

## 2020 - 2021

# Curriculum and Enrollment Guide

Mulvane High School

The courses a student selects in high school may have a great deal to do with the kind of work, the amount of income and the kind of post high school education they will have as adults. Careful planning is necessary if the student is to gain the most from the high school experience. Each student is encouraged to discuss course selection with parents, counselors, and teachers and to know college, vocational school, or job requirements before making final course selections.

Please note that course offerings are subject to change prior to final enrollment.

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### MHS Graduation Requirements

English		4 Credits
	English 1	1 credit
	English 2	1 credit
	English 3	1 credit
	English 4 or AP Comp/Lit or	1 credit
	English Comp 1 & 2 (college courses)	
Math		3 Credits
	(Choose any 3 math courses)	
Science		3 Credits
	Biology	1 credit
	Elective Science	1 credit
	Elective Science	1 credit
Social Sci	ence	3 Credits
	World Studies	1 credit
	American Studies	1 credit
	US Civics/Topics	1 credit
Physical <b>H</b>	Education	1 Credit
	PE Concepts	1 credit
Career &	Technical Education (CTE)	1 Credit
	Elective CTE credit	1 credit
<u>Fine Arts</u>		1 Credit
	(See appropriate courses)	
Electives		8 Credits

### TOTAL 24 CREDITS

## USD 263 requires 24 credits <u>and</u> eight (8) semesters of attendance in grades 9-12 for high school graduation.

• Classification of a student as a sophomore, junior, or senior will be based upon the total number of high school credits earned by the student prior to the first day of class each school year.

### **CLASSIFICATION MINIMUMS**

Sophomore...5.00 credits and 2 semesters completed Junior......11.00 credits and 4 semesters completed Senior......17.00 credits and 6 semesters completed

A semester length class is worth .50 credit, and a full-year length class is worth 1.0 credit.

### Requirement Comparisons

Subject	Mulvane Graduation Requirements	Kansas Regents Qualified Admissions Curriculum	Kansas Scholars Curriculum
English	<i>(4 Credits)</i> English 1 English 2 English 3 Eng 4 or AP Comp/Lit or Eng. Comp. 1 & 2	<i>(4 Credits)</i> Mulvane graduation requirements fulfill this minimum requirement.	<i>(4 Credits)</i> Mulvane graduation requirements fulfill this minimum requirement.
	<i>(3 Credits)</i> Choose any three courses in the math department.	(3 Credits) Choose 3 approved classes. (Algebra 1 or higher) AND ACT math benchmark 22 OR	(4 Credits) Choose 4 approved classes. (Algebra 1 or higher)
Math		(4 Credits) Choose 4 approved classes. (Algebra 1 or higher; one must be taken in senior year) Algebra 1 in the 8th grade <u>does not</u> count towards this requirement. Mathematical Thinking <u>does not</u> count	Course taken prior to 8 <sup>th</sup> grade <u>do not</u> count towards this requirement. Algebra 1 or Geometry in the 8th grade <u>does</u> count towards this requirement. Mathematical Thinking <u>does not</u> count
Science	(3 Credits) Biology 2 elective science (Anatomy & Physiology) (Earth/Space Science) (Physical Science) (AP Environmental Science) (Chemistry) (Physics) (Plant/Soil Science) (Animal Science)	(3 Credits) Mulvane graduation requirements fulfill this; if one elective is chemistry <u>or</u> physics (Plant/Soil Science & Animal Science do NOT count.)	<i>(3 Credits)</i> Biology Chemistry Physics
Social Studies	(3 Credits) World Studies American Studies US Civics/Topics	<i>(3 Credits)</i> Mulvane graduation requirements fulfill this minimum requirement.	<i>(3 Credits)</i> Mulvane graduation requirements fulfill this minimum requirement.
Physical Education	(1 Credit) PE Concepts for full year	(No Credits Required)	(No Credits Required)
Career & Technical Education	(1 Credit) CTE Elective(1/2 credit) CTE Elective(1/2 credit)	(No Credits Required) May use for additional elective	(No Credits Required)
Fine Arts	<i>(1 Credit)</i> Choose from the list of Fine Arts elective courses	(No Credits Required) May use for additional elective	(No Credits Required)
Additional Credits (Courses) Required	(8 Credits) Elective courses	<i>(3 Credits)</i> Check for approved lists	<i>(2 Credits)</i> Foreign language (must be two years of the same language)

### **Post-Secondary Athletics**

NCAA & NAIA

Students who plan to participate in post-secondary athletics should talk to their high school coach. The earlier you begin planning, the greater chance you'll have a smooth transition. Scholarships will be available to students who fulfill the institutions requirements. There are two very specific organizations that require pre-planning for post-secondary institutions. The NCAA (The National Collegiate Athletic Association) & NAIA (The National Association of Intercollegiate Athletics) both require students to register and follow certain curricular requirements. Students must register during the spring semester of their junior year. NCAA is requesting registration fall semester of sophomore year. Registration and printed materials can be found online.

### NCAA - www.eligibilitycenter.org

### NAIA - www.playnaia.org

### **College Admissions Tests and Pre-college Assessments**

### PSAT/NMSQT

The PSAT is a practice test for the SAT which is also used to determine National Merit Scholar semifinalists. The test is available primarily to juniors; freshmen and sophomores may take it. The PSAT is given at MHS in October each year. Registration is through the Counseling Office. Student must pay a fee.

### <u>SAT</u>

The SAT is a college entrance examination, generally taken during the junior and/or senior year. Students receive a critical reading score, a math score, and a writing score. The SAT is not offered at MHS but is given in the area. Registration is completed online. Student must pay a fee.

### ACT

The ACT is a college entrance examination. Earning a 21, or higher, composite score on this test is a Qualified Admissions requirement. Students receive scores in English, Reading, Math and Science Reasoning, as well as a composite score. We highly recommend that students who plan to further their education after high school take this test at least once. Colleges use ACT scores for scholarships and class placement. The ACT is offered at MHS in October, February, and June. Juniors may receive a prepaid voucher to take one test during their junior year. There are also fee waivers available to any student who participates in the Free/Reduced Lunch Program. See the Counselors for these vouchers and waivers. Registration is online at <u>www.act.org</u>. Student must pay fee or use prepaid voucher or waiver.

### **College Options for Juniors/Seniors**

MHS students may be accepted to Cowley College beginning their junior year of high school. The following college courses are offered for dual credit (student receives both high school and college credit). Juniors and seniors must have a minimum cumulative GPA of 2.75 to be admitted to Cowley College while still in High School.

- Cowley classes will be offered at MHS and will be taught by MHS instructors.
- Students are responsible for the college tuition costs, book fees, and all other related college course costs.
- Cowley classes listed below and taken for dual credit must be taken at MHS.
- The policy applies to all juniors and seniors and to students admitted to the Extended Learning Program at MHS who have college courses indicated on their IEP.

### Junior Options

• College Algebra (year-long 1.0 credit)

### Senior Options

- College Algebra (year-long 1.0 credit)
- College Composition 1 (semester .5 credit must be taken with Comp. 2)
- College Composition 2 (semester .5 credit must be taken with Comp. 1)

Students at MHS may also choose to enroll in a program at Butler Community College. Butler currently offers 5 programs. Programs are targeted at students seeking careers in the health industry, information technology, public safety, engineering and business. Programs are a part-time block for 4 semesters. Beginning the fall semester junior year, students attend BCC ½ day and MHS ½ day. At the completion of the program students will graduate from high school and may earn an associate's degree from Butler Community College. Application to the program is required. Please notify an MHS counselor for additional information.

#### **4 Easy Step Process**

- 1) Complete the Butler Application https://forms.butlercc.edu/butler-application/
- 2) Complete an Academy Application <u>https://www.butlercc.edu/forms/form/305/en/academie</u> <u>s-application</u>
- 3) Take Placement Tests <u>http://www.butlercc.edu/info/200985/testing-</u> <u>center/22/placement-testing/</u>
- 4) Meet with an Academy Director Call (316)218-6139 or email: academies@butlercc.edu \*\*Note: Students who apply to Butler and an Academy by April 1 will be able to pre-test at MHS by Butler staff. The dates and times will be announced.

#### **Program Options**

- Early College Health Science Academy

   Butler's Rose Hill campus
- Early College Humanities Academy (New 2018/19) o Butler's Rose Hill campus
- Early College Elementary Education Academy
   Butler's Rose Hill campus
- Early College Cyber Security Academy
   Butler's Andover campus
- Early College 3D Academy

   Butler's Andover campus
- Early College Business/Entrepreneurship Academy
   Butler's Andover campus
- Early College Engineering Technology Academy

   Butler's Andover campus
- Early College Aviation Academy (New 2018/19)

   Butler's Rose Hill campus
- Early Fire Science Academy (Seniors Only)
   Butler's El Dorado campus
- Early College Culinary Arts Academy (Seniors Only)

   Limited enrollment
  - o Butler's Augusta campus

### **Other Dual Credit College Opportunities**

Students who are interested in attending colleges other than Cowley or Butler for dual credit opportunities must obtain permission from a high school Principal prior to enrolling in a program. Senate Bill 155 provides students opportunities to complete vocational programs and helps pay for coursework while students are still in high school. These would be possible for juniors and seniors. Students and/or parents would need to contact the school to learn about the application and enrollment process. It would be recommended to speak with a MHS Counselor to make sure the program will work into the student's high school schedule prior to completing the enrollment process. Once the enrollment process is completed, students need to provide Counselors with a schedule as proof of enrolment. Once proof is received, the MHS schedule will be adjusted as needed. High school required coursework must take priority. Please have proof of enrollment to MHS by August 1 so schedules are ready for the first day of school.

### Senior Opportunity for Accelerated Release (SOAR)

- Students must be on track for graduation.
- Students must pass required senior courses during the first semester.
- Students participating in any activity governed by the KS State High School Activities Association (KSHSAA) must be enrolled in 5 courses total, and each course must be worth .50 credit. These 5 classes could be taken as a combination between MHS classes and dual credit college classes. Any college course being taken for dual credit must be declared at the beginning of the semester.
- Students must get parental permission to attend fewer than eight hours.
- Valedictorian and Salutatorian honors are based on a minimum of 27 credits earned during four years of high school.
- Students are responsible for getting any necessary information from MHS regarding graduation details.
- All attendance policies will be enforced in regards to this policy. If a student misses the mandated limit of classes, he/she may lose credits and jeopardize graduation.

### Requirements are subject to review/change by the high school principal

### The Scheduling Process

The scheduling process is the shared responsibility of the students, parents, teachers and counselors. Students' educational decisions now will impact post-high school education and eventual career choices, careful planning is a must. Parents should assist students in the selection process by discussing alternatives with students and by helping them analyze their individual interests, needs and goals. Teachers and counselors are available to discuss specific curriculum with students. Students will be provided with this document as well as the appropriate paper work necessary for enrollment. Please pay close attention to deadlines, as schedules are loaded into our automated scheduler and a student who fails to meet their enrollment deadline is not guaranteed their selected courses. Enrollment is based on students' choices. Low enrollment, conflicting schedules or other issues may result in the deletion of a course. It is important that students choose their alternate courses wisely.

### **Dropping or adding classes**

Even with careful course selection it is sometimes necessary to make a request for a schedule change. Please follow the guidelines listed below if you would like to make a change to a student schedule.

Schedule changes will only be allowed for the following reasons:

- failing a prerequisite
- an error in enrollment made by the Counseling Department
- adding a class required for graduation
- administrative/teacher request

Such changes must be requested to the Counseling Department within the first <u>two days</u> after a semester begins. These requests must be made in writing with parent approval.

### **Career and Technical Education**

The Career and Technical Education department currently offers 7 career pathways. Students who complete 3 credits in a pathway are considered "Concentrators" by the state of Kansas. These courses are designed to prepare students for a career in a specific trade. Note: some courses are designated in more than one pathway.

#### **Construction & Design**

Wood working Principles (1 credit) Furniture & Cabinetry Fabrication (1 credit) Advanced Materials Technology (1 credit) Carpentry (1 credit) Carpentry 2 (1 credit) Electrical & Security Systems (.5 credit) HVAC Technology (.5 credit)

- > Drafting CAD 1 (.5 credit)
- Drafting CAD 2 (.5 credit) Architecture Design 1 (.5 credit) Architecture Design 2 (.5 credit)

#### Family, Community & Consumer Services

- Career and Life Planning (.5 credit) Nutrition & Wellness (.5 credit) Family Studies (.5 credit) Human Growth & Development (.5 credit) Consumer and Personal Finance (.5 credit)
- Career Connections (.5 credit)
- Community Connections (.5 credit)

### Visual Arts

- Career and Life Planning (.5 credit) Photo Imaging (.5 credit) Essentials of Interior & Textile Design (.5 credit) Interior & Textile Merchandising (.5 credit)
- Career Connections (.5 credit)
- Community Connections (.5 credit)

### **Computer Science Engineering**

Computer Applications (1.0 credit) Computer Science Essentials (CSE) (1.0 credit) Computer Science Principles (CSP) (1.0 credit) Cybersecurity (1.0 credit)

#### **Production**

- > Drafting CAD 1 (.5 credit)
- Drafting CAD 2 (.5 credit) Production Welding Processes 1 (1 credit) Production Welding Processes 2 (1 credit) Mass Production 1 (1 credit) Mass Production 2 (1 credit)

#### **Business Entrepreneurship & Management**

Business Essentials (.5 credit) Business Communication (.5 credit) Business Management (.5 credit) Entrepreneurship (.5 credit) Accounting (1 credit) Applied Business Development (1 credit)

### **AV Communications**

21<sup>st</sup> Century Journalism (.5 credit) Audio/Video Production Fundamentals (.5 credit) Video Production (KCAT)(1 credit) Digital Media Design Production (Cat Tracks/Yearbook) (1 credit) Project Management & Resource Scheduling (1 credit)

### Health Science

Intro to Health Care (.5 credit) Human Body Systems (Anat/Phys) (1 credit) Care of Athletes (.5 credit) Health Care Work Experience (1 credit)

#### **Teach and Train**

- Career and Life Planning (.5 credit)
- Human Growth & Development (.5 credit) Teaching as a Career (1.0 credit) – New Teaching Internship (1.0 credit)

### **Comprehensive Agricultural Science**

Introduction to Agriculture (1.0 credit) Animal Science (1.0 credit) Plant & Soil Science (1.0 credit) Agricultural Entrepreneurship (1.0 credit)

> Indicates the course can be designated in more than one pathway.

Mulvane High School offers articulation agreements with a variety of post-secondary institutions. For more information on current articulation agreements please talk to your CTE teacher.

For more information about Career Clusters and Pathways visit www.ksde.org

Plan	of	Study	for
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\_\_\_\_\_ Date \_\_\_\_\_

 Future Career Goal \_\_\_\_\_\_
 Pathway Interest \_\_\_\_\_\_

### FRESHMAN (9<sup>TH</sup> GRADE)

1 <sup>ST</sup> Semester Courses	Cr.	2 <sup>nd</sup> Semester Courses	Cr.
Advisory		Advisory	
English 1		English 1	
Math -		Math -	
PE Concepts		PE Concepts	
Biology		Biology	
	SOPHON	IORE (GRADE 10)	
1 <sup>ST</sup> Semester Courses	Cr	2nd Somester Courses	Cr

1 <sup>ST</sup> Semester Courses	Cr.	2 <sup>nd</sup> Semester Courses	Cr.
Advisory		Advisory	
English 2		English 2	
Math -		Math -	
Science -		Science -	
World Studies		World Studies	

### JUNIOR (GRADE 11)

1 <sup>ST</sup> Semester Courses	Cr.	2 <sup>nd</sup> Semester Courses	Cr.
Advisory		Advisory	
English 3		English 3	
American Studies		American Studies	
Science -		Science -	
Math -		Math -	
	SENIC	OR (GRADE 12)	
1ST C C	C	and a c	C

1 <sup>ST</sup> Semester Courses	Cr.	2 <sup>nd</sup> Semester Courses	Cr.
Advisory		Advisory	
English -		English -	
U.S. History Topics/Civics		U.S. History Topics/Civics	

### LANGUAGE ARTS DEPARTMENT

English 1 Prerequisite: None Grade: 9

Credit: 1

English 1 literature uses a variety of novels, short stories, non-fiction articles, *The Odyssey*, and *Romeo and Juliet* to do analysis of literature and critical thinking. This class also teaches researching skills and writing skills through an argumentative essay and a research essay.

English 2 Prerequisite: None Grade: 10 Credit: 1

English 2 consists of a review of the basic elements of grammar and their application to the writing of paragraphs, compositions, and research. English 2 students will also complete units based on short stories, nonfiction, a Shakespearean tragedy, and a novel. An expository research paper in MLA format and a literature-based persuasive essay will be assigned.

English 3 Prerequisite: None Grade: 11 Credit: 1

English 3 is the study of American literature and the English language with an emphasis on the writing process and critical thinking skills. The major literary movements are explored using multiple novels, poems, essays, and short stories (both fiction and non-fiction).

### Honors English 1,2,3

Prerequisite: B or higher in previous English classes. Grade: 9,10,11 Credit: 1

Honors courses will cover enriched strategies and advanced practices with current English curriculum. This course will be available for any student to request. Students will be placed in honors classes based on a variety of requirements including but not limited to: current grades, NWEA scores (both reading and writing), attendance records, English teacher recommendation, B or higher in previous English classes. Students must maintain a C or higher in honor's classes to continue on.

English 4 Prerequisite: None Grade: 12

Credit: 1

This course emphasizes reading and writing skills using a variety of texts with an emphasis on British literature. Classic pieces of British literature such as *Beowulf*, *The Canterbury Tales*, and a Shakespearean play along with nonfiction and fiction novels and drama will be taught. Expository, narrative, technical, and persuasive writing assignments will be completed in conjunction with the literature units. A formal research project and paper using MLA format is required. Time is spent developing and increasing vocabulary and grammar proficiency skills of each student through reading and writing.

### AP Lit/Comp.

Prerequisite: English 3 and completion of summer reading list (3 novels fiction and 1 nonfiction novel). Grade: 12 Credit: 1

This course is for students who want to increase their academic skills because they excel and have an interest in the language arts. Students who take Advanced Placement courses plan to attend a community college or a university after graduation. The goal of the course is to create learners who can not only read and understand works of literary merit (from the 16<sup>th</sup> century to the present), but also discuss them intelligently through classroom discourse and write about them fluently in timed analytical writing assignments. This course is designed to challenge students and to stretch their reading abilities of different genres of literature by applying and synthesizing their knowledge in a variety of ways, in both written and oral forms. The curriculum outlined for this course in intended to prepare the student for the Advanced Placement English Exam. This course also has a required summer reading list. Students will be required to write an essay based on the summer novels during the first week of school. (Student is responsible for all testing fees.)

<u>Composition I (</u>Dual Credit Cowley- 3hrs) ENG2211 Prerequisite: Entrance Requirements for Cowley Grade: 12 Credit: 1/2

This course is designed to improve students' reading, writing and researching skills. Critical analysis of essays will be used to aid in developing students' thinking, support of thesis and style. Students will be introduced to the basic components of research by writing a documented essay in MLA style. The emphasis is on fundamental principles of written English in structurally correct sentences, paragraphs, and expository themes.

<u>Composition II (</u>Dual Credit Cowley- 3hrs) ENG2212 Prerequisite: Composition I with a grade of C or above Grade: 12 Credit: 1/2

Through a study of novels, poetry, short story, drama and essays as literary forms, this course furthers students' writing skills. This course also improves research techniques through writing a research paper in MLA style with an emphasis on accuracy and fluency in expressing sound ideas in class discussions and short essays.

### MATH DEPARTMENT

### <u>Pre-Algebra</u>

Prerequisite: Placement only Grade: 9, 10 Credit: 1

This course is designed for students who are not proficient in the required skills to successfully complete Algebra 1. Students who are not performing at the identified level on norm referenced tests, the state mathematics assessment, and their previous course work will be placed in this course. The course will focus on strategies that enhance student's ability to find success within high school mathematics.

Algebra 1 Prerequisite: None Grade: 9, 10 Credit: 1

This course is the introductory class for basic algebraic concepts. The student will master computation of polynomials, problem solving, and solution of linear and quadratic equation. Successful completion of Algebra 1 should enable students to enroll in upper level mathematics classes.

### **Geometry**

Prerequisite: Algebra 1 Grade: 9, 10, 11 Credit: 1

Geometry is a course that uses Algebra to solve problems that investigate the relationships between lines, planes, angles, polygons, and simple solid figures. Problems involving areas and volumes of plane and solid figures, right triangle relationships, including trigonometry are also solved. A calculator is recommended first semester and needed second semester.

### Honors Geometry

Prerequisite: Algebra 1 and Teacher approval Grade: 9, 10, 11, 12 Credit: 1

This course will cover the same topics as the Geometry course but in greater depth. Students should carefully consider the extra time needed for this more challenging course. This course is designed for students who possess a high interest in mathematics and who plan to enroll in advanced/honors math courses during subsequent high school years. Students will be placed in the Honors class based on a variety of requirements including but not limited to: current grades, NWEA scores, assessment scores, writing scores and attendance records.

<u>Algebra 2</u> Prerequisite: Algebra 1 Grade: 9, 10, 11, 12

Algebra 2 is a course which thoroughly reviews and extends the basic concepts of Algebra 1. The course stresses problem solving strategies, graphing, matrices, polynomials of a higher degree, functions, conic relations, and transformation.

Credit: 1

### Honors Algebra 2

Prerequisite: Geometry and Teacher approval Grade: 10, 11, 12 Credit: 1

This course will cover the same topics as the Algebra 2 course but in greater depth. Students should carefully consider the extra time needed for this more challenging course. This course is designed for students who possess a high interest in mathematics and who plan to enroll in advanced/honors math courses during subsequent high school years. Students will be placed in the Honors class based on a variety of requirements including but not limited to: current grades, NWEA scores, assessment scores, writing scores and attendance records.

### **AP Statistics**

Prerequisite: Completion or concurrent enrollment in Algebra 2. Grade: 10, 11, 12 Credit: 1

This course will cover Data Analysis, Sampling and Experimentation, Anticipating patterns, and Statistical Inference. Students will be expected to have read and taken notes over material before it is covered in class. Daily activities will provide students with frequent opportunities to communicate their ideas with one another. Students will also produce more formal pieces of work in Special Problems. The curriculum outlined for this course in intended to prepare the student for the advanced Placement Statistics AP Exam. (Student is responsible for all testing fees)

### **Technical Math**

Prerequisite: Minimum of one math credit at MHS prior to taking this course. Grade: 10, 11, 12 Credit: 1

This course will be a project / application- oriented course in which students will apply mathematics concepts to support their work in other classes. This includes certificate oriented classes such as Welding and Construction as well as other core classes such as Physical Science. We will also focus on strengthening student knowledge in areas that will be assessed on exams such as program entrance exams and certificate completion programs.

### Pre-Calculus

Prerequisite: Algebra 2 Grade: 11, 12 Credit: 1

Pre-Calculus uses mathematical models to solve problems through the study of functions and their graphs. Polynomial functions, exponential, logarithmic, rational, and trigonometric functions are covered. Methods for solving these types of equations are developed so that applications to real situations can be solved. Arithmetic and geometric series are included

AP Calculus 1 Prerequisite: Pre-Calculus Grade: 12 Credit: 1

Calculus is intended for students who have a thorough knowledge of college preparatory mathematics. The study of calculus involves three stages: the limit process, differentiation, and integration. The curriculum outlined for this course in intended to prepare the student for the advanced Placement Calculus AP Exam. (Student is responsible for all testing fees)

### AP Calculus 2

Prerequisite: AP Calculus 1 Grade: 12 Credit: 1

This course extends the content learned in AP Calculus 1. The course will cover different types of equations (polar, parametric, and vector-valued) and new topics (Euler's method, integration by parts, partial fraction decomposition). The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically and verbally, and to make connections amongst these representations.

### **Transition to College Algebra**

Prerequisite: Algebra 2 Grade: 12 or teacher approval Credit: 1

The goal of the Transition to College Algebra class is to prepare students to qualify for and be successful in College Algebra. Students enrolled in Transition to College Algebra will review and learn mathematical processes ranging from Algebra I, Geometry, and Algebra II topics. They will develop skills necessary to be successful in College Algebra through a series of assignments, discussions, quizzes, and exams. This course will expose students to a college prep curriculum as well as the format of a college class. At the end of this year long course, the final assessment will be the College Algebra placement test, as well as a final exam.

<u>College Algebra</u> (Dual Credit Cowley- 3hrs) MTH4420 Prerequisite: Entrance Requirements for Cowley Grade: 11, 12 Credit: 1

This course is an introduction of algebraic functions and some transcendental functions with application in business and life, natural, and social sciences. Topics include solving equations, zeros, rational functions, matrices, exponentials, logarithms, and systems. Additional topics are included as time permits.

### SCIENCE DEPARTMENT

<u>Biology</u> Prerequisite: None Grade: 9

Credit: 1

Biology is a way of explaining by scientific processes what living organisms do and how they do it. Students in this course study the six unifying themes of biology: evolution, homeostasis, continuity, development, ecology and energy, matter and organization. Laboratory exercises are used to facilitate understanding and learning. After this course, a student will be able to make connections between biological concepts and daily life.

### Physical Science

Prerequisite: None Grade: 11, 12 Credit: 1

This course provides students with an introduction to the concepts of chemistry and physics. Students develop necessary scientific skills and a foundational knowledge base to continue further studies in science.

### Earth/Space Science

Prerequisite: None Grade: 10, 11, 12 Credit: 1

This course focuses on the Earth and its place in the universe. Astronomy focuses on our solar system, stars, other space objects and processes. Earth science will focus on geology, which is the study of the Earth and processes that change the Earth, and meteorology. This is the study of our atmosphere, weather and their changes.

### **Chemistry**

Prerequisite: Concurrent enrollment or completion of Algebra 2 and/or Technical Math; or teacher recommendation Grade: 10, 11, 12 Credit: 1

Fundamental principles and concepts of inorganic chemistry are studied including atomic theory and structure, chemical equations and their quantitative applications, solutions and their preparations, the study of the gas laws, and basic organic chemistry concepts. Lab work includes both qualitative and quantitative analysis.

### **AP Environmental Science**

Prerequisite: Chemistry, Algebra 1 Grade: 11, 12 Credit: 1

AP Environmental Science will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.

### Anatomy and Physiology (Health Science Pathway Course) Prerequisite: Biology Grade: 11, 12 Credit: 1

Students study the structure and function of the following systems of the body: integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive. Anatomy and Physiology is designed to introduce students pursuing careers in the health fields to the structure and function of the human body. To observe the three-dimensional relationships between structures more clearly, hands-on dissection is required. This class is geared for the academically able, science-oriented student; a considerable amount of time should be devoted to study for tests.

### Physics Prerequisite: Algebra 2 Grade: 11, 12 Credit: 1

Physics is the study of the physical world. The course goal is to use basic concepts, equations and assumptions to describe the physical world and make predictions regarding different phenomena. Studies will focus on mechanics, sound, light, and wave phenomena. Mathematics is used throughout the course and homework study is essential to successful understanding. Laboratory work is used to help understand the basic physics concepts.

## SOCIAL SCIENCE DEPARTMENT

### **World Studies**

Prerequisite: None Grade: 10

Credit: 1

This course is an examination of the period in time from the emergence of the Renaissance to the present. It will cover political, social, and economic development in Europe, Asia, the Americas, Africa, and the transition to modern times. Current events will also be included.

### American Studies

Prerequisite: None Grade: 11 Credit: 1

This course is a survey of the United States during the 20<sup>th</sup> Century until the 1950's. It will cover the economic, geographical, political, and social development of the period. Special emphasis will be place on America's great people and major wars involving the United States.

### AP American History

Prerequisite: None Grade: 11 Credit: 1

This is a more intensive approach to the standard U.S. History course which emphasizes the history of the United States from Reconstruction to the present. Students will explore the culture, economics, geography, governmental ideology, history, and individuals, groups and interactions of each major period. The curriculum outlined for this course in intended to prepare the student for the Advanced Placement History Exam. (Student is responsible for all testing fees)

### **United States Civics**

Prerequisite: None	-
Grade: 12	Credit: <sup>1</sup> / <sub>2</sub>

This is a required survey course for seniors. It will cover rights and responsibilities of citizenship in the United States, plus the development and everyday tasks of the Federal, State, and Local governments.

### **United States History Topics**

Prerequisite: None	
Grade: 12	Credit: 1/2

This course will cover the political, economic, and social history of the United States from 1950 to the present. Topics include leaders, major wars, social development, and major events that helped shape the United States during this time period.

### **Psychology**

Prerequisite: None Grade: 10, 11, 12

Credit: 1/2

This course is an introductory offering in psychology designed to give students a general understanding of psychology and the terminology used in psychology. There is special emphasis placed on mental illness, personality development, and techniques of getting along in today's complex society.

### AP Psychology

Prerequisite: None Grade: 11, 12 Credit: 1

Students enrolled in AP Psychology will learn information regarding human behavior and mental processes. Students will become acquainted with psychological theories, research, motivation, personality, human development, biological issues related to behavior, states of consciousness, learning, memory, stress, psychological disorders, therapy, and social psychology. They will develop skills through a series of readings, individual and group assignments, discussion, quizzes, essays, and exams. Taking the AP Psychology Exam in the spring is strongly encouraged, and as part of the students' enrollment fees, an AP workbook will be purchased for use in the class.

### PHYSICAL EDUCATION DEPARTMENT

<u>PE Concepts</u> (Incorporates Health and Physical Education) Prerequisite: None Grade: 9 Credit: 1

This is a course that will fulfill the physical education requirement for graduation. It will focus on lifetime sports. Grades are based on class participation and skill improvement. The curriculum will include team and individual sports such as basketball, volleyball, flag football, track softball, handball, and recreational sports. Personal fitness will be a major emphasis reflected in grading of all units. This class studies both the physical and the mental characteristics of an individual's well-being. Included in the curriculum are the studies of the systems of the body, mental health, nutrition, human development, and current health problems.

Coed Activities (may be repeated for credit) Prerequisite: None Grade: 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course will include units on individual and team sports including basketball, bowling, badminton, fitness, softball, volleyball, track, flag football, pickleball, and recreational sports. This course may be repeated for credit.

Strength & Conditioning, Male (may be repeated for credit) Prerequisite: Teacher/Coach approval (Signature required) Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This is a course that will fulfill the physical education requirement for graduation. This course will only be offered to boys who will be participating in Mulvane High School athletics, and teacher approval will be required for enrollment. This class is for individuals who want to learn how to lift, increase strength, add weight, and be in good physical condition. Basic techniques and terminology will be covered. Students will be expected to participate diligently. Repeating students should be skilled in weight lifting techniques and want to improve physical performance. Weightlifting and speed training will be emphasized.

Strength & Conditioning, Female (may be repeated for credit)

Prerequisite: Teacher/Coach approval (Signature required) Grade: 9, 10, 11, 12 Credit: ½

This is a course that will fulfill the physical education requirement for graduation. This course will only be offered to girls who will be participating in Mulvane High School athletics, and teacher approval will be required for enrollment. This class is for individuals who want to learn how to lift, increase strength, add weight, and be in good physical condition. Basic techniques and terminology will be covered. Students will be expected to participate diligently. Repeating students should be skilled in weight lifting techniques and want to improve physical performance. Weightlifting and speed training will be emphasized. <u>General Weights (may be repeated for credit)</u> Prerequisite: None Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This is a course that will fulfill the physical education requirements for graduation. It is a class for individuals who want to learn how to lift, increase strength, add weight, and be in good physical condition. Basic techniques and terminology will be covered. Students will be expected to participate diligently. Repeating students should be skilled in weight lifting techniques and want to improve physical performance. Weightlifting and speed training will be emphasized.

### CAREER & TECHNICAL ED. DEPARTMENT

### **BUSINESS & COMPUTER SCIENCE TECHNOLOGY**

**Business Entrepreneurship and Management Pathway (BEM)** 

Business Essentials<br/>Prerequisite: None(Beginning with class of 2022 – no longer required)Pathway: (BEM) (FMEM) (AV)<br/>Grade: 9, 10, 11, 12Credit: ½

This is a course designed to give students an overview of the business, marketing and finance career occupations. Students will develop an understanding of how academic skills in mathematics, economics, and written and oral communications are integral components of success in these occupations. Students will examine current events to determine their impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources should be managed to achieve company goals and identify employability and personal skills needed to obtain a career and be successful in the workplace. As students learn about different types of business ownership, they will interpret industry laws and regulations to ensure compliance, identify principles of business management, and analyze business practices to determine ethics and social responsibilities.

### **Business Communications**

Prerequisite: None **Pathway:** (BEM) Grade; 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course will enable the student to develop communication skills that will be effective in job performance, career advancement, and organizational success. The student will develop effective writing, listening, speaking, and nonverbal communication skills through the process of practice, application, and meaningful feedback using a variety of office software and resources. The student will learn essential communication skills necessary for success in today's technology driven business environment.

### <u>Business Management</u>

Prerequisite: None **Pathway:** (BEM) Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course acquaints students with management opportunities and effective human relations. The course will provide students with the skills to perform planning, staffing, financing and controlling functions within a business. In addition, it will provide a macro-level study of the business world, including business structure and finance, and the interconnections among industry, government and the global economy. The course will also have an emphasis on problem-based, real world applications of business concepts and use accounting concepts to formulate, analyze and evaluate business decisions.

Entrepreneurship Prerequisite: None Pathway: (BEM) Grade: 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course acquaints students with the knowledge and skills necessary to own and operate their own business. The course will include content from the following areas: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting and communications.

Accounting I	(will only be offered based on student requests/interest)
Prerequisite: None	
Pathway: (BEM)	
Grade: 10, 11, 12	Credit: 1

Basic math skills are important to succeed in this course. Fundamental principles such as recording of business transactions and preparing of financial statements are stressed. The course provides vocational training for students as bookkeepers. It is also recommended for those who plan to attend college.

### **Applied Business Development**

Prerequisite: Minimum of 1 credit in Business classes **Pathway:** (BEM) Grade: 11, 12 Credit: 1

This course is designed to simulate a business environment so that students will experience the skills, knowledge, and attitudes that accompany working in a business setting. The vocational coordinator/instructor will serve as the employer and the student will serve as the employee. This course is conducted on the school premises, in the business lab, during regular school hours. Application of the skills learned in other business courses will be the basis for which the student will work. Students are encouraged to keep a portfolio of their work.

### Computer Science Engineering Pathway (CSE)

Computer Applications	Highly recommended for 9 <sup>th</sup> grade students prior to other <i>Computer Science courses.</i>
Prerequisite: None	
Pathway: (CSE)	
Grade: 9, 10, 11, 12	Credit: 1

In this introductory course, students will explore concepts in: personal information management, researching the Internet, word processing and presentations, spreadsheets, managing data, ethics and security, and quality assurance.

**<u>Computer Science Essentials (CSE)</u>** (Project Lead the Way pathway)

Prerequisite: None Pathway: (CSE) Grade: 9, 10, 11, 12 Credit: 1

(This course will be offered on a rotational basis with Computer Science Principles.) – offered again in 2021-2022.

This course exposes students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. Students use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python® to create apps and develop websites, and learn how to make computers work together to put their design into practice.

Computer Science Principles (CSP) Prerequisite: None Pathway: (CSE) Grade: 9, 10, 11, 12 Credit: 1

Using Python ® as a primary tool, students explore and become inspired by career paths that utilize computing, discover tools that foster creativity and collaboration, and use what they've learned to tackle challenges like app development and simulation.

<u>Cybersecurity</u> Prerequisite: 2.0 credits in Computer Science classes **Pathway**: (CSE) Grade: 11, 12 Credit: 1

Cybersecurity introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely.

### Comprehensive Agriculture Science Pathway

Introduction	to	Agriculture
Inti ouuction	ω	Agriculture

*Highly recommended for 9<sup>th</sup> grade students prior to other Agriculture Science courses.* 

Prerequisite: None **Pathway**: (CAS) Grade: 9, 10, 11

Credit: 1

The Introduction to Agriculture course provides students with the opportunity to explore various aspects of the agricultural industry such as plant science, animal science, agriscience, and agribusiness.

Animal Science Prerequisite: Introduction to Agriculture or teacher approval Pathway: (CAS) Grade: 10, 11, 12 Credit: 1

This course explores the sciences involved in animal production. Instruction will lead students through animal anatomy and physiology, reproduction, nutrition, health issues, marketing, and animal products. Students will gain knowledge and skills through direct instruction, labs, and field trips. This information will tie into students' FFA, CDE, and SAE experiences. This course may be taken as one of the two elective credits of science for MHS. All students must take Biology. It will not count for Qualified Admissions or Regents' Scholars Curriculum. *This course is not recommended to replace Earth/Space Science or Chemistry in the sophomore year*.

Plant & Soil Science Prerequisite: Introduction to Agriculture or teacher approval Pathway: (CAS) Grade: 10, 11, 12 Credit: 1

This course expands instruction about the art and science of growing plants, shrubs, trees, flowers, fruits, agriculture crops and vegetables. Soils and media mixtures, soil chemistry, fertility, mineralogy, hydrology, soil conservation, and advanced weed and pest control are included within course lessons. This course may be taken as one of the two elective credits of science for MHS. All students must take Biology. It will not count for Qualified Admissions or Regents' Scholars Curriculum. *This course is not recommended to replace Earth/Space Science or Chemistry in the sophomore year.* 

### Agriculture Entrepreneurship

Prerequisite: Introduction to Agriculture and either Animal Science or Plant and Soil Science

Pathway: (CAS)Grade: 11, 12Credit: 1

The Ag Entrepreneurship course provides students with the information and skills necessary for success in agribusiness and in operating entrepreneurial ventures in the agricultural industry. This course covers topics such as economic principles, budgeting, risk management, finance, business, law, marketing and promotion strategies, insurance and resource management. Other possible topics include developing a business plan, employee/employer relations, problem-solving and decision making, commodities, and building leadership skills.

### FAMILY AND CONSUMER SCIENCE DEPARTMENT

Family Community & Consumer Services Pathway (FCS) Visual Arts Pathway (VA)

### Career & Life Planning

Prerequisite: None **Pathway:** (FCS) (VA) Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course prepares the student to meet the challenges of daily life. The student will learn about budgeting, job seeking, money management, relationships and all aspects of wellness. A career portfolio will be completed by each student. This is a great class for both males and females wanting to establish themselves before marriage.

### Nutrition & Wellness

Prerequisite: None **Pathway:** (FCS) Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course will include a study of the fundamentals of nutrition, food preparation and safety, the effects of diet on health and wellness, and career opportunities in related fields. The labs will focus on fruits/vegetables, eggs, microwave cookery, pies, and quick breads. Individual nutrition analysis will be introduced.

### **Essentials of Interior & Textile Design**

Prerequisite: None **Pathway:** (VA) Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course introduces students to and expands upon various aspects of industry, conveying the commercial application of principles and elements of design, production processes, and maintenance techniques to meet the design needs of humans. This course will also provide a discussion and exploration of career opportunities in interior, textiles and set/exhibit design.

### **Interior & Textile Merchandising**

Prerequisite: Essentials of Interior & Textile Design **Pathway:** (VA) Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course centers upon the merchandising of interior and textile products in a variety of settings. Topics include exploring cycles, trends and style as well as the techniques in coordination, promotion display and sales of interior and textile items. Basic management and entrepreneurship will be introduced as will the relationship of the skills to set and exhibit design.

### **Consumer and Personal Finance**

Prerequisite: None **Pathway:** (FCS) Grade: 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course is designed to help students plan financial goals, understand the requirements for reaching a satisfactory standard of living and establish financial stability. Lessons include: setting goals and making decisions, preparing a budget, understanding banking services (check writing, savings and investing), using credit wisely, buying insurance, purchasing a car, making wise consumer decisions, living on ones' own, and planning retirement.

# Family StudiesPrerequisite: NonePathway: (FCS)Grade: 10, 11, 12Credit: ½ credit

This course is a study of personal and family relationships with emphasis on the factors involved in balancing work and family. Some areas included are: needs the family provides, relationships, changing male and female roles, readiness for marriage, importance of communication, adjustments in marriage, and divorce.

### Human Growth & Development

Prerequisite: None **Pathway:** (FCS) Grade: 10,11, 12 Credit: <sup>1</sup>/<sub>2</sub>

A study of development from prenatal to the senior years. The physical, emotional, and intellectual development of children from birth to adulthood will be compared. Additional topics studied include: childcare, day care center, babysitting, child abuse, parent readiness, adoption, foster care, working mothers, at-risk children and healthy vs. unhealthy relationships. Time will be spent in observing small children and noting their physical, emotional, and intellectual development during an actual preschool experience.

### **Career Connections**

Prerequisite: 1 credit of any FCS coursework **Pathway:** (FCS) (VA) Grade: 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course is the application course in the FCS field. Participants will review coursework from previous classes including: character development, volunteerism, roles of a good citizen and balancing work, family and volunteer work. Focus will be on job placement in the human services field and students will practice applying and interviewing for jobs. The course will also help students understand the involvement of agencies such as Social and Rehabilitation Services.

### **Community Connections**

Prerequisite: 1 credit of any FCS coursework **Pathway:** (FCS) (VA) Grade: 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course is the application course in the FCS field. This course will require students to be placed in a community environment for firsthand experience.

### **INDUSTRIAL TECHNOLOGY**

### Construction & Design Pathway (CD) Production Pathway (P)

### **Drafting CAD 1**

Prerequisite: None **Pathway:** (CD) Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

A comprehensive course designed to instruct students in the use of CAD design software. Students will: identify and demonstrate the use of CAD commands and system peripherals, demonstrate the ability to dimension draw on the CAD system, demonstrate proficiency in setting limits and scale on the CAD system, demonstrate proficiency in setting, turning on and turning off layers, create standard drawings for templates, demonstrate the ability to create drawings in 3D, demonstrate the ability to load, store files and transport files via internet, place text on a drawing and be able to change to different font styles, sizes and angles and be proficient in the use of printer/plotter operations.

### **Drafting CAD 2**

Prerequisite: Drafting CAD 1 **Pathway:** (CD) Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course is a continuation of the CAD 1 course. Students will: construct drawings using straight line, circle and hidden line statements, construct isometric 3D drawings, set grid and snap specifications, define and use commands to modify a drawing and use symbols in a drawing.

Architecture Design 1 Prerequisite: Drafting CAD 1 Pathway: (CD) Grade: 9, 10, 11, 12 Credit: ½

A comprehensive course designed to instruct students on the basic skills of architectural design with a particular emphasis on residential and light commercial applications. Students will: identify historical styles of architecture and types of structural design, design a functional structure suitable for a particular site, calculate/estimate building costs for a structure and develop brief specifications for the project, produce a floor plan with all walls, doors, windows and stairs properly identified,

draw plumbing and electrical layers, draw a foundation plan for a single family dwelling, draw elevations and pictorial presentations, develop a plot plan with house, out buildings, trees, utility supply lines and communications supply lines.

Architecture Design 2 Prerequisite: Architecture Design 1 Pathway: (CD) Grade: 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course is a continuation of the Architecture Design 1 course. Students will: demonstrate the ability to 3D model a structure using different mediums in design, draw a roof framing plan for a single-family dwelling, draw interior elevations with fixtures, built-ins, trims, utilities and openings, construct an interior finish schedule, create and interior one-point perspective drawing and create an exterior two-point perspective drawing.

### Woodworking Principles

Prerequisite: None Pathway: (CD) Grade: 9, 10, 11, 12 Credit: 1

A comprehensive course designed to instruct students in the basic knowledge and skills required for cabinetmaking and furniture design. Students will: utilize hand tools for cutting, scraping or planning the stock for a project, apply math skills to control distance, spacing &/or angle measurements and placements for constructing a project, utilize power tools and machines to construct a project, perform steps to interpret, transfer and layout lines, construct a project incorporating the elements & principles of design as related to traditional styles in history, select and perform "best-method" for joining and assembling project parts and apply a quality finish on a project utilizing appropriate materials and equipment.

### Furniture & Cabinetry Fabrication

Prerequisite: Woodworking Principles **Pathway:** (CD) Grade: 10, 11, 12 Credit: 1

An advanced level application course designed to provide students with experience in constructing cabinets, counters, furniture and interior woodwork. Students will: properly use maintain and care for hand tools and machines, apply traditional history with the principles and elements of design to create project plans, select quality wood, create a bill of material, estimate the cost of a project, select, apply and perform "best-method" joint construction and fitting as well as assembly for a project.

### Advanced Material Technology

Prerequisite: Woodworking Principles <u>and</u> Furniture & Cabinetry Fabrication **Pathway:** (CD) Grade: 11, 12 Credit: 1

This is an advance application course covering topics in woodworking and fabrication.

<u>Carpentry 1</u> Prerequisite: Woodworking Principles and Teacher approval **Pathway:** (CD) Grade: 11, 12 Credit: 1

A comprehensive course designed to instruct students in the basic knowledge and skills required for construction of residential structures. Students will: demonstrate blueprint reading skills, estimate building materials and costs for a project, set up and utilize leveling instruments, install sill seal and sill plate to the foundation, lay out, construct and erect walls and partitions, lay out, cut and install ceiling joists, construct a frame roof and apply sheathing, install pre-hung windows, exterior doors and an entry door, apply fiberglass shingles and install cabinets, countertops and a backsplash. Students will complete a project off campus. Signed consent from parents is required to enroll in this course.

### **Carpentry 2**

Prerequisite: Carpentry and Teacher approval Pathway: (CD) Grade: 12 Credit: 1

An advance comprehensive course designed to instruct student in the skills pertaining to rough construction and finish work. Students will: erect, plumb and brace concrete forms, install footings and foundations, install thermal and sound insulation, lay and construct a floor assembly, walls, and partitions, install drywall panels, construct a frame roof, construct a staircase, install doors, windows, base and ceiling trim. Students will complete a project off campus. Signed consent from parents is required to enroll in this course.

### Electrical & Security Systems

Prerequisite: None **Pathway:** (CD) Grade: 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

A comprehensive course designed to instruct students in the basic skills required for installation of electrical and security systems. Students will: cut, ream, thread and bend conduit, compute branch circuit loads, demonstrate the procedure for safely using a clamp-on ammeter and a voltage tester, install raceways and boxes, correctly pull wire through conduit, install service entrance equipment, ground electrical circuits, install breakers, plugs and switches, install lighting fixtures, describe various fire and security systems, demonstrate knowledge on installing closed circuit TV and troubleshoot and repair problems in lighting fixtures, including ballast replacement.

HVAC Prerequisite: None Pathway: (CD) Grade: 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

A course designed to instruct students in the basic skills required to install HVAC systems.

### Production Welding Processes 1

Prerequisite: None **Pathway:** (P) Grade: 9,10, 11, 12 Credit: 1

This is an introductory course for students, which covers many aspects of welding fabrication. Students will be exposed to oxyfuel, ARC, and MIG welding while learning the various techniques required to weld multiple joints. Students will also be introduced to a variety of cutting techniques using oxyfuel, plasma, and CNC plasma cutting equipment. Students will use a wide variety of metalworking machines, including but not limited to the lathe, mill, sheet metal breaks, and various hand tools.

### Production Welding Processes 2

Prerequisite: Production Welding Processes 1 Pathway: (P) Grade: 10, 11, 12 Credit: 1

This is an advanced course in welding fabrication. Students will be required to become proficient in oxyfuel, ARC, MIG, and TIG welding while learning the various techniques required to weld multiple positions. Students will also be required to become proficient in a variety of cutting techniques using oxyfuel, plasma, and CNC plasma cutting equipment. Students will use a wide variety of metalworking machines, including but not limited to the lathe, mill, sheet metal breaks, and various hand tools. Students will apply these skills when completing required projects of their choice.

### Mass Production 1

Prerequisite: Production Welding Processes 1 Pathway: (P) Grade: 10, 11, 12 Credit: 1

This is an introductory course for students, which covers many aspects of production technology. Students will integrate multiple mass production processes to design and build projects that will be sold to the community. Students will be required to utilize oxyfuel, ARC, and MIG welding while constructing their mass production project that is assigned to them. Students will also use a wide variety of metalworking machines, including but not limited to the lathe, mill, sheet metal breaks, and various hand tools to complete their project. Students will be required to work as a team in order to produce a quality product.

Mass Production 2 Prerequisite: Mass Production 1 Pathway: (P) Grade: 11, 12 Credit: 1

This is an advanced course for students, which covers many aspects of production technology. Students will incorporate LEAN manufacturing concepts to design and build projects that will be sold to the community. Students will be required to utilize oxyfuel, ARC, and MIG welding while constructing their mass production project that is decided on by the class. Students will also use a wide variety of metalworking machines, including but not limited to the lathe, mill, sheet metal breaks, and various hand tools to complete their project. Students will be required to work as a team in order to produce a quality product.

### JOURNALISM

### AV Communications Pathway (AV) Visual Arts Pathway (VA)

### <u>21<sup>st</sup> Century Journalism</u>

Prerequisite: None **Pathway:** (AV) Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

21st Century Journalism promotes the development of the skill set needed today and in the future. Topics include an exploration of the role media and the communications industry has in society, the development of the technical skills related to journalistic writing and interviewing, as well as understand the ethical and legal issues related to the field.

#### Audio/Video Production Fundamentals

Prerequisite: 21st Century JournalismPathway: (AV)Grade: 9, 10, 11, 12Credit: ½

Audio Video Production Fundamentals provides a basic understanding of producing video for a variety of uses. Topics include analyzing the pre-production, production and post-production process, as well as explore the equipment and techniques used to develop a quality video production.

#### **Photo Imaging**

Prerequisite: None **Pathway:** (VA) Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

Photo Imaging teaches the technical skills needed to produce quality images for use in a variety of applications. Topics include use of equipment, software and techniques to take, edit and manipulate digital images.

### Video Production (KCAT)

Prerequisite: 21<sup>st</sup> Century Journalism **Pathway:** (AV) Grade: 10, 11, 12 Credit: 1

Video Production applies the technical skills learned in Audio Video Production Fundamentals by allowing students to orchestrate projects from setting the objectives to the post-production evaluation. The subject of the presentation may be determined in a number of ways, but must address an authentic need. The complexity of the presentation is not the focus of the course, but the

experience of the entire process in, to include planning the presentation, setting up the studio (if applies), acting as videographer and editor to make it fluid and seamless.

### **Digital Media Design Production (CAT Tracks/Yearbook)**

Prerequisite: None **Pathway:** (AV) Grade: 9,10, 11, 12 Credit: 1

Digital Media Design and Production will provide students with the opportunity to apply the fundamental techniques learned in Digital Media Technology course through the production of a multi-media project for public presentation. Topics include developing a production schedule, working as a team, utilizing composition principles and embedding audio, video or other content in digital formats.

### Project Management & Resource Scheduling

Prerequisite: Video Production or Digital Media Design Production Pathway: (AV) Grade: 11, 12 Credit: 1

Project Management and Resource Scheduling will provide an opportunity for students to assume a leadership role in a collaborative environment, by guiding their peers from the development of an idea to a finished product. Students will be responsible for assigning responsibilities, developing timelines, evaluating information for accuracy, appropriateness, relevance, and validity, as well as securing and scheduling resources.

### Health Science Pathway (HS)

### Introduction to Health Care

Prerequisite: NonePathway: (HS)Grade: 9, 10, 11Credit: ½

This course exposes students to the variety of opportunities available within the health care industry (such as nursing, therapy, dental care, administrative services and lab technology). This course provides experiences in the Health Science Education pathways along with information and knowledge related to the health care industry as a whole.

### Health Care Work Experience

Prerequisite: Concurrent enrollment or completion of Anatomy & Physiology **Pathway:** (HS) Grade: 11, 12 Credit: 1 This course content will provide students with professional experience in the Health Science pathway. Goals are typically set cooperatively by the student, parents, teachers and employers. The course will include classroom activities involving research of the various careers in the health professions.

Care of Athletes (semester two) (Health Science Pathway Course) Prerequisite: Biology Pathway: (HS) Grade: 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This course is designed to introduce high school students to Athletic Training and other Allied Health Occupations. The topics covered will include injury prevention, management, treatment, and rehabilitation. Included in this study will be a lab experience in First Aid, CPR and basic taping and wrapping for sports injuries. Additionally, the students will be introduced to Sports Nutrition and Sports Psychology. Students will be required to serve a practicum observing athletic training in the field. This will involve some required after school time.

### Teach and Train Pathway

Teaching as a CareerPrerequisite: NonePathway: (TT)Grade: 11,12Credit: 1

The Teaching as a Career course introduces students to the principles underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. This course exposes students to and trains them in classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in the field of education.

**Teaching Internship** Prerequisite: Teaching As a Career **Pathway**: (TT) Grade: 12 Credit: 1

School and teacher mentor partnerships are developed for High School students to gain career experience in Mulvane schools. Arrangements are designated through the Counseling Office. Students are expected to participate in this internship for the full school year. This course will replace the current Student Mentor course.

### FINE ARTS DEPARTMENT

### VISUAL ART

Introduction to Art (may not be repeated) Prerequisite: None Grade: 9, 10, 11, 12 Credit: ½

The students will be exposed to different mediums in two and three-dimensional art. Various techniques will be taught, demonstrations given, art history incorporated and basic art terms utilized to help develop the students' interest, talent, and knowledge base.

**Design Production** (may not be repeated) Prerequisite: Introduction to Art Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This class is designed for highly interested art students. The course will include projects involving layout, design, lettering, construction, and advertising. Students will focus on problem solving, processes and creative thinking. Class may also be responsible for coordinating with other departments to help design and construct props for the school play.

Drawing and Painting (semester two; may be repeated for credit) Prerequisite: Introduction to Art Grade: 10, 11, 12 Credit: ½

Students will begin drawing for the first nine weeks. Perspective, still life, landscape, caricature, and portraits will be covered. Various assignments will be done utilizing several mediums. Second nine weeks students will begin painting. Still life, landscape, portraits, and other multi-color paintings will be covered. Painting assignments will involve the use of watercolors, tempra, and acrylics. If a student wished to do any other type of painting, he/she must supply his or her own materials.

Sculpture and Ceramics (semester one; may be repeated for credit) Prerequisite: Introduction to Art Grade: 10, 11, 12 Credit: ½

This class is designed for the 3-D minded, hands-on student. The class covers the aspects of sculpture techniques and will utilize many materials such as paper, wood, plaster, paint and wire in creating both realistic and abstract projects. During the semester, the class will also focus on ceramics and how to create works using hand building techniques, wheel throwing, glazing and firing of ceramic clay.

<u>Advanced Art</u> (may be repeated for credit) Prerequisite: Introduction to Art, Drawing & Painting and Sculpture & Ceramics and submission of application (applications are available with Art instructor). <u>class size is limited to a maximum of 15 students</u>

Grade: 11, 12 Credit: 1

This class is designed for those highly skilled students who have a strong interest in pursuing art on a more challenging level. Students are required to be self-motivated, to work independently on self-chosen subject matter and mediums. Quality is a must! Works produced will be submitted in art shows and competitions. The class is not designed for the average skilled student.

### VOCAL MUSIC

<u>Mixed Chorus (</u>may be repeated for credit) Prerequisite: None Grade: 9, 10, 11, 12 Credit: 1

This course is open to all students at the High School. This choir will perform at all major school concerts and at music festival. Sacred and secular music will be studied and performed. The development of proper breathing and mature voice technique will be stressed in this class. Some choreography will be incorporated on songs. KSHSAA eligibility is required for competition.

<u>Women's Choir (may be repeated for credit)</u> Prerequisite: Enrollment by audition and teacher approval Grade: 9 (S2 only), 10, 11, 12 Credit: 1

The choir will perform at all major school concerts. This choir will compete at regional and state music festivals. Sacred and secular music will be studied and sung during the year. The development of proper breathing and mature voice skills will be stressed in this class. Some choreography will be incorporated on songs. Standing in this class will be re-evaluated at semester for all enrolled. If standing is unsatisfactory, the student will be replaced. KSHSAA eligibility is required for competition.

Esprit De Corps (may be repeated for credit) Prerequisite: Enrollment by audition and teacher approval Grade: 10, 11, 12 Credit: 1

Up to twenty-four mixed ensemble members are chosen by audition. Show tunes, madrigals, jazz and popular literature will be studied and performed. Performances include regular concerts and music festivals, plus outside performances. Choreography will be incorporated on most songs. KSHSAA and MHS eligibility is required throughout the year; this is a year-long commitment. This course does have financial commitments.

### **INSTRUMENTAL MUSIC**

<u>Varsity Band</u> (may be repeated for credit) Prerequisite: None Grade: 9, 10, 11, 12 Credit: 1

Varsity band is open to any member of the student body grades 9-12. Previous band experience is highly suggested. This band will be the "show band" for football games and competitions. The band will focus on reaching a higher level of mastery on their instruments through a variety of music and performances.

Jazz Band (may be repeated for credit) Prerequisite: Enrollment by audition Grade: 9, 10, 11, 12 Credit: 1

This group will perform concerts, perform for civic/community functions, and attend a jazz festival. Students need to be highly proficient on their instruments to audition for this group.

### **THEATRE**

Introduction to Theatre (may not be repeated) Prerequisite: None Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

Students will learn the fundamentals of play production, concepts in acting technique, technical theatre and a general background of theatre. The aim of this course is to develop individual skills along with discipline involved in a working relationship with other students. Good reading and comprehension skills are necessary to be successful in this course.

Theatre History and Appreciation (may not be repeated)

Prerequisite: None Grade: 9, 10, 11, 12 Credit: ½

This class explores and examines the history and evolution of theatrical art through history. Students will learn the significance of theatre through the ages and its impact on society and culture. This class is open to all students who are interested in all forms of theatre.

**Technical Theatre** (may be repeated for credit) Prerequisite: Introduction to Theatre or teacher approval Grade: 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

Technical theatre will utilize the methods and concepts applied in theatre, with emphasis on the specific area of stagecraft (set construction, properties, sound, lighting, marketing and house management). Special emphasis on stagecraft will be utilized for high school productions and stage presentations. This course may be repeated for credit with permission of the instructor.

Advanced Theatre (may be repeated for credit) Prerequisite: Introduction to Theatre Grade: 10, 11, 12 Credit: 1

Advanced theatre will utilize the methods and concepts applied in theatre, with emphasis on various styles of acting. Special emphasis on staging and directing will provide preparation for a performance, produced by advanced theatre students. This course may be repeated for credit with permission of the instructor.

<u>Competitive Speech & Drama</u> (semester two; may be repeated for credit) Prerequisite: None Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

This class may be used to fulfill a <sup>1</sup>/<sub>2</sub> credit towards fine arts. The purpose of the class is to develop skills in research, outlining, memorization and character analysis along with acting and speaking techniques for the purpose of forensics competition. The MHS Forensics Team competes in several tournaments during the spring semester, most of which are on Saturdays. Tournament competition and assistance in hosting the MHS tournament are requirements of the course.

Debate(semester one; may be repeated for credit)Prerequisite: NoneGrade: 9, 10, 11, 12Credit: ½

The purpose of the class is to develop skills in research, organization, argumentation, public speaking and critical thinking for the purpose of debate competition. The MHS debate team competes in several tournaments during the fall semester, most of which are on Saturdays. Tournament competition and assistance in hosting the MHS tournament are required.

### **Intro to Speech**

Prerequisite: None	
Grade: 9, 10, 11, 12	Credit: 1/2

Intro to Speech is a semester long course designed to help students overcome inhibitions in public speaking situations and to achieve a style that is correct and effective. In speech preparation, there is an emphasis on research and outlining skills. Focus will be on delivery of the various types of speeches for class presentations as well as uses for public speaking throughout one's life.

College Public Speaking (Dual Credit Cowley- 3hrs) COM2711 Prerequisite: Entrance Requirements for Cowley Grade: 11,12 Credit: <sup>1</sup>/<sub>2</sub>

This course includes fundamentals basic to all good private and public speaking experiences; elements in voice production and improvement, bodily movement, confidence, poise, and understanding of all types of public speeches.

### FOREIGN LANGUAGE DEPARTMENT

<u>French 1</u>

Prerequisite: None Grade: 9, 10, 11, 12 Credit: 1

This class is a beginning level class focused on practical and everyday spoken language. Emphasis will be placed on the acquisition of language through active participation in listening, speaking, reading, and writing activities. Students will also study the customs and cultures of Francophone countries around the world. Conversation in French will be emphasized as much as possible.

### French 2 Prerequisite: French 1 Grade: 10, 11, 12 Credit: 1

This class will extend your knowledge of the French language, and will seek to reinforce the skills previously learned in French I. Emphasis will be placed on further acquisition of vocabulary and grammar through active participation in listening, speaking, reading, and writing activities. Various forms of technology will also be used to enhance target language acquisition.

### <u>Spanish 1</u>

Prerequisite: None Grade: 9, 10, 11, 12 Credit: 1

This is a beginning level class designed to introduce the student to the practical and everyday spoken language. Emphasis will be placed on the acquisition of language through active participation in listening, speaking, reading, and writing activities. Students will also be exposed to the customs and cultures of Spanish speaking countries around the world. The majority of class will be conducted in Spanish. Various forms of technology will also be used to enhance target language acquisition.

Spanish 2Prerequisite: Spanish 1Grade: 10, 11, 12Credit: 1

This class will extend your knowledge of the Spanish language, and will seek to reinforce the skills previously learned in Spanish I. Emphasis will be placed on further acquisition of vocabulary and grammar through active participation in listening, speaking, reading, and writing activities. Various forms of technology will also be used to enhance target language acquisition. The majority of class will be conducted in Spanish to emphasize conversation skills.

### <u>Spanish 3</u>

Prerequisite: C or higher in Spanish 2, as well as teacher approval. Grade: 11, 12 Credit: 1

This is an upper level Spanish class designed to increase vocabulary and grammar through reading and writing. The majority of class will be conducted in Spanish and a greater emphasis on conversation skills will be the focus. Culture and the study of Hispanic lifestyles will also be incorporated into units.

### <u>Spanish 4</u>

Prerequisite: C or higher in Spanish 3, as well as teacher approval.

Grade: 12 Credit: 1

This course continues work completed in levels 1-3 of Spanish. The focus will be on history, civilization, and literature, as well as expanding the student's grammar base. By the end of the school year, Spanish 4 students will be expected to use a variety of verb tenses and moods in their coursework, and will have completed a thorough review of all grammar previously learned throughout their studies. Course work will include managing conversations with techniques to begin, continue and end conversations.

### ADDITIONAL PROGRAMS

**<u>Research</u>** (semester one; may be repeated for credit) Prerequisite: Placement based on Gifted IEP or recommendation of MTSS Team Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

A project-based course designed to learn and use the research process from the literature review to applications and impact of research. Students will learn to discern well-designed research from poorly designed or biased research. The research process will be used to produce a paper or presentation on a topic of personal interest.

**Logic and Problem Solving** (semester two; may be repeated for credit) Prerequisite: Placement based on Gifted IEP or recommendation of MTSS Team Grade: 9, 10, 11, 12 Credit: <sup>1</sup>/<sub>2</sub>

A project-based course designed to increase logical thinking skills and apply logic and creativity to problem solving. Students will learn to identify logical fallacies. Historical and present-day problems will be analyzed to determine how logical thoughts and fallacies impacted the events by either escalating the problem or creating a solution. Games, including Chess, will be used to explore how logical thinking has been taught historically. Future Problem Solving Topics (FPSI) will be used to practice creative and logical thinking applications.

Test Prep (New Course for 2019-2020)Prerequisite: completed or concurrent enrollment in Algebra 2Grade: 10, 11, 12Credit: ½

This course is designed for sophomores, juniors, seniors (must have completed or be enrolled in at least Algebra 2). The student will learn strategies and tips for improving performance on standardized tests in the 4 core content areas (English, reading, mathematics, and science). The course will not teach new curriculum; it is meant to be a review of previously-learned material in English, reading, mathematics, and science.

<u>Tier 2 Study Skills</u> Prerequisite: Placement Only Grade: 9, 10, 11, 12 Credit: 1

The study skills class is designed to help the student be better prepared to meet the requirements of class; the program seeks to assist students to succeed where they have failed. Assistance is available from the teacher and from peer tutors on daily assignments, test preparation, projects, etc. Student progress is monitored regularly. Classroom teachers give input on student progress and needs.

### <u>Teacher Assistants</u>

Prerequisite: A student in good standing Grade: 12 Credit: ½

Students may receive credit for acting as a teacher assistant under the following conditions: 1) The teacher must approve the student. 2) No classroom teacher will be assigned more than one assistant per hour with a maximum of two assistants per teacher each semester. 3) No assistant may be assigned during a teacher's planning period. 4) Students may act as a teaching assistant only once a semester.

### Peer Tutor (Tier 2 classroom)

Prerequisite: Good attendance, strong academic background, a student in good standing Grade: 11, 12 Credit: <sup>1</sup>/<sub>4</sub>

Peer Tutors work in the Help Room to provide academic assistance to students from various courses. Tutors will go through training sessions to learn how to properly tutor other students. Topics covered during training are tutoring techniques, communication skills, and different types of study skills. This is an excellent course for students who are considering education as a career.

Student Mentor(see Teaching Internship in Career Tech Ed Pathways on pg. 32)Prerequisite: Good attendance, good academic background, a student in good standingGrade: 12Credit: 1

Elementary Mentors will assist and mentor students at the primary school (grades K-2), the grade school (grades 3-4-5), or the middle school (grades 6-8). Students are expected to be good role models by the way they conduct themselves. They are to dress appropriately, use appropriate language, and show respect to the adults with whom they work. Students must have their own transportation and a signed parental permission slip to drive to the school at which they will work.

### **Notice of Non-Discrimination**

USD #263 does not discriminate on the basis of race, color, national origin, sex, or disability in admission or access to, or enrollment into its programs and activities.

Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990 and the Americans with Disabilities Act Amendments of 2008 prohibit discrimination against persons with a disability in any program receiving federal financial assistance. USD #263 acknowledges its responsibilities under Section 504/ADA and its amendments to avoid discrimination in policies and practices regarding

its personnel, students and patrons. No discrimination against any person with a disability shall knowingly be permitted in any program or practice within USD #263.

Any person having inquiries concerning USD #263's compliance with regulations implementing Title II, Title VI, Title IX, Section 504 or the Age Discrimination Act is directed to contact the Superintendent of Schools for USD #263 at 628 E. Mulvane Street, P.O. Box 130, Mulvane, KS 67110. Telephone number: (316) 777-1102.

### For Enrollment Questions Contact MHS Counselors

Teresa Brown tbrown@usd263.org

Or

Katie Shephard <u>kshephard@usd263.org</u>

Updated 5/15/2020