# KNOX COUNTY R-1 SCHOOL DISTRICT



# CAREER PATHWAYS GUIDE

2020 - 2021

# KNOX COUNTY R-I HIGH SCHOOL

The Knox County R-I High School is accredited by the Department of Elementary and Secondary Education of Missouri. It offers a four-year program for Missouri residents. Non-residents may apply for admission by contacting the school administration; tuition payments are required for non-resident students.

# **PURPOSE OF THIS GUIDE**

The purpose of this guide is to provide assistance to students, parents, and counselors in developing the students' four-year sequence of high school classes and preparing for post-secondary decisions. Students should look at their interests, abilities, and talents to choose one of the six broad career pathways and then consider the possible careers in each pathway. The intent is not for students to decide on a specific occupation for the rest of their lives, but to focus on a broader career path to help them select school courses.

The Career Pathway Guide will help students to focus on and provide relevance to their course selections throughout high school. Each career path provides a suggested program of study for careers in entry and college prep levels. A change in paths or levels of post-secondary education can occur any time during the student's high school career. It is hoped that career paths will help parents and other adults provide better assistance to students as they develop a four-year sequence of courses at Knox County R-I School.

# **OVERVIEW AND BENEFITS OF CAREER PATHS**

Career paths are clusters of occupations/careers grouped according to participants' interests and talents or skills. Selecting a career path is not a lifelong commitment; it is a place to begin focusing one's energies. As students take different courses and learn more about themselves and careers, they will probably change career paths. Students who understand the career path concept will be aware that there are a variety of other related possibilities if the first path they choose no longer fits them. If different career paths become more interesting, the students can reevaluate plans, make appropriate decision, and pursue other plans.

#### Benefits:

- All paths include a variety of occupations that require different levels of education and training.
- Career paths provide a plan for all students, whatever their interests, abilities, talents, or desired levels of education.
- Selecting a career path provides all students with an area of FOCUS, along with FLEXIBILITY and a VARIETY of ideas to pursue as they make decisions regarding course selection.
- Career paths allow all students to see a relevance to their selected school courses. Thus, students are more apt to do better in school.
- Career paths help parents and other adults provide better assistance to students as they discuss careers and select courses.

# **CHOOSING A CAREER CLUSTER**

Knox County R-I students complete a career exploration unit in the 8<sup>th</sup> grade. At the end of the unit, a tentative career cluster is chosen by each student. Interest inventories and aptitude surveys are used in assisting the student in this choice. Students will then produce a 4 year plan to assist them in choosing classes that will guide them along their career cluster.

11th and 12<sup>th</sup> grade students are encouraged to sign-up for and take aptitude and ability assessments. Sophomores take the ASVAB. Juniors may sign up to take the district ACT in the spring of their junior year. The national ACT may be taken as many times as necessary for the student to receive their desired score. The Missouri Connections Career Interest Inventory will be given to all freshman and juniors.

As Knox County's students begin high school and gain new experiences, it is important to remember that planning is an ongoing developmental process with different activities at each grade level. Classroom presentations, workshops, career fairs, college days, testing, inventories, job shadowing, college and military representative visits, individual conferences, school bulletins, counseling office and library reference materials are provided for all Knox County students.

As students have new experiences and participate in these activities, they will learn new things about themselves and may change career clusters. A career path is not a permanent commitment. The following are suggested activities by grade level for students and parents to complete. These activities will help the student prepare for graduation and to look ahead both educationally and occupationally. These are in addition to other activities being conducted by the staff at school.

# **GRADE 9**

<ol> <li>Solidify Four-year plan</li> <li>Get involved in extracurricular activities</li> </ol>		
3. Review graduation requirements	4. Participate in Mentoring program	
5. Take the Career Interest Inventory on Missouri Connections 6. Develop good study habits		
7. Review tenth grade educational plans with parents and counselor; enroll for 10 <sup>th</sup> grade		

## **GRADE 10**

1. Take the ASVAB	2. Take the Work Values assessment on Missouri Connections		
3. Continue to be involved in extracurricular activities	4. Start to explore post-secondary plans - job shadowing		
5. Explore possibility of vocational/technical school programs	6. Review graduation requirements and schedule for 11 <sup>th</sup> grade		
7. If interested in taking dual credit courses, take the ACT for qualifying scores in English & Math (See course descriptions for qualifying			
scores).			

## **GRADE 11**

1. Take the ASVAB and ACT	2. Continue to monitor academic progress
3. Update activities and awards file portfolio	4. Continue to be involved in extracurricular activities
5. Solidify post-secondary plans and begin collecting information	6. Review graduation requirements and schedule for 12 <sup>th</sup> grade
about various programs	
7. Choose electives that are consistent with post-secondary plans	8. Take the Career Interest Inventory on Missouri Connections

## **GRADE 12**

Review post-secondary plans with counselor and parents	2. Take the ACT
3. Prepare an outline of academic activities and awards – ongoing	4. Attend College Day – college reps that come to KCHS or SCHS
5. Visit prospective college campus	6. Attend FAFSA Night and Complete FAFSA form (financial aid)
7. Meet deadlines for post-secondary plan	8. Contact individuals for possible recommendations and references
9. Complete scholarship applications by posted deadlines	

# YOUR CHOICES AFTER HIGH SCHOOL

**On-the-Job Training:** Some occupations do not require training before employment.

**Apprenticeship:** Apprenticeship is a three- to four-year training program where you earn money while you learn; you are working on the job. You receive a license at the end of training. Examples of trades that use apprenticeship are bricklaying, jewelry making, electrical repair, plumbing, iron working, etc.

**Vocational Technical:** Programs at these schools are generally one month to two years in length.

**Trade Schools:** Examples of vocational technical/trade school programs include practical nursing, robotics, and business.

**Community/Junior College:** Offers two-year "degree" vocational training, associate degrees, or credit transfer to a college or university where you can pursue a bachelor's degree. Most community colleges have an open enrollment policy for high school graduates and individuals with GEDs. They may offer remedial courses.

**College/University:** A bachelor's degree requires approximately four years of college. A master's degree usually requires one to two years of college beyond the bachelor's degree. A minimum of a bachelor's degree is required for about 20 percent of the occupations in the United States. Entrance requirements depend on the desired program/major.

**Job Corps:** Vocational/skill training is provided at various locations throughout the nation. Training, room and board, and sometimes child care are provided free to economically disadvantaged youth, male and female, ages 17-20.

**Military:** Training is available for many jobs while you are enlisted. You also receive financial assistance for college, pay, room and board, and insurance benefits. High School graduation is required.

# **QUESTIONS AND ANSWERS**

Q: What if students change their minds?

• A career path choice is not a permanent commitment.

- As students have new experiences, they will learn new things about themselves and may change career paths. If they decide on new career paths, they can discuss it with their counselor and adjust future course selections accordingly.
- Q: What steps are involved in making a career path decision?
  - Identify interests, abilities, and talents.
  - Consider the possible careers in each path in relationship to those interests, abilities, and talents.
  - Decide which career path seems to fit best.
  - Select courses that are related to the career path chosen.
- Q: How can parents and other interested adults help?
  - Assist student in identifying interests, abilities, and talents by discussing strengths with them.
  - Share information about careers and work experiences.
  - Arrange for students to talk with people about careers that are of interest.
- O: How can I decide which Career Path best fits me?
  - Start by thinking about yourself and answering the questions at the top of each career page.
  - Consider the possible careers in each path.
  - Decide which career path best fits your interests and strengths.
  - Select courses that are related to your career path.

# **EXPLORE YOUR OPTIONS**

- Read about careers and training or college in the counseling department's career center, public library, newspapers, and high school media center.
- Visit work places, observe, shadow and volunteer.
- Investigate technical schools, community, and four-year colleges.

	KNOW YOURSELF
EDUCATION	What courses have you taken? With how much academic challenge are you comfortable? Do you want to continue with college, vocational training, or on-the-job training?
INTERESTS	What are you interested in – working with people, working alone, working indoors or outdoors? Develop a list of the types of jobs and conditions you like best, but be flexible. Have you chosen one of the six career paths?
SKILLS & ABILITIES	Make a list of your skills and abilities. Include your organizing skills, your management skills, and your special talents.

**EXPERIENCE** What has been your involvement in clubs, social activities, travel, volunteer work, or paid employment? Include the

types of responsibilities you have had in these activities.

**VALUES** What are your beliefs and attitudes toward yourself, other people, and the world?

**STRENGTHS** What are your best personal qualities? What attributes do you want your potential employer to know about you?

AREAS OF IMPROVEMENT

What do you want to improve about yourself?

**GOALS** What do you want to accomplish in four to five years? Develop a plan for immediate and long-range goals.

# HOW TO USE THIS CAREER PATHWAYS GUIDE

If your answers to "Know Yourself" on the previous page indicate that you want to

## Enter the work force immediately after graduation:

- Select courses that give you specific information and skills for employment
- Examine job placement opportunities

#### **Enter the military:**

- Graduate from High School.
- Select courses that prepare you for the military occupational specialty (MOS) in which you are interested
- Examine the vocational school options, which are related to your MOS choice
- Contact local recruiters by telephone or talk with them when they visit our school

# Enter technical school, community college, four-year college:

- Observe the admission requirements and articulation requirements
- Select the courses required by the school(s) of your choice
- Maintain your record of activities, leadership roles, honors, achievements, and courses completed when applying to schools
- Explore high school educational options that help you develop your lifestyle plan and follow procedures for those you choose

# CAREER RELATED ASSESSMENT SCHEDULE

In order to assess students' interests and abilities and assist them in making career plans, a battery of assessments is given to students beginning in their  $8^{th}$  grade year and continuing through their  $12^{th}$  grade year. The assessments are as follows:

**Eighth Grade Year:** The Missouri Connections Career Interest Inventory will be taken. It helps students explore various careers and plan for their futures. It does this by categorizing students' responses to questions into 16 major clusters of interest. This helps students to identify which career

and educational goals best relate to their interests. Essentially, it helps eighth graders narrow down their career possibilities by helping them decide what they like to do.

**Ninth Grade Year:** All students will begin a portfolio as part of the students' ongoing career education and assessment that will be reviewed and updated annually during their four years of high school. The portfolio will include a four-year plan that designates a course of study or career pathway, which requires parent/guardian involvement and allows for change in course of study or career pathways. The Missouri Connections Career Interest Inventory will be taken.

**Tenth Grade Year:** The Department of Defense's ASVAB (Armed Services Vocational Aptitude Battery) is a multi-aptitude test battery. It consists of 10 short individual tests covering Word Knowledge, Paragraph Comprehension, Arithmetic Reasoning, Mathematics Knowledge, General Science, Auto & Shop Information, Mechanical Comprehension, Electronics Information, Numerical Operations, and Coding Speed. Individual and combined scores given to yield three academic scores: Verbal, Math, and Academic Ability. A career exploration program follows the academic testing, which allows juniors to identify careers that match their abilities, values, and interests. The military also uses this battery to determine which jobs entering persons are eligible for. The Missouri Connections Career Interest Inventory will be taken.

**Eleventh Grade Year:** Juniors have the option to take the ACT in April.

**Twelfth Grade Year:** Seniors that did not take the District ACT test as a junior, will take the Work Keys Assessment

# **GRADUATION REQUIREMENTS**

Students must complete the following MINIMUM requirements in order to graduate from Knox County High School.

Language Arts	4 credits	Physical Education	1 credit
Mathematics	3 credits	Health	.5 credit
Science	3 credits	Personal Finance	.5 credit
Social Studies	2 credits	Electives	7 credits
Government/Civics	1 credit	Total	24 credits
Fine Arts	1 credit		

Practical Arts 1 credit

Language Arts must consist of English I, English II, and English III, English IV, MACC Composition I and II, and MACC Speech. Other courses may account with administrator approval.

Social Studies must consist of American History, World History, or Geography.

Students may choose the <u>embedded option</u>. An embedded credit course incorporates competencies from one subject into another (host) subject and allows students to earn credit for both. The embedded content should align closely to the state standards that are grade appropriate for the course. For example, in Missouri, those standards would be Show-Me Standards, Grade Level Expectations (GLEs), or Curriculum Frameworks. An example of an embedded credit would be a student earning three units of Vocational Agriculture (AG I, AG II, and Crop Science or Plant Science, Animal or Food Science, Greenhouse Operations and Management, or Conservation of Natural Resources) may be used to waive 1 unit of Science.

Graduates must past the Missouri and U S Constitution tests. The MO Constitution is taken during junior year and 80% is passing. The US Constitution is taken during 8<sup>th</sup> grade year and 70% is passing. Starting with the Class of 2021, students will take the Citizenship test during their freshmen year and 60% is passing.

Beginning with the Class of 2018, each student will be required to receive 30 minutes of CPR instruction and training in the Heimlich maneuver.

The math requirement will be fulfilled through various options, using 1 of the 3 tracks. Track #1 is Fundamentals of Algebra, Algebra I, and Fundamentals of Geometry. Track #2 is Algebra I, Geometry, Algebra II. Track #3 is Geometry, College Algebra, Trigonometry/Statistics or Calculus.

The following table shows the sequence of classes students will take each year:

SUBJECT	FRESHMEN	SOPHOMORE	JUNIOR	SENIOR	
English	Language Arts I	Language Arts II	Language Arts III or higher	Language Arts IV or higher	
Math	Fundamentals of Alg Algebra I Geometry	Algebra I Geometry Algebra II	Fundamentals of Geo Algebra II College Algebra &/or Trig/Stats	If college bound Calculus	
Science	Physical Science Intro to Chem Biology	Intro to Chem Biology Upper level science	Biology Upper level science Upper level science	If college bound Upper level science	
Social Studies	American History	World Survey	Government		
Physical Educatio	n	One Credit Rec	commended 9th or 10th grade		
Fine Arts		One Credit Rec	One Credit Recommended 9 <sup>th</sup> or 10 <sup>th</sup> grade		
Practical Arts		One Credit Rec	One Credit Recommended 9 <sup>th</sup> or 10 <sup>th</sup> grade		
Health/Personal F	inance	0.5 Credit of each	<b>0.5 Credit of each</b> Recommended 11 <sup>th</sup> grade		
Foreign Language		If college bound	take Spanish I and II		

# A+ SCHOOLS PROGRAM

Knox County R-I High School has been designated by the Missouri Department of Elementary and Secondary Education as an A+ High School. The A+ vision for the Knox County R-1 School District is to provide all students the necessary knowledge and skills to be successful in their endeavors beyond high school.

The three goals of the A+ Schools Program are to ensure that all students graduate from high school, to ensure that all students complete a selection of high school studies that is challenging and has identified learning expectations, and to ensure that all students proceed from high school graduation to a college, post-secondary vocational or technical school or a high wage job with workplace skill development opportunities.

Graduates of Knox County R-I High School may be eligible for two years of paid tuition and fees to attend any Missouri public community college, vocational school, or technical school for a period of four years from the date of graduation.

## To be eligible, students must meet the following requirements:

- Sign an A+ Participation Agreement
- Attend three consecutive years and graduate from a designated A+ School
- Graduate with a 2.5 cumulative GPA on a 4.0 GPA scale
- Graduate with an attendance record of 95% for the four years of high school
- Complete fifty hours of unpaid tutoring/mentoring (SAM during senior year)
- Maintain a record of good citizenship and avoid the unlawful use of drugs, tobacco and alcohol
- Make a good faith effort to first secure all available post-secondary funds that do not require repayment by submitting the FAFSA to receive funds
- Have achieved a score of proficient or advanced on the Algebra I end of course exam or a higher level DESE approved end –of –course exam in the field of mathematics

## **CLASS STATUS**

To qualify for specific grade status, students must meet the following criteria:

Freshman Status – Promotion from the 8<sup>th</sup> grade.

Sophomore Status – Minimum of 6 units of credit prior to the beginning of the school year.

Junior Status – Minimum of 11 units of credit prior to the beginning of the school year.

Senior Status – Minimum of 17 units of credit prior to the beginning of the school year.

## **ACADEMIC LETTER**

Letters will be awarded in September of each year and will be given to students not previously receiving the letter and who have earned a grade point average of 8.0 or better in three of the four quarters in the preceding year. Students already possessing a letter will receive the appropriate bar. A gold bar will be given to students on the A honor roll three of four quarters and a silver bar to those on the B honor roll three of four quarters.

# **GRADE POINT AVERAGE**

Knox County High School uses a weighted 4-point scale in calculating honor rolls and student grade point averages. All semester and full year classes are included in the calculation, except classes on a pass/fail grade. A pass grade does not affect grade point average, but a fail grade is calculated in the student grade point average. At graduation, the senior with the highest grade point average is declared the valedictorian, the student ranking next highest is declared the salutatorian. See Board Policy 2523.

# **Dual Credit**

Knox County High School offers several dual credit classes. Students enrolled in these classes can receive college credit in addition to their high school credit. All the dual credit courses are weighted.

## **CAREER PATHS**

#### **Arts and Communication**

These occupations are related to the humanities and the performing, visual, literacy, and media arts. They may include audio and video technology and film, printing technology, visual arts, performing arts, journalism and broadcasting, and telecommunications.

## **Business, Management and Technology**

These occupations are related to the business environment. They may include network systems, information support and services, interactive media, programming and software development, management and entrepreneurship, professional sales and marketing, buying and merchandising, marketing, distribution and logistics, e-marketing, financial and investment planning, business financial management, banking, insurance, management, business management and accounting, human resources, business analysis, and administrative and information support.

# **Natural Resources Agriculture**

These occupations are related to the environment and natural resources. They may include food products and processing systems, plant systems, animal systems, power, structural and technical systems, natural resources and environmental systems, and agribusiness systems.

## **Human Services**

These occupations are related to economic, political and social systems. They may include early childhood development, counseling and mental health services, family and community services, personal care services, consumer services, restaurants/food/beverage services, recreation, amusement, and attractions, travel and tourism, lodging, public management and administration, governance, national security, foreign service, revenue and taxation, correction services, emergency and fire services, security and protective services, law enforcement, legal services, administration and teaching.

## **Industrial and Engineering Technology**

These occupations are related to the technologies necessary to design, develop, install or maintain physical systems. They may include engineering, design, construction, maintenance and operations, production, manufacturing, installation and repair, quality assurance, logistics and inventory control, health safety and environmental assurance, transportation, warehousing and distribution, sales and service.

#### **Health Services**

These occupations are related to the promotion of health and the treatment of disease. They may include biotechnology research and development, therapeutic services, diagnostics services, health informatics, and support services.

# **ARTS & COMMUNICATIONS-Creative Path**

Are you....Creative, Imaginative, Innovative, Original, Good at Communicating Ideas?

Possible Arts, Audio/Visual Technology, and Communications Occupations

Fashion Designer	<ul> <li>Florist</li> </ul>	Graphic Artist
Industrial Designer	<ul> <li>Merchandise Display Worker</li> </ul>	<ul> <li>Motion Picture Camera Operator</li> </ul>
Photographer/Camera Operator	<ul> <li>Set Designer</li> </ul>	Sign Painter and Letterer
Visual Artist	<ul> <li>Interpreter/Translator</li> </ul>	<ul> <li>Public Relations Specialist</li> </ul>
Radio/Television Announcer/Newscaster	<ul> <li>Reporter/Correspondent</li> </ul>	Technical Writer
<ul> <li>Journalist</li> </ul>	<ul> <li>Actor/Director/Producer</li> </ul>	Dancer/Choreographer
Model	<ul> <li>Musician</li> </ul>	<ul> <li>Archivist</li> </ul>

Suggested Career Specific Electives	Speech, Yearbook, Multimedia/Journalism, Art 1, Advanced Art, Draw/Point, Sculptures, Arts
	& Crafts, Desktop Publishing, Band, Business Technology, Composition, Graphic Arts And
	Printing (Vo-Tech)

# **BUSINESS, MANAGEMENT & TECHNOLOGY-Business Path**

Can you...Lead, Organize People, Plan Activities for Others, Talk with People, Work with Numbers or Ideas, Carry Through with an Idea?

Possible Business, Management & Technology Occupations:

Accountant/Auditor	Cashier	Construction Contractor	Insurance Agent/Broker
• Education Administer	Real Estate Agent/Broker	Appraiser	Health Services Mgr
<ul> <li>Stockbroker/Securities</li> </ul>	Personnel/Training	Sales Representative	Retail Sales Manager
Marketing Research Analyst	Adjuster/Investigator/Collection	Bookkeeping/Accounting	Computer Systems Analyst
• Court Reporter	Postal Clerk/Mail Carrier		

Suggested Career Specific Electives	Computer Applications, Business Technology, Accounting I & II, Psychology, Economics, Sociology, AG I & II,
	Ag Business, Ag Management, Speech, Computer Technology (Vo-Tech)

# **HEALTH SERVICES-Health Path**

Are you interested in...Helping People Get/Stay Well, How the Body Works, Observing and Noting Changes in Patients?

## **Possible Health Services Occupations:**

Physical Therapist	Occupational Therapist	Registered Nurse	Chiropractor
• Speech/Language	<ul> <li>Pathologist</li> </ul>	• Dentist	Audiologist
<ul> <li>Optometrist</li> </ul>	• Dietitian	• Physician	• Pharmacist
<ul> <li>Podiatrist</li> </ul>	<ul> <li>Veterinarian</li> </ul>	Respiratory Therapist	Medical Records Technician
• EMT/LPN	<ul> <li>Dental Hygienist</li> </ul>	<ul> <li>EEG/EKG Technologist</li> </ul>	Surgical Technician

Chemistry I & II, Anatomy/Physiology, Psychology, Family & Consumer Sciences, Agriculture classes, Health Services (Vo-tech), Child Care
(Vo-Tech)

# **HUMAN SERVICES-Helping Path**

Are you...Friendly, Open, and Outgoing, Understanding and Cooperative, Good at solving Problems, Interested in Making Things Better for Others?

# **Possible Human Services Occupations:**

<ul> <li>College Professor</li> </ul>	Elementary/Secondary Teacher	Counselor	Librarian
• Archivist/Curator	• Court Administrator	Adult/Vocational Education Teacher	Special Education Teacher
• Lawyer/Judge	Paralegal	Chef/Cook	Correction Officer
Police Officer	• Firefighter	Social Worker	• Detective
• Guard	Special Agent	Animal Caretaker	Truck Driver
Cosmetologist/Barber	Flight Attendant	Rail Transportation Worker	

Suggested Career Specific Electives	Computer Applications, Forensics, Psychology, Family & Consumer Sciences, Agriculture classes, Industrial Technology classes, Child Care
	(Vo-Tech), Computer Technology (Vo-Tech)

# **INDUSTRIAL & ENGINEERING TECHNOLOGY-Building & Fixing Path**

Are you...Mechanically Inclined, Good with your Hands, Practical, Good at Building Things, Interested in Knowing How Things Work?

## Possible Industrial & Engineering Technology Occupations:

Bindery Worker	Prepress Worker	Aerospace/Nuclear Engineer	Civil/Industrial/Chemical Engineer
• Electrical/Electronics Engineer	Mechanical/Petroleum Engineer	Machinist	Bricklayer
Carpet Installer	Welder/Tool/Die Maker	Electrician	Insulation Work
• Roofer	• Surveyor	Architect/Landscape	Carpenter
Drywall Worker	Aircraft/Auto/Diesel Mechanic	Painter	Glazier
Water Treatment Plant	Heating/Air Conditioning	Sheet Metal Worker	Aircraft Pilot
Air Traffic Controller	Broadcast Technician	Computer Programmer	

Computer Applications, Ag I & II, Metals, Woods, Electrical, Drafting I, II, III, Industrial Arts, Auto Collision (Vo-Tech), Construction Trades
(Vo-Tech), Auto Mechanics (Vo-Tech)

# **NATURAL RESOURCES AGRICULTURE-Nature Path**

Are you...Interested in Nature, Physically Active, Interested in Plants and Animals, Curious about the Physical World, Good at Observing, Learning, Investing, or Problem Solving?

## **Possible Natural Resources Agriculture Occupations:**

• Chemist	Geologist/Geophysicist	Meteorologist	Physicist/Astronomer
Agriculture Scientist	Biological Scientist	Forester/Conservationist	Agriculture Engineer
Farm Worker	Farm Operations Manager	Coop. Extension Personnel	Fish/Game Specialist
Nursery Worker			

Suggested Career Specific Electives	Computer Applications, Chemistry, Ag I & II, Animal Science, Ag
	Management, Ag Plant, Floriculture, Horticulture, Botany, Zoology,

## **COURSE DESCRIPTIONS**

## **COMMUNICATION ARTS**

## Language Arts I

#### LA 109

This course is designed to help students with their mastery of basic skills. Literature study presents varied human experiences through forms of short stories, drama, non-fiction, poetry and the novel. Language student includes a strong emphasis on grammar, usage, spelling, and vocabulary. Composition concentrates on variation of sentence structure in the organization of paragraphs.

Grade 9

Year long

# Language Arts II

#### LA 110

Students will study grammar and vocabulary to increase communication skills within and beyond the classroom. By studying all genres of literature, students will acquire the knowledge and skills to gather, analyze and apply information and ideas. Classroom activities and projects are designed to aid the student in acquiring the knowledge and skills necessary to recognize and solve problems as well as in making decisions and acting as responsible members of society.

Grades 10

Year long

Prerequisites: LA I

## **Language Arts III**

#### LA 111

This course focuses on American Literature, literary elements, vocabulary, grammar, style and essays. Language Arts III students will learn the fundamentals of research and will write a research paper for this course. Language Arts III students will learn the fundamentals of research and will write a research paper for this course.

Grades 11

Year long

Prerequisites: LA I, LA II

#### Language Arts IV

#### LA 112

This course is designed to help students become exposed to epics and classical literature while reviewing classical literature while reviewing elements, style, comprehension, analysis, vocabulary, and grammar. Students will also learn steps of obtaining a job including but not limited to applications, resumes, cover letters and interview. Career research is also covered in this class.

Grades 11, 12

Year long

Prerequisite: LA III or College English I

## Mass Media (Yearbook)

#### LA 303

Production of the yearbook will be the primary focus of this class. As the year progresses students will be learning an online publishing interface, exploring what makes an effective photograph and how to take one, and writing copy and captions for each layout in the book. Students will be required to sell commercial advertisements, interview students and staff, layout information, meet deadlines, and work as a team. This hands-on course demands that the student be a self-starter and motivated in order to achieve quality design and text. The work may require that the student attend school activities outside of the regular school day.

Grade 9,10,11,12

Year long

Prerequisite: Application to enroll & Desktop Publishing preferred

#### Multimedia Journalism

**LA 303** 

The course is a reporting and production course in which students gather information using journalism practices, such as in-person interviews, conduct research and learn to use various technologies to produce journalism stories for online and print distribution. Students will create numerous original stories using varied structures and writing techniques. Students will also learn the basics of photojournalism and caption writing. The work may require that the student attend school activities outside of the regular school day.

Grade 11, 12

Year long

#### **Public Speaking**

**SPK 101** 

This course studies the role of speaking in communication in both formal and informal situations. The course includes a study of the communication process, the role of the listener, methods of speech organization, informative and persuasive techniques, and effective delivery.

Grade 9, 10 11, 12

Year long

## **MATHEMATICS**

All mathematics courses require teacher's permission in addition to prerequisites

## **Fundamentals of Algebra**

This course is targeted to help students with math computation to build foundation needed for Algebra. The course is will review and solidify concepts of mathematical factors including multiplication, division, addition, and subtraction in addition to introducing beginning algebra concepts such as solving equations, linear equations, slop/rate of change, and systems of equations.

Grade 9, 10, 11, 12

#### **Fundamentals of Geometry**

This course is designed to introduce students to the basic concepts of geometry. Students will be exposed to real-life, job-related mathematical skills to prepare them to think logically and problem solve in society. In addition to this, students will be exploring geometric theorems and a review of basic algebraic concepts. Grade 9, 10, 11 Year long

## Algebra I

This is a traditional algebra course designed to help students understand the basic structure of algebra and apply basic algebraic concepts to problem solving. Grade 9, 10 Year long

#### **Geometry**

This course will increase the student's ability to carry on logical thinking and employ geometric processes. Students will study figures and measures, parallel lines, congruent, polygons, quadrilaterals, trapezoids, and asymmetric polygons and coordinates.

Grade 9, 10, 11

Year long

Year long

Prerequisite: "C" or higher in Algebra I or teacher recommendation

#### Algebra II

This course is an extension of Algebra I, studying equations and inequalities, polynomials, roots, quadratic equations, exponents, logarithms, statistic, and probability. This class will help students improve logical thinking skills.

Grade 10, 11, 12

Year long

Prerequisites: "C" or higher in Algebra I or teacher recommendation

## **Quantitative Algebra**

This course is designed to fulfill general education requirements for students pursuing non-STEM degrees and career paths. Topics include: problem solving, units of measure, probability and statistics, linear and exponential models, logic and sets. Emphasis is placed on critical thinking and improving students' ability to apply mathematics.

Grade 11, 12

Semester long Prerequisite: Algebra II, Geometry, Dual Credit-20 on the math portion of ACT & GPA 3.0

Weighted

## College Algebra

#### MTH 140

Topics include solving equations, various functions and their graphs, including polynomial and rational functions and exponential and logarithmic functions; and introductions to analytic geometry. The course includes systems of equations and inequalities.

Grade 11, 12

Year long

Prerequisites: Algebra II, Geometry, Dual Credit-20 on the math portion of ACT & GPA 3.0

Weighted

Weighted

#### **College Trigonometry**

#### MTH 145

This course includes angle-based trigonometric functions and their inverses, multiple angle formulas, identities, trigonometric equations, radian measure, arc length, angular velocity, graphs of trigonometric functions, and solution of right triangles.

Grade 11, 12

Semester long

Prerequisites: Algebra II, Geometry, Dual Credit-22 on the math portion of ACT & GPA 3.0 Weighted

## **College Statistics**

#### MTH 160

This course includes elementary probability and statistical inference, descriptive statistics, testing hypotheses and estimation, t-distribution, chi-square distribution, correlation and significance. Prerequisite: Successful completion of Algebra II

Grade 11, 12

Semester long

Prerequisites: Algebra II, 22 on the math portion of ACT or taken College Algebra & GPA 3.0 Weighted

## **College Analytic Geometry and Calculus**

Students are introduced to plane analytic geometry, including limits, continuity, derivative for functions of a single variable, differentials, indefinite and definite integrals, and applications of the derivative and integral.

Grade 12

Year long

MTH 201

Prerequisites: Trigonometry, Dual Credit-24 on the math portion of ACT & GPA 3.0

## **SCIENCE**

## **Physical Science**

A basic course designed to introduce the sciences of chemistry and physics providing a general knowledge of these physical sciences.

Grade 9

Year long

#### **Introduction to Chemistry**

This course will consist of introductory chemical concepts ranging from atomic structure to chemical reactions. The course topics include matter and energy, chemical bonding, intermolecular forces, and acid/base concepts and nuclear changes.

Grade 9, 10

Year long

#### **Biology**

Students will use the methods of scientific investigation to gain an understanding of important biological concepts. Students will gain an appreciation of the natural world from the level of the molecule to the global biosphere.

Grade 9, 10, 11

Year long

## **Chemistry I**

This course is a study of matter and the change it undergoes. Topics studied include measurement and solving problems, atoms, the periodic law, chemical bonding, formulas and compounds, reactions and equations, stoichiometry, gas, liquids, solids, solutions, acids, bases, pH. This course includes hands-on laboratory approximately one per unit.

Grade 10, 11, 12

Year long

#### STEM: Science is fun!

A year long course where students will learn about real life problems and how to solve them through the uses of science, technology, engineering, and math. This class is completely hands on learning.

Grade 10, 11, 12

Year long

Prerequisites: Biology

#### **College Biology (MACC)**

First half of two-semester introductory biology sequence for biology majors and minors. Introduction to the concepts of biological structure and function at the molecular and cellular level, genetics, and evolution. Second half of two-semester introductory biology sequence for biology majors and minors. Introduction to the biology of organisms including evolutionary history, diversity, structure, and function of major taxa; and ecology.

Grade 11, 12

Year long

Prerequisites: Biology

Weighted

## **SOCIAL STUDIES**

#### **American History**

This course will cover American History from Reconstruction to modern day America. It will focus on the major events and personalities of recent American History. Highlight of this course will include settling the West, the two world wars, the cold war, and finally modern America.

Grade 9

Year long

#### **World History**

A sophomore level required course, which explores ancient civilizations, the Middle Ages and Twentieth Century events. An overview of geography is an integral part of each unit. The long-term impact of civilizations, nations, and individuals is studied. Economic, social, and political influences over time are also studied. Students develop critical and analytical thinking skills and work on research and writing skills as well.

Grade 10 Year long

#### Government

This course is designed to make students knowledgeable of governmental processes and prepare them to be informed and involved citizens. Students will study the development of our government and issues relating to our rights and responsibilities. In addition, the Missouri Constitution will be studied and the required test will be given.

Grade 11 Year long

#### **Current Events**

This course will provide students with the opportunity to study in-depth events, which are happening in the present. In addition to studying events, people and places that are currently in the news, the course will examine the "history" behind some of these events.

Grade 10,11, 12 Semester OR Year Long

## **Practical Arts-BUSINESS EDUCATION**

#### Middle School Keyboarding/Introduction to Business

This course is designed to introduce students to how business works in today's society and to provide a foundation for future business courses. Students will also master beginning skills in the areas of word processing, spreadsheet applications, and desktop publishing.

#### **Personal Finance**

This one semester course is based on the Missouri Personal Finance Competencies and presents essential knowledge and skills to make informed decisions about real world financial issues. Students will learn how choices influence occupational options and future earning potential. Students will also learn to apply decision-making skills to evaluate career choices and set personal goals. The course content is designed to help the learner make wise spending, saving, and credit decisions and to make effective use of income to achieve personal financial success.

Grade 11 Semester long

#### **Computer Applications**

A basic, introductory course using personal computers using Microsoft Windows and Office Suite applications. This course also covers PC history, hardware, software and operating concepts. The student will receive hands on experience in MS Windows, Word, Excel, PowerPoint and other programs. This course is a prerequisite for all other computer courses.

Grade 9, 10, 11, 12 Year long

#### **Computer Science**

Students will learn the basics of computer programming along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science. It gives a foundation in the tools used in computer science and prepares students for further study in computer science. The course allows students to work independently in text-based Python. The course also includes a career focus, where at the end of units, students meet (via videos) individuals from different industries who work in coding (medical, music, etc.).

Grade 9, 10, 11, 12 Year long

## **Entrepreneurship** (1st semester)

This course is designed to provide students with the fundamental knowledge needed for organizing, developing and implementing a business. Topics of study will include learning the advantages and disadvantages of owning a business, preparing a business plan, choosing a location, securing a loan, determining organizational structure, and promoting a business.

Grades 10, 11, 12 Semester long

## **Business Management (2<sup>nd</sup> semester)**

This course is designed to help students develop an understanding of skills and resources needed to manage a business. Instruction includes a general overview of American business, forms of business ownership, personnel management, human relations, and government regulations.

Grades 10, 11, 12 Semester long

#### **Desktop Publishing**

Students develop proficiency in using desktop publishing software, Photoshop and Indesign, to create a variety of business publications such as flyers, brochures, newsletters, etc. They also design and create custom items for individuals. In addition, students will learn to create Web pages and use multimedia equipment including scanner and digital camera.

Grade 9, 10, 11, 12 Year long

#### Accounting I

Accounting I introduces students to the basic double-entry accounting concepts and related career opportunities. The student will analyze and record business transactions in journals, ledgers, and prepare financial documents. Students learn to keep records for three types of business – sole proprietorship, partnership, and corporations. Students will work on accounting problems and complete two simulations (one with actual source documents) covering the complete accounting cycle. Thus students have the opportunity to develop accounting skills for personal use, the workplace, and for more advanced study of accounting.

Grade 9, 10, 11, 12

Year long

#### **Accounting II**

This course is designed to provide the student with an opportunity to develop in-depth knowledge of accounting procedures and techniques using an automated accounting system. With the use of computers, students will review basic accounting procedures; and will learn: departmental and payroll accounting, partnership and corporation accounting, accounting control systems, accounting for taxes, notes and drafts, cost accounting, special problems in accounting for sales, and how management uses accounting data. It is designed for any student planning to continue the pursuit of a business or accounting program in college, as well as for those who have an interest in accounting careers upon high school graduation.

Grade 11, 12 Year long Prerequisite: Accounting I

#### **Hospitality Management**

Students will learn about the art of cooking and get a global view of hospitality and tourism management. This course will teach students real-world skills they can use for a few career in business or human services and includes a hands-on cooking lab component. This class may require time outside of the regular school day for the end-of-semester dinner(s).

Grades 10, 11, 12 Year long

#### Marketing/Advertising

This semester long course is designed to provide an understanding of the fundamental marketing processes. This course includes instruction on the creation, execution, transmission, and evaluation of commercial messages concerned with the promotion and sales of products and services.

Grades 9, 10, 11, 12 Semester long

## **Practical Arts-INDUSTRIAL TECHNOLOGY**

# 7<sup>th</sup> and 8<sup>th</sup> Industrial Technology

This course will allow students to explore basic wood processing practices involving basic hand tools, basic electrical circuits and how alternative energy is produced. Students will then learn to build and test a bicycle generator one year. The next year students will build a candy dispenser. Students also will turn their very own ink pen on the wood lathes every year. If some students get their projects completed early they have the option of marking their own small project or they can assist on other projects underway in the shop. During this time, students will have the opportunity to learn the torch mate software so they are familiar with it when they get into high school.

#### **Electrical**

Scientific theory of magnetism and electricity. This course will introduce students to the generation and distribution of electrical energy. Students will practice using Ohm's Law and Watt's Law to DC and AC circuits containing resistors, and/or capacitors, and/or inductors in series, parallel, and series/parallel combinations. The lab will include the use of testing equipment, bread boarding, and troubleshooting of basic DC and AC circuits. An introduction to residential wiring according to the NEC will also be covered.

Grade 11, 12 Year long Prerequisites: Algebra II

## **Drafting I (1st semester)**

Introduction to 2D engineering drawing using <u>AutoCAD</u>. This course will include orthographic projections, proper dimensioning, instruction of tolerances, section views, and fasteners. The final project will be to produce a complete set of working drawings.

Grade 9, 10, 11, 12 Semester long

## **Drafting II** (2<sup>nd</sup> semester)

Students will be introduced to Solid works program and apply it to create solid models. From these models student can create fully dimensional orthographic projections, isometrics, various sections, and animated assemblies. They then can be printed on 3D printers.

Grades 9, 10, 11, 12 Semester long

#### Woods I

This course will introduce students to basic wood processing practices involving basic hand tools and machine operations. Students will become proficient in using measuring tools and project layout techniques. Students will be assigned 4 small projects that will use a variety of hand tools and must be completed before students will be able to choose one heirloom project to construct from a predetermined list.

Grades 9, 10, 11, 12

#### Woods II

This course will introduce students to the more advanced wood processing practices involving sharpers, routers, and other machining operations. Students will be required to make a set of plans to complete with a material list for five predetermined projects. These include a headboard, cabinet, steamer trunk, checkerboard, toolbox, or hedge bow (without arrows)

Grades 10, 11, 12

#### Metals

This course will start with the basics of arc, mig, tig welding, and oxy welding and cutting. Students will be graded on a variety of welds from each process. Students will then submit their final assignment for dye testing. Students will also learn basic machining methods, and will master the use of measuring instruments such as calipers, micrometers, and snap gauges to manufacture parts with tolerances of  $\pm$ .001. Students will be required to layout and mark pieces for proper hole, and thread placement. Threading will be completed by the use of taps, or cut threads on the lathe and this course will be complemented by the TorchMate design software where students will be able to design a project and then cut their parts out on the Torchmate. Every student gets a 2x2 foot piece of 16 Ga. Metal to deigns and cut from. This class will also work on projects for customers that may need welding, machining, or cut on the TorchMate. Students will design and make projects to sell for donations to help fund the Ind. Tech Program. This will all come full circle with a class trip to Vermeer Mfg. in Pella, IA and a trip to Clow Valve foundry and machine shop in Oskaloosa, IA. This trip will assist in tying together lessons in the classroom and the welding lab, as well as, giving students insight into the various manufacturing processes.

Grade 9, 10, 11, 12 Year long

#### **Industrial Tech**

This course will introduce students to residential maintenance. Students may have the opportunity to build a shelter for the PTO. They will work on various projects ranging from cabinet building, residential maintenance, metal projects, framing and construction. Students will also be able to design, write a bill of materials, and build projects of their choosing. Other maintenance projects from around the school will sldo be available for students to practice on. Students will also learn to operate the Lincoln TorchMate. Students will get a 2x2 foot square of metal to deigns and cut for themselves. This class will also work on projects for customers that may need welding, machining, or cut on the TorchMate. Students will design and make projects to sell for donations to help fund the Ind. Tech Program. In addition to this students will become Master Certified Technicians through Briggs and Stratton as well as through Stihl for 2-cycle engines.

Grade 10, 11, 12 Year long Prerequisite: Metals and Woods I

## **Practical Arts-VOCATIONAL AGRICULTURE**

## **Exploring Agriculture**

A general literacy course designed to introduce and apply life skills related to one of America's basic industries – agriculture. Units of instruction will be selected from Introduction to Agriculture, Plant Science, Animals in Society, Products from Agriculture, Natural Resources, Leadership and Personal Development, and Basic Home and Farmstead Safety, and Maintenance. <u>Available every other year</u>

## **Agricultural Science I**

This course is designed for instruction in animal science, agricultural mechanics, careers, leadership, and supervised agricultural experience. Units may include agribusiness, fish and wildlife management, and food science. Available every year

Grade 9

#### **Agricultural Science II-Plant & Mechanics**

This course is designed for instruction in plant and crop science, soils, entomology, horticulture, forestry, mechanics, careers, leadership, and supervised agricultural experience. Available every year

Grade 10 Prerequisite: Ag. Science I

#### **Supervised Agricultural Experience Co-op (FLEX)**

This course provides for the enrolment of students that are released on school time to complete a cooperative occupational experience in an approved training station in agriculture. A signed training agreement and training plan must be completed for each student. Available every year.

Grade 12 Prerequisites: Ag. Science I, Ag. Science II and one other Ag class

#### **Conservation of Natural Resources**

This course prepares students for activities in the conservation and/or improvement of natural resources such as oil, water, air, forests, fish, and wildlife for economic and recreational purposes. Available during even years

Grade 11, 12 Year long Prerequisites: Ag. Science I, Ag. Science II

## Food Science and Technology

This course includes the areas of food chemistry and nutrition, food additives, food packaging and labeling, evaluation of foods, food microbiology, food processing, food fermentation, principles of sanitation and quality control. <u>Available during even years</u>

Grade 11, 12 Semester long with Communication Prerequisites: Ag. Science I, Ag. Science II

# **Agricultural Communications and Leadership**

This course will enable students to develop the knowledge, attitudes, and skills to demonstrate positive leadership for agriculture. Ares of focus include public speaking, extemporaneous speaking, impromptu speaking, written communication, meeting people, good first impressions, personal goals, team work, team/organizational goals, organizing groups to take action and evaluation of team/organizational actions. <u>Available during even years</u>

Grade 11, 12 Semester long with Food Science Prerequisites: Ag. Science I, Ag. Science II

#### **Agricultural Management and Economics**

This course combines farm management, agribusiness management, and content based agricultural economic principles. Computer applications are included to enhance student understanding and utilization of current technology. Units include human relations, verbal and written communication, microcomputers in agriculture, economic principles, farm planning, agribusiness functions, and business management. <u>Available during even years</u>

Grade 11, 12 Prerequisites: Ag. Science I, Ag. Science II

## Landscaping

This course includes the basic techniques of landscape design, landscape construction, installation, and maintenance. Available during even years

Grade 11, 12 Semester long with Floriculture Prerequisites: Ag. Science I, Ag. Science II

#### **Floriculture**

This course includes the production, arrangement, and retailing of flowers. It includes fresh, silk, or dried flowers to be used in the design of corsages, wedding bouquets, table flower arrangements, and seasonal holiday decorations. <u>Available during even years</u>

Grades, 11, 12 Semester long with Landscaping Prerequisites: Ag. Science I, Ag. Science II

## **Greenhouse Operation and Management**

This course develops a basic understanding of greenhouse techniques. The production of greenhouse crops will be used to demonstrate procedures such as plants started from cuttings, seeds, grafts, and layering. Students will manage their own crop as a greenhouse project. <u>Available during every year</u>

Grade 11, 12 Prerequisites: Ag. Science I, Ag. Science II

#### **Agricultural Management and Economics**

This course combines farm management, agribusiness management, and content based on agricultural economic principles. Computer applications are included to enhance student understanding and utilization of current technology. Units include human relations, verbal and written communication, microcomputers in agriculture, economic principles, farm planning, agribusiness functions, and business management. Available during odd years

Grade 11, 12 Year long Prerequisites: Ag. Science I, Ag. Science II

## **FINE ARTS**

#### Art I

Students will learn techniques that allow them to create a series of drawings, paintings and sculptures incorporating the use of the elements of art and principle of design. Students will be expected to research a famous artist.

Grades 9, 10, 11, 12 Year long

#### **Arts and Crafts**

This year long course will cover a wide variety of crafts and uses a wide variety of materials, including found materials like aluminum cans and traditional rafting media such as yarn. The class is hands on and teaches different crafting techniques.

Grades 9,10,11,12 Year long

#### **Drawing (1st semester)**

During this semester class, use drawing media such as pencil, charcoal, pastel, etc. to create art.

Grades 10, 11, 12 Semester long Prerequisite: Art I

# Painting (2<sup>nd</sup> semester)

During this semester, students will explore watercolor, acrylic, and oil paint

Grades 10, 11, 12 Semester long Prerequisite: Art I

## Ceramics (1<sup>st</sup> semester)

This course is hands-on. Students will use clay and learn different art making methods like making tiles, vases, etc.

Grades 10,11,12 Semester long Prerequisite: Art I

## Sculpture (2<sup>nd</sup> semester)

During this semester, students will create 3D artwork using found materials like toothpicks and traditional sculpture media like plaster.

Grades 10,11, 12 Semester long Prerequisite: Art I

#### **Digital Art**

Students learn a variety of digital art marking products including Photoshop, Illustrator, and Blender and create products using the print shop.

Grades 10, 11, 12 Year long

#### Choir

This class offers an opportunity for students to work intensively with vocal music. Students will learn to evaluate, interpret, and perform different types of vocal music. In addition to singing, students will learn about the physiology of the voice, proper vocal technique, and music theory pertinent to singing. Instructor will audition students before enrollment is completed for honor choir.

Grades 9, 10, 11, 12 Year long

#### Band

Students enrolled in band will have the opportunity to continue their personal music development of skills and knowledge needed in instrumental music performance. As a part of the group, band students will work towards excellence in performance marching, concert, small ensemble and solo events. Students are expected to attend all performances and rehearsals.

Grades 9, 10, 11, 12

#### **MACC Music Appreciation**

This course is an introduction to music, emphasizing the various phases of musical beauty, designed to furnish a rational basis for intelligent listening to music. Focus is on basic elements of music and listening techniques; representational Renaissance, Classicism, Romanticist, and Post-Romanticist composers and their music; and discussion of extra-musical factors that bear upon lives and works.

Grades 11, 12 Year long Weighted

## PHYSICAL EDUCATION AND HEALTH

#### **Basic Physical Education**

This course is designed for 9<sup>th</sup> and 10<sup>th</sup> grade students with no previous high school physical education credit. Students will perform fundamental skills and gain a basic knowledge of rules and strategies related to the individual, team, and lifetime sports. Physical fitness is the emphasis of the course. Grades 9, 10, 11, 12

#### Health

This is a required sophomore course that will cover the areas of infectious and non-infectious diseases, nutrition, drug, alcohol, tobacco abuse, mental wellness, first aid, human reproduction, systems of the body, AIDS, and STDS. These topics will be covered because of their importance of mental, physical and social well-being.

Grade 11

## **Weight Training**

This course is designed for high school students. They will perform stretching exercises in a warm-up period, perform basic plyometric form running exercises in a cardiovascular period, and perform general conditioning lifts, which concentrate on developing the overall individual strength.

Grades 9, 10, 11, 12

# **FOREIGN LANGUAGE**

## **Introduction to Spanish (Middle School)**

In the course, students will learn and review basic Spanish vocabulary. Illustrations will be given as cues to the meanings of the Spanish words. Since all Spanish words are phonetic, once the Spanish alphabet has been mastered, the students should be able to pronounce any Spanish word. This is an introduction to language learning. The vocabulary and expressions from this unit will be recycled throughout the course with the emphasis here on recognition and limited use, not on mastery. Students will learn fundamental structures of the language by engaging in brief conversations, directed dialogues, and a variety of oral activities.

## Spanish I

Students in Spanish I will have a course of study in the Spanish language in conversation, grammar and culture.

Grades 9, 10, 11, 12 Year long

#### Spanish II

Students in Spanish II learn communication skills appropriate for beginning to intermediate level students. These skills will be learned by writing, reading, listening, speaking and study of the culture.

Grades 10, 11, 12 Year long Prerequisites: Spanish I with a grade of C or higher

## **Spanish III**

A study of the fundamentals of the Spanish language with attention to grammar, composition, and conversation.

Grade 11, 12 Year long Prerequisites: Successful completion of Spanish I & II

#### **OTHER**

## **Game Design**

Students use Unity3D and C# to create games. The first year focuses on 2D games and the second year continues on to 3D games, and the continuing years' students create games independently.

Grades 10, 11, 12 Year long Prerequisites: none, can be taken multiple years

#### **App Development**

Students use Xcode and Swift code to develop apps. First semester focuses on the basics of the code, second semester students will create their own independent apps. Following years, students will be allowed to develop more complex projects.

Grades 10, 11, 12 Year long Prerequisites: none, can be taken multiple years

## **SWAT (Students Working to Advance Technology)**

This course is a hands-on study of technology use in the classroom. Students will gain skills in Apple apps and devices as well as other technologies used by teachers and students at all grade levels. Students will use their skill and knowledge to help students and teachers across the district use the technology effectively. Grades 9, 10, 11, 12 Year long Prerequisites: Application with Mrs. Barnhill

#### **CSC Exploration / Foundations of Education**

First semester, an introduction to the Culver-Stockton College Teacher Education Program, its philosophy, mission and purpose, conceptual framework, student expectations, and its entry and exit requirements. A study of the sociological foundations of education will be explored as necessitated by diversity in society, social challenges in schools, and education that is multicultural. Five hours of observation is required. Second semester, students will study the legal, historical, philosophical, ethical, and sociological foundations of education.

Grades 11, 12 Year long Weighted

# **A+ PARTICIPANTS**

#### **SAM – Student Academic Mentoring**

This curriculum will include strategies of tutoring/mentoring of younger students in an academic setting. The course is available to students in the A+ Program. Grade 12 Semester or year long *Pass/Fail* 

## **VOCATIONAL/TECHNICAL EDUCATION**

This educational program is available through the Kirksville Area Vocational/Technical Center. Students are transported for the morning sessions. Students may select from the following programs of study:

- Auto Collision
- Auto Mechanics
- Allied Health

- Construction Trades
- Digital Design & Graphics
- Pathways to Teaching
- Engineering
- Computer Science

The school district will provide transportation to Kirksville. KCHS is allotted a designated number of openings in various classes. Students wishing to enroll in the Vo-Tech Programs should contact the counselor. Students may articulate credits in some of the courses to post-secondary programs at area community colleges.

Grades 11, 12