



Moniteau High School



Class of 2026

Sophomore

Course Guide

2023-2024

GRADUATION REQUIREMENT NOTIFICATION

In an effort to remain consistent with the expectations defined by the PA Dept of Ed, the graduation criteria specify that Moniteau students:

1. Earn 26 credits.
2. Students must meet one of the five graduation pathways that are outlined below.
3. Students will also be required to complete a culminating career portfolio with eighteen pieces of evidence and a career plan by the end of their junior year.

EVERY STUDENT SUCCEEDS ACT (ESSA) and ACT 158 OF 2018

GRADUATION REQUIREMENTS: As a requirement for graduation from the Moniteau School District, a student must achieve:

- 1. Keystone Proficiency Pathway: Scoring Proficient or Advanced on each Keystone Exam: Algebra 1, Literature, and Biology.**
- 2. Keystone Composite Pathway: Earning a satisfactory composite score on the Algebra 1, Literature, and Biology Keystone Exams (while achieving at least a proficient score on at least one of the three exams and no less than a basic score on the remaining two).**
- 3. Alternate Assessment Pathway: Successful completion of the Keystone Class associated with the Exam (grade C or higher) and one of the following:**
 - a. Attainment of an established score on the SAT, PSAT, ACT, or ASVAB;**
 - b. GOLD Level on the ACT Workkeys Assessment;**
 - c. Attainment of an established score on an Advanced Placement Program or an International Baccalaureate Diploma Program exam in an academic content area associated with each Keystone Exam on which the student did not achieve at least a proficient score;**
 - d. Successful completion of a Dual Enrollment Course in the content area associated with each Keystone Exam in which the student did not achieve at least a proficient score;**
 - e. Successful completion of a pre-apprenticeship program; or**
 - f. Acceptance in an accredited 4-year non-profit institution of higher education and evidence of the ability to enroll in college-level coursework.**
- 4. Evidence Based Pathway: Successful completion of the Keystone Class associated with the Exam (grade C or higher) and demonstration of three pieces of evidence consistent with the student's goals and career plans, including**
 - a. One of the following:**
 - i. Attainment of an established score on the ACT Workkeys assessment, a SAT subject test, an Advanced Placement Program Exam, or an International Baccalaureate Diploma Program Exam;**

- ii. **Acceptance to an accredited nonprofit institution of higher education other than a 4-year institution and evidence of the ability to enroll in college-level coursework;**
 - iii. **Attainment of an industry-recognized credential; or**
 - iv. **Successful completion of a Dual Enrollment or Post-Secondary Course; and**
 - b. **Two additional pieces of evidence, including one or more of the options listed above, or: Satisfactory completion of a service learning project; attainment of a score of proficient or advanced on a Keystone Exam; a letter guaranteeing full-time employment; a certificate of successful completion of an internship or Cooperative Education Program; or satisfactory compliance with the NCAA's core courses for college-bound student athletes with a minimum grade point average of 2.0.**
- 5. **CTE Pathway: For CTE concentrators, Successful completion of the Keystone Class associated with the Exam (grade C or higher) and attainment of an industry-based competency certification related to the CTE program of study or demonstration of a high likelihood of success on an approved industry-based competency assessment or readiness for continued meaningful engagement in the CTE program of study.**

The new pathways do not exclude students from taking the Keystone Exams. All students will take the exams upon the completion of the trigger courses for each exam.

If a student does not attain the Proficient Level in the areas of Algebra I, Biology 1, and Literature, he/she will be provided remedial strategies prior to re-testing. The PA Dept. of Education provides that students will be permitted to re-take a non-proficient Keystone Exam, or until the student attains a proficient level or has met one of the new pathways above. After the first Keystone test is taken in each of the three courses, and one of the pathways from above is met, the students in questions will have met the graduation requirement for testing and assessment.

Title IX Notification

Moniteau School District is an equal opportunity institution and will not discriminate on the basis of race, color, national origin, sex, or handicap in its activities, programs, or employment practices as required by Title VI, Title IX, Section 504, and the American with Disabilities Act.

For information regarding civil rights, grievance procedures or information regarding services, activities, and facilities that are accessible to and usable by handicapped persons, contact the High School Principal at (724) 637-2091, ext. 1000.

For additional information, please refer to the Pennsylvania Department of Education website at www.pde.state.pa.us.

Post Secondary Options

College

An independent institution of higher learning offering a course of general studies leading to a bachelor's degree.

University

A collection of colleges offering undergraduate and graduate degrees.

Cooperative College

An institution offering the student an opportunity to combine college-level work with periodic employment in the field of the student's specialization. A cooperative plan may require five years of college.

Community College

A publically supported institution committed to providing educational resources for all county residents. Four general programs are offered: (1) the college transfer program serves as an intermediary for students planning to continue their education at a four-year college after two years of study; (2) the one-semester college preparatory program; (3) the career program preparing students for immediate employment after one or two years; (4) the community services and continuing education program meeting the occupational, cultural, recreational, social, and educational needs of the community.

Schools of Nursing

There are two types of nursing education programs. One prepares the student to be a professional or registered nurse. The other prepares the student to be a licensed practical nurse. Preparation for professional nursing may be obtained through a college bachelor's degree program, a junior college associate's degree program, or a diploma program at a hospital school of nursing. The practical nursing license is usually obtained in a one-year program at a state-approved hospital or community college.

Technical, Trade, or Career Schools

Technical schools offer technical training in a specific area. For example, schools train individuals for engineering work in elementary design and for operation or maintenance of radio, television, or aeronautical equipment. Check the National Association of Trade and Technical Publications "Handbook of Trade and Technical Career Training" to assist you in your selection. Career schools are usually non-college professional schools that give highly specialized training for specific careers. Schools of music, art, design, dramatics, photography, sculpture, business, computers, etc. are examples of types of schools that prepare students for these careers.

Work Force

Students may also receive certifications and licenses through vocational education that will allow them to directly enter the workforce after graduation. Students should always be mindful of job qualifications and requirements before beginning a profession.

Apprenticeship Training

An apprenticeship is on-the-job training where an apprentice works with a skilled master craftsman under the supervision of a foreman. The apprentice learns under actual working conditions, and most often, takes related courses at a nearby school. Some typical apprenticeship programs are offered in the areas of carpentry, cement work, sheet metal machining, etc. The Apprenticeship Information Center, 915 Penn Avenue, Pittsburgh PA 15222 offers detailed information on the subject.

Armed Services Schools

The Armed Services operate schools designed to meet the needs of a particular branch of service. Service schools are usually semi professional, technical, or trade schools. Additional information can be obtained through the United States Armed Forces Institute Courses in Madison, Wisconsin or local colleges.

Military Service

Thousands of Americans consider joining the military every year. The military can be a very rewarding growth experience if you prepare yourself before joining. Many opportunities will be awarded to students to visit with recruiters from the different branches of the military. Taking part in the Armed Services Vocational Aptitude Battery test (ASVAB), will also allow the student to gain a sense of their skills and strengths that could determine what the student will be doing in the military. The ASVAB test is offered to students in the 11th and 12th grade every year.

Federal Services Academies

The military branches – Army, Navy, Air Force, Coast Guard, and Merchant Marine – offer four years of education leading to a Bachelor of Science Degree. A candidate receives full tuition, medical care, room and board, and a monthly stipend. Candidates must receive nominations from members of Congress. Other sources of nomination are available to prospective candidates, principally through affiliation with the armed forces. Some appointments are also available under special categories and conditions.

How do you know which option is right for you?

There are a number of different considerations when choosing a career path. Every individual is different and each person may have a different set of priorities that determine their path. Some considerations are income, working conditions, location, level of education, required tasks, vacation time/leave policies, etc. The internet is a valuable tool in assisting with the acquisition of information. Two websites that are helpful specifically for career planning are: www.pacareerzone.com and www.careercruising.com. (username: moniteau, password: bleachers).

CREDIT PROGRESSION

To ensure satisfactory progression from one grade level to the next, the following guidelines for graduation credits have been established.

26 Credits to graduate

Students need the following credits to be considered:

A Sophomore:	6 Credits
A Junior:	12 Credits
A Senior:	18 Credits

Students must have an average of 7 credits in their schedule. The administration has the discretion to grant students permission to take 9 credits annually.

It is recommended that students check with their guidance counselor to maintain the proper progression of credits.

GRADUATION REQUIREMENTS CAREER ACADEMIES OF STUDY

All students are required to declare a Career Academy course of study during the 2nd semester of the 8th Grade Year.

Students may switch Academies at the beginning of their 10th or 11th Grade school years, but will not be allowed to switch mid-year.

The Academy selected will determine the courses required for graduation and the course sequences selected by students.

Three Academies of Study are available for students to select:

- o Professional Career Academy
- o Technical Career Academy
- o CTE Career/Completer Academy.

College & Career Academy

Bachelor's Degree, Post Graduate Degree, Professional Certification

The following **26** Credits are required for the Professional Career Academy:

English	4	
Social Studies	4	Personal Finance
Science	4	or
Science Lab Credits	1(2 Labs)	Essential Skills .50
Math	4	Foreign Language/Fine Art/ or Engineering Courses 2
Physical Education	2	Electives 10 Possible/4 Needed
Health	.50	

Career Cluster Academy

Associate/Bachelor's Degree, Employment Certification, Apprenticeship

The following **26** Credits are required for the Technical Career Academy:

English	4	Health	.50
Social Studies	3	Personal Finance	
Science	3.5 (1 Lab)	or	
Math	4	Essential Skills	.50
Physical Education	2	Career Cluster	3
		Electives	11.5 Possible/5.5 Needed

- ❖ In the Technical Career Academy, students are required to choose one Career Cluster.
- ❖ The student must complete three course credits in the cluster to fulfill the graduation requirements for the Technical Career Academy.
- ❖ Students are allowed to take classes that appear in different clusters as electives, but must complete three credit courses in one cluster.
- ❖ Students will receive priority scheduling into their selected clusters, before students who are taking the classes as electives.
- ❖ The following is a list of possible Career Cluster choices:

Career Clusters/Sequence

Moniteau Media Cluster

1. Media 1-.05 Credit
2. Media 2-.05 Credit
3. Media 3-1 Credit
4. Media 4-1 Credit or
Pop Culture and Media-1 Credit

Moniteau Technology Education Cluster

1. Manufacturing and Construction 1-.05 Credit
2. Manufacturing and Construction 2-1 Credit
3. Manufacturing and Construction 3-1 Credit
4. Engineering & Design-.05 Credit

Moniteau Engineering and Design Cluster

1. Engineering & Design-.05 Credit
2. Systems Engineering-.05 Credit
3. Advanced Engineering 1-1 Credit
4. Advanced Engineering 2-1 Credit

Moniteau Vocal and General Music Cluster(Fine Art)

1. Choir 9-1 Credit or
Ensemble (Audition Based)-1 Credit or
Guitar 1-.05 Credit
2. Senior High Choir-1 Credit or
Ensemble (Audition Based)-1 Credit or
Guitar 2-.05 Credit
3. Senior High Choir-1 Credit or
Ensemble (Audition Based)-1 Credit or
Guitar 3-.05 Credit
Guitar 4-.05 Credit
Music Appreciation-.05 Credit

Moniteau Instrumental Music Cluster(Fine Art)

1. Senior High Band-1 Credit
2. Senior High Band-1 Credit
3. Senior High Band-1 Credit

Moniteau Family Consumer Science Cluster

1. FCS 1-.05 Credit
2. Baking-.05 Credit
3. Chef's Corner-.05 Credit
4. Personal Life-.05 Credit
5. Child Development 1-.05 Credit
6. Child Development 2-.05 Credit

Moniteau Business Cluster

1. Business 1: Introduction to Business-1 Credit
2. Business 2: Marketing-1 Credit
3. Business 3 – Sports and Entertainment Marketing.05 Credit
4. Foundations of Personal Finance-.05 Credit

Moniteau Computer Programming Cluster

1. Computer Applications-.05 Credit
2. Introduction to Computer Programming-.05
3. AP Computer Science A-1 Credit
4. Cobalt-.05 Credit (2024-25)
5. Python-.05 Credit (2024-25)

Moniteau Visual Art Cluster(Fine Art)

1. Studio Art 1-.05 Credit
2. Studio Art 2-.05 Credit
3. Drawing-1 Credit
4. Ceramics 1-.05 Credit
5. Ceramics 2-.05 Credit
6. Ceramics 3-1 Credit
7. Art History-.05 Credit

CTE Completer/Concentrator Career Academy

CTE Student, Industry Certification

The following **26** Credits are required for the CTE Completer/Concentrator Career Academy:

English	4	Health	.50
Social Studies	3	Personal Finance	
Science	3	or	
Math	4	Essential Skills	.50
Physical Education	1.5	CTE Courses	9
		Electives	6.5 Possible/0.5 Needed

- ❖ Students who are enrolled in a three-year program at Butler County Vo-Tech will choose this Career Academy.
- ❖ Students who select one of the three Vocational Agricultural Program at Moniteau High School will choose this Academy. The following courses are required to complete the state requirements for our vocational agricultural programs.

CTE Vocational Agricultural Programs and Courses

01.0000 Agriculture, General

- 9th Grade-** Introduction to Agriculture-.50 Credit
Agricultural Technology and Leadership-.50 Credit
SAE 1-.50 Independent Study Credit
- 10th Grade-** Agricultural Mechanics-.50 Credit
Welding-.50 Credit
Animal Systems-1 Credit
SAE 2-.50 Independent Study Credit
- 11th Grade-** Plant Systems-1 Credit
Wildlife and Fisheries-.50 Credit
Agricultural Business-.50 Credit
SAE 3- 1 Independent Study Credit
- 12th Grade-** Natural Resource Management-.50 Credit
Bio. Technology and Food Science-.50 Credit
Special Projects-1 Credit
SAE 4- 1 Independent Study Credit

01.0601 Horticulture

- 9th Grade-** Introduction to Agriculture-.50 Credit
Agricultural Technology and Leadership-.50 Credit
SAE 1-.50 Independent Study Credit
- 10th Grade-** Plant Systems-1 Credit
Agricultural Business-.50 Credit
Bio. Technology and Food Science-.50 Credit
SAE 2-.50 Independent Study Credit
- 11th Grade-** Introduction to Horticulture-1 Credit
Greenhouse Production & Management-.50 Credit
Agricultural Business-.50 Credit
SAE 3- 1 Independent Study Credit
- 12th Grade-** Hydroponics-.50 Credit
Landscaping & Soil Design-.50 Credit
Special Projects-1 Credit
SAE 4- 1 Independent Study Credit

01.0201 Agricultural Mechanization

- 9th Grade-** Introduction to Agriculture-.50 Credit
Agricultural Technology and Leadership-.50 Credit
SAE 1-.50 Independent Study Credit
- 10th Grade-** Agricultural Manufacturing & Construction 1-.50 Credit
Agricultural Mechanics-.50 Credit
Welding-.50 Credit
SAE 2-.50 Independent Study Credit
- 11th Grade-** Agricultural Manufacturing & Construction 2-1 Credit
Agricultural Business-.50 Credit
Systems Engineering-.50 Credit
SAE 3- 1 Independent Study Credit
- 12th Grade-** Agricultural Manufacturing & Construction 3-1 Credit
Engineering & Design-.50 Credit
Special Projects-1 Credit
SAE 4- 1 Independent Study Credit

Weighted Courses

A student must earn an “A”, “B”, or ”C” grade to receive the additional weighted value. A student who receives a “D” will obtain the credit value for the course but not the weighted value. AP courses earn an additional weighted value of 10 points and honors courses earn an additional weighted value of 5 points.

The following is a list of the weighted courses:

AP Biology	Honors English 9
AP Calculus	Honors English 10
AP Chemistry(2023-2024)	Honors Geometry
AP Comparative Government (2024-2025)	Honors Algebra II
AP Computer Science	Honors Biology 1
AP English Language	
AP English Literature	
AP Psychology	
AP Statistics	
AP United States History	
AP United States Government (2023-24)	

Moniteau Grading Scale

90-100%	A
80-89%	B
70-79%	C
60-69%	D
0-59%	E

Course Selection

Change Policy

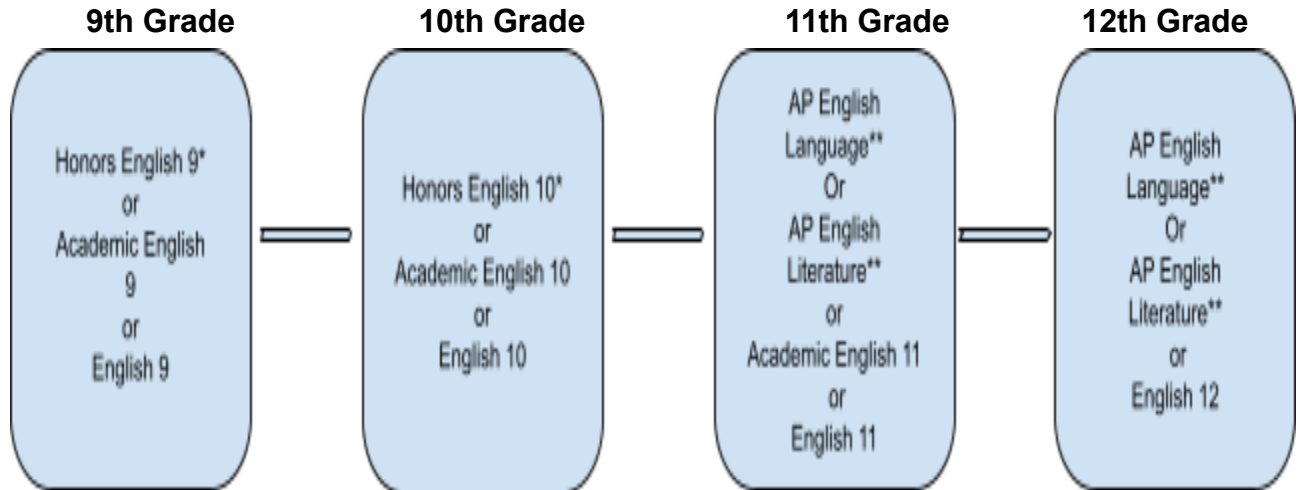
1. Schedule change requests **must** be in writing, signed by a parent/guardian and returned to a counselor.
2. Selection of courses may require adjustment due to the successful completion of classes in a summer school program or due to the elimination of classes as a result of low enrollment or staffing concerns.
3. **AP and Honors courses cannot be dropped once the preceding school year has ended.**
4. Course changes for semester and full year classes may be requested **before the first day** of class only if :
 - 1.) The student's course selection(s) is incorrect due to administrative error.
 - 2.) The student has significantly revised his/her career plans and other courses are required by the post secondary educational institution.
 - 3.) The Student opts to change his/her **elective** course choice providing:
 1. Student space is available in the newly selected course.
 2. The change will not significantly affect the class size of the other new selected course (i.e. computer class).
 - 4.) The student is successful in an approved summer school that will affect course selections for the new school year.

Sophomore Year Checklist

- Attend an area college fair. Two popular local choices are the Butler County College and Career Fair in September at Butler Jr. Sr. High School and the Pittsburgh College Fair in February at the David L. Lawrence Convention Center.
- Take the PSAT (a preliminary SAT exam offered in the fall at Moniteau). The results give you an idea how you might perform on the SAT.
- Revisit your results at www.pacareerzone.com and see how your answers may have changed. Revisit your career goals.

Recommended Sequence of English Courses

Students are encouraged to select an educational path in the horizontal path. The educational path may be selected or adjusted following established procedures and discussions with teachers, students, parents, and counselors.



Key

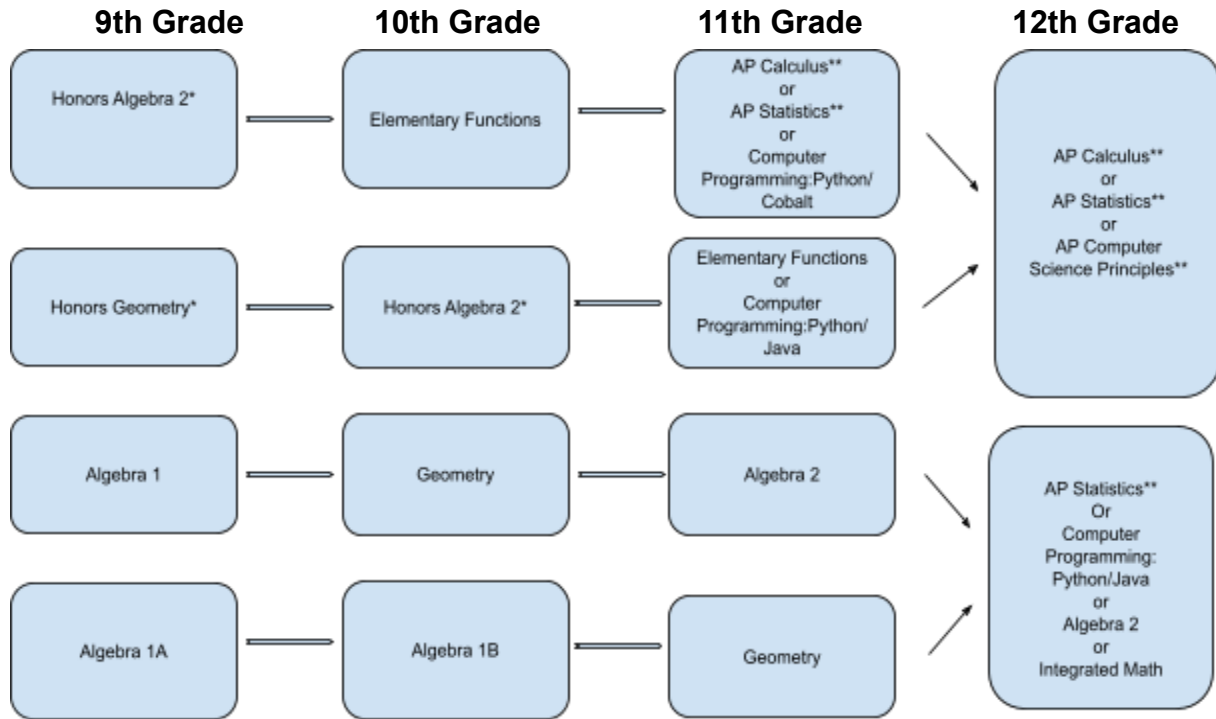
Honors Course Credit*
Advanced Placement Credit**

Department Electives

Mythology-Semester
Journalism
Creative Writing-Semester
Yearbook

Recommended Sequence of Math Courses

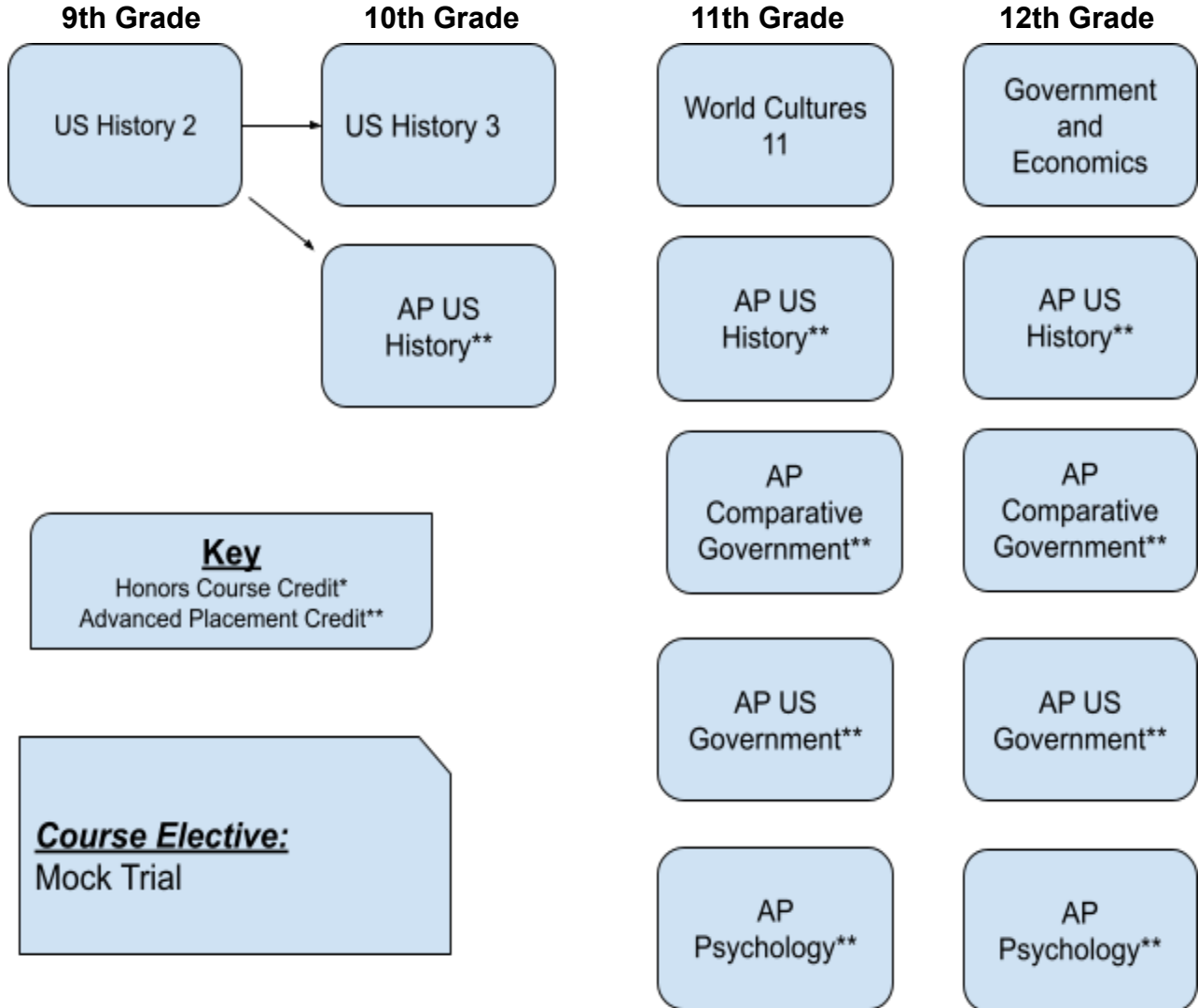
Students are encouraged to select an educational path in the horizontal path. The educational path may be selected or adjusted following established procedures and discussions with teachers, students, parents, and counselors.



Key
 Honors Course Credit*
 Advanced Placement Credit**

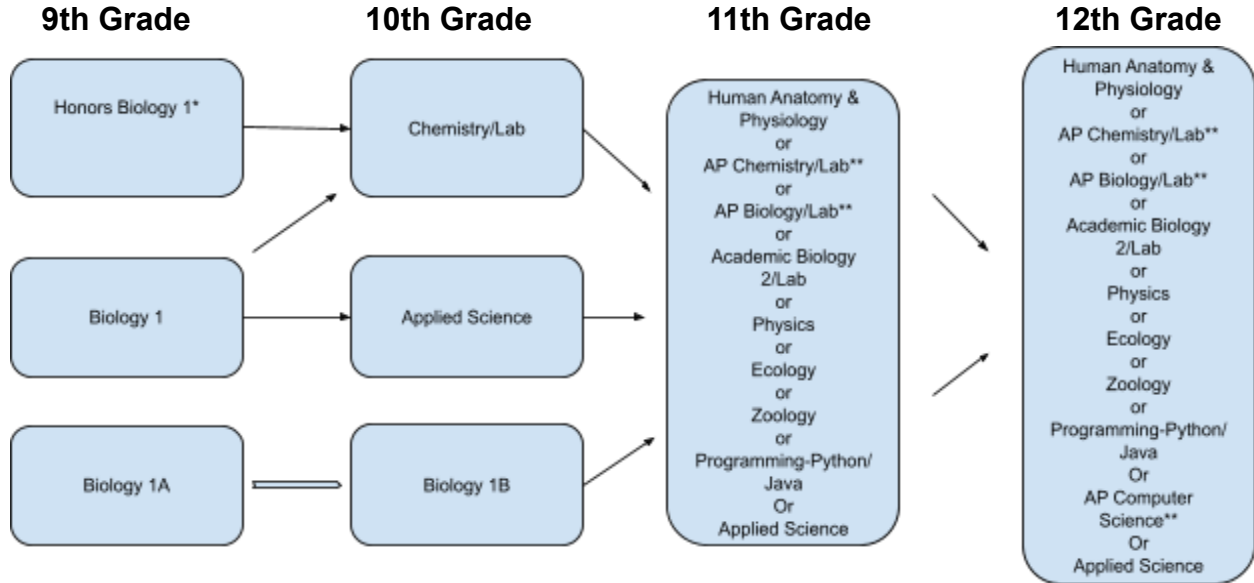
Recommended Sequence of Social Studies Courses

Students are encouraged to select an educational path in the horizontal path. The educational path may be selected or adjusted following established procedures and discussions with teachers, students, parents, and counselors.



Recommended Sequence of Science Courses

Students are encouraged to select an educational path in the horizontal path. The educational path may be selected or adjusted following established procedures and discussions with teachers, students, parents, and counselors



Key
 Honors Course Credit*
 Advanced Placement Credit**

COURSE INDEX

GRADE 10

<u>REQUIRED COURSES</u>	<u>PAGE</u>		
<u>English</u>			
Keystone Requirement	18	Foundation of Personal Finance	24
Honors English 10	18	International Foods	24
Academic English 10	18	Intro. To Computer Programming	24
English 10	18	Intro. To Family Consumer Sci.	24
		Introduction to Guitar 1	24
		Manufacturing & Construction I-Ag.	25
		Media Production 1 & 2	25
		Music Appreciation	25
<u>Math</u>		Mythology	25
Algebra 1B	19	SAE II	25
Geometry	19	Statistics	26
Algebra II	19	Studio Art I & II	26
Honors Algebra II	19	Systems Engineering	26
Elementary Functions	19	Welding	26
		Academic Decathlon	27
<u>Science</u>		Animal Systems	27
Applied Science	20	Band	27
Chemistry & Lab	20	Business 1 & 2	27/28
Biology 1B	20	Ceramics 3	28
		Concert Choir	28
<u>Social Studies</u>		Drawing	28
US History III	20	Ensemble	28
AP US History	20	French I, II	28/29
		Introduction to Horticulture	29
<u>Physical Education</u>		Journalism	29
Adapted Physical Ed 10	21	Manufacturing & Construction 2-Ag.	29
Physical Education 10	21	Media Production III	29
Personal Fitness/Weight Training	21	Mock Trial	30
		Plant Systems	30
<u>ELECTIVE COURSES</u>		Spanish I, II	30
Ag Mechanics	22	Yearbook	31
Art History	22	Butler Co Vo Tech	32-42
Baking	22	<u>Resources</u>	<u>42 - 43</u>
Business: Sports and Marketing	22		
Ceramics 1 & 2	22/23		
Chef's Corner/Creative Cooking	23		
Child Development 1	23		
Computer Applications	23		
Creative Writing	23		
Engineering & Design 1	24		
Essential Skills	24		

ENGLISH

Students are required to take four English courses in Grades 9 – 12. They may take any combination of General, Honors, Academic, or AP English classes.

ENGLISH 10

- If a student passes the English 10 class and the Keystone Literature Exam, he/she has met the graduation requirement for English 10.
- If a student passes the English 10 class and fails the Keystone Literature Exam, the student will be placed into the General English 11 class so that he/she receives the remedial support required to retest the Keystone Literature Exam.
- If a student fails the English 10 class but passes the Keystone Literature Exam, the student will be required to complete the English 10 class.
- If a student fails both the English 10 class and the Keystone Literature Exam, he/she will be required to complete the English 10 class and the re-test for the Keystone Literature Exam.

ENGLISH 10- HONORS -

1 CREDIT

This is an advanced course, designed for students who excel in English. The course focuses on a thematic view of reading and analyzing literature from different genres (short stories, plays, novels, poems, and some nonfiction selections). Outside reading and writing activities, as well as other projects, are required. Class work also includes developing vocabulary, understanding elements of fiction and figurative language, and improving writing skills. Students will write essays, poetry, creative compositions, and research papers. Grammar, mechanics, and usage will be taught throughout the year, as needed. Work at the start of the year is based on the completion of summer reading and writing projects. Any student who enrolls for Honors English 10, will be required to sign an agreement waiving his/her right to drop/change the Honors English 10 class for the coming school year.

ENGLISH 10 - ACADEMIC -

1 CREDIT

This course focuses on a thematic view of reading and analyzing literature from different genres (short stories, plays, novels, poems, and some nonfiction selections). Class work also includes developing vocabulary, understanding elements of fiction and figurative language, and improving writing skills. Students will write essays, poetry, creative compositions, and research papers. Grammar, mechanics, and usage will be taught throughout the year, as needed. The students will also participate in group projects, presentations, and creative assignments.

ENGLISH 10 -

1 CREDIT

This course will focus on the improvement of reading, writing, and communication skills. The literature focuses on a thematic view of reading and analyzing different genres (short stories, plays, novels, poems, and some nonfiction selections). Class work also includes developing vocabulary and understanding elements of fiction and figurative language. Much of the writing instruction will concentrate on: improving sentence structure, developing paragraphs, and writing cohesive compositions. Instruction in grammar, mechanics, and usage will be taught throughout the year. A short research paper is required. The student will also participate in group projects, presentations, and creative assignments.

MATHEMATICS

Students are required to take four Math courses in Grades 9 – 12. They may take any combination of classes offered by the Math Department. Students will participate in the Algebra I Keystone assessment upon the completion of Algebra I or Algebra 1B. All Students will take Algebra I, Geometry, and Algebra II. Upon completion of those courses they may choose from Elementary Functions, AP Statistics, Integrated Math, Computer Programming-Java/Python (24-25), AP Computer Science, or AP Calculus.

ALGEBRA 1B - 1 CREDIT

This full year course is designed to cover the second half of Algebra 1. Students will study Coordinate Geometry including rates of change, slope, and linear equations, and data organization. At the end of this course, students will take the Keystone Algebra Exam. Algebra 1B is to be taken after successfully completing Algebra 1A.

GEOMETRY - 1 CREDIT

Geometry deals with the development of an axiomatic system, including postulates, definitions and theorems. Properties of geometric objects will be studied and these include: lines and planes; the polygon with a focus on quadrilaterals and triangles; circles; and polyhedral and other solids. Students will also develop inductive and deductive reasoning skills. Geometry is to be taken after successfully completing Algebra 1 or Algebra 1B.

ALGEBRA II - 1 CREDIT

In this course, the students will study linear relations and functions including: systems of equations and inequalities, relations, equations, and inequalities. Students will also study quadratic polynomial rational and radical functions and relations. The course also involves an in depth look at the sets of real and imaginary numbers. Additionally, this course introduces matrices, statistics and probability. Algebra II is to be taken after successfully completing Geometry.

HONORS ALGEBRA II - 1 CREDIT

In this course, the students will study linear relations and functions including: systems of equations and inequalities, relations, equations, and inequalities. Students will also study quadratic polynomial rational and radical functions and relations. The course also involves an in depth look at the sets of real and imaginary numbers. Additionally, this course studies matrices and statistics. This course will prepare students to be successful on their SAT and Elementary Functions course. Honors Algebra II is to be taken after successfully completing Honors Geometry..

ELEMENTARY FUNCTIONS/TRIGONOMETRY 1 CREDIT

This course includes the study of polynomial functions including solving and graphing linear, quadratic, and cubic equations. While graphing, students will study translating, reflecting, and vertically and horizontally stretching and shrinking of graphs. The course includes the study of various properties and identities of functions. The second semester of the course is primarily focused upon trigonometric functions including sine, cosine, and tangent. This class is a **pre-calculus** course designed to prepare students for College Calculus. Elementary Functions is to be taken after successfully completing Honors Algebra 2 or Algebra 2.

SCIENCE

Students are required to take three science credits in Grades 9 – 12. They may take any combination of classes offered by the Science Department.

APPLIED SCIENCE

1 CREDIT

A general course for the non-science oriented student. It is an integrated approach to science concepts dealing with the Earth and the environment. Biology, Chemistry and Physics concepts are presented.

CHEMISTRY AND LAB

1.5 CREDITS

The course emphasizes the logical processes of reasoning through the study of atomic make-up of our environment. The students will discover the relationships between structure and properties of matter. Laboratory work is used to underline classroom concepts and to acquaint students with techniques, technology and equipment of scientific investigation. Applications of chemistry to everyday life are included whenever possible.

BIOLOGY 1B

1 CREDIT

This full year course is designed to cover the second half of Biology 1. Students will demonstrate the knowledge of Cell & Growth Reproduction, the knowledge of Genetics, and Ecology. At the end of this course, students will take the Keystone Biology 1 Exam.

SOCIAL STUDIES

US HISTORY III -

1 CREDIT

The course covers recent US History and expands the students' views of the world around them today. Beginning in the 1970's, students will study political, social, and economical aspects of the country over the past few decades. The end of the cold war will lead to the rise of the current world economy that will be addressed, as well as, the growing tension between the US and the many nations of the world. Each President's term in office will be used as the conceptual framework for the course.

AP UNITED STATES HISTORY* (Grades 10, 11 and 12)

1 CREDIT

Advanced Placement United States History is to be equivalent to a college history course. The AP History course will be an extensive in-depth study of United States History. In AP U.S. History, students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change. The course also provides eight themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power;

America in the world; American and regional culture; and social structures. Any student who enrolls for AP US History, will be required to sign an agreement waiving his/her right to drop/change the AP US History class for the coming school year. All AP students are required to take the AP Exam. This course can be used as a Social Studies Graduation Credit. Requirement: \$97.00 AP Exam Fee

*Students must recognize that successful completion of the AP Examination does not guarantee automatic placement and /or credit in college. Therefore, students must inquire of individual colleges about their policies regarding the use of AP Examinations.

*Any student experiencing financial difficulty that could influence his/her decision to take an AP class due to the AP Exam Fee should see a guidance counselor prior to completing schedule requests.

PHYSICAL EDUCATION

ADAPTIVE PHYSICAL EDUCATION 10 .5 CREDIT

This course consists of an individualized program of exercises and activities for those who are recommended for the class. Modified sports activities will be presented to improve the student's limited condition. Course difficulty ranges from mild to moderate depending on the student's physical challenge.

PHYSICAL EDUCATION 10 .5 CREDIT

Students will be provided with instruction that will enable them to display skills and practices of a physically active lifestyle. Students will gain knowledge about the benefits of physical activity and about achieving a healthy state of well-being. Sport skills, fitness skills, and lifelong activities will be addressed. This is a required course and cannot be taken as an elective. Students must pass the preceding Physical Education class before enrolling in the next level.

PERSONAL FITNESS AND WEIGHT TRAINING .5 CREDIT

This course will focus on the discussion and participation in weight training to develop and increase muscular strength, muscular endurance, flexibility, and body composition. Areas of concentration will include selection and proper use of weight room equipment, strength training, circuit training, plyometrics, programming, injury prevention and sports specific training. Students will be required to design and follow an appropriate training program. Students will document their progress through a portfolio composed of teacher and self assessments. May be used as a Physical Education graduation requirement credit in place of PE 10.

ELECTIVES

.50 CREDIT

AGRICULTURAL MECHANICS 1 (Grade 10)-

.5 CREDIT

Basic Agricultural Mechanics is an introductory course that explores a wide variety of mechanical processes, scheduled 2nd semester after welding. Students will use scientific and mathematical applications through relevant mechanical topics. In addition, students will complete numerous lab-based and project-based activities that will give students the opportunity to develop an understanding of the scientific process and increase hand-eye coordination and motor skills. Areas of study in this course include careers in agriculture mechanics, mechanical safety and hazards, hand and power tools. Topic clusters in this course include electricity, small engines, wood construction, measuring, and mechanical technology. Participation in Future Farmers of America student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration, and reinforcement of academic concepts.

ART HISTORY – (Grades 9-12) -

.5 CREDIT

Students in this class will be introduced to various art movements from different cultures and time periods. After learning about an art movement, students will then create a piece of art reflective of that particular art movement or time period. For example, after learning about Greek Art, students could make a ceramic Greek inspired vase.

BAKING (Grades 9-12) -

.5 CREDIT

This course provides an overview of baking and allows for students to learn basic techniques for making quick breads, cakes, cookies, candies, pies, and tarts. The baking process, leavening agents, and the importance of careful measuring and precisely following directions are emphasized.

BUSINESS: SPORTS & ENTERTAINMENT MARKETING (Grades 9-12) .5 CREDIT

The field of sports and entertainment marketing is rapidly growing. In this course we will explore the intriguing world of sports and entertainment from the perspective of marketing. The core standards of marketing will be incorporated throughout the course that will focus on collaboration, teamwork and projects that you would potentially encounter in the real world of marketing.

CERAMICS (Grades 9-12) -

.5 CREDIT

Ceramics is designed to introduce students to the various ceramic hand building processes and a working knowledge of wheel thrown pottery. The course will integrate the design and construction of ceramic ware using a full spectrum of artistic tools, techniques and materials. The students will also learn surface decoration and glazing methods. Students will also gain a working knowledge of multiple kilns and firing processes. The history of ceramics, work of contemporary artists, and various ceramic careers will be covered.

CERAMICS 2 – (Grades 9-12) -**.5 CREDIT**

Ceramics two builds upon skills from the ceramics one course. Students will review handbuilding techniques (slab, coil, cut and scoop, pinch pot) and will also be introduced to the potter's wheel. The potter's wheel will become more of a focus in this course. Students will also be introduced to loading and unloading a kiln, history of ceramics, historical and contemporary ceramic work, art careers, and kiln types.

CHEF'S CORNER/CREATIVE COOKING (Grades 10-12) –**.5 CREDIT**

This course deals with an advanced emphasis on basic food preparation and nutritional information. Labs will focus on basic foods and cooking techniques. This course will teach students about foods from various regions around the world. Students will review distinct dishes and the different factors that influence the types of food that people eat. Food units will concentrate on the preparation of meats and casseroles. This course will introduce students to how individual foods can be combined in many imaginative ways to create new and interesting dishes. Combinations of foods can take a variety of forms while including many combinations of ingredients.

CHILD DEVELOPMENT 1 (GRADES 10-12) -**.5 CREDIT**

This course offers the student a variety of life learning experiences that they will face after graduation. Examples are employment, living on your own, budgeting, personal relationships, sewing, and cooking. Cooking projects will determine classroom lab fees. The primary focus of this course will be child development. Students will explore the world of infants, toddlers, and preschoolers. Child development as a foundation for effective parenting and care giving will be reviewed. Students will be required to complete direct observation in a childcare setting. The primary focus of this course will be pregnancy and child development. Students will explore the stages of pregnancy and the developmental stages of infants, toddlers, and preschoolers. Students will also learn the foundations of parenting and influences on the development of children.

COMPUTER APPLICATIONS (Grades 9-12) -**.5 CREDIT**

A semester course that engages students in emerging technologies and programs that help guide learning, provide you with instant feedback, provide for collaboration, make life easier, keep you organized and help make learning fun. Subjects and programs include Google Drive tools such as Sheets, Doc, Forms and Draw. Other online tools supplement programs that are used for word processing, data analysis and presentation. Students work in group settings with presentations and project based assessments.

CREATIVE WRITING (Grades 9-12) –**.5 CREDIT**

Students can elect to take creative writing, a half-year course aimed to increase students' abilities to compose original short stories, poems, narratives, screenplays, speeches, and scripts. Students will participate in various writing workshops to edit and revise their work. This class will also involve presentation of work.

ENGINEERING & DESIGN 1 (Grades 9-12) - .5 CREDIT

A semester class that focuses on the implementation of the design process to solve a variety of complex problems. 3-D computer drawing is taught and will be implemented with all projects. Students will utilize engineering and design principles to produce desired outcomes. Some example projects that will be taught in the class are: 1. The Transportation Model 2. Mousetrap Vehicle 3. Bridge Building

ESSENTIAL SKILLS (Grades 9-12)- .5 CREDIT

This class will teach students life skills that are essential to master in order to live as a functioning adult. These skills are targeted to help students carry out simple tasks that will be presented in both their personal, and professional lives. Life skills such as; balancing a checkbook, reading a tape measure, fixing a plumbing leak, mortgage and renting, how to change a tire, checking the fluid levels in a car, infant care and parenting, as well as similar skills that a student will need as a functioning member of society. Course is an elective, but can be taken at any grade level.

FOUNDATIONS OF PERSONAL FINANCE (Grades 9-12) - .5 CREDIT

Personal Finance is 80% behavior and 20% knowledge. It is important to teach teens how to take control of their money so they can avoid huge money mistakes in the future. Students will learn how to budget, save, spend wisely, and avoid debt. Students will develop an education and career plan that will help them obtain and grow their income over time. Students will understand investment and retirement portfolios. Insurance and financial risk will also be reviewed.

INTERNATIONAL FOODS (GRADES 10-12) .5 CREDIT

Travel the world through food without leaving home! Students will explore the foods and customs associated with the different regions of the United States and numerous countries around the world. Students will apply various cooking techniques and skills to help create a complete meal from the regions and countries selected.

INTRO. TO COMPUTER PROGRAMMING/GAMING (GRADE 10-12)- .5 CREDIT

Students will start by learning about internet safety, cyber bullying, and legal and ethical issues related to use of technology. This course aims to provide students with an understanding of the role computation can play in solving problems. It also aims to help students to feel confident in their ability to write small programs that allow them to accomplish useful goals. The class will use the Scratch programming language as well as a variety of other software.

INTRODUCTION TO FAMILY & CONSUMER SCIENCE (Grades 9-11) - .5 CREDIT

This course will introduce the student to nutrients that the human body requires, as well as carbohydrates, proteins, fats, vitamins, minerals, and water. Building on knowledge of the necessary nutrients, the student will learn about foods and meal preparation essential to the body.

INTRODUCTION TO GUITAR 1 (Grades 9-12) - .5 CREDIT

Students will be introduced to the basics of proper guitar care and maintenance, strum patterns, note reading, TAB, and repertoire. Students will be expected to achieve specific performance goals and demonstrate consistent growth on their instrument.

MANUFACTURING & CONSTRUCTION 1-AGRICULTURAL(Grades 9-12) .5 CREDIT

A semester class that builds on what was already learned in Intro to Manufacturing and Design. It will add many different components of the construction trade, such as electrical, framing, plumbing, and drywall. Students will also do some woodworking. Students will be able to pick a project that the teacher approves. The students will then learn the problem solving process/manufacturing process to finish their desired projects.

MEDIA PRODUCTION I – (Grades 9-12) - .5 CREDIT

A one-semester exploratory course is offered in both the fall and the spring semesters, which provides an introduction to the tools, principles and techniques of television production. Areas covered include studio production, location shooting and editing. Emphasis is placed on attendance and professionalism throughout the course. Students will help create the morning announcements seen on TEAU TV. Students may only take this course once.

MEDIA PRODUCTION II – (Grades 9-12) - .5 CREDIT

A one semester class is offered in the fall and the spring semesters, which provides the foundation of the TEAU TV production program. Thorough attention is given to the studio production, location, videography, linear and non-linear editing computer graphics, and audio and video production projects. Students learn how to negotiate the entire media production process, from initial planning and treatments to delivery of a final product. Solid academics and work habits are also stressed. Students will create and edit footage for morning announcements seen on TEAU TV. Students may only take this class once.

MUSIC APPRECIATION (Grades 9-12) – .5 CREDIT

This is a 9 -12 grade course that covers American music 1900 – Present. The study of music genres, artists, technologies, and cultural influences. The class will involve a traditional lecture format combined with technologies/media.

MYTHOLOGY (Grades 9-12) - .5 CREDIT

Mythology is a semester-long elective that is intended to provide students with the extrinsic information that is necessary to fully understand references in academic literature. As a part of this course, students will study numerous figures, events, and texts from various ancient civilizations. Concepts studied in this course include but are not limited to Roman, Egyptian, and Greek gods and goddesses; Biblical figures; Roman, Egyptian, and Greek legends (ie. Hercules, Helen of Troy, etc.); historic events (ie. The Exodus, Greek Wars, and Roman Wars).

SAE II- (Grade 10)*INDEPENDENT STUDY COURSE* .5 CREDIT

Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students will experience and apply what is learned in the classroom, laboratory, and training site to real-life situations. Students work closely with their agricultural teacher, parents, and/or employers to get the most out of their SAE program. The course is offered as an independent study for students in the “completer” phase of the agriculture education program. SAE programs can include entrepreneurship, agriculture placement, improvement, exploratory, and research. Projects such as raising livestock, raising pheasants, working for a feed mill, home, garage, or building repair or improvement, studying wildlife behavior using trail cams and movement patterns, etc. **MUST complete the SAE record book to receive credit.**

STATISTICS (Grades 9-12) – .5 CREDIT
In this course, students will be introduced to the processes and procedures involved in collecting, analyzing and interpreting data. Students will learn how to properly conduct a survey or experiment. Also, students will study the patterns found in the survey or experimental data and make predictions using patterns, probability and simulations. Lastly, students will be engaged in the analysis of the data and the testing of hypotheses.

STUDIO ART I (Grades 9-12) – .5 CREDIT
This course is an in-depth study of the elements of design. An emphasis on understanding and using color, line, shape, value, etc in art work will be covered. Art History is integrated with projects for a greater understanding of projects and the past and present art world. Projects, critiques, and material safety will all be covered in this class.

STUDIO ART II (Grades 9-12) – .5 CREDIT
Students will continue studying the elements of design more in-depth. Students will also learn how to combine the elements by studying the principles of designs to create dynamic compositions. Art History, projects, and critiques are the basic make-up of the class.

SYSTEMS ENGINEERING (Grades 9-12) - .5 CREDIT
A semester class that focuses on the implementation of the design process to solve a variety of complex problems. 3-D computer drawing is taught and will be implemented with all projects. Students will learn how systems work together in order to produce a desired outcome. Some example projects that will be taught in the class are: 1. The Trebuchet 2. Egg Drop Vehicle 3. Solid Fuel Rocket

WELDING- (Grade 10) - .5 CREDIT
A semester course with Agricultural Mechanics I, that studies welding and cutting of metal. This class will begin with basic metal work. We will learn about how to properly and safely cut metal with oxygen-acetylene torches and plasma cutter. Welding skills will be gained in both stick and Metal Inert Gas style welding. If time permits, students will undertake simple projects to put their knowledge into application. Metal properties will be discussed and proper application of metal to the job will be part of the course. Students will be expected to behave in a safe manner during all times in the class. The teacher has the discretion to remove a student if they are detrimental to the safety of the other students and shop area. Participation in Future Farmers of America student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration, and reinforcement of academic concepts.

1 CREDIT

ACADEMIC DECATHLON (Grade 9-12) –

1 CREDIT

This is a course of study that aligns with the United States Academic Decathlon Curriculum where students will be required to complete intense study in each of the following areas: Art, Economics, Language, Literature, Math, Music, Science, and Social Studies. Each year the enrichment theme changes, however, the in-depth study of fundamentals does not change. Each student will gain interpersonal skills as they compose and deliver speeches, undergo interviews, and debate materials in a group setting. Students will attempt to qualify for three Academic Sports League competitions and could possibly advance to USAD regional, state, and even national competitions. This reading and writing intensive course can help create college and higher-level study skills that can relate to any discipline of future study. *After school study sessions are mandatory during competition preparation. The course lectures and discussions begin during the summer via weekly meetings. Although the weekly meetings are not required, student participation is highly recommended.

ANIMAL SYSTEMS (Grades 10-12) –

1 CREDIT

A full year course of study that can be counted as a science requirement, concerning large agriculture animal science, including beef, dairy, swine, sheep, horse, and poultry including their characteristics and behaviors. The class will cover areas such as disease prevention, uses of animals, digestive systems, anatomy, reproductive system, understand feed stuffs and labels, and demonstrate good production practices. Additionally this class will incorporate Veterinary Science and general animal biology on other animals pertaining to agriculture and wildlife. Participation in Future Farmers of America student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration, and reinforcement of academic concepts.

BAND (Grades 9-12) –

1 CREDIT

Senior High Band offers students in grades 9-12 who play an instrument the opportunity to perform in an ensemble setting. The band performs at all football games, several parades, and four public concerts a year. Participation at all performances is required. *Dance & Drill members are part of the Band. After football season, students will opt for Band or Choir and receive 1 credit or be placed in study hall for the remainder of first semester and receive no credit. Students will be required to compete for a position on the Dance & Drill squad. Students not opting for Band or Choir may select an elective for second semester.*

BUSINESS 1: INTRO TO BUSINESS- (Grades 9-12) -

1 CREDIT

Introduction to Business is a full year elective course designed to introduce students considering entering the business profession to exciting and challenging concepts and practices. Through the information and activities covered in class, students will increase their preparation to be a knowledgeable consumer, a well-prepared employee, and an effective citizen in today's economy, all while gaining experience working within our school store. Topics will focus on two week units covering general topics in business including entrepreneurship, free market, ownership, business planning, finance, marketing, accounting, and emerging technologies in the profession.

BUSINESS 2: MANAGEMENT AND WORK: (Grades 9-12) - 1 CREDIT

Business 2 is a full year elective course designed for students to practice management scenarios in the real world and continue to consider entering business as a profession. Through the information and activities covered in class, students will effectively be running the school store operations with oversight from the teacher. Students will increase their preparation to be a knowledgeable consumer, a well-prepared employee, and an effective citizen in today's economy. Topics will focus on two week units covering general topics in business including entrepreneurship, free market, ownership, business planning, finance, marketing, accounting, and emerging technologies in the profession. The instruction will conclude after the first semester and project based assessments will be the focus of the second semester with remediation and extensions as needed. People management and training will be a theme throughout the units.

CERAMICS 3 (Grades 10-12) – 1 CREDIT

Students are asked to choose between hand building and wheel throwing skills. By choosing a specific building method, students will advance their skills and become more proficient and accomplished in their work. Projects in this course are student led and student based. This course will cover ceramic careers, clay body types, glaze calculations, slip casting, continuing ceramics history, and visiting artists.

CONCERT CHOIR (Grades 9-12) - 1 CREDIT

The Concert Choir is a mixed choral group from Grades 9-12. The choir meets daily to rehearse a variety of musical styles. Singing skills, music theory and music reading are incorporated throughout the class. Participation in all concerts is a requirement of the course.

DRAWING (Grades 10-12) - 1 CREDIT

Students in this course will focus on various drawing techniques, tools, and media. The course will cover an in-depth study of value, texture, gesture, still life, and drawing from life. Students will also be introduced to historical and contemporary working artists

ENSEMBLE CHOIR (Grades 9-12) - 1 CREDIT

The Ensemble Choir is a competitive mixed choral group from grades 9-12. Students will be selected for participation in this course. The Ensemble Choir will meet daily to rehearse performance-based programming. Ensemble will incorporate various styles of music along with a variety of skills related to music reading and interpretation. Participation in scheduled concerts and performances is a requirement of this course. Basic singing appreciation for various styles of music and skills in reading music is included in the course.

FRENCH I – (Grades 9-12) - 1 CREDIT

This course includes basic vocabulary and grammar necessary for students to communicate about school, friends, family, travel, shopping, and sports. Students will learn about various cultures of the French-speaking world. Reading, writing, speaking, and listening are the skill components of this course.

FRENCH II (Grades 10-12)

1 CREDIT

This course is a continuation of French I. There will be a review of French I at the beginning of the year. Students will continue to build their vocabulary around topics that deal with common daily activities: shopping, daily routine, health, traveling, sports, cultural events, vacations, money, and banking. Students will improve their speaking, listening, reading and writing skills.

INTRODUCTION TO HORTICULTURE (Grades 10-12)

1 CREDIT

In this course, students will study a variety of topics within the agricultural field. We will focus on plants, soils and landscaping. Topics will include, Plant Science, Soil Science, Landscaping, and Greenhouse Safety.

JOURNALISM 2 (Grade 10)–

1 CREDIT

This course focuses on the historical, ethical, and rhetorical components of journalism. Students will gather and report the news by writing news features, sports articles, and editorials for the school newspaper. They will become knowledgeable in the areas of interviewing and editing techniques. Mock press conferences will be held regularly to strengthen speaking and listening skills, and research on current events is required. This course also focuses on the design and layout of the school newspaper. Students will revise, edit, and publish articles written by other students. Students will create templates and newspaper pages on the computer and place articles into the final layout to design the overall layout of the paper. Students are responsible for all photography, captions, artwork, headlines, and sidebars. A school newspaper will be published each grading period.

MANUFACTURING & CONSTRUCTION 2-AGRICULTURAL(Grades 10-12) 1 CREDIT

A yearlong class that will add to what was taught in Manufacturing and Construction 1. Students will gain a better understanding of all construction trades and will be tested on more complex problems within these trades. Students will be able to pick their own teacher approved project for this class. Students will get the opportunity to use more complex machines for their projects and will be shown higher level woodworking processes. Students will have the opportunity to work collaboratively on free standing structures (sheds, gazebos, decks, playhouses, and many more).

MEDIA PRODUCTION III – (Grades 10 – 12) -

1 CREDIT

This full year course will focus on the skills and techniques learned in Media I and II. Class work will be focused on creating media related projects such as music videos, documentaries and in school activities. Skills learned in these classes will be used to plan and manage in and out of school productions. Products/videos will be seen on TEAU TV on a regular basis and will cover a variety of topics. These skills will be applied to produce effective, high quality programming. Skills with cameras, lighting equipment, sound equipment, and digital editing systems will improve with continued use. Standards of technical and aesthetic quality will be raised through consistent analysis and review.

MOCK TRIAL (Grades 9-12)

1 CREDIT

This is a course for 9th – 12th grade students that studies the American judicial system. Students will use critical thinking skills to analyze a civil or criminal case and to prepare attorney or witness parts. They will improve debate and speaking skills, and create structured opposing viewpoints. Students are required to compete in a minimum of two Mock Trial competitions throughout the year. Students will be required to stay after school as needed to participate in attorney led workshops.

PLANT SYSTEMS–(Grades 10- 12) -

1 CREDIT

Full year course that covers both plant and soil systems. Topics to be covered in this course will be plant reproduction, plant nutrition, managing agricultural soils, environmental factors, the effect of plant growth, plant identification, integrated pest management, field crop and specialty crop production, fruit and vegetable production, greenhouse management, identification of common PA field crops and vegetables, and nursery management and production plus an understanding of how to calculate area such as acres. Students will explore hands-on projects and activities to learn the characteristics of plant science and work on projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers and producers, and plant research specialists face in their respective careers.

SPANISH I (Grades 9-12) –

1 CREDIT

This is a full-year course in which students practice fundamentals of the language including pronunciation and grammatical patterns for communicating at a novice level. Emphasis is placed on everyday conversation, cultural insights, and customs and traditions of the Spanish-speaking world.

SPANISH II – (Grades 10-12)-

1 CREDIT

Is a full-year course in which students continue to practice and build on patterns and structures used to achieve higher levels of proficiency in the areas of speaking, listening, reading, and writing. Emphasis is placed on communicating using basic conversation skills to express individualism, cultural insights and diversities of the Hispanic world.

YEARBOOK PRODUCTION 2(Grade 10) -

1 CREDIT

Yearbook Production includes all the basics of journalism: page design, copyrighting photography, and artwork. In addition to learning these basics, students will gain the experience of applying these skills as well as the experience of selling ads to local businesses. Students will be responsible for completing yearbook pages from designing computerized layouts to writing copy to cropping and proofreading. Student photographers are needed to supplement the professional photography and take good quality prints both in school and after school. The following skills will be taught in Yearbook:

Yearbook 1 (9th-12th Grades)	Yearbook 2 (10th-12th Grades)	Yearbook 3 (11th-12th Grades)
Taking candid photographs	Editing photographs	Pre-editing of all pages (Editors)
Working fundraisers	Helping to organize fundraisers	Managing various fundraisers
Scanning ads and photographs	Downloading & uploading photos	Designing & creating business ads
Formatting layouts	Designing layouts	Creating page templates
Learning color patterns	Mentoring Level I students	Mentoring Level II students
Learn captions and headlines	Write captions and headlines	Yearbook public relations
	Manage advertising	Distribution of the yearbooks
		Organizing underclassmen and club picture days

BUTLER COUNTY AREA VOCATIONAL-TECHNICAL SCHOOL

Butler County Area Vocational-Technical School offers programming in technical and mechanical, professional, service, and production occupations to eligible high school students residing in the Moniteau School District. Students who complete 9th, 10th or 11th grade may apply for admission to any of the 15 different programs by submitting the *BCAVTS Application for Admissions* to their academic guidance counselor. ***Please see your guidance counselor for complete admission procedure details.*** Accepted students will spend a two-hour portion of their day involved in career and technical education at BCAVTS and the remainder of the day completing academic requirements at Moniteau High School.

The desire to learn, a cooperative work attitude, and the ability to profit from technical instruction are qualities needed to be a successful student in any of the programs. As a student at BCAVTS, the technical course work which includes cutting edge, rigorous and relevant curriculum will prepare students of all ability levels to enter an occupation, a post-secondary school, or the military. Each student's pathway to success is unique. BCAVTS can help you explore that pathway. Students considering enrollment at BCAVTS need to consider a number of personal factors including: career interests, academic abilities, social maturity, and specific career aptitudes.

Earning College Credit at BCAVTS: Students can earn advanced placement at various post-secondary institutions by taking advantage of *local articulation agreements* established by BCAVTS or by accessing statewide articulation credits for eligible students.

Local Articulation Agreements have been established with college and career schools throughout the region. Qualifying students have the opportunity to receive credits at specific institutions for learning achievements accomplished at BCAVTS. The number of credits awarded and specific requirements vary for each institution. Call the BCAVTS Guidance Office for the latest articulation information at 724-282-0735.

Statewide Articulation Agreements BCAVTS strives to prepare students for college and careers in a diverse, high-performing workforce. Beginning in the 2009-2010 school year, BCAVTS courses have become *program of study (POS)* courses which combine relevant, coherent, and rigorous technical education with aligned challenging academic standards. These career and technical *programs of study* include a statewide articulation agreement partnership between secondary schools and post-secondary institutions throughout Pennsylvania. To view current statewide articulation agreements, go to the equivalency search results for PA Bureau of Career and Technical Education at the website www.collegetransfer.net.

*In order to take advantage of the Statewide Articulation Agreements through Butler County Area Vocational-Technical School's Programs of Study, students are advised to take college preparatory core academic subjects.

Qualifying second and third year students may wish to consider participating in the **Cooperative Education** program. The program can provide a student the opportunity to be employed with his/her area of vocational-technical study and earn wages while under the supervision of the BCAVTS Cooperative Education Coordinator. All BCAVTS courses are eligible for participation, but students need to meet specific requirements, apply, and be accepted into the program. Cooperative Education guidelines established by the PA Department of Education and approved by the local area school districts will be followed.

Numerous *certification* opportunities exist for BCAVTS students. A certification is a business and/or industry documentation verifying skills and knowledge in a specific area of study. These certifications may become increasingly important for advancement within a career area. NOCTI (National Occupational Competency Testing Institute) Certification is offered to all students but Machine Technology students. Machine Technology students are offered NIMS (National Institute of Metalworking Skills) Certification. Many more *certifications* and *accreditations* are displayed in each Course Description in the next few pages.

BCAVTS **has a** guidance counselor who works cooperatively with Moniteau High School's guidance counselors in order to meet the needs of our students. Questions about specific programs of study at BCAVTS can be referred to Moniteau High School's guidance counselors or to the guidance office at BCAVTS (724) 282-0735.

2023-2024

Butler County Area Vocational–Technical School Course Descriptions

Air Conditioning/Heating/Electrical

A student in the Air Conditioning/Heating/Electrical program will be introduced to careers centering on the installation, maintenance and repair of heating, ventilation, and air conditioning equipment. The student will also gain enough residential and commercial electrical knowledge to choose entrance to electrical/electrical skilled careers. Skills learned in the classroom include working with compressors, relays, and thermostats; recovering and recycling refrigerants; learning related plumbing and electrical skills; fabricating sheet metal, following electrical and building codes, and installing, servicing, and maintaining residential or commercial heating, refrigeration, ventilation, and air conditioning systems.

Certifications Offered at BCAVTS	Accreditations Offered at BCAVTS
<ul style="list-style-type: none">- American Refrigeration Institute ICE Exam- EPA Refrigerant Recovery 608- HVAC Excellence Certifications- OSHA 10- 609 Automotive Mainstream Engineering- Mainstream Engineering<ul style="list-style-type: none">● 410A Safety Certification● Preventive Maintenance	HVAC Excellence

Auto Body/Collision Repair

A student in the Auto Body/Collision Repair program will be introduced to careers centering on the replacement and repair of automobile and light truck bodies and body parts. New technologies that include a touch-mix computerized paint mixing system, resistance welder, aluminum welder, paint gun cleaner, paint recycling system, fresh air breathing system for the paint booth, hydraulic lift, and a cost estimating area will be used daily by students. Instruction utilizes the Inter-Industry Conference on Auto Collision Repair (I-CAR) curriculum presented through theory and application/practical skills with assessment of both portions reflected in each student's grade.

Certifications Offered at BCAVTS	Accreditations Offered at BCAVTS
<ul style="list-style-type: none">- ALLVIS (laser frame measuring system)- Aluminum Welding- Mig Welding- EPA Refrigerant Recovery (auto a/c)- LORD Fusor® Bumper Repair- OSHA 10- SP/2 Automotive	I-CAR

Automotive Technology

A student in the Automotive Technology program will be introduced to the highly technical careers centering on the repair of automobiles and light trucks. Rigorous evaluation by the National Automotive Technicians Education Foundation (NATEF) and the National Institute for Automotive Service Excellence (ASE) has resulted in program certification that assures employers standards of excellence in the areas of instruction, facilities, and equipment are met by BCAVTS. Skill areas include maintenance and light repair of brakes, heating, ventilation and air conditioning systems, automatic transmissions, and electrical/electronic systems for the first year and engine performance, engine repair, suspension and steering, and manual drive train/clutches for the second year of the program.

Certifications Offered at BCAVTS	Accreditations Offered at BCAVTS
<ul style="list-style-type: none"> - Automotive Service Excellence (ASE) - Pennsylvania State Inspection <ul style="list-style-type: none"> • Category I • Category II • Category III - EPA Refrigerant Recovery (auto air conditioning) - Valvoline Motor Oil Certification - Snap-on Digital Multi-meter Certification - OSHA 10 - SP/2 Automotive 	Automotive Service Excellence (ASE) Education Foundation (AYES & NATEF merged and formed this foundation) National Coalition of Certification Center (NC3) Subaru U

Building Construction

A student in the Building Construction program will be introduced to careers in the residential and commercial building industry. Each student will receive training in carpentry, electrical, masonry, and plumbing. The students in Building Construction may participate in the annual construction of a complete home. Students who complete the program will receive certification from the National Center for Construction Education and Research (NCCER). Building Construction students are also eligible for Occupational Safety and Health Administration (OSHA) 10 certification as well as Caterpillar Forklift Operators certification.

Certifications Offered at BCAVTS	Accreditations Offered at BCAVTS
<ul style="list-style-type: none"> - Forklift Operator - OSHA 10 - Ram-Set certification - AWPT in Arial Work Platforms - All Terrain Telehandler - Telehandler Rough Terrain Truck - S/P2 Construction 	National Center for Construction Education and Research (NCCER)

Carpentry

A student in the Carpentry program will be introduced to careers for general carpenters, wood workers, and fine cabinetmakers. Classroom instruction will include measuring, use of power tools, use of hand tools, types of fasteners, types of adhesives, rough carpentry skills, cabinetmaking skills, blueprint reading skills, programming/operation of the CNC (computerized numerical control) lathe, router, lasers, and moving gantry router. Practical application includes fine cabinetmaking and working on the construction of the modular home. The Carpentry program is accredited by the National Center for Construction Education and Research (NCCER).

Certifications Offered at BCAVTS	Accreditations Offered at BCAVTS
- Forklift Operator - OSHA 10 - S/P2 Construction	National Center for Construction Education and Research (NCCER)

Computer Networking and Security

A student in the Computer Networking and Security program will be introduced to the creative technologies related to supporting and networking computer systems in both theory and direct application. The fundamentals of media, topologies, protocols, standards, network implementation, and network support will be presented. Problem solving and analytical skill development are taught and supported within the classroom structure. As an authorized Pearson/VUE Test Center, students are eligible to complete advanced industry certification in CompTIA A+, and others right in their classroom.

Certifications Offered at BCAVTS
- CompTIA <ul style="list-style-type: none">● A+● Network +● Servers● Security +● Strata● IT Fundamentals
- OSHA 10

Cosmetology

A student in the Cosmetology program will be introduced to the skills surrounding careers in the beauty industry. Competence in hair care, hair cutting, skin care, and nail care are obtained through learning techniques and practice on mannequins. Advanced practice on classmates and then clients will take place in the school's salon, Salon 7. All hours earned during daily class and evening classes are applied to the 1250 hours of instruction needed for the PA State Board of Cosmetology State Board Certification license. State licensing can be pursued once the required number of hours is in place.

Certifications Offered at BCAVTS	Accreditations Offered at BCAVTS
- PA Cosmetology State Board Exam - Academy Pro <ul style="list-style-type: none"> ● Hair Extensions ● Air Brush Makeup -OSHA 10 -SP2 Cosmetology	PA Cosmetology State Board

Culinary Arts

A student in the Culinary Arts program will work in areas such as dining room operations, cooking, bakeshop and pastry making. Students will be expected to work individually, in groups, and in a professional kitchen brigade preparing food for the school's restaurant, The Eatery, to experience a wide range of learning experiences in keeping with industry expectations. The food service industry is one of the nation's largest employers, and job opportunities abound food preparation cooks, sous chefs, executive chefs, bakers, pastry chefs, and front-of-the-house positions including wait staff, managers, and food and beverage directors. Students also have the opportunity to earn ServSafe Sanitation Certification, Nutrition Certification, Restaurant & Food Service Management Certification, Culinary Certification and Baking & Pastry Certification, and a Certificate of Achievement from the American Culinary Federation.

Certifications Offered at BCAVTS	Accreditations Offered at BCAVTS
-ServSafe Manager -American Culinary Federation <ul style="list-style-type: none"> ● Intro to Hospitality ● Sanitation & Safety ● Business & Math Skills ● Food Prep ● Garde Manger ● Baking ● Purchasing & Receiving ● Nutrition ● Dining Room Service ● Menu Planning ● Human Relations ● Sustainability - National Restaurant Association <ul style="list-style-type: none"> ● On Baking ● On Cooking - OSHA 10 - S/P2 Culinary	American Culinary Federation National Restaurant Association

Graphic Design

Graphic Design students will learn all the basic skills required in the field of visual communication: color theory, design, illustration, digital imagery, typography, multi-page layout and publication, advertising, and packaging, as well as electronic pre-press, silk-screening, vinyl decal design and application, binding and finishing, and laser operations. This course will focus on developing creativity, increasing knowledge in all aspects of design including technical skills, problem solving skills as well as practicing appropriate interviewing skills. The Apple/PC software programs of Adobe InDesign, Adobe Photoshop, and Adobe Illustrator are utilized throughout the three year course. Completing the required training and developing an artist's portfolio to display mastery of skills enables students not only to further their education, but to pursue entry level graphic design positions with advertising agencies, magazines, newspapers, and corporate communications departments.

Certifications Offered at BCAVTS	Accreditations Offered at BCAVTS
-Adobe Certified Associate (ACA) for Adobe Photoshop CS5 and Adobe Illustrator - OSHA 10	PrintED

Health Assistant

A student in the Health Assistant program will be introduced to the field of health care with an emphasis on direct patient care. Instructional areas will include: anatomy; physiology; medical terminology; infection control; emergency procedures; patient care; and technological advancements in patient care. The expanded overview of the health care field allows students to explore, refine, and choose an area of specialization in health care after field trips, job shadowing experiences, and clinical rotations are taken. Completers of the Health Assistant program will have the opportunity to earn the following certifications: CPR/AED, Feeding Assistant, Patient Care Technician, Electronic Medical Recorders, and Pharmacy Technician as well as college credits through Butler County Community College.

Certifications Offered at BCAVTS
-American Heart Association <ul style="list-style-type: none"> ● BLS for Healthcare Providers which includes adult, child, infant ● CPR ● AED ● First Aid -Department of Health <ul style="list-style-type: none"> ● Feeding Assistant - National Restaurant Association Educational Foundation <ul style="list-style-type: none"> ● Nutrition -National Healthcare Assoc.

- EKG
- Pharmacy Technician
- Electronic Medical Records
- Certified Patient Care Technician

-Dean Vaughn

- Medical Terminology

-Department of Public Welfare

- Personal Care Home Direct Care Staff

-OSHA 10

Heavy Equipment Repair

A student in the Heavy Equipment program will be introduced to maintenance and repair of medium/heavy duty trucks and construction equipment using state of the art lifts and computer diagnostic software. Students will be given the opportunity to study a variety of repair scenarios on equipment, diesel and gasoline engine, transmissions, drivelines, differentials, steering and brake systems, as well as electrical, pneumatic, and hydraulic systems through both in-class learning and hand-on experience. Students have the opportunity to obtain Caterpillar Forklift Operators certification.

Certifications Offered at BCAVTS

- | |
|---|
| <ul style="list-style-type: none"> - EPA Refrigerant Recovery (auto a/c) - Forklift Operator - Basic Commercial Truck Tire Service - Pennsylvania State Inspection <ul style="list-style-type: none"> ● Category I ● Category III - OSHA 10 - SP/2 Heavy-Duty/Diesel |
|---|

Machine Technology

A student in the Machine Technology program will be introduced to the skills used in the precision metalworking industry. Students will be instructed on how to develop a process plan, how to produce and/or repair parts, how parts fit and work together, how to use a variety of metal working equipment, how to program and produce products on the computer numerical controlled (CNC) machines, and how to make accurate quality control inspections. Skills obtained in this area can secure a high-paying career in manufacturing as well as transfer into four-year college engineering degrees. Machine Technology offers nine nationally-recognized credentials through the National Institute for Metalworking Skills (NIMS) as well as up to 15 college credits from the Butler County Community College.

Certifications Offered at BCAVTS	Accreditations Offered at BCAVTS
- National Institute for Metalworking Skills (NIMS) <ul style="list-style-type: none"> • Measurement, Materials & Safety • Job Planning, Bench Work & Layout • Manual Milling Skills I • Turning Operations: Turning Between Centers • Turning Operations: Turning Chucking Skills • Grinding Skills I • Drill Press Skills I • CNC Turning: Programming Setup & Operations • CNC Milling: Programming Setup & Operations • CNC Turning: Operations • CNC Milling: Operations • Machining Level 1 Certificate of Merit - OSHA 10	NIMS Metal Working Program

Protective Services

A student in the Protective Services program will acquire knowledge and skills from the public safety areas of firefighting, emergency medical services, vehicle, rope, and confined space rescue, as well as law enforcement. Students can expect to receive instruction; participate in practical applications and situational learning experiences; and prepare to test for national, state, and local certifications. Through exploration and physical practice of skills presented within the curriculum, students will be able to refine personal career opportunities and choose an area of specialization in public safety.

Certifications Offered at BCAVTS	Accreditations Offered at BCAVTS
<u>First-Year Certifications</u> -PA. State Fire Academy <ul style="list-style-type: none"> • Introduction to the Fire Service (ELIS) • Fire Ground Support (ELFG) • Basic Rigging for Rope Rescue (ROBR) • Rope / High Angle Rescue - I (RORE) • Hazardous Materials - Awareness (HMA) • Resource Accountability Responder (RAR) 	PA State Fire Academy PA Department of Health National Registry of Emergency Medical Technicians American Heart Association Federal Emergency Management Agency

<p>-PA Department of Health</p> <ul style="list-style-type: none"> • National Vehicle Rescue - Awareness (NVRA) <p>-Federal Emergency Management Agency</p> <ul style="list-style-type: none"> • Introduction to Incident Command System (ICS-100) • National Incident Management Systems (NIMS IS-700A) <p>-American Heart Association</p> <ul style="list-style-type: none"> • BLS for Healthcare Providers (CPR/AED) <p>-OSHA 10</p> <p style="text-align: center;"><u>Second-Year Certifications</u></p> <p>-PA State Fire Academy</p> <ul style="list-style-type: none"> • Exterior Firefighter (ELEF) • Interior Firefighter (ELIF) • Confined Space Rescue (CSR) • Rope/High Angle Rescue - II (RORA) • Structural Collapse Operations - I (SCOA) • Hazardous Materials - Operations (HMO) <p>-PA Department of Health</p> <ul style="list-style-type: none"> • National Vehicle Rescue Operations (NVRO) <p>-American Heart Association</p> <ul style="list-style-type: none"> • BLS for Healthcare Providers (CPR/AED) <p>-Federal Emergency Management Agency</p> <ul style="list-style-type: none"> • ICS for Single Resources and Initial Action Incidents (IS-200.B) • National Response Framework (IS-800.B) <p style="text-align: center;"><u>Third-Year Certifications</u></p> <p><i>(Offered to third-year students who have met all PSFA course prerequisites)</i></p> <p>-PA. State Fire Academy</p> <ul style="list-style-type: none"> • Engine Company Operations (ECOP) • Truck Company Operations (TRCO) • Respiratory Protection I (REPA) • Respiratory Protection II (REPR) • Forcible Entry (TFE) 	
--	--

Sports Medicine

The Sports Medicine program will prepare students with a strong foundation in the field of physical therapy, occupational therapy and sports medicine. Students will develop skills in prevention, recognition, assessment, management, disposition, and rehabilitation of injuries. Students will learn the principles of designing exercise programs for healthy individuals and those who are in a rehabilitation phase after an accident or injury. Students will also learn the how to develop proper diets through the essentials of nutrition. Upon successful completion, students will be prepared to assess injuries and illnesses, provide immediate and long-term care, determine the outlook, and design a basic rehabilitation program. Anticipated certifications offered in this program are as follows: Personal Training, CPR/First Aid/AED and Bloodborne Pathogens.

Anticipated Certifications Offered at BCAVTS	Anticipated Accreditations Offered at BCAVTS
-American Heart Association <ul style="list-style-type: none"> ● BLS for Healthcare Providers which includes adult, child & infant ● CPR ● AED ● First Aid - Personal Trainer - Bloodborne Pathogens - OSHA 10	American Medical Certification Association (AMCA) American College of Sports Medicine (ACSM) National Academy of Sports Medicine (NASM)

Welding

A student in the Welding program will be introduced to the application of technical knowledge and skills in shielded metal, gas tungsten, flux-core, and gas metal arc welding as well as brazing, flame cutting and plastic welding. Students learn safety practices, types and use of electrodes and welding rods, properties of metals, blueprint reading, electrical principals, welding symbols and mechanical drawing, Computer Numerical Control (CNC) programming, use of equipment for testing welds by ultrasonic methods and destruction and harness testing, use of manuals and specification charts, use of portable grinders for surface cleaning, positioning and clamping, and welding standards established by the American Welding Society and The American Petroleum Institute. Students are eligible for certification from the American Welding Society in mild steel, aluminum, and stainless steel.

Certifications Offered at BCAVTS	Accreditations Offered at BCAVTS
- America Welding Society <ul style="list-style-type: none"> ● Entry Level 1 - OSHA 10 -SP2/Welding	AWS Educational Institution

Resources:

Occupational Outlook Handbook: www.bls.gov/oco

College Catalogs: www.collegeresources.org

College Search: www.collegenet.com

www.collegeview.com

www.embark.com

www.usnews.com/usnews/edu/eduhome.htm

www.princetonreview.com

www.nces.ed.gov/ipeds/cool

www.petersons.com

Career Planning: www.acinet.org/acinet

www.adventuresineducation.org

www.bestjobusa.com

<http://www.aie.org/>

www.careerinfonet.org/

www.pacareerstandards.com

www.overview.com/colleges

www.papsa.org

www.bls.gov

www.pacareerzone.com

www.acrnetwork.org

Testing:

www.act.org

www.collegeboard.com

www.kaplan.com

www.testprep.com

Athletics:

www.naia.org

www.ncaa.org

www.nsr-inc.com

Military:

www.af.mil

www.goarmy.com

www.rotc.monroe.army.mil

www.usrotc.com

Financial Aid: <https://profileonline.collegaboard.com/prf/index/jsp>.

<http://iefa.org/>

<http://studentaid.ed.gov>

<http://www.nasfaa.org/>

<http://www.fafsa.ed.gov>

<http://pheaa.org/>

<http://www.fastweb.com>

<http://salliemae.com/>

<http://finaid.org/>

<http://scholarship-page.com/>

<http://www.gocollege.com/>

General Info: <http://dir.yahoo.com/education/programs>

www.ed.gov/pubs
www.collegeboard.com
www.acenet.edu
www.collegenight.com
www.mycollegeguide.org/index
www.collegeispossible.com
www.nacac.com
www.princetonreview.com