specialized Topics in Science, students have the opportunity to develop greater understanding of science content beyond what is taught in other Texas Essential Knowledge and Skills-based science courses while utilizing science and engineering practices. Students understand the value and role of curiosity in any discipline of science. The specialized topic of study may originate from local or global phenomena, student interest, or teacher specialties. The emphasis of study may vary such as theoretical science, citizen science, science investigations, science careers, specialized disciplines of science, designing innovations, the ethics of science, or history of science.

## Biology (Honors)

## Recommended Grade Placement: 9 <br> Credit(s): 1

## Prerequisite: AP \& Honors Admission Criteria

Honors biology includes the study of cells, plant and animal processes, genetics and ecology through classroom and laboratory experience. The study develops scientific attitudes, skills in the use of the scientific method and relates the vast store of scientific knowledge to solving problems in today's world.

## Biology

## Recommended Grade Placement: 10

## Credit(s): 1

Prerequisite: None
Biology includes the study of cells, plant and animal processes, genetics and ecology through classroom and laboratory experience. The study develops scientific attitudes, skills in the use of the scientific method and relates the vast store of scientific knowledge to solving problems in today's world.

## Chemistry (Honors)

## Recommended Grade Placement: 10 <br> Credit(s): 1

Prerequisite: Biology, AP \& Honors Admission Criteria

This course includes all the concepts of Chemistry, but increases the challenge for those students with adequate mathematical background by providing additional opportunity for development of abstract reasoning and problemsolving skills. This course is appropriate for motivated students considering further study in a science-related field.

## Chemistry

## Recommended Grade Placement: 11

## Credit(s): 1

## Prerequisite: Biology

Chemistry is a study of matter and energy. The course includes the study of atomic structure, phases of matter, chemical periodicity, bonding, chemical reactions, nuclear chemistry and organic chemistry. Many of the concepts in this course require mathematical reasoning.

## Principles of Technology <br> Recommended Grade Placement: 11

## Credit(s): 1

## Prerequisite: Chemistry

In Principles of Technology, students will 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.

## Advanced Animal Science <br> Recommended Grade Placement: 11-12 <br> Credit(s): 1 <br> Prerequisite: Biology \& Chemistry

Advanced Animal Science examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences

## Anatomy and Physiology

Recommended Grade Placement: 11-12
Credit(s): 1
Prerequisite: Chemistry
Physiology and Anatomy offers students general exploratory and advanced studies in the structure and functions of the components of the human body. Students will practice the methods and techniques used by professional scientists in medical investigations, build a mature understanding of the relationship of the structure and function of human body components, and acquire a realization of the interrelationship of the body systems. This course is particularly recommended for students who desire to pursue a career in the health sciences.

## Forensic Science

## Recommended Grade Placement: 11-12

## Credit(s): 1

## Prerequisite: Chemistry

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.

## Physics <br> Recommended Grade Placement: 11-12 <br> Credit(s): 1 <br> Prerequisite: Chemistry

Physics is a sequential study of physical principles that govern the behavior of matter. It includes mechanics, thermodynamics, waves, sound, optics, electricity, and magnetism. This course emphasizes the understanding of physics concepts with the extensive use of mathematics and the development of problem-solving strategies. A strong math background is required.

## AP Physics I

## Recommended Grade Placement: 11-12

## Credit(s): 1

## Prerequisite: Chemistry, AP \& Honors Admission Criteria

AP Physics is a more advanced study of physical principles that govern the behavior of matter. It includes mechanics, thermodynamics, waves, sound, optics, electricity and magnetism. In introducing fundamental physical concepts, emphasis will be placed on the use of mathematics and the development of problemsolving strategies. A strong math background is necessary. This course is designed to prepare students for the AP program and may require extra hours of study per week. All students taking an AP course are expected to take the AP exam.

## AP Physics II <br> Recommended Grade Placement: 12 <br> Credit(s): 1 <br> Prerequisite: AP Physics I, AP \& Honors Admission Criteria

AP Physics II is a more advanced study of physical principles that govern the behavior of matter. Students learn about the foundational principles of physics as you explore Newtonian mechanics; work, energy, and power; mechanical waves and sound; and introductory, simple circuits. You'll do hands-on laboratory work to investigate phenomena. A strong math background is necessary. This course is designed to prepare students for the AP program and may require extra hours of study per week. All students taking an AP course are expected to take the AP exam.

## AP Environmental Science

## Recommended Grade Placement: 12

## Credit(s): 1

Prerequisite: Chemistry
AP Environmental Science is a college level course. Explore and investigate the interrelationships of the natural world and analyze environmental problems, both natural and human-made. You'll take part in laboratory investigations and field work. This course is designed to prepare students for the AP exam and may require extra hours of study per week. Non-dual credit students will take this course at their $4^{\text {th }}$ year science course. Students meeting satisfactory practice test results are expected to take the AP exam. Administrative exceptions may be allowed.

## Dual Credit Biology (BIOL 1406/1407)

## Recommended Grade Placement: 11-12

## Credit(s): 1

## Prerequisite: Chemistry, Dual Credit Admission Criteria

(BIOL 1406) Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. Laboratory activities will reinforce the fundamental principles of living organisms, 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. (BIOL 1407) 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 the diversity and classifications of life, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals.

## SOCIAL STUDIES

## World Geography

## Recommended Grade Placement: 09

Credit(s): 1

## Prerequisite: None

The student will be introduced to the nature of geography. Analysis of physical characteristics and natural resources of various regions of the earth will be made with respect to the economic, social and cultural impact on the environment and resources. Students will also examine the uses and preservation of natural resources and physical environment.

## AP Human Geography <br> Recommended Grade Placement: 09

## Credit(s): 1

## Prerequisite: AP \& Honors Admission Criteria

This college level course introduces students to the systematic study of patterns and processes that have shaped human understanding, use and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. Students also learn about the methods and tools geographers use in their science and practice. The major topics studied in Human Geography include, but are not limited to, Geography: Its Nature and Perspectives, Population, Cultural Patterns and Processes, Political Organization of Space, Agriculture and Rural Land Use, Industrialization and Economic Development, and Cities and Urban Land Use. This course requires outside reading and study regularly to meet the requirements in the curriculum. This course is designed to prepare students for the AP program and may require extra hours of study per week. All students taking an AP course are expected to take the AP exam.

## World History

Recommended Grade Placement: 10

## Credit(s): 1

Prerequisite: None
This course includes a survey of the history and the development of various cultures and civilizations from ancient times through the 20th century with special emphasis on Western
civilization. Students are given the opportunity to examine history as the study of people and how they have reacted to the social, economic, religious, political and geographical aspects of their world. Students are encouraged to compare and contrast various civilizations and time periods in view of these major themes.

## AP World History

Recommended Grade Placement: 10
Credit(s): 1
Prerequisite: AP \& Honors Admission Criteria
In AP World History, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. This course is designed to prepare students for the AP program and may require extra hours of study per week. All students taking an AP course are expected to take the AP exam.

## Dual Credit Texas Government (GOVT 2306)

## Recommended Grade Placement: 10

## Credit(s): 1

## Prerequisite: Dual Credit Admission Criteria

Origin and development of the Texas Constitution, structure and powers of the state and local government, federalism and intergovernmental relations, political participation, the election process, public policy and the political culture of Texas.

## United States History <br> Recommended Grade Placement: 11 <br> Credit(s): 1

Prerequisite: World Geography or World History
United States History is a survey course that studies the United States from the post-Civil War period through the present. Students study the social, cultural, political and economic changes that took place in an America progressing from an agricultural nation to a position of world influence. Political policies from the "Square Deal" to the "New Deal" are presented to the students to compare and contrast with current domestic policies.

## Dual Credit United States History (HIST 1301/1302)

Recommended Grade Placement: 11

## Credit(s): 1

Prerequisite: World History or World Geography and/or AP Human Geography, Dual Credit Admission Criteria This course is designed to give students the opportunity to study the history and development of the United States in a more in-depth manner than regular United States History. Emphasis is placed on the political, cultural and social-economic history of the United States. This course is taught by a professor from Collin College and students receive both high school and college credit.

## Economics <br> Recommended Grade Placement: 12 <br> Credit(s): 1 <br> Prerequisite: None

The focus is on the basic principles concerning production, consumption, and distribution of goods and services (the problem of scarcity) in the United States and a comparison with those in other countries around the world. Students analyze the interaction of supply, demand, and price. Students will investigate the concepts of specialization and international trade, economic growth, key economic measurements, and monetary and fiscal policy. Students will study the roles of the Federal Reserve System and other financial institutions, government, and businesses in a free enterprise system. Types of business ownership and market structures are discussed. The course also incorporates instruction in personal financial literacy. Students apply critical-thinking skills using economic concepts to evaluate the costs and benefits of economic issues.

## U.S. Government <br> Recommended Grade Placement: 12 <br> Credit(s): . 5 <br> Prerequisite: US History

This course is designed to trace the foundations of the United States system of government. Students will analyze the philosophies and individuals that formed our government. Students will develop higher learning skills through the use of computers, cooperative learning simulation, TV and other forms of technology. Basic fundamental principles of American Government will be stressed through study of the following history of political ideas that led to our form of Government, the U.S. Constitution, the three branches of government, political parties and the civic responsibilities of American citizens.

## Dual Credit Economics (ECON 2301)

Recommended Grade Placement: 12
Credit(s): . 5

## Prerequisite: Dual Credit Admission Criteria

An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy.

## Dual Credit United States Government (GOVT 2305)

Recommended Grade Placement: 12
Credit(s): 1
Prerequisite: US History, Dual Credit Admission Criteria
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.

## FINE ARTS

## Art I

Recommended Grade Placement: 9-12

## Credit(s): 1

Prerequisite: None
This course serves as a survey course in which students produce a variety of artworks in various two and threedimensional media. Students explore the historical and cultural contexts in which many artworks are created. Students also analyze and evaluate artwork on the basis of the elements and principles of design.

## Art II <br> Recommended Grade Placement: 10-12 <br> Credit(s): 1 <br> Prerequisite: Art I \& Instructor Approval

Students produce media specific designs using basic techniques in relation to historical and cultural contents. Students analyze artwork using the elements and principles of design.

## AP Art 2-D Design

## Recommended Grade Placement: 11-12

## Credit(s): 1

Prerequisite: Art II \& Instructor Approval
AP 2-D Design course is designed to address a very broad interpretation of two-dimensional (2-D) design issues. Students are asked to demonstrate a proficiency in 2-D design which includes, but is not limited to, graphic design, typography, digital imaging, photography, collage, fabric design, weaving, illustration, painting, and printmaking. The student's portfolio will include a variety of approaches in abstraction, representation and expression.

## AP Art Drawing

Recommended Grade Placement: 11-12

## Credit(s): 1

Prerequisite: Art II \& Instructor Approval
AP Drawing is a portfolio course that explores numerous forms of two-dimensional art creation. Students generate art that focuses on confident mark making, illusion of depth, implying three dimensionality, and more. Students with a developed ability to draw are encouraged to enroll in the class. AP art are college-level courses, and students should expect to spend 5-10 hours a week outside of class working on art assignments. A portfolio will be submitted to the College Board in May and those students with passing portfolios may earn college credit.

## Theater Arts I

## Recommended Grade Placement: 9-12

Credit(s): 1

## Prerequisite: None

This course of study is designed as an introductory survey in the fundamentals of theater production, including the role of the actor in the interpretation of dramatic literature, the development of the physical theater, theater history, and dramatic literature. The student is also involved in the physical and mental processes of learning to act with emphasis on interpretation, body movement, and characterization.

## Theater Arts II-IV <br> Recommended Grade Placement: 10-12 <br> Credit(s): 1 <br> Prerequisite: Theater Arts I/II/III \& Instructor Approval

This course of study is designed to provide the student with knowledge of the actor's craft, the history and development of theater as part of our cultural heritage, fine dramatic literature and the ability to evaluate dramatic experiences. The major emphasis of the course is on the extension of the student's knowledge of the principles of acting, comedic and dramatic theory, stagecraft, advanced movement, and experience in scene work and/or play production.

## Dance I <br> Recommended Grade Placement: 9-12 <br> Credit(s): 1 <br> Prerequisite: None

This course will provide students with the fundamental skills and knowledge of dance as an art form and lifetime activity. The course will develop kinesthetic awareness, create aesthetic appreciation of various dance forms, and provide fitness opportunities for students. This class can also count as a fine arts credit.

## Dance II-IV

Recommended Grade Placement: 10-12
Credit(s): 1
Prerequisite: Dance I/II/III \& Instructor Approval
Advanced Dance is a full year course where students can earn physical education credit for the fall semester and fine arts or elective credit for the spring semester.

## Choir I

Recommended Grade Placement: 9-12
Credit(s): 1
Prerequisite: None
Students of varying vocal and sight-reading skills may join this mixed choir. Students will develop vocal and sightreading skills through the performance of a variety of styles of music. They will participate in concerts and competitions.

## Choir II-IV <br> Recommended Grade Placement: 10-12 <br> Credit(s): 1 <br> Prerequisite: Choir I/II/III \& Instructor Approval

Students of varying vocal and sight-reading skills may join this mixed choir. Students will develop vocal and sightreading skills through the performance of a variety of styles of music. They will participate in concerts and competitions.

Band I-IV<br>Recommended Grade Placement: 9-12<br>Credit(s): 1<br>Prerequisite: Instructor Approval<br>This course provides an opportunity for students to continue instrumental development. All students are members of the marching band in the fall semester and indoor drumline in the spring. This band will perform as part of the total band program at all designated football games, pep assemblies, parades, marching contests, concerts, and festivals. All members will also perform at all indoor percussion competitions and percussion concerts. Time will be required outside of the class for rehearsals, trips, and other engagements. Attendance at all outside of school rehearsals and performances is required. Band placement is determined by audition. This is a full year course.

Jazz Band I-IV
Recommended Grade Placement: 9-12
Credit(s): 1
Prerequisite: Instructor Approval
Students will perform in a variety of formal and informal settings and may participate in festivals and competitions. This course must be taken in conjunction with Band I-IV unless otherwise approved by the band director. The study of improvisation will be incorporated into the curriculum of this course. Attendance at all outside of school rehearsals and performances is required. Band placement is determined by audition. This is a full-year course.

Dual Credit American Music (MUSI 1310)
Recommended Grade Placement: 9-10
Credit(s): 1
Prerequisite: Dual Credit Admission Criteria
A general survey of various styles of music of the Americas, including but not limited to jazz, folk, rock, and contemporary music. 3 credit hours. (A) (Student must have a TSI score for ELAR and Math)

FOREIGN LANGUAGE

## Spanish I <br> Recommended Grade Placement: 8-11 <br> Credit(s): 1 <br> Prerequisite: None

The beginning secondary course emphasizes communication, especially listening and speaking skills, in relevant contexts. Students are presented with opportunities to learn cultural customs and practices from the contexts of the activities.

## Spanish II <br> Recommended Grade Placement: 9-12

Credit(s): 1
Prerequisite: Spanish I
The course is the continuation of the basic Spanish program. This course broadens the student's ability to communicate in Spanish in a variety of contexts. Students will increase their knowledge of Hispanic culture, art, and history.

## Spanish III (Honors)

Recommended Grade Placement: 10-12
Credit(s): 1
Prerequisite: Spanish II, AP \& Honors Admission Criteria
This course continues the development of language skills for communication. It includes conversational situations, vocabulary development for reading and expression, and reasonable fluency both orally and in writing. It is an advanced class and will be conducted primarily in Spanish.

## AP Spanish IV <br> Recommended Grade Placement: 11-12 <br> Credit(s): 1 <br> Prerequisite: Spanish III, AP \& Honors Admission Criteria

This course continues the AP program begun in Spanish III, developing and refining listening, comprehension, reading, and writing skills. In addition to textbooks, class materials include recordings, films, videos, newspapers, magazines, and fiction. This course is designed to prepare students for the AP program and may require extra hours of study per week. All students taking an AP course are expected to take the AP exam.

## AP Spanish V

Recommended Grade Placement: 12
Credit(s): 1
Prerequisite: Spanish III, AP \& Honors Admission Criteria
This course continues the AP program and focuses on Spanish Literature. This course is designed to prepare students for the AP program and may require extra hours of study per week. All students taking an AP course are expected to take the AP exam.

## Special Topics in Language and Culture (Spanish)

Recommended Grade Placement: 9-12
Credit(s): 1
Prerequisite: Spanish I, Instructor Approval
This course will explore the culture, geography, and development of the Spanish language.

| Foreign Language Substitution |  |  |
| :--- | :--- | :--- |
| COURSE CODE | COLLEGE COURSE | HIGH SCHOOL COURSE |
| COSC 1436 | Programming Fundamentals I | Computer Science I |
| COSC 1437 | Programming Fundamentals II |  |
| COSC 2325 | Computer Organization | Computer Science II |
| COSC 2336 | Programming Fundamentals III |  |

## PLEASE CHECK WITH YOUR POTENTIAL COLLEGE(S) OF CHOICE REGARDING THE FOREIGN LANGUAGE ADMISSION AND GRADUATION REQUIREMENT.

Dual Credit Programming Fundamentals I (COSC 1436)
Recommended Grade Placement: 9-12
Credit(s): 1
Prerequisite: Dual Credit Admission Criteria
This course introduces the fundamental concepts of structured programming, and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. This course is only offered in an online format.

## Dual Credit Programming Fundamentals II (COSC 1437)

Recommended Grade Placement: 9-12
Credit(s): 1
Prerequisite: DC Programming Fundamentals I, Dual Credit Admission Criteria
This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. This course is only offered in an online format.

Dual Credit Computer Organization (COSC 2325)
Recommended Grade Placement: 10-12
Credit(s): 1
Prerequisite: DC Programming Fundamentals II, Dual Credit Admission Criteria
The organization of computer systems is introduced using assembly language. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems. This course is only offered in an online format.

Dual Credit Programming Fundamentals III (COSC 2336)
Recommended Grade Placement: 10-12
Credit(s): 1
Prerequisite: DC Computer Organization, Dual Credit Admission Criteria
Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), searching, sorting, recursion, and algorithmic analysis. Programs will be implemented in an appropriate object oriented language.

## PHYSICAL EDUCATION

## Physical Education

Recommended Grade Placement: 9

## Credit(s): 1

Prerequisite: None
The basic purpose of this course is to motivate students to strive for lifetime personal fitness while emphasizing the health-related components of physical fitness. The knowledge and skills taught in this course include the process of becoming fit, achieving some degree of fitness within the class, and the concept of wellness.

## SPEECH

## Agriculture Leadership, Research, \& Communications <br> Recommended Grade Placement: 9

## Credit(s): 1

## Prerequisite: None

Agricultural Leadership, Research and Communications will focus on challenging Agriculture, Food, and Natural Resources (AFNR) students to use higher level thinking skills, develop leadership abilities, employ standard research principles, and communicate agricultural positions effectively with all stakeholders.

## Professional Communications

## Recommended Grade Placement: 9

Credit(s): . 5
Prerequisite: None
This course blends written, oral, and graphic communication in a career-based environment. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct internet research.

## Dual Credit Business and Professional Communication (SPCH 1321)

Recommended Grade Placement: 9
Credit(s): . 5

## Prerequisite: Dual Credit Admission Criteria

Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams, and technologically mediated formats. Additionally, it includes the relationship of communication to organizational conflict, management and international business; practice in conducting and participating in business interviews and presentations.

## CAREER AND TECHNICAL EDUCATION

The mission of Career and Technical Education is to prepare students for high-wage, high-demand occupations within the competitive global economy and to provide students with the academic skills necessary to continue their education in post-secondary schools. Career and Technical Education can help students explore their potential and establish future career goals. Farmersville ISD offers a variety of career and technical pathways in order to engage students in meaningful learning experiences resulting in career exploration, industry certifications, and career \& post-secondary readiness.

AGRICULTURE

|  | Animal Science |
| :--- | :--- |
|  | Plant Science |
|  | Applied Agricultural Engineering |

Digital Communications
Design \& Multimedia Arts
BUSINESS, MARKETING, \& FINANCE
Business Management
HEALTH SCIENCE
Healthcare Therapeutic
SCIENCE, TECHNOLOGY, ENGINEERING, \& MATH

Engineering

## Agriculture, Food, and Natural Resources Career Cluster

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

## Animal Science <br> Statewide Program of Study



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

## Secondary Courses for High School Credit Grade 9

- Principles of Agriculture, Food, and Natural Resources


## Grade 10

- Livestock Production/Lab (2 credits)


## Grade 11

- Advanced Animal Science


## Grade 12

- Practicum in Agriculture, Food, and Natural Resources (2 credits)


## Work-Based Learning and Expanded Learning Opportunities

| Exploration Activities | Work-Based Learning Activities |
| :---: | :---: |
| - Participate in Texas FFA | - Compete in an AgriScience Fair 4H |
| - Participate in Texas FFA Leadership | - Volunteer at a local farm or with a |
| Development | veterinarian |
| Events and Career | - Participate in an FFA |
| Development | supervised agriculture |
| Events | experience |

## Industry-Based Certifications

- Agricultural Biotechnology
- Certified Veterinary Assistant, Level 1
- Elanco Fundamentals of Animal Science Certification*
- Elanco Veterinary Medical Applications Certification
- Equine Management \& Evaluation Certification
- Feedyard Technician in Cattle Care and Handling
- Licensed Veterinary Technician
- Production Agriculture - Job Ready
- Small Animal Science and Technology
- Agriculture
- Biology
- Zoology/ Animal Biology

Master's, Doctoral, and Professional Degrees

- Genetics
- Veterinary Medicine
- Biological and Physical Sciences
- Biological and Biomedical Sciences


## Aligned Occupations

| Occupations | Median Wage | Annual Openings | \% Growth |
| :--- | :---: | :---: | :---: |
| Animal Breeders | $\$ 39,139$ | 28 | $9 \%$ |
| Animal Scientists | $\$ 57,533$ | 22 | $12 \%$ |
| Medical Scientists | $\$ 63,898$ | 435 | $27 \%$ |
| Veterinarians | $\$ 93,496$ | 294 | $24 \%$ |
| Zoologists and Wildlife Biologists | $\$ 67,309$ | 45 | $32 \%$ |

Successful completion of the Animal Science program of study will fulfill requirements of a Business and Industry endorsement or STEM endorsement if the math and science requirements are met. Revised - August 2022

## Animal Science Course Information

## Level 1

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Principles of Agriculture, <br> Food, and Natural <br> Resources | $13000200(1 \mathrm{credit})$ | None | None |

Level 2

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :---: | :---: | :---: | :---: |
| N/A |  |  |  |

Level 3

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :---: | :---: | :---: | :---: |
| Livestock Production/Lab | $13000300(1$ credit $)$ |  | None |

Level 4

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :---: | :---: | :---: | :---: |
| Advanced Animal Science | 13000700 (1 credit) | Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production | None |
| Practicum in Agriculture, Food, and Natural Resources | 13002500 ( 2 credits) <br> 13002505 (3 credits) <br> 13002510 ( 2 credits) <br> 13002515 (3 credits) | None | None |

FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCE CAREER CLUSTER, GO TO https://tea.texas.gov/cte

Farmersville ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Wayne Callaway, Executive Director of Human Resources and Student Services, 501A Hwy 78N, Farmersville, TX 75442, 972-782-6601,
wcallaway@farmersvilleisd.org.
Farmersville ISD no discrimina por motivos de raza, color, origen nacional, sexo, discapacidad o edad en sus programas o actividades y brinda igualdad de acceso a los Boy Scouts y otros grupos juveniles designados. La siguiente persona ha sido designada para manejar consultas sobre las políticas de no discriminación: Wayne Callaway, Executive Director of Human Resources and Student Services, 501A Hwy 78N, Farmersville, TX 75442, 972-782-6601,
wcallaway@farmersvilleisd.org.
Further nondiscrimination information can be found at Notification of Nondiscrimination in Career and Technical Education Programs.

## Principles of Agriculture, Food, \& and Natural Resources

## Recommended Grade Placement: 9

Credit(s): 1
Prerequisite: None
Principles of Agricultural Science is designed to introduce students to global agriculture. The course includes the study of agricultural career development, leadership, communications and personal finance.

## Agriculture Leadership, Research, \& Communications <br> Recommended Grade Placement: 9

Credit(s): 1
Prerequisite: None
Agricultural Leadership, Research and Communications will focus on challenging Agriculture, Food, and Natural Resources (AFNR) students to use higher level thinking skills, develop leadership abilities, employ standard research principles, and communicate agricultural positions effectively with all stakeholders.

## Livestock Production/Lab

Recommended Grade Placement: 10

## Credit(s): 2

## Prerequisite: Principles of Ag and Natural Resources

This course prepares students to be introduced to the common veterinary skills and procedures used on livestock, anatomy of livestock, genetics and reproduction, and diseases that can affect all livestock animals. Animal species to be addressed in this course may include, but are not limited to, beef cattle, dairy cattle, swine, sheep, goats, and poultry.

## Advanced Animal Science <br> Recommended Grade Placement: 11

Credit(s): 1
Prerequisite: Biology \& Chemistry, Algebra I \& Geometry, Livestock Production
Advanced Animal Science examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences

## Practicum in Agriculture, Food \& Natural Resources

Recommended Grade Placement: 12
Credit(s): 2-3
Prerequisite: Livestock Production
Practicum in Agriculture, Food, and Natural Resources 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. 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 Agriculture, Food, and Natural Resources Career Cluster®

## Agriculture, Food, and Natural Resources Career Cluster

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

## Plant Science Statewide Program of Study



The Plant Science program of study focuses on the science, research, and business of plants and other living organisms. It teaches students how to apply biology and life science to real-world life processes of plants and vegetation, either in laboratories or in the field.

## Secondary Courses for High School Credit <br> Grade 9 <br> - Principles of Agriculture, Food, and Natural Resources

## Grade 10

- Floral Design and/or
- Horticulture


## Grade 11

- Practicum in Agriculture, Food, and Natural Resources (2 credits)


## Grade 12

- Practicum in Agriculture, Food, and Natural Resources (2 credits) (2 ${ }^{\text {nd }}$ time taken)


## Postsecondary Opportunities

## Certificate Level 1

- Sustainable Agriculture
- Controlled Environment Agriculture

Associates Degrees

- Applied Horticulture/ Horticulture Operations, General
- Ornamental Horticulture
- Agricultural Business and Management, General
- Turf and Turfgrass Management


## Bachelor's Degrees

- Applied Horticulture/ Horticulture Operations, General
- Agronomy and Crop Science
- Agricultural Business and Management, General
- Turf and Turfgrass Management

Master's, Doctoral, and Professional Degrees

- Applied Horticulture/ Horticulture Operations, General
- Agronomy and Crop Science
- Agricultural Business and Management, General
- Farm/Farm and Ranch Management


## Work-Based Learning and Expanded Learning Opportunities

| Exploration Activities | Work-Based Learning <br> Activities |
| :--- | :--- |
| - Participate in Texas | - Work at a florist or |
| FFA | landscaper business |
| -Participate in <br> SkillsUSAParticipate in an FFA <br> supervised agriculture <br> experience |  |

## Industry-Based Certifications

- Agricultural Biotechnology
- BASF Plant Science Certification
- Commercial/Non-Commercial Pesticide Applicator
- Commercial/Noncommercial Pesticide Applicator
"Vegetation Management" License
- Horticulture - Landscaping - Job Ready
- Landscape Irrigator
- Principles of Floral Design Certification
- Production Agriculture - Job Ready
- Texas Certified Landscape Associate (TCLA)
- Texas Certified Nursery Professional
- Texas State Florist's Association Knowledge Based Floral Certification *
- Texas State Florist's Association Level I Floral Certification *
- Texas State Florist's Association Level II Floral Certification *


## * Offered at Farmersville High School

## Aligned Occupations

| Occupations | Median Wage | Annual Openings | \% Growth |
| :--- | :---: | :---: | :---: |
| Soil and Plant Scientists | $\$ 54,662$ | 116 | $21 \%$ |
| Agriculture Engineers | $\$ 64,792$ | 9 | $13 \%$ |
| Pesticide Handlers, Sprayers, and Applicators | $\$ 36.733$ | 196 | $22 \%$ |
| Landscaping Supervisors | $\$ 44,408$ | 807 | $19 \%$ |
| Biological Technicians | $\$ 42,931$ | 452 | $17 \%$ |
| cessful completion of the Plant Science program of study will fulfill requirements of a Business and Industry | Texas Eduacion Agency |  |  |

## Plant Science Course information

## Level 1

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Principles of Agriculture, <br> Food, and Natural <br> Resources | 13000200 (1 credit) | None | None |

## Level 2

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| N/A |  |  |  |

Level 3

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :---: | :---: | :---: | :---: |
| Floral Design/Lab | $13001800(1$ credit $)$ | None | None |
| Horticultural Science/Lab | 13001810 (2 credits) | None | None |

## Level 4

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
|  | $13002500(2$ credits $)$ |  |  |
| Practicum in Agriculture, | $13002505(3$ credits) |  | None |
| Food, and Natural | $13002510(2$ credits $)$ | None |  |
| Resources | $13002515(3$ credits $)$ |  |  |

FOR ADDITIONAL INFORMATION ON THE AGRICULTURE, FOOD, AND NATURAL RESOURCE CAREER CLUSTER, GO TO: https://tea.texas.gov/cte

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# Principles of Agriculture, Food, \& and Natural Resources 

## Recommended Grade Placement: 9

Credit(s): 1
Prerequisite: None
Principles of Agricultural Science is designed to introduce students to global agriculture. The course includes the study of agricultural career development, leadership, communications and personal finance.

## Agriculture Leadership, Research, \& Communications <br> Recommended Grade Placement: 9

Credit(s): 1
Prerequisite: None
Agricultural Leadership, Research and Communications will focus on challenging Agriculture, Food, and Natural Resources (AFNR) students to use higher level thinking skills, develop leadership abilities, employ standard research principles, and communicate agricultural positions effectively with all stakeholders.

## Floral Design <br> Recommended Grade Placement: 10

Credit(s): 1
Prerequisite: None
This course is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students develop respect for the traditions and contributions of diverse cultures. Students respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations.

## Horticulture

Recommended Grade Placement: 10
Credit(s): 1
Prerequisite: None
Horticultural Science is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production. To prepare for careers in horticultural systems, students must 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.

## Practicum in Agriculture, Food, \& Natural Resources

Recommended Grade Placement: 11-12
Credit(s): 2-3
Prerequisite: Floral Design or Horticulture
The practicum course is for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources cluster. 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.

## Agriculture, Food, and Natural Resources Career Cluster

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

## Applied Agricultural Engineering Statewide Program of Study



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

## Secondary Courses for High School Credit <br> Grade 9

- Principles of Agriculture, Food, and Natural Resources

Grade 10

- Agricultural Structures Design and Fabrications

Grade 11

- Practicum in Agriculture, Food, and Natural Resources (2 Credits)


## Grade 12

- Practicum in Agriculture, Food, and Natural Resources (2 credits) (2 ${ }^{\text {nd }}$ time taken)


## Postsecondary Opportunities

Certificate Level 1 or 2

- Entry Welding Certification
- Welding Technology Certification


## Associates Degrees

- Heavy Equipment Maintenance Technology/Technician
- Agricultural Mechanization, General
- Small Engine Mechanics and Repair Technology/Technician
- Welding Technology/ Welder

Bachelor's Degrees

- Agricultural Engineering
- Agricultural Mechanization, General

Master's, Doctoral, and Professional Degrees

- Agricultural Engineering
- Agricultural Mechanization, Genera


## Work-Based Learning and Expanded Learning Opportunities

| Exploration Activities | Work-Based Learning Activities |
| :---: | :---: |
| - Tour a farm products or machinery plant <br> - Participate in Texas FFA <br> - Participate in welding competitions <br> Participate in SkillsUSA | - Earn a welding certification <br> - Intern at a farm products or machinery plant <br> - Participate in an FFA supervised agriculture experience |

## Industry-Based Certifications

- Agriculture Mechanics
- Agriculture Mechanics
- API 1104 Welding Pipelines and Related Facilities AWS Certified Welder
- AWS D1.1 Structural Steel *
- AWS D9.1 Sheet Metal Welding *
- AWS SENSE Level 1: Entry Welder *
- Feedyard Technician in Machinery Operation, Repair and Maintenance
- Industrial Technology Maintenance (ITM) Maintenance Welding
- Machining Measurement, Material, and Safety Level I
- NCCER Welding Level I
- General Welding - Job Ready
*Offered at Farmersville High School


## Aligned Occupations



# Applied Agricultural Engineering Course Information 

## Level 1

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Principles of Agriculture, <br> Food, and Natural Resources | $13000200(1 \mathrm{credit})$ | None | None |

Level 2

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| N/A |  |  |  |

## Level 3

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Agricultural Structures Design | $13002300(1$ credit $)$ |  | None |
| and Fabrications/Lab | $13002310(2$ credits $)$ | None |  |

## Level 4

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
|  | $13002500(2$ credits $)$ |  |  |
| Practicum in Agriculture, | $13002505(3$ credits) |  | None |
| Food, and Natural Resources | $13002510(2$ credits $)$ | None |  |

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Principles of Agriculture, Food, \& and Natural Resources
Recommended Grade Placement: 9
Credit(s): 1
Prerequisite: None
Principles of Agricultural Science is designed to introduce students to global agriculture. The course includes the study of agricultural career development, leadership, communications and personal finance.

Agriculture Leadership, Research, \& Communications<br>Recommended Grade Placement: 9<br>Credit(s): 1<br>Prerequisite: None<br>Agricultural Leadership, Research and Communications will focus on challenging Agriculture, Food, and Natural<br>Resources (AFNR) students to use higher level thinking skills, develop leadership abilities, employ standard research principles, and communicate agricultural positions effectively with all stakeholders.

Agricultural Structures Design \& Fabrication<br>Recommended Grade Placement: 9-10<br>Credit(s): 1<br>Prerequisite: None<br>Students should attain academic skills and knowledge; acquire technical knowledge and skills related to equipment, structural, and technical agricultural systems and the workplace; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations.

Practicum in Agriculture, Food, \& Natural Resources
Recommended Grade Placement: 12
Credit(s): 2-3
Prerequisite: Agricultural Equipment Design
The practicum course is for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources cluster. The practicum is designed to give students supervised practical application of knowledge and skills.

## Business, Marketing, and Finance Career Cluster

The Business, Marketing, and Finance Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.

## Business Management Statewide Program of Study



The Business Management program of study teaches CTE learners how to plan, direct, and coordinate the administrative services and operations of an organization. Through this program of study, students will learn the skills necessary to formulate policies, manage daily operations, and allocate the use of materials and human resources. This program of study will also introduce students to mathematical modeling tools and organizational evaluation methods.

## Secondary Courses for High School Credit Grade 8 <br> - Business Information Management I

## Grade 9

- Business Information Management II


## Grade 10

- Business Management (Dual Credit)


## Grade 11

- Practicum in Business Management (Dual Credit) (2 credits)


## Grade 12

- Practicum in Business Management (Dual Credit) ( 2 credits) (2 ${ }^{\text {nd }}$ time taken)
- Career Preparation I (2 or 3 credits)


## Postsecondary Opportunities <br> Certificate Level 1

- Business Management

Associates Degrees

- Business Administration
- Business/Commerce
- Public Administration
- Business Management

Bachelor's Degrees

- Business Administration
- Business/Commerce
- Public Administration
- Management Science

Master's, Doctoral, and Professional Degrees

- Business Administration
- Business Management
- Public Administration
- Management Science


## Work-Based Learning and Expanded Learning Opportunities

Exploration Activities

- Participate in Business Professional of America, Future Business Leaders of America, or DECA

Work-Based Learning Activities

- Intern with a local business or chamber of commerce
- Work a part-time job with early release


## Industry-Based Certifications

- Administrative Assisting
- Certified Associate in Project Management (CAPM)
- Entrepreneurship and Small Business
- MB-920: Microsoft Dynamics 365 Fundamentals Finance and Operations Apps
- Microsoft Office Specialist 2016 Master
- Microsoft Office Specialist: Microsoft Access Expert (Access and Access 2019)
- Microsoft Office Specialist: Microsoft Excel Expert (Excel and Excel 2019) *
- Microsoft Office Specialist: Microsoft Word Expert (Word and Word 2019) *
- Project Management Institute (PMI) Project Management Ready
- Microsoft Office Specialist-Excel*
- Microsoft Office Specialist-Word*
* Offered at Farmersville High School


## Aligned Occupations

| Occupations | Median Wage | Annual Openings | \% Growth |
| :--- | :---: | :---: | :---: |
| Administrative Service Managers | $\$ 96,138$ | 2,277 | $21 \%$ |
| Management Analysts | $\$ 87,651$ | 4,706 | $32 \%$ |
| General and Operations Managers | $\$ 107,640$ | 18,679 | $20 \%$ |
| Supervisors of Administrative Support Works | $\$ 57,616$ | 14,982 | $20 \%$ |

[^1]
## Level 1

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Business Information <br> Management I/Lab | $13011400(1$ credit |  |  |

## Level 2

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Business Information | $13011500(1$ credit $)$ | Business Information | None |
| Management II/Lab | $13011510(2$ credits $)$ | Management I |  |

## Level 3

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :---: | :---: | :---: | :---: |
| Business Management | $13012100(1 \mathrm{credit})$ | None | None |

## Level 4

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
|  | $13012200(2$ credits $)$ |  |  |
| Practicum in Business | $13012205(3$ credits $)$ |  | None |
| Management | $13012210(2$ credits $)$ | None |  |
| Career Preparation I | 13012215 (3 credits) |  | None |
|  | $12701300(2$ credits $)$ | None |  |

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```
Business Information Management I
Recommended Grade Placement: 7-9
Credit(s): 1
Prerequisite: None
Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.
```


## Dual Credit Business Computer Applications (BCIS 1305)

## Recommended Grade Placement: 10

Credit(s): 1
Prerequisite: Dual Credit Admission Criteria
Introduces and develops foundational skills in applying essential and emerging business productivity information technology tools. The focus of this course is on business productivity software applications, including word processing, spreadsheets, databases, presentation graphics, data analytics, and business-oriented utilization of the Internet. This course is part of the associate degree plan.

## Business Information Management II <br> Recommended Grade Placement: 9-10

Credit(s): 1
Prerequisite: BIM I
In Business Information Management II, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software.

## Practicum in Business, Marketing, \& Finance I \& II

Recommended Grade Placement: 11-12
Credit(s): 2-3
Prerequisite: BIM I and BIM II
This course allows students to apply business, marketing, and finance concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain a working knowledge of business functions such as selling, advertising, display, the free enterprise system, inventory control systems, marketing mathematics, and resume writing. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace.

COLLIN COLLEGE BUSINESS MANAGEMENT LEVEL I CERTIFICATION
Students enrolled in this program should apply for graduation from Collin College when they are enrolled in the final course in the program.

| Farmersville ISD and Collin College <br> Business Management Course Crosswalk |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| COURSE <br> CODE | COLLEGE COURSE | Most or all of the courses offered below are taught ONLINE. <br> HIGH SCHOOL <br> COURSE | SEMESTER | YEAR (Recommended) |
| BMGT 1307 | Team Building | Principles of Business, <br> marketing, and Finance | Fall | Sophomore |
| BMGT 1327 | Principles of <br> Management | Principles of Business, <br> marketing, and Finance | Spring | Sophomore |
| BMGT 1341 | Business Ethics | Practicum in Business, <br> Marketing \& Finance I | Fall | Junior |
| BMGT 2303 |  <br> Decision Making | Practicum in Business, <br> Marketing \& Finance I | Spring | Junior |
| HRPO 2307 | Organizational <br> Behavior | Practicum in Business, <br> Marketing \& Finance I | Fall | Senior |
| BMGT 2309 | Leadership | Practicum in Business, <br> Marketing \& Finance I | Spring | Senior |

Courses in the BMGT Program are only offered in an online format.
Dual Credit Team Building (BMGT 1307)
Recommended Grade Placement: 10
Credit(s): $1 / 2$
Prerequisite: Dual Credit Admission Criteria
Principles of building and sustaining teams in organizations. Includes team dynamics, process improvement, trust and collaboration, conflict resolution, and the role of the individual in the team.

Dual Credit Principles of Management (BMGT 1327)
Recommended Grade Placement: 10
Credit(s): $1 / 2$
Prerequisite: Dual Credit Admission Criteria
Concepts, terminology, principles, theories, and issues in the field of management. This course is only offered in an online format.

## Dual Credit Business Ethics (BMGT 1341)

Recommended Grade Placement: 11
Credit(s): $1 / 2$
Prerequisite: Dual Credit Admission Criteria
Discussion of ethical issues, the development of a moral frame of reference, and the need for an awareness of social responsibility in management practices and business activities. Includes ethical corporate responsibility. This course is only offered in an online format.

```
Dual Credit Problem Solving & Decision Making (BMGT 2303)
Recommended Grade Placement: }1
Credit(s): 1/2
Prerequisite: Dual Credit Admission Criteria
Decision-making and problem-solving processes in organizations utilizing logical and creative problem-solving
techniques. Application of theory is provided by experiential activities using managerial decision tools. This course is
only offered in an online format.
Dual Credit Organizational Behavior (HRPO 2307)
Recommended Grade Placement: }1
Credit(s): 1/2
Prerequisite: Dual Credit Admission Criteria
The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and
the integration of interdisciplinary concepts from the behavioral sciences. This course is only offered in an online
format.
Dual Credit Leadership (BMGT 2309)
Recommended Grade Placement: }1
Credit(s): 1/2
Prerequisite: Dual Credit Admission Criteria
Leadership and its relationship to management. Prepares the student with leadership and communication skills
needed to motivate and identify leadership styles. This course is only offered in an online format.
```


## Arts, Audio/Video Technology, and Communications Career Cluster

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

## Graphic Design \& Multimedia Arts Statewide Program of Study



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

## Secondary Courses for High School Credit Grade 9

- Graphic Design and Illustration I

Grade 10

- Graphic Design and Illustration II

Grade 11

- Practicum in Graphic Design and Illustration (2 credits)

Grade 12

- Practicum in Graphic Design and Illustration (2 credits) ( $2^{\text {nd }}$ time taken)


## Work-Based Learning and Expanded Learning Opportunities

| Exploration Activities | Work-Based Learning <br> Activities |
| :--- | :--- |
| - Design the school | -Intern with a <br> multimedia or <br> yearbook |
| Join a website <br> development or <br> coding club | -animation studio <br> Obtain a certificate or <br> certification in <br> Participate in <br> SkillsUSA or TSA |
| graphic design |  |

## Industry-Based Certifications

- Adobe Certified Professional in Graphic Design and Illustration Using Adobe Illustrator *
- Adobe Certified Professional in Print and Digital Media Publication Using Adobe InDesign
- Adobe Certified Professional in Visual Design
- Adobe Certified Professional in Visual Design Using Adobe Photoshop
- Adobe Certified Professional In Visual Effects and Motion Graphics Using Adobe After Effects
- Audio-Visual Communications - Job Ready
- Autodesk Associate (Certified User) 3ds MAX
- Certified Professional Photographer
- Graphic Production Technology - Job Ready
- Animation, Interactive Technology, Video Graphics and Special Effects
- Graphic Design
- Game and Interactive Media Design

Master's, Doctoral, and Professional Degrees

- Animation, Interactive Technology, Video Graphics and Special Effects

Graphic Design

- Intermedia/Multimedia


## Postsecondary Opportunities

## everticate

Video Production
Associates Degrees

- Animation, Interactive Technology, Video Graphics and Special Effects

Graphic Design
Game and Interactive Media Design
Bachelor's Degrees

* Offered at Farmersville High School



## Aligned Occupations

| Occupations | Median Wage | Annual Openings | \% Growth |
| :--- | :---: | :---: | :---: |
| Graphic Designers | $\$ 44,824$ | 1,433 |  |
| Marketing Managers | $\$ 128,033$ | 2,052 | $15 \%$ |
| Multimedia Artists and Animators | $\$ 67,392$ | $22 \%$ | 186 |

Successful completion of the Graphic Design \& Multimedia Arts program of study will fulfill requirements of the Business and Industry endorsement. Revised - August 2022

## Graphic Design \& Multimedia Arts Course Information

## Level 1

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :---: | :---: | :---: | :---: |
| N/A |  |  |  |

## Level 2

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Graphic Design and <br> Illustration I Lab | $13008800(1$ credit $)$ | None | None |

## Level 3

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Graphic Design and | $13008900(1$ credit | Graphic Design and |  |
| Illustration II/Lab | 13008910 (2 credits) | Illustration I | None |

## Level 4

| COURSE NAME | SERVICE ID | PREREQUISITES (PREQ) | COREQUISITES (CREQ) |
| :---: | :---: | :---: | :---: |
| Practicum in Graphic | $13009000(2$ credits $)$ | Graphic Design and |  |
| Design and Illustration | $13009005(3$ credits $)$ | Illustration II and Graphic <br> Design and Illustration II <br> Lab | None |
| Career Preparation I | $13009010(2$ credits $)$ | None |  |
| $12009015(3$ credits $)$ | None |  |  |

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```
Graphic Design I
Recommended Grade Placement: 9-10
Credit(s): }
Prerequisite: Instructor Approval
Within this context, in addition to developing knowledge and skills needed for success in the Arts, Audio/Video
Technology, and Communications Career Cluster, students will be expected to develop an understanding of the
industry with a focus on fundamental elements and principles of visual art and design. Students in this course will
produce the yearbook, and will receive 1 credit that meets the graduation requirement for fine arts.
Graphic Design II/Lab
Recommended Grade Placement: 10-11
Credit(s): }
Prerequisite: Digital Art & Animation; Instructor Approval
Students will apply advanced knowledge and skill needed for success in the Arts, Audio/Video Technology, and
Communications Career Cluster, and will be expected to develop an understanding of the industry with a focus on
fundamental elements and principles of visual art and design. Students in this course will produce the yearbook,
and will receive }1\mathrm{ credit that meets the graduation requirement for fine arts.
```


## Practicum in Graphic Design

```
Recommended Grade Placement: 11-12
Credit(s): 2-3
Prerequisite: Instructor Approval; Training Plan
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.
```


## Arts, Audio/Video Technology, and Communications Career Cluster

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

## Digital Communications <br> Statewide Program of Study



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

## Secondary Courses for High School Credit Grade 9

- Audio/Video Production I


## Grade 10

- Audio/Video Production II

Grade 11

- Practicum of Audio/Video Production (2 credits)


## Grade 12

- Practicum of Audio/Video Production (2 credits) (2 ${ }^{\text {nd }}$ time taken)


## Work-Based Learning and Expanded Learning Opportunities

| Exploration Activities | Work-Based Learning <br> Activities |
| :--- | :--- |
| - Shadow a production | - Intern at a local |
| team | television station or <br> - |
| Participate in | video production |
| SkillsUSA or TSA | company |
| - Serve on the AV | - Work with a local |
| Broadcasting Team | company on a <br> project |

## Industry-Based Certifications

- Adobe Certified Professional in Digital Video Using Adobe Premiere Pro *
- Adobe Certified Professional in Print and Digital Media Publication Using Adobe InDesign
- Adobe Certified Professional in Print and Digital Media Publication Using Adobe InDesign
- Adobe Certified Professional in Visual Design
- Adobe Certified Professional in Visual Design Using Adobe Photoshop
- Audio-Visual Communications - Job Ready
- Broadcasting and Journalism
- Digital Video Production Foundations
* Offered at Farmersville High School



## Aligned Occupations

| Occupations | Median Wage | Annual Openings | \% Growth |
| :---: | :---: | :---: | :---: |
| Sound Engineering Technicians | \$39,562 | 79 | 27\% |
| Camera Operators, Television, Video, and Motion Picture | \$50,024 | 129 | 9\% |
| Audio and Video Equipment Technicians | \$40,581 | 757 | 29\% |
| Film and Video Editors | \$47,382 | 118 | 23\% |

# Digital Communications Course Information 

Level 1

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :---: | :---: | :---: | :---: |
| N/A |  |  |  |

## Level 2

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Audio/Video Production <br> I/Lab | $13008500(1 \mathrm{credit})$ | None | None |

## Level 3

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES (CREQ) |
| :--- | :---: | :---: | :---: |
| Audio/Video Production <br> II/Lab | 13008600 (1 credit) |  |  |

Level 4

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :---: | :---: | :---: | :---: |
| Practicum in Audio/Video | $13008700(2$ credits $)$ |  |  |
| Production | $13008705(3$ credits) | Audio/Video | None |
| Career Preparation I | $13008710(2$ credits $)$ | Production II/Lab |  |
|  | $13008715(3$ credits $)$ |  | None |

FOR ADDITIONAL INFORMATION ON THE ARTS, AUDIO/VIDEO TECHNOLOGY, AND COMMUNICATIONS CAREER
CLUSTER, GO TO: https://tea.texas.gov/cte

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## Audio Video Production I

Recommended Grade Placement: 9-10
Credit(s): 1
Prerequisite: Principles of Arts, Audio Video Technology \& Communication
This is a hands-on introductory course where students will explore both studio and field television production techniques. The course will include techniques in videography, lighting, producing, directing and editing. Students will be expected to develop an understanding of the industry with a focus on pre-production, production, and postproduction audio and video activities.

## Audio Video Production II/Lab

Recommended Grade Placement: 10-11
Credit(s): 2
Prerequisite: Audio Visual Production I
Develops an advanced understanding of the industry with a focus on pre-production, production, and post-production activities. Through diverse forms of storytelling and productions, students will exercise and develop creativity, intellectual curiosity, and critical-thinking, problem-solving, communication, and collaborative skills. Students are expected to participate in extended learning experiences such as CTE student organizations and other leadership or extracurricular organizations.

## Practicum in Audio/Video Production I \& II

Recommended Grade Placement: 11-12
Credit(s): 2-3
Prerequisite: Audio Video Production II, Instructor Approval
Building upon the concepts taught in Audio/Video Production II, 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 increasing understanding of the industry with a focus on applying preproduction, production, and post-production audio and video products in a professional environment.

## Science, Technology, Engineering, and Mathematics Career Cluster

The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.

## Engineering <br> Statewide Program of Study



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

## Secondary Courses for High School Credit

Grade 9

- Engineering Design and Presentation I

Grade 10

- Engineering Design and Problem Solving

Grade 11

- Practicum in STEM (2 or 3 credits)
- Applied Math for Technical Professionals (not included in POS)

Grade 12

- Practicum in STEM (2 or 3 credits) (2 ${ }^{\text {nd }}$ time taken)


## Postsecondary Opportunities <br> Level 1 Certificate

- Electronic Engineering Technology
- Robotics and Automation
- Computer-Aided Drafting and Design


## Level 2 Certificate

- Robotics and Automation


## Associates Degrees

- Electrical and Electronics Engineering
- Drafting and Design Technology/ Technician, General
- Engineering Technology

Bachelor's Degrees

- Electrical and Electronics Engineering
- CAD/CADD Drafting and/or Design Technology/ Technician
- Bioengineering and Biomedical Engineering
- Construction Engineering Technology/ Technician

Master's, Doctoral, and Professional Degrees

- Electrical and Electronics Engineering
- Mechanical Engineering
- Bioengineering and Biomedical Engineering


## Work-Based Learning and Expanded Learning Opportunities

## Exploration Activities

- Participate in Skills USA competitions
- Compete in VEX and FIRST Robotics
- Participate in Team America Rocketry Challenge (TARC)


## Industry-Based Certifications

- Autodesk Associate (Certified User) AutoCAD
- Autodesk Associate (Certified User) Fusion 360*
- Autodesk Associate (Certified User) Inventor for Mechanical Design
- Autodesk Associate (Certified User) Revit Architecture
- Autodesk Associate (Certified User) Revit for Electrical
- Autodesk Associate (Certified User) Revit for Structural Design
- Autodesk Certified Professional Fusion 360*
- Autodesk Certified Professional in AutoCAD for Design and Drafting
- Autodesk Certified Professional in Civil 3D for Infrastructure Design
- Autodesk Certified Professional in Inventor for Mechanical Design
- Autodesk Certified Professional in Revit for Architectural Design
- Autodesk Certified Professional in Revit for Electrical Design
- Autodesk Certified Professional in Revit for Structural Design
- C-103 Certified Industry 4.0 Associate - Robot System Operations
- Engineering Technology Foundations
- Lean Six Sigma Green Belt Certification
- Pre-Engineering/Engineering Technology - Job Ready

* Offered at Farmersville High School


## Aligned Occupations

| Occupations | Median Wage | Annual Openings | \% Growth |
| :--- | :---: | :---: | :---: |
| Aerospace Engineers | $\$ 110,843$ | 481 | $9 \%$ |
| Industrial Engineers | $\$ 97,074$ | 1,263 | $10 \%$ |
| Mechanical Engineers | $\$ 91,107$ | 1,535 | $11 \%$ |
| Chemical Engineers | $\$ 112,819$ | 474 | $9 \%$ |
| Electrical Engineers | $\$ 98,405$ | 1,137 | 105 |

Successful completion of the Engineering program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met. Revised - August 2022

## Engineering Course Information

## Level 1

|  | COURSE NAME | SERVICE ID | PREREQUISITES |
| :--- | :--- | :--- | :--- | COREQUISITES 9

Level 2

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :--- | :--- | :--- |
| N/A |  |  |  |

Level 3

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :---: | :---: | :---: | :---: |
| Engineering Design and Presentation I | 13036500 (1 credit) | Algebra I | None |

Level 4

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Engineering Design \& Problem Solving | 13037300 (1 credit) | Algebra I and Geometry | None |
|  | 13037400 (2 credits) |  |  |
| Practicum in Science, Technology, Engineering, and | 13037405 (3 credits) | Algebra I and Geometry | None |
| Mathematics | $13037410(2$ credits $)$ |  |  |
|  | 13037415 (2 credits) |  |  |

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#### Abstract

Engineering Design \& Presentation Recommended Grade Placement: 9 Credit(s): 1 Prerequisite: None Students enrolled in Engineering Design and Presentation will demonstrate knowledge and skills of the design process as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software applications to complete assignments and projects. Through implementation of the design process, students will transfer advanced academic skills to component designs. Additionally, students explore career opportunities in engineering, technology, and drafting and what is required to gain and maintain employment in these areas.


## Engineering Design \& Problem Solving <br> Recommended Grade Placement: 10

## Credit(s): 1

Prerequisite: Engineering Design \& Presentation
The Engineering Design and Problem-Solving course is the creative process of solving problems by identifying needs and then devising solutions. The solution may be a product, technique, structure, or process depending on the problem. Science aims to understand the natural world, while engineering seeks to shape this world to meet human needs and wants. Engineering design takes into consideration limiting factors or "design under constraint." Various engineering disciplines address a broad spectrum of design problems using specific concepts from the sciences and mathematics to derive a solution. Meets a Science Graduation Requirement.

## Scientific Research \& Design Recommended Grade Placement: 11 (Summer) Credit(s): . 5 <br> Prerequisite: Engineering Design \& Presentation

Scientific Research and Design is a broad-based course designed to allow districts and schools considerable flexibility to develop local curriculum to supplement any program of study or coherent sequence. The course has the components of any rigorous scientific or engineering program of study from the problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions. These components are integrated with the career and technical education emphasis of helping students gain entry-level employment in highskill, high-wage jobs and/or continue their education.

## Practicum in STEM

Recommended Grade Placement: 11-12
Credit(s): 3
Prerequisite: Engineering Design \& Problem Solving
Practicum in STEM is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

| Collin College Engineering Course Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COURSE CODE | COLLEGE COURSE | HIGH SCHOOL COURSE | SEMESTER | YEAR |
| RBTC 1405 | Robotic Fundamentals (Articulated Credit) | Engineering Design and Presentation I | Fall/Spring | Freshman |
| CETT 1307 | Fundamentals of Electronics | Engineering Design and Problem Solving | Fall | Sophomore |
| TECM 1343 | Technical Algebra and Trigonometry + | Applied Math for Technical Professionals | Spring | Sophomore |
| ENTC 1171 | Introduction to Engineering Technology | Scientific Research \& Design | Summer | Before Junior Year |
| INTC 1307 | Instrumentation Test Equipment | Practicum in STEM | Fall | Junior |
| CETT 1425 | Digital Fundamentals |  | Spring | Junior |
| CETT 1409 | DC-AC Circuits | Practicum in STEM I (2 ${ }^{\text {nd }}$ time taken) | Fall | Senior |
| CETT 1445 | Microprocessors |  | Spring | Senior |
| CETT 2471 | Emerging Topics in Engineering Technology | N/A | Summer or Post | aduation |
| CETT 1457 | Linear Integrated Circuits | N/A | Summer or Post | aduation |
| EECT 2439 | Communication Circuits | N/A | Summer or Post | aduation |

[^2]Dual Credit Robotic Fundamentals (RBTC 1405)
Recommended Grade Placement: 9
Credit(s): see Engineering Design and Presentation

## Prerequisite: None

An introduction to flexible automation. Topics include installation, repair, maintenance, and development of flexible robotic manufacturing systems.

Dual Credit Fundamentals of Electronics (CETT 1307)
Recommended Grade Placement: 10
Credit(s): see Engineering Design and Problem Solving
Prerequisite: Collin College Admission Criteria
Applies concepts of electricity, electronics, and digital fundamentals; supports programs requiring a general knowledge of electronics.

Dual Credit Technical Algebra and Trigonometry (TECM 1343)
Recommended Grade Placement: 10
Credit(s): see Applied Math for Technical Professionals
Prerequisite: Collin College Admission Criteria
Algebraic and trigonometric applications used in technical/industrial settings.
Dual Credit Introduction to Engineering Technology (ENTC 1171)
Recommended Grade Placement: 11
Credit(s): see Scientific Research and Design
Prerequisite: Collin College Admission Criteria
Topics address introduction to Electronic Engineering Technology, Robotics, Automation and Biomedical Equipment Technology industries and career pathways.

Dual Credit Instrumentation Test Equipment (INTC 1307)
Recommended Grade Placement: 11
Credit(s): see Practicum in STEM (1 ${ }^{\text {st }}$ time taken)
Prerequisite: Collin College Admission Criteria
Theory and application of instrumentation test equipment. Emphasizes accuracy, limitations of instruments, and calibration techniques.

Dual Credit Digital Fundamentals (CETT 1425)
Recommended Grade Placement: 11
Credit(s): see Practicum in STEM (1 ${ }^{\text {st }}$ time taken)
Prerequisite: Collin College Admission Criteria
An entry level course in digital electronics to include numbering systems, logic gates, Boolean algebra, and combinational logic.

Dual Credit DC-AC Circuits (CETT 1409)
Recommended Grade Placement: 12
Credit(s): see Practicum in STEM (2 ${ }^{\text {nd }}$ time taken)
Prerequisite: Collin College Admission Criteria
Fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchhoff's laws, networks, transformers, resonance, phasors, capacitive and inductive circuit analysis techniques.

Dual Credit Microprocessors (CETT 1445)
Recommended Grade Placement: 12
Credit(s): see Practicum in STEM (2 ${ }^{\text {nd }}$ time taken)
Prerequisite: Collin College Admission Criteria
An introductory course in microprocessor software and hardware: architecture, timing sequence, operation, and programming. Discussion of appropriate software diagnostic language and tools.

## Health Science Career Cluster

The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, communicate effectively, and work well with others.

## Healthcare Therapeutic Statewide Program of Study



The Healthcare Therapeutic program of study introduces students to occupations and educational opportunities related to diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study also includes an introduction to the opportunities associated with providing treatment and counsel to patients as well as rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

## Secondary Courses for High School Credit

## Grade 9

- Principles of Health Science


## Grade 10

- Medical Terminology (Dual Credit)
- Pathophysiology (Dual Credit)

Grade 11

- Anatomy and Physiology (Dual Credit)
- Health Science Theory/Clinical (Dual Credit) (2 Credits)

Grade 12

- Practicum in Health Science (Dual Credit) (3 Credits)


## Postsecondary Opportunities

Licensure Program

- Vocational Nursing

Associates Degrees

- Dental Hygienist
- Medical/Clinical Assistant
- Nursing

Bachelor's Degrees

- Dental Hygienist

Master's, Doctoral, and Professional Degrees

- Dentist
- Physician Assistant
- Family and General Practitioners
- Pharmacist


## Work-Based Learning and Expanded Learning Opportunities

| Exploration Activities | Work-Based Learning <br> Activities |
| :--- | :--- |
| - Participate in SkillsUSA or | -Volunteer at a community <br> wellness center, hospital, <br> assisted living, or nursing <br> Home |
| Students of America | homen |

## Industry-Based Certifications

- Certified Clinical Medical Assistant *
- Certified Dental Assistant
- Certified EKG Technician *
- Certified Nurse Aide (CNA)
- Certified Occupational Therapy Assistant
- Certified Patient Care Technician (CPCT)
- Medical Scribe * (not part of TEA's IBC list)
- Medical Assistant
- Medical Laboratory Assistant
- Nationally Registered Certified EKG Technician
- Patient Care Technician
- Pharmacy Technician
- Phlebotomy Technician *
- Registered Dental Assistant X-Ray Certification
$\qquad$
* Offered at Farmersville High School in partnership with Collin College


## Aligned Occupations

| Occupations | Median Wage | Annual Openings | \% Growth |
| :---: | :---: | :---: | :---: |
| Medical Assistants | \$29,598 | 8,862 | 30\% |
| Surgical Technologists | \$45,032 | 1,150 | 20\% |
| Dental Hygienists | \$73,507 | 1,353 | 38\% |
| Licensed Vocational Nurses | \$45,178 | 7,186 | 21\% |
| Registered Nurses | \$68,682 | 17,493 | 26\% |
| Nurse Practitioners | \$107,827 | 977 | 50\% |
| Physicians and Surgeons | \$213,071 | 1,151 | 30\% |

## Healthcare Therapeutic <br> Course Information

Level 1

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :---: | :---: | :---: | :---: |
| Principles of Health <br> Science | 13020200 (1 credit) | None | None |
| Level 2 |  |  |  |
| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| Medical Terminology | $13020300(1 \mathrm{credit})$ | None | None |
| Level 3 |  |  |  |


| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Anatomy and Physiology | 13020600 (1 credit) | One credit in Biology, one <br> credit in Chemistry, <br> Integrated Physics and <br> Chemistry, or Physics. | None |
| Health Science Theory/ <br> Health Science Clinical | $13020400(1$ credit) <br> $13020410(2$ credits) | Biology | None |

## Level 4

| COURSE NAME | SERVICE ID | PREREQUISITES | COREQUISITES |
| :--- | :---: | :---: | :---: |
| Pathophysiology | $13020800(1$ credit) | Biology and <br> Chemistry | None |
| Practicum in Health <br> Science | $13020500(2$ credits $)$ | Health Science <br> $13020505(3$ credits $)$ <br> $13020510(2$ credits $)$ <br> $13020515(3$ credits $)$ | Theory and Biology |

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| Collin College <br> Medical Assistant Course Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COURSE CODE | COLLEGE COURSE | HIGH SCHOOL COURSE | SEMESTER | YEAR |
| HPRS 1201 | Introductions to Health Professions | Health Science Theory | Fall/Spring | Freshman |
| HITT 1305 | Medical Terminology | Medical Terminology | Fall | Sophomore |
| HPRS 2301 | Pathophysiology | Pathophysiology | Spring | Sophomore |
| MDCA 1309 | Anatomy and Physiology for Medical Assistants | Anatomy and Physiology | Fall | Junior |
| MDCA 1417 | Procedures in a Clinical Setting | Health Science Theory/Clinical | Fall | Junior |
| MDCA 1321 | Administrative Procedures |  | Spring | Junior |
| MDCA 1448 | Pharmacology \& Administration of Meds. |  | Spring | Junior |
| MDCA 1452 | Medical Assistant Laboratory Procedures | Practicum in Health Science I | Fall | Senior |
| HPRS 2321 | Medical Law and Ethics for Health Professionals |  | Fall | Senior |
| MDCA 1154 | Medical Assisting Credentialing Exam Review |  | Spring | Senior |
| MDCA 1360 | Clinical-Medical/Clinical Assistant |  | Spring | Senior |

## Dual Credit Introduction to Health Professions \& Principles of Health Science (HPRS 1201) Recommended Grade Placement: 9

Credit(s): 1 (non-weighted)

## Prerequisite: Dual Credit Admission Criteria

This course provides an overview of the roles of various members of the health care system, therapeutic, diagnostic, health informatics, support services and biotechnology research and development systems of the healthcare industry. This particular course is primarily a survey course and is non-weighted.

## Dual Credit Medical Terminology (HITT 1305)

## Recommended Grade Placement: 10

Credit(s): 1
Prerequisite: Collin College \& Dual Credit Admission Criteria
Study of medical terms through word origin and structure. Introduction to abbreviations and symbols, surgical and diagnostic procedures, and medical specialties.

## Dual Credit Pathophysiology (HPRS 2301)

Recommended Grade Placement: 10
Credit(s): 1
Prerequisite: Collin College \& Dual Credit Admission Criteria
Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries.

Dual Credit Anatomy and Physiology for Medical Assistants (MDCA 1309)
Recommended Grade Placement: 11
Credit(s): 1
Prerequisite: Collin College \& Dual Credit Admission Criteria
Emphasis on structure and function of human cells, tissues, organs, and systems with overview of common pathophysiology.

Dual Credit Procedures in a Clinical Setting (MDCA 1417)

## Recommended Grade Placement: 11

Credit(s): see Health Science Theory/Clinical
Prerequisite: Collin College \& Dual Credit Admission Criteria
Emphasis on patient assessment, examination, and treatment as directed by physician. Includes vital signs, collection and documentation of patient information, asepsis, office clinical procedures, and other treatments as appropriate for ambulatory care settings.

```
Dual Credit Administrative Procedures (MDCA 1321)
Recommended Grade Placement: 11
Credit(s): see Health Science Theory/Clinical
Prerequisite: Collin College \& Dual Credit Admission Criteria
Medical office procedures including appointment scheduling, medical records creation and maintenance, interpersonal communications, bookkeeping tasks, coding, billing, collecting, third party reimbursement, credit arrangements, and computer use in the medical office.
```


## Dual Credit Pharmacology \& Administration of Medications (MDCA 1448) <br> Recommended Grade Placement: 11 <br> Credit(s): see Health Science Theory/Clinical <br> Prerequisite: Collin College \& Dual Credit Admission Criteria <br> Instruction in concepts and application of pharmacological principles. Focuses on drug classifications, principles and procedures of medication administration, mathematical systems and conversions, calculation of drug problems, and medico-legal responsibilities of the medical assistant.

```
Dual Credit Medical Assistant Laboratory Procedures (MDCA 1452)
Recommended Grade Placement: 12
Credit(s): see Practicum in Health Science
Prerequisite: Collin College \& Dual Credit Admission Criteria
Application of governmental health care guidelines. Includes specimen collection and handling, quality assurance and quality control in performance of Clinical Laboratory Improvement Amendments (CLIA)-waived laboratory testing.
```

Dual Credit Medical Law and Ethics for Health Professionals (HPRS 2321)
Recommended Grade Placement: 12
Credit(s): see Practicum in Health Science
Prerequisite: Collin College \& Dual Credit Admission Criteria
Principles, procedures, and regulations governing the legal and ethical relationships among physicians, patients, and health care professionals. Includes current ethical issues related to the various healthcare professions and patient confidentiality.

## Dual Credit Medical Assisting Credentialing Exam Review (MDCA 1154)

Recommended Grade Placement: 12
Credit(s): see Practicum in Health Science
Prerequisite: Collin College \& Dual Credit Admission Criteria
A preparation for one of the National Commission for Certifying Agencies (NCCA) recognized credentialing exams.
Dual Credit Clinical-Medical/Clinical Assistant (MDCA 1360)
Recommended Grade Placement: 12
Credit(s): see Practicum in Health Science
Prerequisite: Collin College \& Dual Credit Admission Criteria
A health-related work-based learning experience that enables the student to apply specialized occupational theory,
skills, and concepts. Direct supervision is provided by the clinical professional.

## WORK-BASED LEARNING \& PRACTICUM EXPERIENCES

A paid work-based learning instructional arrangement in Career-Technical Education for students who, through written training agreements between the school and the employer (training sponsor), receive instruction by study in school with on-the-job training in an approved program area for paid employment. Paid work experiences build upon the academic and occupational competencies previously developed through a student's general education courses and other components of a program of study in Career-Technical Education.

Farmersville High School offers a practicum experience in each career and technical education program of study. Additionally, students may choose to enroll in Career Preparation during the 11th and/or 12th grade if they meet prerequisite and enrollment requirements.

## Career Preparation I, II <br> Recommended Grade Placement: 11-12

## Credit(s): 3

Prerequisite: Instructor Approval and verified employment averaging no less than 15 hours weekly The Career Preparation course provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.


[^0]:    * A score of 3 or higher in AP Biology or AP Physics $1 \& 2$ or AP Physics $1 \&$ C may substitute for the science requirement.
    + A score of 3 or higher in AP Precalculus and AP Calculus may substitute for the math requirement.
    Other DC science or math courses may be substituted as well. See counselor for more details and approval.

[^1]:    Successful completion of the Business Management program of study will fulfill requirements of the Business and Industry endorsement. Revised - August 2022

[^2]:    + A score of 3 or higher in AP Precalculus and AP Calculus may substitute for the math requirement.

