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# Program of Studies 2024- 2025



## NOTICE

Parents and students – Please read this Program of Studies carefully.

The information contained on the following pages is an explanation of the requirements, courses, policies, and procedures you must complete to graduate from any Berkeley County High School.

The responsibility to complete all requirements rests solely with the student. Please be sure you understand what you must do to complete all graduation requirements.

If you have questions, contact your school counselor or principal, and they will help you with your concerns.

Please scan the barcode on the card given to you or use the link below to view the Program of Studies.

The Berkeley County Schools Program of Studies is designed to communicate high school graduation requirements to BCS students and families. Due to changes that may occur in subsequent years to Policy 2510 (which governs graduation requirements), **updated versions of the Program of Studies can be found on the Parent/Student tab of the Berkeley County Schools website, or by scanning the QR code on the front cover.**

Visit [www.berkeleycountyschools.org/programofstudies](http://www.berkeleycountyschools.org/programofstudies) to learn more about:

- Course Descriptions
- Graduation Requirements
- Career Programs
- Instructional Programs
- College Entrance Requirements
- Post-Secondary Planning
- .....and much more!

**\*\*\*\*\* Remember, high school counselors invite you to make an appointment to discuss school plans and answer any questions or concerns you may have.**

**BERKELEY COUNTY SCHOOLS**  
**PRINCIPALS AND COUNSELORS - Middle/High School**

<b>Hedgesville Middle School</b>	754-3313	
Elizabeth Adams.....		Principal
Arlin Riggs.....		Counselor
Lynne Corea.....		Counselor
<b>Martinsburg North Middle</b>	267-3540	
Rebecca Eyer.....		Principal
Lauren Poe.....		Counselor
Briana Sigler.....		Counselor
<b>Martinsburg South Middle</b>	267-3545	
Mark Barney.....		Principal
Julie Stark.....		Counselor
Bridget Snapp.....		Counselor
<b>Musselman Middle</b>	229-1965	
Ashley Sura.....		Principal
Jessica Wolfe.....		Counselor
Beth Sedlar.....		Counselor
<b>Mountain Ridge Middle</b>	229-8833	
Wendy Kiser.....		Principal
Susan Brandenburg.....		Counselor
Jason Brier.....		Counselor
<b>Springs Mills Middle</b>	274-5030	
Dr. Amy Haderer.....		Principal
Wendy Reeves.....		Counselor
Jessica Coleman.....		Counselor
Julianne Piscitelli.....		Counselor
<b>Hedgesville High School</b>	754-3354/ Ext. #3106	
Ron Lyons.....		Principal
Britney Dehaven.....		Counselor
Amanda Brown.....		Counselor
Hannah Carl.....		Counselor
Kevin Frankhouser.....		Counselor
Lewis Ruddek.....		Counselor
<b>Martinsburg High School</b>	267-3530/ 267-3535	
Trent Sherman.....		Principal
Katie Myers.....		Counselor
Claudette "Dee Dee" Dofflemyer.....		Counselor
Jeanne Cloud.....		Counselor
Tamesa Smith.....		Counselor
Darlynnes Reyes Alfonso.....		Counselor
<b>Musselman High School</b>	229-1950/ 229-1962	
Alicia Riggleman.....		Principal
Brigitte Frye.....		Counselor
Chris Showe.....		Counselor
Jackie Ellwanger.....		Counselor
Melissa Sherman.....		Counselor
Amber Smith.....		Counselor
Megan Mullin.....		Counselor
<b>Spring Mills High School</b>	274-5141	
Mark Salfia.....		Principal
Ben Davis.....		Counselor
Shara Stewart.....		Counselor
Taylor Lyons.....		Counselor
Elizabeth Kantor-Bright.....		Counselor
Seth Eby.....		Counselor
<b>James Rumsey</b>	754-7925	
Donna VanMetre.....		Director/Principal
Carla Cacicia.....		Counselor

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# INTRODUCTION

The purpose of this **Program of Studies** is to acquaint you with courses that will be offered in the upcoming school year and also to inform you of the requirements needed for graduation. It is important to keep your educational and career goals in mind as you select courses for next year.

A wide variety of elective courses are being offered in order to meet the needs and abilities of all students. We urge you to work with your school counselor using the PEP Plan for a guide as you look ahead and prepare your high school program of studies.

## General Information for All Grades

1. **All students will be scheduled for 7 periods. Only seniors enrolled in dual credit courses or Coop will be able to leave the high school campus. BCS may create a “High School on the College Campus” where juniors could participate in certain programs (by riding the bus to the campus).**
2. **Each required course that is failed must be made up in summer school or the following year.**
3. Courses dropped after the first Friday after the first and third interim report will receive an automatic “F” on the permanent record unless extenuating circumstances are verified by the Student Assistance Team (SAT).
4. Students must attend high school for 4 years before they can graduate. Exceptions to this ruling may be considered (see page 14).
5. Driver education students must be 15 years of age and each high school will develop a prioritized system to enroll students.
6. Only those classes with sufficient pre-registration will be included in the master schedule of course offerings.
7. **In order to be enrolled in honors, advanced placement or college classes, students must meet specific criteria.**

The high school counselors invite both you and your parents to make an appointment to discuss your school plans and to answer any questions or concerns you may have.

## INSTRUCTIONAL PROGRAMS

### PROGRAMS FOR THE HIGHLY MOTIVATED

Honors, Advanced Placement and college courses are offered to meet the instructional needs of those students who are working on or, more frequently, above their grade placement and are sufficiently motivated to learn at an accelerated pace.

While these programs should prepare students effectively for college, those with other career plans can also benefit and are encouraged to enroll. Students and parents interested in any of these programs should consult with school counselors to obtain complete eligibility requirements and other pertinent information. Qualified students may select different courses in the Honors or AP Program. For example, students may select simultaneously Honors English and AP Social Studies.

#### Honors

Honors courses provide intensive instruction within a highly structured, whole class setting. Students' reading assignments are usually longer and more numerous than those in other courses. Writing and discussion activities are frequent. Admission to Honors courses is, in general, limited to students who have met these qualifications:

(1) have a grade-point average of 3.0 or higher in the pertinent subject matter area and (2) have been recommended by a former instructor in that academic discipline. An "Honors Application" may be required. **There may be summer reading or projects required.**

#### Advanced Placement (AP)

AP courses are college level classes that afford advanced students an opportunity to earn, in addition to high school credit, college credit and/or appropriate placement at the college level if they attain a specific score on a national standardized examination and if they attend one of many colleges and universities which recognize students' participation in the College Board's Advanced Placement Program. Students who take these courses are eligible to take an AP test. To enroll in an AP course, students should have a grade-point average of 3.0 or higher in the pertinent subject matter area or the recommendation of the most recent instructor in that academic discipline. An "AP Application" may be required. **There may be summer reading or projects required.**

#### College Courses

With the approval of the school principal and meeting college requirements, students demonstrating outstanding achievement and ability may enroll at a community college, four-year college, university or take college courses at their high school when offered. Some college credits earned (only BCS approved dual credit courses) may fulfill prescribed or elective credits to meet high school graduation requirements (see page 11). Although seniors must be enrolled in eight high school periods, school counselors may help seniors place some of the college courses into the high school schedule (only if seniors want the college grades to be on a high school transcript). However, the college courses on the high school schedule will be limited as students are still in high school and must be enrolled in seven periods. Only seniors will be able to leave the high school campus. **Transportation, tuition, textbooks and fees are the responsibility of the student/parent.**

### SPECIAL EDUCATION

In conformance with State Law, special education services are provided to students who need special services. While these students are frequently assigned to courses taught by special education teachers, efforts are made to include them in classes in which they learn with non-special education students. Programs available to special education learners include learning disability, deaf and hearing impaired, blind and visually impaired, physically handicapped, behavior disorders, home-hospital instruction, and educable, trainable, and profound mental impairment.

### TECHNICAL EDUCATION

A variety of Career and Technical Education classes are available at each high school and at the tri-county James Rumsey Technical Institute. Students whose plans include James Rumsey Technical Institute should consult with the counselor regarding appropriate prerequisites in the ninth and tenth grades.

### SUMMER SCHOOL

Summer school courses may be available at one site in Berkeley County each year, contingent on enough enrollment. Summer school is designed for students who wish to take a course which they are unable to work into their schedule during the regular school term or for students who need to make up a credit for which they did not receive a passing grade.

## COLLEGE PLANNING

<http://www.cfwv.com/> (College Foundation of West Virginia) is a website that helps students plan their careers, search for schools, apply for admission, and apply for financial aid, including the Promise Scholarship. It provides 24-hour online access to information and admissions applications for many West Virginia's colleges and universities, as well as other degree-granting schools such as business and trade schools. Features include online application process for admissions and financial aid, virtual campus tours, matching individual interests and needs with specific schools, scholarship searches, and multiple career assessment tools. After a college application has been completed online, the information is maintained and does not have to be re-entered should the student wish to submit an application to another school. **See your school counselor for additional information.**

## COLLEGE CLASSES

It is the intent of Berkeley County Schools to make available college courses for our students. Course offerings, times, locations, fees and admittance requirements rest solely with and are at the discretion of the college or university. See page 11 for credit information.

Registration, transportation, and all fees are the responsibility of the students and their parents. Entry requirements and eligibility are determined by college or university.

College courses should not be confused with advanced placement courses that are offered during the regular school day at all Berkeley County high schools.

**Approved BCS course offerings will be posted at all Berkeley County high schools for the fall and spring schedules. Interested students must speak to their school counselor regarding enrollment procedures, costs, times and locations. Some college courses may be included on a senior's high school schedule. These will be limited as all students must be enrolled in seven periods. Only seniors will be allowed to leave the high school campus. However, BCS may create a "High School on the College Campus" where juniors may participate in certain programs (by riding the bus to the campus).**

**Students must confer with counselors during scheduling about taking college courses for high school credit. These must be pre-arranged in order to count for high school credit.**

## APPROVED DUAL CREDIT COURSES

College courses must be Berkeley County approved courses to be placed on a high school schedule or transcript. Check with your counselor before signing up to determine if college courses are approved BCS dual credit courses. **Failure of college course(s) can affect graduation requirements.**

## COLLEGE ENTRANCE REQUIREMENTS

College entrance requirements vary from college to college. **It is the responsibility of the student/parent to research and meet the requirements for entrance into a specific college** after high school graduation.

## ARTICULATED COURSES

Written agreements exist between colleges, James Rumsey Technical Institute, and Berkeley County Schools that allow college credit to be earned for skills and competencies achieved in specific high school courses. Interested students should see their counselors for specific requirements.

## WEST VIRGINIA EDGE PROGRAM

WV EDGE stands for "Earn a Degree/Graduate Early" and it allows students to take high school courses for community and technical college credit. The courses are connected to the CTE Pathway. To be eligible to receive credit in the EDGE initiative, a high school student must: (1) enroll in an eligible EDGE high school course; and (2) receive a **C** in the high school course. **Interested students should see the counselor for details. A list of courses can be found on Blue Ridge Community College's website.**

## CO-CURRICULAR AND EXTRACURRICULAR PROGRAMS

### Activities

There are a variety of activities at the high schools. For example, the school band and chorus provide an outlet for those with musical talent. Others may participate in theatre productions and/or various interscholastic sports. Both the school newspaper and yearbook are produced by students. Many academic events such as Science Fairs, Social Studies Fairs and Math Field Day begin at the school level and lead to Regional, State and/or National Competition. In addition, the four Berkeley County high schools compete in Academic Competition for Excellence.

### Athletics

All students are encouraged to participate in a program of interscholastic athletics. Parents are invited to support the athletic programs by attending games and joining the school's Boosters Club. Students must have a minimum of 2.0 GPA the previous semester to be eligible to participate (based on a 4.0 unweighted scale).

### NCAA ELIGIBILITY

Athletes must be certified by the NCAA Eligibility Center to compete at a Division I or II school. To create a certification account, go to <http://web3.ncaa.org/ecwr3/>.

## GRADING SCALE

The grading scale used in Berkeley County follows the uniform grading rules established by the WVBE.

A = 90 - 100

B = 80 - 89

C = 70 - 79

D = 60 - 69

F = 0 - 59

\*\*\* "P" for Passing cannot be transcribed.



## **STUDENT SUPPORT SERVICES**

### **Counseling**

School counselors have a significant role in the high school program. They are available daily to conduct individual and group counseling, interpret test data, advise students and parents, and furnish academic and vocational information. In addition, they assist teachers with career education curriculum objectives, provide those students who plan to continue their education with financial aid information, and arrange meetings between students and representatives of colleges, trades, and industries.

### **Health Services**

Berkeley County Schools provide health services which include consultation, mass screenings, individual referrals and follow-up. Mass screenings include vision, hearing, scoliosis, and blood pressure.

### **Attendance and Social Work**

The Pupil Services Department is responsible for working with school attendance problems, assisting with school adjustment problems, visiting homes to help with various problems, and in some cases, making appropriate referrals to secure clothing and shoes for the needy. The social workers often coordinate referrals to other community agencies. These services help to bridge the gap between the home and school. This department is entrusted with the responsibility of keeping students of legal school age involved in an educational program as mandated by the compulsory school attendance.

### **Student Assistance Team (SAT)**

The SAT is established in each school for the purpose of facilitating an interdisciplinary team approach to referrals and program planning for students with special problems or needs. The SAT consists of a school administrator, teachers involved with the referral, special education teacher, counselor, attendance worker, and school nurse. The chairperson is responsible for following through with the committee's recommendations. Any SAT decisions may be appealed to the school principal.

### **Crisis Intervention Team**

The need for assistance with crisis situations (e.g., suicide, accidental/tragic death of a student or teacher, etc.) at the school level necessitated the development of a Crisis Intervention Team. The team is a group of volunteers from the school system and community who are trained to deal with the aftermath of youth suicide and related tragedies by providing emotional support and consultation to students and staff in need.

### **Drop-Out Prevention**

In an effort to address the drop-out problem, the Director of Pupil Services oversees all drop-out and community programs and grants relative to drop-outs and at-risk students.

### **Youth and Family Support**

The Youth and Family Support department provides services for the social-emotional development, mental health and well-being of students.

**WEIGHTED CLASS IMPLEMENTATION PROCEDURES  
HONORS GRADUATE PROCEDURES  
AND  
HIGH SCHOOL RANKING IN CLASS PROCEDURES**

Effective with the 2003-04 school policy, Berkeley County Schools adopted the State's Uniform Grading Policy which permits the weighting of specifically identified classes and defines a uniform grading scale. The classes identified as weighted will be given a value of:

<b>Grade</b>	<b>Weighted Value</b>	<b>Non-Weighted Value</b>	<b>Grading Scale</b>
A	5 Points	4 Points	A = 90 - 100
B	4 Points	3 Points	B = 80 - 89
C	3 Points	2 Points	C = 70 - 79
D	2 Points	1 Point	D = 60 - 69
F	0 Points	0 Points	F = 0 - 59

The GPA for all students is determined strictly on the basis of all high school classes taken and the quality points so assigned to those classes under State policy and Berkeley County policy.

**BERKELEY COUNTY SCHOLARS PROGRAM**

<b><u>Honor</u></b>	<b><u>GPA</u></b>	<b><u>Medal</u></b>
Summa Cum Laude	3.8 and above	Gold
Magna Cum Laude	3.4 – 3.799	Silver
Cum Laude	3.0 – 3.399	Bronze

Students achieving the above honors are recognized as Berkeley County Scholars, are listed in the graduation program per the above categories, and wear medals signifying their academic achievement.

Grade point averages are based on the Berkeley County Board of Education Policy and are computed at the end of the first semester of the senior year. Credits earned in classes that count toward high school graduation, except classes evaluated on a pass-fail basis, shall be included when computing class rank and grade point average.

Honors graduates will be recognized in press releases, graduation ceremonies, and in any other manner each high school deems appropriate.

In cases where schools are asked to submit the name of the student graduating with the highest GPA, principals and counselors are reminded that the practice of publishing the name of a student as valedictorian is not allowed by this procedure.

All students in a class shall be included in the determining of rank-in-class. However, to be eligible for inclusion in the class ranking, a student must have completed the first semester of his/her senior year at the high school.

Exact rank shall be computed at the end of the junior year and again at the end of the first semester of the senior year. Class rank shall be determined by grade point average as computed by WVEIS. The final class rank will be determined at the completion of the students' final semester.

## Identified High School Weighted Courses

**Art:** AP 2-D Art and Design

**Language Arts:** English 9 Honors, English 10 Honors, English 11 Honors, English 12 CR Honors, AP Language and Composition, AP Literature/Composition

**Social Studies:** World History to 1900 (9) Honors US Studies (10) Honors, Contemporary Studies (11) Honors, AP US History, AP US Government and Politics, AP Psychology, Civics and Government Honors, AP World History, Comprehensive Honors

**Dual Credit:** Only BCS approved dual credit courses may be placed on a high school schedule and transcript. These courses must be pre-arranged with the school counselor to count for high school credit.

**Mathematics:** Algebra I Honors, Geometry Honors, Algebra II Honors, Trigonometry/Pre-Calculus Honors, AP Statistics, AP Calculus AB, AP Calculus BC, AP Computer Science A, College Algebra 126, College Trigonometry 128, WVU Calculus

**Science:** Earth and Space Science Honors, Biology Honors, AP Biology, WVU Biology, Chemistry Honors, AP Chemistry, AP Environmental Science, AP Physics

**Foreign Language:** AP French, AP Spanish

**CTE:** AC Informatics, AC Applied Engineering, AC Aerospace Engineering

**Other:** AP Computer Science Principles, AP Seminar, AP Research, CTE Advanced Career (AC) courses

**Note:** All Honors and AP classes will be weighted.

## INSTRUCTION

### BERKELEY COUNTY GRADUATION REQUIREMENTS (Grades 9-12)

#### RATIONALE

The Berkeley County Board of Education believes that schools must attempt to prepare every student who exits from high school with the knowledge, skills, and attitudes necessary to be a successful, functioning member of society; to develop proficiency in basic skills to function in this culture; to develop a sense of civic responsibility and to prepare him/her for a vocation and vocational activities.

#### DEFINITIONS

- A. **Graduation Requirements** - Graduation requirements are the number of prescribed and elective units of credit that must be earned by a student in order to be graduated from high school. A diploma is the document that is awarded to a student to verify completion of these graduation requirements.
- B. **Unit of Credit** - Recognition given to a student for the successful demonstration of mastery of the instructional objectives at a level established for an approved course as determined by the county Board of Education. Individual students who demonstrate mastery of instructional objectives of a particular course must be provided opportunities to progress to the next level of objectives. Credit shall also be granted for documented (provided on a transcript) mastery of high school course requirements by a student prior to grade nine. Successful completion of college credit shall be granted under certain circumstances.
- C. **Standard Diploma** - Formal documentation and recognition that a student has satisfactorily completed the graduation requirements of the state and county school district.
- D. **Alternate Diploma** - Awarded when a student who has severe disabilities satisfactorily completes modified graduation requirements. Students with disabilities are defined as those students with cognitive impairments so severe that instructional objectives for prescribed and elective courses are not appropriate, even when delivered in altered form or through different

strategies, i.e. changes in delivery, specially designed instructional objectives, teaching strategies, media/resources, and evaluation techniques. The Individualized Education Program (IEP) Committee determines if the student is unable to meet the graduation requirements for a regular diploma. The modified graduation requirements are recorded on the student's IEP and Individualized Student Transition Plan.

- E. **Elective Courses** - "Free" courses students may choose to study based on need and interest.
- F. **Program Courses** – A series of credits directly related to a student's chosen career cluster and postsecondary goal. The technical programs offered by the school must be aligned with local, state, and national job market opportunities.
- G. **Prescribed Credits** - The required courses that are specifically prescribed per policy (Refer to 6.1 Grades 9 through 12 Standards-focused curriculum and graduation requirements) for all content areas. Unless the county has created dual credit courses with local colleges that teach the standards for these prescribed courses, the prescribed courses may not be replaced with a dual credit course.
- H. **Personalized Credits** – The courses that may be personalized by student and school staff per policy (Refer to 6.1 Grades 9 through 12 Standards-focused curriculum and graduation requirements) based on the student's post- secondary plans.

### **Career Clusters**

Berkeley County Schools are committed to the School to Career Program. Our goal is to provide opportunities for students to gain both academic and workplace readiness skills. Students will develop a general understanding of careers as they study sixteen career clusters during eighth grade. During the eighth grade, students will select a cluster to investigate during their ninth and tenth grade years. Students may choose to change their cluster choice. At the end of the tenth grade, the student will select a program of study within the chosen cluster. In each cluster, there are educational pathways to prepare students for post-secondary programs or entry level jobs.

Students will enter their freshman year with a PEP Plan designed to help them focus on a definite educational career program. In grades nine and ten, students will focus primarily on the prescribed core subjects. They will define their career interests. Based on their interest, they will select a program of study within their chosen cluster. By the end of tenth grade, students will plan the most appropriate program of study in order to reach their desired career objectives. Students may change their cluster at the

end of any semester after consulting with their assigned school counselor. However, students must complete the prescribed program courses in order to graduate.

### **Computation of Class Standing**

1. Class standing shall be determined by GPA based on grades earned for any high school level course. This includes any high school level course taken prior to grade 9, courses taken during grades 9-12, high school level courses taken during summer school, and college courses taken for dual credit.
2. Berkeley County Board of Education policy allows each high school to determine awards and/or recognitions at the individual graduation ceremonies.
3. Classes taken for dual credit at an accredited college/university will be counted in the grade point average. Dual credit means courses taken at college which the student chooses to count as college credit as well as high school credit.

Courses taken for dual credit must be approved by the school principal or designee. A written declaration must be signed by the parent, student, and principal or designee prior to the start of the course. Once this is approved, the course will become part of the student's permanent record and is calculated into the student's GPA.

4. Class standing will be recorded on students' transcripts after graduation.
5. Students will be categorized in grades 9-12 according to the following standards:

9<sup>th</sup> Grade - Less than 5 credits  
10<sup>th</sup> Grade - 5 credits minimum  
11<sup>th</sup> Grade - 12 credits minimum  
12<sup>th</sup> Grade - 17 credits minimum

### **Definition of Grade Point Average (GPA) Equivalence**

The value assigned to each letter grade A, B, C, D, F

Grade Quality Pts.	Weighted Pt. Value
A = 4	5
B = 3	4
C = 2	3
D = 1	2
F = 0	0

## **ADMINISTRATIVE PRACTICES**

### **A. Alternatives to the Unit of Credit**

#### **1. Accepting Credits Earned Before Grade 9**

Any student who successfully completes a high school level course prior to grade nine shall receive full credit for that course toward graduation requirements. In Berkeley County, these courses are Algebra I-8 (in rare circumstances Geometry), Spanish I and French I. Transfer students will need a transcript which indicates that the course taken before 9<sup>th</sup> grade was counted as a high school credit. The student's permanent record for grades 9-12 shall indicate completion of the courses. The grade for any course taken prior to grade nine becomes part of the student's permanent record and is calculated in the student's GPA (grade point average).

#### **2. College Credits**

When a student is enrolled in high school and would profit by taking a course at the college/university, three semester hours of college credit may be counted as ½ unit of credit at the high school. A college course must be a Berkeley County approved course for dual credit in order to be placed on a student's high school schedule and transcript. This credit may apply for prescribed courses (if the Curriculum Standards are aligned) or for elective courses. Grades from dual credit courses will be weighted and placed on a student's transcript and will apply to GPA and class standing. Information may be obtained at the school's counseling office.

#### **3. Alternative Educational Programs**

Schools may include credits from accredited alternative programs, provided the instructional program meets the requirements listed in the West Virginia Instructional Goals and Objectives and Berkeley County Benchmarks. These alternative educational programs may include but are not limited to summer school, night school, transitional school and independent study.

#### **4. Option to Attend Class**

Any pupil attending a school or other place approved by the county or any pupil receiving instruction may attend any class offered by Berkeley County Schools, provided that such pupil is registered at least one month prior to the scheduled commencement of such class or classes and provided that such pupil complies with applicable attendance area and transfer requirements. Any such pupil who successfully completes any class offered by Berkeley County Schools shall receive the appropriate credit.

## 5. Testing Out

Students may advance or accelerate by testing out of a class. Courses are limited in which a student may test out. Testing out occurs twice a year. Students may attempt to test out of one course in the winter and one in the spring. Information may be obtained at the counselor's office.

## 6. Virtual High School Courses

The Berkeley County Virtual School (BCVS) pathway is an alternative learning program, and there are a limited number of positions. We will consider a limited number of students for the 2023-24 school year. Students participating in the virtual pathway take classes online outside of the school setting. The classes are not direct instruction; rather they are a learning platform where the student reads and applies information to learn. To be a successful member of the BCVS, a student needs to be an *independent, self-motivated* learner. A BCVS student should also have good technological and communication skills. For students in grades K - 12, there will be a high level of caregiver involvement and weekly Teams meetings with the teacher for the student to be successful. There is no cost to participate. Families would need to have reliable access to the internet to participate.

These students are considered Berkeley County School students, will earn credits towards graduation and will be able to participate in school activities, if eligible. Some of the activities in which virtual pathway students can participate are as follows: picture day, field days, plays, dances, sports, clubs, and other activities the same as students who attend school in person each day.

**Enrollment for the fall semester of the BCVS will open early second semester and close before the last day of school for students.**

By filling out the online form, you are not guaranteed admittance. It should be a mutual decision between the BCVS, the caregivers, and the home school that this would be the best pathway for the student. Once you have already submitted your request, we will be contacting you about whether you will be in the BCVS pathway for the 2023-24 school year. Caregivers, please monitor your email regularly for updates. Once a student has been fully approved for the BCVS pathway, the student and caregiver must attend a mandatory orientation to learn how to use the online platform. Failure to attend may result in the student remaining with in-person learning. Joining the BCVS is designed to be a full year commitment.



## **B. Students with Disabilities**

An Individualized Education Program, (IEP) shall specify the method by which graduation credit is to be earned by an eligible student with disabilities. Primary consideration must be given to the mastery of instructional goals as prescribed for all students. An IEP committee determines whether the approved CSO in the core curriculum and concentration areas of study are reasonable for a particular student. Changes may be made to the delivery of CSOs through learning objectives, teaching strategies, media resources and evaluation techniques, if such changes are deemed necessary by the IEP committee and are specified in the student's IEP. Students who master the IEP's CSOs shall be awarded standard diplomas.

If the IEP committee determines that students cannot successfully achieve the CSOs necessary to earn standard diplomas, the IEP committee shall specify the alternative CSOs that are appropriate to meet the needs of the student. Students who complete the alternative CSOs, as specified in their IEPs, shall be awarded a modified diploma.

## **C. Attendance**

### **WVDE Policy 2510 126-42-8.1.a.3.c requires the following:**

All students shall be scheduled in the defined high school course work, college courses, career and technical programs, credit recovery, Option Pathway, experiential learning, or virtual school courses for the full instructional day during grades 9 – 12.

Attendance for all four years during grades 9-12 is important to attain full benefit from the educational programs offered. Therefore, all students shall be scheduled for the full instructional day for all four years. However, exceptions may be made for seniors to accommodate placement into college courses, advanced vocational programs, or for other compelling circumstances as approved by the Student Assistance Team.

## **D. Evaluating Credits for Transfer Students**

### **Other States, Alternative Education Programs, Correspondence Schools and Home School - House Bill 2785 (Passed July 6, 2021) Section e**

A student from another state, or who is eligible to enroll in a public school in this state, shall be enrolled in the same grade in a public school in West Virginia as the student was enrolled at the school or program from which the student transferred. A transcript or other credential provided by a public school program, private school program, homeschool program or HOPE Scholarship program shall be accepted by a public school in this state as record of a

student's previous academic performance for the purposes of placement and credit assignment.

**E. Students Who Do Not Complete Requirements in Four Years**

If a student has been enrolled continuously for four years in grades 9-12 but has not accumulated the required number of credits, the student will not be required to attend the full day during his/her fifth year.

**F. Students Who Lack One Credit or Less at Normal Graduation Time**

If a senior lacks no more than one credit at the end of the regular school year, the student may be allowed to participate in the commencement ceremony with his/her class, provided that the following conditions have been met:

1. The student and his parent/guardian agree (in writing) that the student will complete the required subject during the impending summer session.
2. Tuition for that course must have been paid in full. Following the successful completion of the required subject in summer school, the student will be eligible to receive his/her diploma.

**G. Early Graduation**

Students must make application with their school counselor who takes the request to the principal. Permission must then be granted from the SAT team at their school to graduate early. It is the responsibility of the student to provide an application with written documentation outlining their reasons for early graduation requests. The principal along with SAT (Student Assistance Team) has the authority, based upon the student's documentation, to grant requests for early graduation. Early graduation requests must be based upon: (1) entrance into armed services; or (2) hardships based upon extenuating circumstances or (3) other compelling circumstances.

Each SAT should submit a list of early graduates to the Assistant Superintendent of Teaching and Learning on or before March 30 of students' sophomore year. The list should include name of school, name of students, and reasons for early graduation.

**\*\*\* This section is from West Virginia Department of Education Policy 2510. Changes may occur for the 2024-2025 freshman class.**

## **§126-42-6. High School Programming.**

6.1. Grades 9 through 12 Standards-focused Curriculum and Graduation Requirements.

### **Foundations for High Quality Developmentally Appropriate High School Programming (Grades 9-12)**

Courses needed for graduation require mastery of approved content standards. The completion of coursework will prepare all students for education, employment, and/or enlistment. **Students should consult with their chosen post-secondary educational/training institution and scholarship program requirements when choosing course options and electives.** The required courses outlined below build strong content knowledge and extend disciplines by engaging students in work of quality and substance. In grades 9 and 10, students build foundational knowledge and skills. In grades 11 and 12, students enter into the personalized aspect of their PEP, focusing carefully on selected coursework that leads to successful completion of their personal and academic goals. Each student's coursework will be designed to lead directly to placement in entry-level, credit-bearing academic college courses, completion of an industry-recognized certificate or license, a workforce training program, or job placement. Students who do not demonstrate mastery of the approved content standards shall be provided extra assistance and time through personalized learning and support.

### **Berkeley County requires 24 credits to graduate – 12 prescribed – 10 personalized – 2 electives**

#### **English Language Arts (ELA) – 4 credits**

##### **Graduation Requirements**

##### **3 Prescribed Credits**

English 9 or 9H

English 10 or 10H

English 11 or 11H or AP Language

##### **1 Additional Personalized Credit from Course Options**

An Advanced Placement (AP®), Dual Credit, or International Baccalaureate (IB®) ELA course may be substituted for any ELA credit. In Berkeley County, AP Language can replace English 11 and AP Literature can replace English 12. Only BCS approved dual credit courses can replace the Prescribed English courses. English 101 and 102 are the only aligned courses and may replace English 12.

### **Personalized Course Options**

#### **Recommended College- and Career- Readiness Course Options and Courses Required to be Offered**

One credit from English 12, 12H, AP Literature, College English 101 and 102 or Transition English Language Arts for Seniors or Creative Writing and Reading or Technical English Language Arts

**Additional Course Options**

English Language Arts College Courses

County-created and Approved English Language Arts Courses based on student need and interest ensuring state standards for English are met.

**Mathematics – 4 Credits****Graduation Requirements****2 Prescribed Credits**

Math I or Algebra I

Math II or Geometry

**2 Additional Personalized Credits from Course Options**

An AP®, Dual Credit, or IB® Mathematics course may be substituted for any Mathematics credit. In Berkeley County, there are no AP or dual credit courses that will replace Algebra I or Geometry.

**Personalized Course Options****Recommended College- and Career-Readiness Course Options and Courses Required to be Offered**

Math III STEM or Math III LA or Algebra II

Math IV - Trigonometry/Pre-calculus,

Applied Statistics, Transition Mathematics for Seniors

**Additional Course Options**

Introduction to Mathematical Applications

AP® Computer Science A

Advanced Mathematical Modeling

Calculus

Statistics

Quantitative Reasoning

STEM Readiness Mathematics

Math III TR

Math IV TR

Mathematics college courses

Computer Science and Mathematics

County-created and Approved Math

Courses higher than Math III or

Algebra II

Technical Transition Math

Financial Algebra

**Science - 3 credits****Graduation Requirements****2 Prescribed Credits**

Earth and Space Science

Biology

### **1 Additional Personalized Credit from Course Options**

An AP®, Dual Credit, or IB® Science course may be substituted for a science credit. In Berkeley County, there are no AP science courses that will replace Earth and Space Science. Biology is a prerequisite for AP Biology not a replacement. There are no dual credit courses that will replace Earth and Space Science or Biology.

### **Personalized Course Options**

#### **Recommended College- and Career- Readiness Course Options and Courses Required to be Offered**

Chemistry

Human Anatomy and Physiology

Physics

Physical Science

#### **Additional Course Options**

Environmental Science

Forensics

Science college courses

Computer Science – GIS

County-created and Approved Science Courses

#### **CTE Courses:**

AC Energy and Power (Courses 1-4)

Animal and Plant Biotechnology

Principles of Agriculture Science-Plan

Principles of Engineering

Human Body Systems

Natural Resources Management

Therapeutic Services (Courses I, II, and III)

### **Social Studies - 4 credits**

#### **Graduation Requirements**

##### **3 Prescribed Credits**

1 Credit from World Studies or an AP® Social Studies Course

1 Credit from United States (US) Studies\* or US Studies Comprehensive, or AP® US History

1 Credit from Civics (includes personal finance) or AP® Government and Politics\*\*

##### **1 Additional Personalized Credit from Course Options**

\*Beginning with the 2020-2021 9<sup>th</sup> grade cohort students who take US Studies must utilize Contemporary Studies as their Personalized Credit unless they are utilizing JROTC Courses I-IV.

\*\*Students who utilize AP® Government and Politics or Dual Credit Civics (not aligned in BCS) must be provided instruction in the personal finance standards found in Civics. In Berkeley County, there are no other AP courses or dual credit courses that will replace the Prescribed social Studies courses.

## **Personalized Course Options**

### **Recommended College- and Career- Readiness Course Options and Courses Required to be Offered**

Contemporary Studies

Economics

Geography

World Studies

### **Additional Course Options**

AP® Social Studies Courses

IB® Social Studies Courses

Financial Literacy

Psychology

Social Studies college courses

Dual Credit Courses (BCS approved courses)

Sociology

JROTC (Courses I-IV)

County-created and Approved Social Studies Courses

## **Physical Education (PE) - 1 credit**

### **Graduation Requirement**

#### **1 Prescribed Credit**

PE 9-12, Integrated PE, or counties may choose to offer Extracurricular/Interscholastic PE both graded and non-graded.

### **Additional Course Options**

JROTC I and II will fulfill the 1 credit PE requirement

Dual Credit Courses (BCS approved courses)

Other PE courses based on student need and interest paired with the integrated online course

## **Health - 1 credit**

#### **1 Prescribed Credit**

Health 9-12

### *Additional Course Options*

Health College Courses, Dual Credit Courses (BCS approved courses)

## **The Arts - 1 credit**

### **Graduation Requirement**

#### **1 Personalized Credit**

An AP®, Dual Credit (BCS approved courses), or IB® Arts course may be substituted for any Arts credit.

### **Required to be Offered**

Four sequential courses in music (both choral and instrumental), visual art (general art and/or studio art), dance, theatre

Course Options

Arts Offerings

Arts College Courses  
Arts College Courses  
Digital Photography (1515)

**The following CTE courses will fulfill the 1 credit Arts requirement:**

- Fundamentals of Illustration (1851)
- Fundamentals of Graphic Design (1857)
- Illustration (1861)
- Graphic Design Applications (1859)
- Ornamental Metal Work (1982)
- Digital Imaging/Multimedia I (1431)
- Drafting Techniques (1727)
- Floriculture (0213)
- Digital Photography (1515)
- Millwork and Cabinetmaking I (2126). II (2127), III (2128). IV (2129)

### **Personalized Education Plan (PEP) - 4 credits**

#### **4 Personalized Credits**

- 4 credits in a CTE Program of Study
- 4 credits that lead to post-secondary goals

Each student's PEP will identify a career cluster and either a CTE program of study or course work for the 4 credits that will lead directly to college placement, attainment of an industry-recognized certificate or license, a workforce training program, or job placement (Appendix D). Best practices encourage students to experience the following: an AP®, IB®, dual credit, and/or Advanced Career (AC) course with corresponding examination, 2 credits in one world language, an additional science, a computer science, an online/digital learning experience, entrepreneurial experiences, and/or 4 credits (culminating in acquisition of industry-recognized CTE credential focused on career aspirations).

### **Career and Technical Education**

See section 6.3: Career and Technical Education

#### **Required to be Offered**

One foundational course that teaches parenting skills

#### **Recommendation**

Counties are encouraged to expand career exploration and offer CTE foundational courses and CTE programs of study in grades 9 and 10.

## **Community Readiness**

Counties may allow students with disabilities to earn 4 credits in Community Readiness Counties may allow students with disabilities to earn 4 credits in Community Readiness Training recommended through an IEP Team as a personalized, non-CTE program of study.

## **Electives**

County Board of Education Members (CBEM) have the authority to set graduation requirements beyond the state minimum for schools in their counties. Students may typically earn up to 32 credits on a block schedule and up to 28 on a traditional schedule over their high school careers.

**When choosing electives, students should consult with their chosen post-secondary educational institution and review scholarship program requirements to make sure the electives are appropriate and acceptable**

## **Computer Science**

### **Required to be Offered**

One Course in Computer Science  
Additional Course Options  
Computer Science in the Modern World  
AP® Computer Science Courses  
Information Technology (IT)  
Information Management  
Web Development  
Other courses based on student need and interest  
CTE Computer Science/IT Courses  
County-created Computer Science/IT Courses  
College Computer Science Courses

## **World Languages**

### **Recommended College- and Career-Readiness Course Options:**

Most four-year colleges and universities require the completion of at least two credits of the same world language before or during post-secondary programming. Students need to consult with their post-secondary educational institutions concerning world language requirements

### **Required to be Offered**

Three levels of one world language  
Students who demonstrate proficiency in two languages (English and one additional) can receive the Seal of Biliteracy.

### **Additional Course Options**

Other world languages and additional levels based on student need and interest  
AP® World Language  
World Language college courses



## **Driver Education**

### **Required to be Offered**

One Course in Driver Education

## **Social and Emotional Advisory System for Student Success**

### **Required**

Through a Comprehensive School Counseling System, high schools will implement a continuous advisory system that provides students with meaningful supportive relationships and maximizes each student's personalized learning experience.

The advisory system will be evidence- and standards-based to systemically address Policy 2520.19 and include the development of each student's Personalized Education Plan (PEP), career portfolio, social emotional learning, and the teaching of other skills that enhance school success, and build competent, engaged citizens.

### **6.2. High School Programming.**

6.2.a. High schools' schedules shall allow for mastery of the content standards of each course. When developing schedules, the principal and a team of teachers will determine the adequate amount of time necessary to achieve mastery of the approved content standards for each program of study and effectively address the academic needs of all students. If the staff develops a schedule with courses less than 8100 minutes and academic achievement is not at or above state proficiency for a minimum of two years, the school will review and adjust its schedule based on student need and be approved by the CBEM.

6.2.b. Students shall have access to at least four AP<sup>®</sup> courses annually (at least one from the content areas of English language arts, mathematics, science, and social studies). All AP<sup>®</sup> courses must have a syllabus approved through the College Board. All AP<sup>®</sup> courses shall be taught by a teacher who has completed the required professional learning (Appendix D.). Access to AP<sup>®</sup> courses may also be attained via West Virginia Virtual Schools (WVVS) AP<sup>®</sup> courses. Grades earned in an AP<sup>®</sup> course must be weighted.

6.2.c. Students who do not meet the college- and career-readiness benchmarks on the West Virginia General Summative Assessment for English language arts and/or mathematics prior to their senior year may be enrolled in a designated transition English Language Arts course and/or a designated transition mathematics course even if they already have the required number of credits in that area. Students may enroll in a higher level course with agreement between the student, the student's parent/guardian, and the school to ensure the best interests and needs of each student are met.

### **6.3. Career and Technical Education (CTE).**

The high school must offer students in grades 9-12 engaging and empowering career development learning opportunities that include: Structured, on-going CTE experiences for career awareness, exploration, decision-making, and career preparation exposing students to all 16 career clusters. These offerings may be delivered within a Simulated Workplace/project-based hands-on environment.

A CTE program of study is aligned with the approved 16 career clusters and consists of four courses identified for WVDE-approved CTE programs of study (refer to W. Va. 126CSR44M, Policy 2520.13, West Virginia College- and Career-Readiness Programs of Study/Standards for Career and Technical Education

(Policy 2520.13)). Each CTE program of study shall provide students a Simulated Workplace environment and the opportunity to obtain an industry recognized credential as part of the instructional program when applicable.

Multi-county Centers, county CTE centers, and comprehensive high schools must provide students with access to programs of study based on the student population. Centers/schools with a population of:

- 0-400 students must offer a minimum of three of the 16 nationally approved career clusters;
- 401-800 students must offer a minimum of four of the 16 nationally approved career clusters; or
- 801+ students must offer a minimum of five of the 16 nationally approved career clusters.

Students in grades 9 and 10 must have access to at least one CTE foundational course.

Students in grades 11 and 12 must have access to four units in a CTE program of study and two CTE electives.

A CTE completer is defined in Policy 2520.13, Explanation of Terms.

*State-approved CTE courses that lead to industry certifications or licenses requiring specific competencies or time-based instruction shall be scheduled no less than 90 consecutive minutes per day equaling 135 hours per course. Counties must consider transportation times to and from county and multi-county CTE centers when developing those schedules.*

#### **Approved West Virginia Career Clusters**

Agriculture, Food, and Natural Resources  
Architecture and Construction  
Arts, A/V Technology, and Communication  
Business Management and Administration  
Education and Training  
Finance  
Government and Public Administration  
Health Sciences  
Hospitality and Tourism  
Human Services  
Information Technology  
Law, Public Safety, Corrections, and Security  
Manufacturing  
Marketing  
Science, Technology, Engineering, and Mathematics  
Transportation, Distribution, and Logistics

Two options exist for students with IEPs to complete a CTE program of study:

1. All students in a CTE program of study must pass the respective program of study safety exam with a score of 100 percent.
2. Individual Work Ready Competencies (IWRC).

#### **6.4. Grades 9 through 12 Alternative Means to Earn High School Credit.**

6.4.a. CBEM shall provide alternative means for students to earn high school credit.

6.4.a.1. Students may substitute one of the following comparable courses in place of a course

as listed in the applicable high school program of study: 1) an AP® course; 2) an IB® course; 3) an AC course; or 4) a dual credit or college course in accordance with approved county policy. The student's parent/guardian must approve by signing the student's PEP.

6.4.a.1.A. Such substitution requests must be approved by the county superintendent (or designee) and principal. The decision as to whether a substitute course will count as credit must be based on its applicability to the student's 5-year PEP, post-secondary goals, and/or program of study. Schools shall provide information regarding the availability of advanced courses to students and parents and strongly encourage students to take such courses based upon student interests and post-secondary goals.

6.4.a.1.B. Students and their parent/guardian must be advised of the decision of the superintendent (or designee) and the impact of the substitute course on the student's preparation for college, other post-secondary education, or gainful employment identified in the student's PEP.

6.4.a.1.C. To ensure this process has been followed, the parent/guardian and student each must sign and receive a copy of, or have access to, the digital copy of the modified PEP.

6.4.a.2. Any student who successfully completes a high school level course (one meeting the high school approved content standards and taught by a content-certified teacher) prior to grade 9 shall receive full credit for that course toward graduation requirements. The student's permanent record for grades 9-12 shall indicate completion of the courses. The grade for any credit-bearing course taken prior to grade 9 becomes part of the student's permanent record and is calculated in the student's grade point average (GPA).

6.4.a.3. All students will receive appropriate grades and/or credit for all work completed while attending school, regardless of the duration of their enrollment period. Students cannot receive credit for the same course twice. When a student retakes a failed course, both grades shall be transcribed.

6.4.a.3.A. No teacher may be required to change a student's grade on either an individual assignment, a report card, or transcript unless there is clear and convincing evidence that there was an error, per W. Va. §18-5-46.

6.4.b. West Virginia Option Pathway. The Option Pathway provides the opportunity for at-risk students, ages 16-21, who are enrolled in and attending a West Virginia public high school or attending a West Virginia Schools of Diversion and Transition (WVSDT) juvenile or adult instructional education program, to stay in school, complete a state-approved CTE program of study as defined in Policy 2520.13, pass the entire WVDE-approved high school equivalency assessment and receive a high school diploma.

6.4.c. Students transitioning from the WVSDT schools must be provided with marketable job skills equal to those in nonresidential settings. Personalized learning options for students enrolled in WVSDT schools are intended to be rigorous in delivery yet flexible in terms of graduation requirements.

6.4.c.1. A WVSDT school operated by the WVDE will transfer graduation credits earned to a county for the awarding of a high school diploma. Counties are required to accept the transferred credit(s).

6.4.d. A student who transfers into a West Virginia school from another state or county public school with different graduation requirements may not be able to complete the requirements for

graduation. In such cases, the student's credits shall be evaluated by the county superintendent or designee in the receiving county to determine if one or more county and/or state requirements can be substituted with an equivalent course. Any courses requiring a waiver must be reviewed and approved by the State Superintendent of Schools or designee.

6.4.e. Counties may develop tests for the purpose of accelerating students by proving proficiency through assessment.

6.4.f. Counties may develop a policy that allows for credit-bearing workplace readiness experiences.

6.4.g. Virtual learning (refer to Appendix C, Virtual Learning). Digital learning offered through the WVVS or a county virtual instruction program.

## SCHOOL TO CAREER - EDUCATIONAL PROGRAMS OF STUDY

Berkeley County Schools is committed to the School to Career program. Our goal is to provide opportunities for students to gain both academic and workplace readiness skills. Students will develop a general understanding of careers as they study sixteen career clusters during their eighth-grade year. During the year, students will select a cluster to investigate during their ninth and tenth grade years. Students may choose to change their cluster choices. At the end of the tenth grade, students will select a career program within the chosen cluster.

To provide students with guidance and assistance in making career cluster and program choices and in developing their personal educational plan, a committee of educators representing all subject areas developed career pathways.

Each cluster has been divided into career programs. In each program, there are pathways to prepare students for post-secondary programs or entry level jobs.

Students will enter as freshman with a PEP Plan designed to focus them on an educational and career program. In grades nine and ten, students will focus primarily on the required core subjects. They will define their career interests. Based on their interests, they will select a career program within their chosen cluster. By the end of tenth grade, students will plan the most appropriate program of study in order to reach their desired career objectives.

### Key points to remember:

- Every student will select a career cluster in grade eight and a program in grade ten.
- School Counselors will work with students and parents in making choices.
- A career cluster and/or program can be changed.

### The Sixteen Clusters are as follows:

- |                                          |                                               |
|------------------------------------------|-----------------------------------------------|
| *Agriculture, Food and Natural Resources | *Transportation, Distribution and Logistics   |
| *Arts, A/V Technology and Communications | * Health Science                              |
| *Business Management and Administration  | *Education and Training                       |
| *Information Technology                  | *Government and Public Administration         |
| *Marketing                               | *Hospitality and Tourism                      |
| *Architecture and Construction           | *Human Services                               |
| *Manufacturing                           | *Law, Public Safety, Corrections and Security |
| *Finance                                 | *Science, Technology, Engineering and Math    |

**The recommended core courses for each program in the sixteen clusters are listed on the following pages.**

The academic and career unit courses reflect the needs and demands of each educational pathway. Students and parents are encouraged to look closely at each of the available choices when making cluster decisions.

# **CAREER AND TECHNICAL INFORMATION**

## **PLANNED EDUCATIONAL PROGRAMS**

A planned educational program is defined as a program of study that includes the minimum requirements for graduation as set forth in Policy 2510. The program places emphasis on preparation for:

**APPROVED LOCAL CONCENTRATIONS/NON-CTE (Career and Technical Education) PATHWAY PROGRAM OF STUDIES** – Courses taken in a program of studies that prepare a student to pursue a four-year college degree.

CTE (Career and Technical Education) PATHWAY PROGRAM OF STUDIES – Courses taken in a program of studies that prepare a student to pursue a two-year college, a post-secondary degree or go into the world of work.

## **SIMULATED WORKPLACE**

**All CTE programs will be Simulated Workplaces.**

Simulated Workplace Programs introduce students to various business processes using twelve distinct measurement areas.

- Transform the classroom environment into a replicated company.
- Utilize time clocks or some other form of formal attendance recording process.
- Develop/Adhere to the county developed Random Drug Testing Policy, while testing a minimum of 40% of all students enrolled within a Simulated Workplace classroom.
- Conduct an application / interview process for enrolling students.
- Develop a company name and procedures / protocol manual.
- Ensure all students receive quality safety training.
- Begin each class period / session with a 5-10-minute company meeting.
- Submit data reports developed by students and instructor.
- Establish work teams and an organizational system with students rotating across teams.
- Integrate the 6S Continuous Quality Improvement principles.
- Participate in Business and Industry yearly onsite evaluations.
- Utilize a portfolio system for students to document learning, credentials earned, projects completed, etc.

## **PORTFOLIOS/NOCTI ASSESSMENT**

Portfolios are collections of student work representing their performance, skill sets and credentials. A portfolio may be a folder or an electronic file containing a systematic collection of student work and related materials that best illustrates CTE activities, projects, and achievements within his/her training program. Portfolios should also include evidence of student work, performance evaluations, CTSO participation, pictures of projects/activities, earned credentials, service learning projects, etc. The overall goal is to assist students in assembling a portfolio that can demonstrate their talents, represent their writing capabilities, and tell their personal story of career and college readiness. Students will be required to obtain service hours related to their concentration. CTE teachers will provide the amount of hours required for completion.

The Portfolio will be a part of the concentration classes. The portfolio is an excellent tool to take to a job interview as they will show the employer the skills that the student is capable of utilizing if hired.

The NOCTI (National Occupational Competency Testing Institute) Assessment will be given at the end of a CTE Completer Program. The assessment is aligned with industry standards and created by industry experts in conjunction with educators.

**NON-CAREER AND TECHNICAL EDUCATION/LOCALLY APPROVED CONCENTRATIONS  
COURSES RECOMMENDED**

**Students Preparing for a Four-Year College**

**9<sup>th</sup> Grade**

- English 9 or 9 Honors
- Algebra I or Algebra I Honors
- Earth and Space Science or Earth and Space Science Honors
- World History or World History Honors or AP World History
- Health
- Personalized Career Program Course or \*Foreign Language I
- \*\*Arts Credit
- Elective

**11<sup>th</sup> Grade**

- English 11, 11 Honors, or AP
- Personalized Higher-Level Math Credit
- Personalized Science Credit
- Contemporary Studies or Contemporary Studies Honors
- Personalized Elective
- Elective
- Elective
- Elective

**10<sup>th</sup> Grade**

- English 10 or 10 Honors
- Geometry or Geometry Honors
- Biology or Biology Honors
- US Studies or US Studies Honors or AP US History
- Physical Education
- Personalized Career Program Course or \*Foreign Language II
- Elective
- Elective

**12<sup>th</sup> Grade**

- Personalized - English 12, 12 College Readiness Honors, Transition ELA, AP or College English 101/102
- Personalized Higher-Level Math Credit
- Personalized Science Credit
- Civics or Civics Honors or AP Government and Politics
- Personalized Elective
- Elective
- Elective
- Elective

**Career Program Courses:**

Science—4<sup>th</sup> Science from list of approved science courses

Foreign Language—2 credits in 1 language

1 additional credit required. It is recommended that all professional pathway students complete at least 1 AP or AC course with corresponding examination or dual credit course.

\*This course may be taken during any year.

\*\*The Arts credit may be taken during any year.

## CTE (Career and Technical Education) Courses Recommended

### 9<sup>th</sup> Grade

- English 9 or 9 Honors
- Algebra I or Algebra I with Algebra I Support
- Earth and Space Science or Earth and Space Science Honors
- World History or World History Honors or AP World History
- Health
- \*Arts Credit
- \*\*Personalized Career Program Course (High School CTE Program)
- Elective

### 10<sup>th</sup> Grade

- English 10 or 10 Honors
- Geometry or Geometry Honors
- Biology or Biology Honors
- US Studies or US Studies Honors
- Physical Education
- Personalized Career Program Course (High School CTE Program)
- Elective
  
- Elective

### 11<sup>th</sup> Grade

- English 11, 11 Honors, or AP
- Personalized Math Credit
- Personalized Science Credit
- Contemporary Studies or Contemporary Studies Honors
- Personalized Career Program Course (High School CTE Program)
- Elective
- Elective
- Elective

### 12<sup>th</sup> Grade

- Personalized - English 12, 12 Honors, Transition ELA, AP or College English 101/102
- Personalized Math Credit
- Civics or Civics Honors
- Personalized Career Program Course (High School CTE Program)
- Elective
- Elective
- Elective
- Elective

Career Program Courses: See the Career Cluster section for the Program of your choice on the pages that follow.

\*The Arts credit may be taken during any year.

\*\*James Rumsey CTE Programs begin in grade 11. Students will take 3 or 4 program courses at James Rumsey both junior and senior years which will alter the recommended courses above.



## VOCATIONAL AGRICULTURE

2024-2025 (odd year)

2025-2026 (even year)

Introduction to Agriculture, Food, and Natural Resources (every year)

The Science of Agriculture (every year)

Fundamentals of Agriculture Mechanics (every year)

Agriculture Structures (odd year)      Agriculture Equipment & Repair (even)

Livestock Production (even year)      Companion Animal Care (odd years)

Greenhouse Production and Management (every year)

Horticulture (every year)

Animal Production and Management (every year)

Natural Resource Management (every year)

Agricultural Cooperative Education (every year)

Supervised Agricultural Experience

Students shall receive 1/2 credit per academic year based on completion of approved SAE and submission of approved documentation. Two years must be completed to meet the requirement of 1 full credit.



## **AGRICULTURE, FOOD, AND NATURAL RESOURCES**

The production, processing, marketing, distribution, financing and development of agricultural commodities and resources including food, fuel, fiber, wood products, natural resources, horticulture and other plant and animal products/resources.

### **Agribusiness Systems Pathway**

AG0120 Agribusiness Systems

### **Animal Systems Pathway**

AG0220 Animal Systems

### **Plant Systems Pathway**

AG0210 Plant Systems

### **Power, Structural and Technical Systems Pathway**

AG0110 Power, Structure and Technical Systems

## Cluster: Agriculture, Food, and Natural Resources

### HIGH SCHOOL

**Program:  
Agribusiness Systems**

Introduction to Agriculture,  
Food, and Natural Resources

The Science of Agriculture

Agricultural Experience Program  
(Two semesters required for the full credit)

\*Select Specialization A, B, C or D from  
below:

- A** Horticulture
- B** Animal Production and Management
- C** Fundamentals of Agriculture Mechanics
- D** Natural Resource Management

### HIGH SCHOOL

**Program:  
Animal Systems**

Introduction to Agriculture,  
Food, and Natural Resources

Animal Production and Management

Agricultural Experience Program (Two  
semesters required for the full credit)

\*Select Specialization A or B from below:

- A** Livestock Production
- B** Companion Animal Care

### HIGH SCHOOL

**Program:  
Plant Systems**

Introduction to Agriculture,  
Food, and Natural Resources

Horticulture

Agricultural Experience Program  
(Two semesters required for the full credit)

Greenhouse Production and Management

### HIGH SCHOOL

**Program:  
Power, Structural and Technical Systems**

Introduction to Agriculture,  
Food, and Natural Resources

Fundamentals of Agriculture Mechanics

Agricultural Experience Program (Two  
semesters required for the full credit)

\* Select Specialization A or B from below:

- A** Agriculture Structures
- B** Agriculture Equipment & Repair

# **ARTS, A/V TECHNOLOGY COMMUNICATIONS**

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

## **Journalism and Broadcasting Pathway**

AV1684 Multimedia Publishing

## **Visual Arts Pathway**

AV1850 Graphic Design

## **Journalism and Broadcasting Pathway**

AV 1680 Broadcasting Technology

AV 1690 Social Journalism

## Cluster: Arts, AV Technology Communications

**JAMES RUMSEY**

**Program:**  
**Multimedia Publishing**

Introduction to Visual Communication

Digital Photography

Videography

Cross-Media Publishing

**HIGH SCHOOL**  
**Broadcasting Technology**

Fundamentals of Broadcasting

Radio Broadcasting Presentations

Television Production Applications

**Select 1 Specialization Course from Below:**

**A** Producing Live TV

**B** Video Editing

**HIGH SCHOOL**  
**Social Journalism**

Fundamentals of Media Writing

Cross-Media Publishing

AP English Language and Composition (11)

AP English Literature and Composition (12)  
or Dual Credit English Language (English 101  
& 102)

**JAMES RUMSEY**

**Program:**  
**Graphic Design**

Fundamentals of Graphic Design

Fundamentals of Illustration

Graphic Design Applications

Illustration

# **BUSINESS MANAGEMENT AND ADMINISTRATION**

The Business Management and Administration Cluster prepares students for careers in planning, directing, and evaluating business functions essential to efficient and productive business operations.

## **Administrative Support Pathway**

### **BM 1465 Administrative Support**

### **BM 0510 Career and Work Skills Training (CWST)**

#### **HIGH SCHOOL**

##### **Program:**

##### **Administrative Support**

Business Computer App I

Office Procedures

Business Computer App II

Business Communications

**\*\*\* (Through 2027)**

#### **HIGH SCHOOL**

##### **Program:**

##### **Career and Work Skills Training (CWST)**

Career and Work Skills Training I

Career and Work Skills Training II

CWST Work Experience I

CWST Work Experience II

# **FINANCE**

The Finance Pathway focuses on careers in a company that manages policies and strategies for (and implementation of) capital structure, budgeting, acquisition and investment, financial modeling and planning, funding, dividends and taxation.

## **Business Financial Management Pathway**

FI1410 Accounting and Finance

### **HIGH SCHOOL**

**Program (Through 2027):**

#### **Accounting and Finance**

Intro to Finance

Accounting I

Accounting II

Personal Finance

FI1420 Financial Management

### **HIGH SCHOOL**

**Program (Begins 2024-2025):**

#### **Financial Management**

Accounting I

Accounting 2

Introduction to Finance

Business Finance



# **INFORMATION TECHNOLOGY**

Building Linkages in IT Occupations Framework: For entry level, technical, and professional Careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

## **Interactive Media Pathway**

IT1442 Coding, App and Game Design

IT1450 Information Management

## **Network Systems Pathway**

IT1640 CISCO Networking Academies

## **Information and Support Services Pathway**

IT2210 Informatics (Advanced Careers)

## Cluster: Information Technology

### HIGH SCHOOL

#### **Program: Information Management**

Technical Computer App I

Technical Computer App II

Digital Imaging/Multimedia I

\*Select 1 specialization course:

**A** Desktop Publishing

**B** Management and Entrepreneurship

### JAMES RUMSEY

#### **Program: Cisco Networking Academies**

CCNA 1

CCNA 2

CCNA 3

CCNA 4

### JAMES RUMSEY

#### **Program: Coding, App and Game Design**

Digital Imaging/ Multimedia I

Digital Imaging/ Multimedia II

Coding, App and Game Design I

Coding, App and Game Design II

### JAMES RUMSEY

#### **Program: AC Informatics (Advanced Career)**

AC Informatics I

AC Informatics II

AC Informatics III

AC Informatics IV

# **MARKETING**

Planning, managing, and performing marketing activities to reach organizational objectives.

## **Marketing Management Pathway**

MK0420 Marketing Management

### **Cluster: Marketing**

#### **HIGH SCHOOL**

**Program:**  
**Marketing Management**

Marketing Principles

Marketing Applications

Cross-Media Marketing

Marketing Work Experience/Internship (1 credit only)

# SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS

Focuses on a broad range of engineering careers and foundation knowledge including basic safety, plan reading, use of tools and equipment as well as how to employ positive work ethics in an engineering career.

## Engineering and Technology Pathway

ST2460 Pre-Engineering (PLTW)

**Cluster: STEM**

**HIGH SCHOOL**

**Program:**

**Pre- Engineering (Project Lead the Way)**

Introduction to Engineering Design

Principles to Engineering Design

\*Select 1 specialization from below:

**A** Environmental Sustainability

**B** Aerospace Engineering

**C** Engineering Design and Development

## Engineering and Technology Pathway

ST2200 AC Aerospace Engineering

**Cluster: STEM**

**JAMES RUMSEY**

**Program:**

**AC Aerospace Engineering (Advanced Careers)**

AC Aerospace Engineering I

AC Aerospace Engineering II

AC Aerospace Engineering III

AC Aerospace Engineering IV

# ARCHITECTURE AND CONSTRUCTION

Careers are in designing, planning, managing, building and maintaining the built environment.

## Construction Pathway

AR1760 Electrical Technician

AR1820 Carpentry

AR1910 Masonry

## Design/Pre-Construction Pathway

AR1720 Computer Aided Drafting and Design

AR1800 Building Maintenance and Operations

## HIGH SCHOOL

### Program:

#### Building Maintenance and Operations

Building Maintenance and Operations 1

Building Maintenance and Operations 2

Building Maintenance and Operations 3

Building Maintenance and Operations 4

## CLUSTER: ARCHITECTURE AND CONSTRUCTION

### HIGH SCHOOL

**Program:**  
**Computer Aided Drafting and Design**

Fundamentals of Drafting

Drafting Techniques

Mechanical Drafting

Architectural Drafting

### JAMES RUMSEY

**Program:**  
**Electrical Technician**

Electrical Trades I

Electrical Trades II

Electrical Trades III

Electrical Trades IV

Integrated Electrical Lab/Rotating Devices  
& Control Circuitry

Blueprint Reading/Industrial & Commercial  
Wiring

### JAMES RUMSEY

**Program:**  
**Carpentry**

Carpentry I

Carpentry II

Carpentry III

Carpentry IV

### JAMES RUMSEY

**Program:**  
**Masonry**

Masonry I

Masonry II

Masonry III

Masonry IV

# **MANUFACTURING**

Planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning, and control, maintenance and manufacturing/process engineering.

## **Manufacturing, Production Process Pathway**

MA1630 Robotics

## **Production Pathway**

MA1980 Welding

MA2120 Millwork and Cabinetmaking

MA 2235 Integrated Production Technology

## CLUSTER: MANUFACTURING

### HIGH SCHOOL

**Program:**  
**Millwork and Cabinetmaking**

Millwork and Cabinetmaking I

Millwork and Cabinetmaking II

Millwork and Cabinetmaking III

Millwork and Cabinetmaking IV

### JAMES RUMSEY

**Program:**  
**Welding**

Welding I

Welding II

Welding III

Welding IV

### JAMES RUMSEY

**Program:**  
**Robotics**

Robotics 1

Robotics 2

\*Choose between the 2 pathways:

**Robotics**

Robotics 3

Robotics 4

**Drones**

Ground Operations

Flight Operations

### JAMES RUMSEY

**Program:**  
**(AC) Integrated production Technology  
(Advanced Careers)**

AC Advanced Manufacturing I

AC Advanced Manufacturing II

AC Advanced Manufacturing III

AC Advanced Manufacturing IV



## **TRANSPORTATION, DISTRIBUTION AND LOGISTICS**

Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

### **Facility and Mobile Equipment Maintenance Pathway**

TR1620 Automotive Technology

TR1740 Diesel Equipment Technology

## **Cluster: Transportation, Distribution and Logistics**

**JAMES RUMSEY**

**Program:  
Automotive Technology**

Automotive Technology MLR-1

Automotive Technology MLR-2

Automotive Technology MLR-3

Automotive Technology MLR-4

**JAMES RUMSEY**

**Program:  
Diesel Equipment Technology**

Fundamentals of Diesel Equipment Technology

Diesel Engine Components

Diesel Support Systems

Electronic Engine Control

# **HEALTH SCIENCE**

Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

## **Therapeutic Services Pathway**

HE0723 Therapeutic Services

## **Cluster: Health Science**

**James Rumsey**

**Program:**  
**Therapeutic Services**

Fundamentals of Health Science

Advanced Principles of Health Science

Clinical Specialties I

Clinical Specialties II

## **EDUCATION AND TRAINING**

Planning, managing and providing education and training services, and related learning support services.

### **Teaching/Training Pathway**

ED1320 Early Childhood Classroom Assistant Teacher (ECCAT)

**James Rumsey**

**Program:**

**Early Childhood Classroom Assistant Teacher (ECCAT)**

Early Learning Child Development

Early Learning Special Needs Inclusion

Early Learning Language and Literacy

Early Learning Numeracy

## **GOVERNMENT AND PUBLIC ADMINISTRATION**

Executing governmental functions to include governance, national security; Foreign Service; planning; revenue and taxation; regulation; and management and administration at the local, state, and federal levels.

### **National Security Pathway**

GO1070 JROTC

#### **HIGH SCHOOL**

**Program:**  
**JROTC**

ROTC I  
(Traditions, Wellness and Foundations of Citizenship)

ROTC II  
(Communication, Awareness and Leadership)

ROTC III  
(Life Skills and Career Opportunities)

ROTC IV  
(Fundamentals of Management)

# **HOSPITALITY AND TOURISM**

Hospitality and Tourism encompasses the management, marketing and operations of restaurants and other food services, lodging attractions, recreation events and travel related services.

## **Restaurants and Food Beverage Services Pathway**

HO 1010 Pro-Start Restaurant Management

**JAMES RUMSEY**

**Program:**  
**Prostart Restaurant Management**

Restaurant and Culinary Foundations

Restaurant Management Essentials

Advanced Principles in Food Production

Restaurant Professional

## **HOSPITALITY AND TOURISM (continued)**

### **Restaurants and Food Beverage Services Pathway**

HO1015 Baking and Pastry

#### **HIGH SCHOOL (Begins with Class of 2022)**

**Program:**  
**Baking and Pastry**

Baking and Pastry Foundations

Baking and Pastry I

Baking and Pastry II

Baking and Pastry Advanced

#### **HIGH SCHOOL (Begins during 2023-2024 school year)**

**Program:**  
**Tourism**

Introduction of Tourism

Travel West Virginia

Tourism Marketing (Will be phased in)

TBA (Will be phased in)



## **LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY**

Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

### **Emergency and Firefighting Management Services Pathway**

LA2200 Emergency and Firefighting Management Services

### **Law Enforcement Services Pathway**

LA1020 Law and Public Safety

## **Cluster: Law, Public Safety, Corrections and Security**

**JAMES RUMSEY**

**Program: Emergency and  
Firefighting Management Services**

Firefighting I

Firefighting II

Emergency Medical Preparedness I

Emergency Medical Preparedness II

**JAMES RUMSEY**

**Program:  
Law and Public Safety**

Foundations of Public Safety Leadership

Ethical Issues in Public Safety

Practical Applications of Public Safety

Seminar in Courts and Legal System

# LIST OF HIGH SCHOOL COURSE OFFERINGS

## Creative Arts

Art I, II, III, IV  
Media Arts  
Calligraphy  
Painting I, II, III, IV  
Drawing I, II, III, IV  
Theatre I, II, III, IV  
Performance Evaluation & Critique  
Theatre Construction & Preparation  
Dance I, II, III, IV  
Dance Team  
Music Theory  
Music History  
Band I, II, III, IV  
Stage Band  
Flags/Rifles I, II, III, IV  
Percussion  
Strings  
Piano I, II  
Chorus I, II, III, IV  
Chamber Chorus Advanced  
Show Choir  
Guitar I, II, III, IV  
Women's Chorus  
Orchestra  
AP 2-D Art Design

## Foreign Language

French I, II, III, IV  
Spanish I, II, III, IV  
AP Spanish  
AP French  
Chinese I, II

## Language Arts

English/Language Arts 9  
English/Language Arts 9 Honors  
English/Language Arts 10  
English/Language Arts 10 Honors  
English/Language Arts 11  
English/Language Arts 11 Honors  
English/Language Arts 12  
English/Language Arts 12 CR Honors  
College English 101 & 102 (Replaces English 12)  
English as a Second Language & II, III, IV  
AP English Language and Composition (11<sup>th</sup>)

AP English Literature and Composition (12<sup>th</sup>)  
Creative Writing, I, II  
Fundamentals of Media Writing  
Journalism I  
Broadcast Journalism  
Broadcast Journalism Coop  
School Newspaper  
Cross Media Publishing (Yearbook)  
Advanced Communication I  
Young Adult Fiction I, II  
Mythology I  
Library Practice  
Shakespeare

## Mathematics

Algebra I  
Algebra I Honors  
Algebra I Support  
Geometry  
Geometry Honors  
Algebra II  
Algebra II Honors  
Trigonometry/Pre-Calculus  
AP Statistics  
AP Calculus AB  
AP Calculus BC  
AP Computer Science A  
College Algebra 126  
College Trigonometry 128  
WVU Calculus  
Co-Requisite Math  
Transition Math for Seniors  
Math Modeling  
Applied Statistics

## Physical Education

Physical Education  
Integrated Physical Education  
Extracurricular/Interscholastic PE  
Health  
Weight Training Introduction, Weight Training,  
Weight Training Intermediate & Advanced  
Team Sports & Team Sports II  
Athletic Training  
Sports Management  
Advanced Fitness and Nutrition  
Fitness Education

**Science**

Earth and Space Science  
Earth and Space Science Honors  
Biology  
Biology Honors  
AP Biology  
WVU Biology  
Chemistry  
Honors Chemistry  
AP Chemistry  
Physics  
AP Physics  
Human Anatomy and Physiology  
Environmental Science  
AP Environmental Science  
Forensic Science  
Physical Science

**Social Studies**

World History to 1900  
World History to 1900 Honors  
United States Studies  
United States Studies Honors  
Contemporary Studies  
Contemporary Studies Honors  
AP U.S. History  
Comprehensive Studies  
Civics/Government  
Civics/Government Honors  
AP Government & Politics  
Geography  
Psychology  
AP Psychology  
Sociology  
Economics  
AP World History

**Business and Marketing Education**

Accounting Principles I, II  
Business Law and Ethics  
Diversified Cooperative Education  
Business Record Keeping  
Business and Marketing Essentials  
Office Procedures  
Basic Keyboarding  
Business Computer Applications I, II  
Desktop Publishing  
Personal Finance  
Digital Imaging/Multimedia I

Marketing Principles  
Marketing Applications  
Marketing Work Experience/Internship  
Fashion Marketing  
Management & Entrepreneurship  
Sports, Entertainment, and Recreation  
Marketing  
Web Page Publishing  
Hospitality and Tourism  
Introduction to Finance  
Business Finance  
Technical Communications I  
Technical Communications II  
Business Finance

**Family and Consumer Science**

Learning for Independence, Family,  
and Employment (LIFE)  
Personal Resource Management I, II  
Baking and Pastry Foundations  
Baking and Pastry I  
Baking and Pastry II  
Baking and Pastry Advanced  
Human Development I, II  
Parenting and Strong Families

**Technology Education/Mechanical Drawing**

Fundamentals of Drafting  
Architectural Drafting  
Mechanical Drafting  
Drafting Techniques  
Millwork and Cabinetmaking I, II, III, IV

**Agricultural Education**

Introduction to Agriculture, Food, and  
Natural Resources  
The Science of Agriculture  
Agriculture Cooperative Education  
Fundamentals of Agriculture Mechanics  
Agriculture Structures  
Agriculture Equipment and Repair  
Natural Resource Management  
Horticulture  
Greenhouse Production & Management  
Companion Animal Care  
Livestock Production  
Animal Production and Management  
Agricultural Experience Program (SAE)

**AF ROTC**

JROTC I, II, III, IV  
 AFJROTC Junior Course  
 AFJROTC Senior Course

**Pre-Engineering Courses**

Advanced Technology for Design and Production  
 Systems of Advanced Technology  
 Mechatronic Systems  
 Production of Advanced Products  
 Introduction to Engineering  
 Principles of Engineering  
 Engineering Design and Development  
 Environmental Sustainability  
 Aerospace Engineering

**Broadcasting Technology Courses**

Fundamentals of Broadcasting  
 Radio Broadcasting Presentations  
 Television Production Applications  
 Producing Live TV  
 Video Editing

**Social Journalism CTE Courses**

Funds of Media Writing  
 Cross-Media Publishing

**Career and Work Skills Training (CWST)**

Career and Work Skills Training I  
 Career and Work Skills Training II  
 CWST Work Experience  
 CWST Work Experience II

**Building Maintenance and Operations**

Building Maintenance and Operations 1  
 Building Maintenance and Operations 2  
 Building Maintenance and Operations 3  
 Building Maintenance and Operations 4

**Tourism**

Introduction to Tourism  
 Travel West Virginia

**Additional Courses**

ACT/SAT Test Prep  
 Africana Studies  
 AP Computer Science Principles  
 AP Research  
 AP Seminar  
 Civil War History  
 Community Service  
 Driver Education  
 History of the Bible  
 Learning Skills  
 Independent Studies  
 Intro to Computer Science I  
 Photography  
 Leadership  
 Learning Skills  
 Medieval & renaissance History  
 Microbiology  
 Multicultural Studies  
 Photography  
 Science Lab Assistant  
 Zoology

**Fulfillment Courses:**

Digital Imaging/Multimedia I fulfills 1 Art credit  
 Drafting Techniques fulfills 1 Art credit.  
 Millworking I, II, III or IV fulfills 1 art credit (Begins With class of 2027)  
 JROTC 1 (1065) & II (1066) fulfills 1 PE credit.  
 JROTC 1 (1065), II (1066), III (1080) and IV (1081) Fulfills 1 Social Studies credit (not Civics – see JROTC descriptions for more information.  
 Natural Resource Management fulfills the 3<sup>rd</sup> Science credit  
 Principles of Engineering fulfills the 3<sup>rd</sup> Science credit

**James Rumsey Fulfillment Courses:**

Digital Imaging/Multimedia I fulfills 1 Art credit  
 Funda of Illustration fulfills 1 Art credit  
 Graphic Design Appa fulfills 1 Art credit  
 Funds of Graphic Design fulfills 1 Art credit  
 Illustration fulfills 1 Art credit  
 Ornamental Metalwork fulfills 1 Art credit  
 3 required courses in Therapeutic Services fulfills  
 The 3<sup>rd</sup> science credit – Funds of Health Science, Adv. Principles of Health Science and either Clinical Specialty I or II

## **Program of Studies**

Please note that most courses outlined on the following pages are offered in all four high schools in Berkeley County Schools; however, some courses are offered only at one or two schools. The following notations will indicate the school(s) which will offer each course:

- (1) Hedgesville High School offering
- (2) Martinsburg High School offering
- (3) Musselman High School offering
- (4) Spring Mills High School offering
- (\* ) Offered in all schools

## Courses Offered and Descriptions

### ART

#### **ART I--3211**

1 credit; 1 year; open to grades 9-12. Prerequisite: none. Students will learn the mechanical aspects of drawing, the principles of the basics of design, color, etc. The course includes some art history and appreciation. Offered: \*

#### **ART II--3212**

1 credit; 1 year; open to grades 10-12. Prerequisite: Art I. This course explores the techniques learned in Art I and concentrates on developing new techniques, one's style, self-critique, and problem solving. This course includes some art history and appreciation. Offered: \*

#### **ART III --3213 & ART IV--3214**

1 credit; 1 year; open to grades 11-12. Prerequisite: Art II, III. This is a course of high level of art exploration. These courses emphasize increased skills in advanced techniques including painting, graphic design, printmaking, and 3-dimensional work as well as in-depth studies of art history and art appreciation. Students will have the opportunity to choose their own media at times during the course as individual student projects. The course includes some art history and appreciation. Offered: \*

#### **CALLIGRAPHY— (3319)**

1 credit; open to grades 10-12. A course designed to introduce the student to the art of beautiful writing. Students will learn techniques for several basic lettering styles with emphasis being placed on the italics style of pen lettering. Offered: 4

#### **PAINTING—3245, PAINTING II – 3246, PAINTING III – 3247, PAINTING IV - 3248**

½ credit; open to grades 10-12. This course could be taken with photography or calligraphy for an art credit. Students will work with various paintings, media, techniques, and processes. A critical process will be used to discuss student work and the work of others. Ancient paintings through modern paintings will be researched, discussed, and emulated. Offered: 1, 3, 4

#### **DRAWING—3331, DRAWING II - 3332, DRAWING III – 3333, DRAWING IV - 3334**

½ credit; open to grades 10-12. This course can be taken with Photography, Calligraphy, or Painting for the art credit. Students will work with various drawing techniques, media and processes. A critical process will be used to discuss student work and the work of others. Subjects and themes of historical and contemporary artists will be researched, discussed and emulated. Offered: 3

#### **AP STUDIO ART 2-D DESIGN--3222**

1 credit; open to grades 11-12. Prerequisite: Art I, Art II, and signature from teacher. The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. The AP Studio Art Program consists of three portfolios—2-D Design, 3-D Design, and Drawing—corresponding to the most common college foundation courses. Offered: \*

#### **GRAPHIC ARTS— 3313**

1 credit; open to grades 9-12. Students will explore the elements of art and principles of design while using technology tools. This course introduces students to basic digital photography and interactive media in making art. Students develop skills and techniques needed to create visual art with electronic media. Course includes some art history and appreciation. Offered: \*

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### DRAMA

#### **THEATRE I--3801**

1 credit; 1 year; open to grades 9-12. Prerequisite: none. This class serves as an introduction to the performing arts with emphasis on developing individual performance abilities. All projects involve class members in group or

## Courses Offered and Descriptions

individual participation in such activities as pantomimes, improvisations, scenes, extemporaneous talks, discussion, plays and performances. Offered: \*

### **THEATRE II--3802**

1 credit; 1 year; open to grades 10-12. Prerequisite: Theatre I (The teacher, however, may accept a student who has displayed unusual ability and knowledge through numerous and various acting experiences). Emphasis will be on advanced acting techniques, serious study of comedy and tragedy, study of dialects, play directions, play production, and a more in-depth study of the technical aspects of play production. Drama Festival participation and one-act class productions are also stressed. Offered: \*

### **THEATRE III--3803**

1 credit; 1 year; open to grades 11-12. Prerequisite: Theatre II. This course is designed for the serious drama student who may want to study theatre arts for a career. There will be more in-depth training in advanced acting techniques, an emphasis on directing techniques, and individual pursuit in all phases of technical theatre. Offered: \*

### **THEATRE IV--3804**

1 credit; 1 year; open to grade 12. Prerequisite: Theatre III. This course will involve the student in actual play production. Each student will be responsible for the production of a one-act class play and will help with the production and selection of the state drama festival play. Students will help with the maintenance of the auditorium and all backstage areas, as well as with the lighting equipment, make-up supplies, etc. Many after school hours will be required. Offered: \*

### **THEATRE STAGE CRAFT— 3859**

1 credit; open to grades 9-12. Prerequisite: none. This class would assist in maintaining the theatre facility of the school. Students would help set up and tear down the stage equipment used in the theatre. Students would work during class time to prepare lights, sound, and stage properties for performances, assemblies, and other school and theatrical events. The class is designed for students who need an art credit but do not have the desire to perform on stage. Limit of 15 students per year. Offered: \*

### **PERFORM EVALUATION AND CRITIQUE— (3835)**

1 credit; open to grades 9-12. This class is aimed at the entering freshman but available to all students. Students will attend and evaluate a variety of performances including stage, film, orchestra, band, choral, stage to film adaptations and dance and visual arts. They then will reflect upon, evaluate and effectively critique each genre according to the objectives of this course. Successful students in the class must attend assigned performances both during and after school. Offered: \*

### **DANCE I--3401**

1 credit; open to grades 9 -12. This dance class will focus on technical skills. In addition, the major principles of choreography and the higher level thinking skills necessary to employ dance as an effective means of communication will be a central part of the curriculum. Offered: \*

### **DANCE II--3402**

1 credit; open to grades 10-12. Prerequisite: Dance I. Students will concentrate on comparing and contrasting dances of various cultures and historical periods as well as making connections between dance and other disciplines. Emphasis will be placed on dance as a means of developing and maintaining a healthy lifestyle. Offered: \*

### **DANCE III--3403**

1 credit; open to grades 11-12. Prerequisite: Dance I and II. Eleventh grade dance will stress practice in performing technical and choreographically skills necessary for artful presentation. Emphasis will be placed on the relationship of dance to careers. Research of dance history and artists will be an integral part on this year of study. Offered: \*

### **DANCE IV--3404**

1 credit; open to grade 12. Prerequisite: Dance I, II, and III. Creating and performing dance is the major emphasis of dance study at the twelfth grade level. The creative process will be studied and students will develop an awareness of dance and its place in the present and future culture. Offered: \*



## Courses Offered and Descriptions

### **DANCE TEAM— (3431)**

1 credit; open to grades 9-12. Prerequisite: By audition only. This course is designed to condition dance skills and develops advance dance technique. After school practices are required. Performance attire is required. Performances are a requirement for completion. Offered: \*

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## **MUSIC**

### **MUSIC THEORY--3756**

1 credit; open to all 10-12. Prerequisite: Teacher permission, and students must have at least 3 years of playing experience. Course involves the study, analysis, and construction of music. Offered: \*

### **MUSIC APPRECIATION/ HISTORY --3671**

1 credit; open to grades 10-12. This course includes recognition of composers and music from different historical periods, understanding theory and analysis of different styles of music. Offered: \*

### **BAND I-3611, BAND II-3612, BAND III-3613, BAND IV-3614**

1 credit; open to all students 9-12 through audition. This course includes the performing of standard and modern band literature in both concert and marching band media. The required activities include practices and performances, both concert and marching; participation during the summer months; and band camp. Band is most active during the fall semester with most weekly performances at half time shows, parades, or marching festivals. Concert band begins after marching season and the performance of modern and standard band literature paves the way for each individual's as well as the ensemble's development. Students are expected to attend all rehearsals and performances. Offered: \*

### **STAGE BAND (INSTRUMENTAL ENSEMBLES IV) – (3747)**

1 credit; open to all students 9-12 by audition only. Course involves the study and performance of all forms of jazz, from swing to jazz-rock fusion. Emphasis is on individual and ensemble excellence with a special emphasis on improvisation. Offered: \*

### **FLAG/RIFLE I – 7574, FLAG/RIFLE II – 7575, FLAG/RIFLE III – 7576, FLAG/RIFLE IV - 7577**

½ credit; open to grades 9-12. Prerequisite: must audition in the spring preceding the next school year. This class is for students that do not play an instrument with the marching band, such as silk squad members. Students should have rhythm, coordination, and be able to stay in beat. Some after-school practice and summer band camp may be required. Offered: \*

### **PERCUSSION (INSTRUMENTAL ENSEMBLES II) – (3744)**

1 credit; open to grades 10-12. Prerequisite: must be a member of the marching band and have permission by the teacher. Students will be taught to read music and play percussion section instruments by following proper musical procedures. Class must have a minimum of 12 students. Offered: \*

### **STRINGS (INSTRUMENTAL ENSEMBLES) – (3743)**

1 credit; open to grades 9-12. Prerequisite: Minimum of two years of playing experience or approval of instructor. This level provides for further development of individual and ensemble playing skills. Students have knowledge of higher positions and scales up to three sharps and flats. This course meets daily. Offered: \*

### **PIANO I—3681, Offered: 1,3,4; PIANO II – 3682, Offered: 1.4**

1 credit; open to grades 9-12. Prerequisite: none. These courses teach basic piano techniques. Students learn correct wrist, hand, and body positions in playing major scales, block and broken chord patterns, cadences using I, IV, and V chords, and simple pieces.

### **GUITAR I—3726, GUITAR II – 3727, GUITAR III, 3729, GUITAR IV - 3730**

1 credit; open to grades 9-12. Prerequisite: none. This course presents fundamentals of music and guitar playing techniques such as strumming and chords. This course may include more advanced playing techniques. Offered: 1, 3, 4

## Courses Offered and Descriptions

### **CHORUS I-3621, CHORUS II-3622, CHORUS III-3623, CHORUS IV-3624**

1 credit; open to grades 9-12. Prerequisite: none. The student studies the fundamentals of singing, sight reading, and ear training. Chorus is a preparation course for advanced level choral music. Offered: \*

### **CHAMBER CHOIR (Vocal Ensembles II) —(3767)**

1 credit. Prerequisite: audition or teacher recommendation. Vocal development and musicianship in the field of choral literature are stressed. This group will perform music of all time periods including choreographed pop music. Concert attire required. Performances are a requirement for completion. Offered: \*

### **SHOW CHOIR I-3770, SHOW CHOIR II-3771, SHOW CHOIR III-3772, SHOW CHOIR IV-3773**

1 credit; open to grades 9-12. Prerequisite: by audition only. This course is designed to develop voice and dancing skills. After school practices are required. Concert attire required. Performances are a requirement for completion. Offered: \*

### **WOMENS CHORUS (Vocal Ensembles) —(3766)**

1 credit; open to grades 9-12. Prerequisite: audition. Female development and musicianship in the field of choral literature are stressed. This group will perform music of all time periods including choreographed pop music. Concert attire required. Performances are a requirement for completion. Offered: \*

### **ORCHESTRA I (HIGH SCHOOL ORCHESTRA)-3764, ORCHESTRA II-3765, ORCHESTRA III-3776, ORCHESTRA IV-3777**

1 credit; open to grades 9-12. Prerequisite: Minimum of three years of playing experience on a string, wind, brass, or percussion instrument; knowledge of scales and melodies up to and including four sharps and four flats. Students will perform full Symphonic Orchestra works from various eras and genres. The class meets for ninety minutes a week in the evenings, plus dress rehearsals and two concerts a year. Audition required. Offered: \*

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## FOREIGN LANGUAGE

**In order to offer various levels of a foreign language, several levels may be combined into one class period.**

### **FRENCH I--5621**

1 credit; open to grades 9-12. Prerequisite: none. This course is an introduction to French which emphasizes active use of the language and speaking. Ample practice in reading and writing is also given. It attempts to provide students with information about today's French-speaking world through an understanding of the language and culture. Offered: \*

### **FRENCH II--5622**

1 credit. Prerequisite: French I. This course is a continuation of French I, stressing the basic skills of listening, speaking, reading, and writing with an emphasis on speaking. It is recommended that students who have successfully completed French I take French II. Offered: \*

### **FRENCH III--5623**

1 credit. Prerequisite: French II. The course provides a more in-depth look at the French language and culture. French music, cooking, art, and other areas of French life will be explored. Also included will be a study of additional French-speaking countries of Europe, the Caribbean and Africa, reading of authentic materials in French, and discussion of historical events and persons. Offered: \*

### **FRENCH IV--5624**

1 credit. Prerequisite: French III. This is an advanced language course focusing on communication, culture, literature, and history. Students will communicate primarily in French. Advanced vocabulary and structure are covered. Offered: \*

## Courses Offered and Descriptions

### **AP FRENCH--5629**

1 credit; open to grade 12 students. Prerequisite: Successful completion of French IV. This course seeks to develop language skills (reading, writing, listening, and speaking) that can be used in various activities and disciplines. Extensive training in the organization and writing of compositions will also be emphasized. (As per the AP French Language course outlined by the College Board.) Offered: \*

### **SPANISH I--5661**

1 credit; open to grades 9-12. Prerequisite: none. Open to grades 8-12. Students begin to learn the second most spoken language in the United States. Students develop listening, speaking, reading and writing skills and experience the culture of Hispanic countries through simulated cultural activities and events. Real-life applications as well as applied grammar are stressed. The course also exposes students to various cultures and customs of the diverse Spanish speaking countries of the world. Its aim is to foster cross-cultural understanding and to increase the students' ability to effectively interact in an increasingly interdependent, and diverse society. Technology will be used to enhance student learning of Spanish through projects and activities. Offered: \*

### **SPANISH II--5662**

1 credit; open to grades 9-12. Prerequisite: Spanish I. Spanish II provides students with unique opportunities to experience the Hispanic culture with the use of a language spoken by more than 500 million people in the world. Students continue to develop both oral and written communication skills using authentic materials such as ads, maps, magazines and newspapers. Students communicate in the present, past, and future tenses. The course also exposes students to various cultures and customs of diverse Spanish-speaking countries of the world. Its aim is to foster cross-cultural understanding and to increase the students' ability to effectively interact in an increasingly interdependent and diverse society. Technology will be used to enhance student learning of Spanish through projects and activities. Offered: \*

### **SPANISH III--5663**

1 credit; open to grades 10-12. Prerequisite: Spanish II. Students express opinions and preferences through more advanced uses of vocabulary in real-life situations. Students expand their use of the target language using the four language skills: speaking, listening, reading, and writing. Topics pertaining to clothing, food, art, music, and leisure activities will be discussed. Students will experience the passion of the Hispanic culture through authentic materials such as music CDs, videos, magazines, newspaper articles, poems, and cultural events. The course aim is to foster cross-cultural understanding and to increase the students' ability to effectively interact in an increasingly interdependent, and diverse society. Technology will be used to enhance student learning of Spanish through projects and activities. Offered: \*

### **SPANISH IV--5664**

1 credit; open to grade 11-12 students. Prerequisite: Spanish III. Spanish IV is an advanced proficiency course to refine both oral and written communications skills with current and relevant vocabulary presented within the context of Spanish-speaking countries. This course focuses on grammatical and structural stumbling blocks encountered by the student of Spanish. Authentic literary readings are presented. The course aim is to foster cross-cultural understanding and to increase the students' ability to effectively interact in an increasingly interdependent, and diverse society. Technology will be used to enhance student learning of Spanish through projects and activities. Offered: \*

### **AP SPANISH--5669**

1 credit; open to grade 12 students. Prerequisite: Spanish IV. Advanced Placement Spanish students are expected to understand spoken Spanish in various contexts; develop a Spanish vocabulary for reading newspaper and magazine articles, literary texts and other non-technical writings without dependence on a dictionary; and express themselves coherently, resourcefully, and with reasonable fluency and accuracy in both written and spoken Spanish. Extensive training in the organization and writing of compositions is an integral part of this course. Preparation for the SAT II and the Advanced Placement Test is provided. Offered: \*

### **CHINESE I—5611 – Chinese I and II will rotate each year.**

1 credit; open to grades 9-11. Prerequisite: none. Beginning students in Chinese will develop initial proficiency by repetition, imitation and memorization. They will rely on active, concrete learning and understand short, simple texts. They will use gestures, facial expressions, visual and/or verbal responses to facilitate successful task completion. Effective use of the five standards (Communication, Culture, Connections, Comparisons and Communities) will guide beginning students toward language proficiency. Offered: \*

## Courses Offered and Descriptions

### **CHINESE II—5612 – Chinese I and II will rotate each year.**

1 credit; open to grades 10-12. Prerequisite: Chinese I. The acquisition of communication skills continues to be the primary focus of Chinese II. Level II students refine communication skills by combining and recombining vocabulary into sentences and longer utterances. They rehearse, initiate questions, and express their own ideas using basic tenses with some limitations. Level II students are comprehensible to a sympathetic native speaker accustomed to communicating with a non-native. Effective use of the five standards of foreign language learning (Communication, Culture, Connections, Comparisons and Communities) and their objectives will guide students toward language proficiency. Offered: \*

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## **LANGUAGE ARTS**

### **ENGLISH LANGUAGE ARTS 9--4009**

1 credit. Prerequisite: none. Through individualized instruction, hands-on activities, and cooperative learning, this course covers basic grammar, literature, and composition. Areas of emphasis include applied communication, oral communication, listening skills, vocabulary, all literary genre, research, and grammar necessary for speaking and writing effectively. Offered: \*

### **ENGLISH LANGUAGE ARTS 9 HONORS--4009H**

1 credit. Prerequisite: honor requirements. This academically challenging course emphasizes higher-level cognitive skills, all literary genre, grammar, vocabulary, composition, and research necessary for the college bound student. Writing skills, verbal skills, and analyzing skills are explored in-depth to insure the student's preparation for Honors English 10, Advanced Placement English, and college. Offered: \*

### **ENGLISH LANGUAGE ARTS 10--4010**

1 credit. Prerequisite: English 9. This course is a review of basic grammar and composition skills that are necessary for written and oral communication. In addition to these studies, vocabulary development is covered as well as all basic reference skills. World literature studies highlight selections from drama, short story, non-fiction, poetry, and novel genres. Offered: \*

### **ENGLISH LANGUAGE ARTS 10 HONORS--4010H**

1 credit. Prerequisite: English 9. This course provides the college bound student a greater depth of study of all language arts genre needed for college preparation. Writing skills are studied to allow an understanding of research projects. Vocabulary is drawn from the standard college admission tests, and all literature elements are explored in a comprehensive study that prepares the student for advanced placement work and, ultimately, college admission. Offered: \*

### **ENGLISH LANGUAGE ARTS 11--4011**

1 credit. Prerequisite: English 10. This course covers American literature, grammar, composition, and communication skills. Through individual instruction, as well as cooperative learning, the literature will be studied as a reflection of the life and times of the American author. With emphasis on hands-on activities, the areas of study will include applied communications, speaking, listening, research, and grammar as a tool to facilitate the teaching of oral and written communications. Offered: \*

### **AP ENGLISH LANGUAGE & COMPOSITION--4041**

1 credit; open to grade 11. Prerequisite: English 10. This course is a preparation for advanced placement college entrance tests. It is a demanding course for the advanced student. This course may be used for English 11 credit. Offered: \*

### **ENGLISH LANGUAGE ARTS 11 HONORS--4011H**

1 credit. Prerequisite: English 10. This academically challenging course covers American literature, grammar, and composition. Using an historical-biographical approach, literature is analyzed through writing, oral presentations, class discussions, and vocabulary study. Grammar study is used as a tool to analyze, self-evaluate, and improve oral and written communications. A formal research paper is also required. Offered: \*

## Courses Offered and Descriptions

### **ENGLISH LANGUAGE ARTS 12--4012**

1 credit. Prerequisite: English 11. This course covers British literature, grammar, composition, and applied communications. Through individual instruction, as well as cooperative learning, British literature will be studied through historical-biographical background, thematic analysis, and writing and discussion activities that prepare the career-bound student for the world of work. Grammar is used to facilitate the teaching of oral and written communications with emphasis on practical application such as writing resumes or business letters, or interviewing for a job. Offered: \*

### **ENGLISH 12 COLLEGE READINESS HONORS--4014H**

1 credit; open to grade 12. This academically challenging course is intended for college bound seniors, who intend to pursue STEM (Science, Technology, Engineering and Math) fields. This course is more grounded in largely informational text and writing across the curriculum. Offered: \*

### **ENGLISH AS A SECOND LANGUAGE—4115, ESL II – 4116, ESL III – 4117, ESL IV - 4118**

1 credit; open to grades 9-12, where appropriate. English as the second language is a holistic approach to the acquisition of the English language by the student struggling with limited proficiency. ESL addresses the four strengths which contribute to language mastery: the ability of a student to speak, read, write, and comprehend English with fluency and proficiency. Great emphasis is placed on English grammar at all levels of student ability. Offered: \*

### **ENGLISH 12 TRANSITION--4013**

1 credit; open to grade 12. Transition English is for students who are unprepared for career or college and need additional instruction in reading/language arts. **This course will focus on informational reading and writing that prepare students with essential life skills.** Offered: 3

### **AP ENGLISH LITERATURE & COMPOSITION--4042**

1 credit; open to grade 12. Prerequisite: AP Language/Composition or English 11. This course is a preparation for advanced placement college entrance tests. It is a demanding course for the advanced student. This course may be used for English 12 credit. Offered: \*

### **CREATIVE WRITING, I--4022**

1 credit; open to grades 9-12. This course is designed for the student who wishes to expand on writing skills. Formal and informal writing will be addressed. Descriptive, short story, poetry, and play writing will be covered. Offered: \*

### **CREATIVE WRITING II--4023**

1 credit; open to grades 10-12. Prerequisite: Creative Writing I. This course is designed for the student who wishes to further expand writing skills. The focus will be concentrated on advanced forms of writing, both formal and informal, rather than instruction of basic writing skills. Offered: 1, 2, 4

### **FUNDAMENTALS OF MEDIA WRITING – 1518**

1 credit; open to grades 9 – 12. This course introduces the students to the fundamentals of storytelling for Media Publishing. Students will explore various methods of researching stories, identifying their audience, and writing for specific audiences. Students will also identify ethical and legal issues related to media production including freedom of press, censorship, ethical standards, and journalistic responsibilities. Offered:\*

### **JOURNALISM I--4051**

1 credit; open to grades 10-12. This course covers the development of newspaper, magazine, radio, and television and their influence on us. Students will learn interview techniques, writing and proof-reading news, features, and sports stories, along with designing and composing pages. Teacher emphasizes journalist's code of ethics and encourages integrity. Offered: \*

### **SCHOOL NEWSPAPER--4066**

1 credit; open to grades 10-12. Prerequisite: approval by newspaper adviser (Journalism I highly recommended). This course involves all aspects of the publication of the student newspaper. Writing news, features, and sports editorials and production skills are included. Students are expected to do research and conduct interviews while maintaining integrity and following the journalist's code of ethics. Offered: \*

## Courses Offered and Descriptions

### **CROSS-MEDIA PUBLISHING – 1517 (Formerly School Yearbook, 4071)**

1 credit; open to grades 10-12. This is a journalism class designed to produce the yearbook. Layout, design copywriting, and photography are included. Offered: \*

### **ADVANCED COMMUNICATION--4021**

1 credit; open to grades 10-12. Students will participate in group and individual speaking activities, oral interpretation, debate, and listening techniques. Offered: \*

### **YOUNG ADULT FICTION I— (4136)**

1 credit; open to grades 9-12. This course is designed for the student who enjoys reading. Books are chosen which are written specifically by or for the teenage reader. Interest/theme will vary. Offered: \*

### **YOUNG ADULT FICTION II— (4150)**

1 credit; open to grades 10-12. Prerequisite: Young Adult Fiction I. This course is designed for students who can work independently with freedom of selection of reading material within the teacher's book selections. Offered: \*

### **MYTHOLOGY 1--4138**

1 credit; open to grades 10-12. Prerequisite: none. This course is an overview of world mythology centering on Greek and Roman as well as American Indian, Egyptian, Oriental, and African. Main topics include the "Aeneid," creation, the god teacher, and flood myths. Offered: \*

### **LIBRARY PRACTICE--5911**

1 credit; open to grades 9-12. This course is designed for the student who has an interest in libraries and reading, good school citizenship, an attitude of helpfulness and has mastered basic reference skills. The class gives the student an opportunity to develop personal skills in using all types of library tools, to render service to the school community, to explore library service as a vocation and develop abilities related to library services. Offered: \*

### **SHAKESPEARE--7735**

1 credit. Prerequisite: English 9 and 10. This course is a year-long study of the works, life, and times of William Shakespeare with the focus of the course being on Shakespeare and performance. Students will read, view, and participate in several of Shakespeare's plays and read a number of his sonnets. Poetry analysis will also be an integral part of the course. Students may attend live productions and participate in Shakespearean Workshops. Offered: 2, 3, 4

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## MATHEMATICS

### **INTRODUCTION TO MATHEMATICAL APPLICATIONS – 3020**

1 credit; open to grade 9. This course will enhance students' capacity to grasp, interpret, and engage with numerical and mathematical information, while improving their problem-solving skills. They will explore and apply fundamental concepts of algebra, geometry, and statistical analysis to real-world career projects and situations. Introduction to Mathematical Application serves as an alternate, career-based option for Grade 9 students to take prior to Algebra I. This course is an option for students to earn one personalized mathematics credit towards graduation.

### **ALGEBRA I--3061**

1 credit; open to 9-12. This area of study introduces the fundamental concepts of algebra. Concepts included are evaluation of expressions, properties, solutions of equations, graphing, factoring, and operations with radicals. Offered: \*

### **ALGEBRA I H--3061H**

1 credit; open to grades 9-12. This class covers same areas as Algebra I in a more rigorous fashion. Offered: \*

### **GEOMETRY--3062**

1 credit; open to 9-12. Prerequisite: Algebra I. Geometry includes the interpretation and drawing of two and three dimensional objects. It includes the representation of problem situations with geometric models and the classifications and application of figures in terms of congruence and similarity. This course includes deduction of properties and

## Courses Offered and Descriptions

relationships between figures and develops an understanding of the axiomatic system through investigation and comparison. It reinforces previously learned algebraic skills and develops logic and deductive and inductive reasoning skills. Offered: \*

### **GEOMETRY H--3062H**

1 credit; open to 9-12. Prerequisite: Algebra I. This class covers same areas as Geometry except in a more rigorous fashion. Offered: \*

### **ALGEBRA II--3063**

1 credit; open to 9-12. Prerequisite: Geometry. This area of study is an extension of the Algebra I program. It includes radicals, quadratic equations, complex numbers, systems of linear equations, inequalities and absolute values. Offered: \*

### **ALGEBRA II H--3063H**

1 credit; open to 9-12. Prerequisite: Geometry. This area of study is an extension of the Algebra I program. It covers the same areas as Algebra II except in a more rigorous fashion. Offered: \*

### **TRIGONOMETRY/PRE-CALCULUS H--3064**

1 credit; open to 10-12. Prerequisite: Algebra I, Geometry, Algebra II. This area of study develops an understanding of both triangular and circular functions with their properties and graphs. Trigonometric equations, inverse Trig functions, polar coordinates, logarithms, and complex numbers are included in this course. The study of limits and functions, and analytical geometry are stressed as a preparation for Calculus. Continued emphasis is placed on multiple approaches to problem solving. Offered: \*

### **AP STATISTICS--3033**

1 credit; open to 11-12. Prerequisite: Algebra II. It introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Four broad concepts are emphasized: (1) exploring data; observing patterns and departures from patterns; (2) planning a study; deciding what and how to measure; (3) anticipating patterns in advance; producing models using probability and statistics; and (4) statistical inference; confirming models. Offered: \*

### **AP CALCULUS AB--3031**

1 credit. Prerequisite: Trigonometry/Pre-Calculus. This is a rigorous college-level mathematics course designed to prepare advanced mathematics students to pass the Advanced Placement Calculus examination. Topics include functions, limits, derivatives, integrations, and their applications. Offered: \*

### **AP CALCULUS BC--3032**

1 credit. Prerequisite: AP Calculus AB. This course is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topics of sequences and series. Offered: \*

### **AP COMPUTER SCIENCE A--2801**

1 credit; open to 11-12. Prerequisites: Minimum of a C in Algebra I and other math courses taken. Learning JAVA requires a good mathematical background and good problem solving skills. Students should have a strong foundation in mathematics and be comfortable with functions and the concepts found in the uses of functional notation. Previous computer programming experience is not required. Recommended: Into to Computer Science I.

This course is designed for students who are serious about programming. JAVA requires a good mathematical background and strong problem solving skills. The course is designed to prepare a student for the AP Computer Science exam, level A. Topics include: simple, user defined and structured data types, algorithm development, decisions and loops, arrays, recursion, searches and sorts, data abstraction, and classes. Offered: \*

### **COLLEGE ALGEBRA 126— (3063)**

½ credit. Prerequisite: Students should have completed math courses through Algebra II with a “C” average or higher. Students must pass a prerequisite test given by WVU in order to take this class. The specific goals of college algebra will be to stress an algebraic, graphic, and numeric approach to the study of algebra. The State WvEB Algebra course is a college-level mathematics course for high school students. The goal of the course is to allow students a smooth transition into college mathematics. Students enrolled in the course at this site will receive 3 credits of College

## Courses Offered and Descriptions

Algebra through WVU. Students must pay tuition at a reduced rate, to be determined. Offered: \*

### **COLLEGE TRIGONOMETRY 128— (7783)**

½ credit. Prerequisite: The only students eligible for this course are those that have successfully completed College Algebra first semester. This is a second semester course only. This course can only be taken after the completion of College Algebra. The specific goals of college trigonometry will be to stress an algebraic, graphic, and numeric approach to the study of trigonometry. The State WvEB Trigonometry course is a college-level mathematics course for high school students. The goal of the WvEB project is to allow students a smooth transition into college science, technology, engineering, and mathematics course work. Students experience the content and pace of a WVU mathematics course while in their high school classrooms. Students enrolled in the course at this site will receive 3 credits of College Trigonometry through WVU. Students must pay tuition at a reduced rate, to be determined. Offered: \*

### **WVU CALCULUS--3144**

1 credit; open to grade 12. Prerequisite: Trigonometry/Pre-Calculus. This is a rigorous college-level math course. Offered: \*

### **CO-REQUISITE MATH--3052**

1 credit; open to grades 11 and 12. Pre-requisite: Algebra I, Geometry, Algebra II. The Co-Requisite Mathematics course is for students who are unprepared for career or college and need additional instruction in mathematics. This course will focus on skills necessary for students to be prepared for a non-STEM college curriculum or essentials life skills. This is equivalent to Blue Ridge CTC's Math 100 and Math 100A. Offered: \*

### **TRANSITION MATH FOR SENIORS--3052**

1 credit; open to grade 12. Prerequisite: Algebra II or Applied Stats. The Transition Mathematics course is for students who are unprepared for career or college and need additional instruction in mathematics. This course will focus on skills necessary for students to be prepared for a non-STEM college curriculum or essentials life skills. Offered: \*

### **MATH MODELING--3025**

1 credit; open to 12. Prerequisite: Algebra II or Applied Stats. Primary focal points of Advanced Math Modeling include the analysis of information using statistical methods and probability, modeling change and mathematical relationships, mathematical decision making in finance, and spatial and geometric modeling for decision making. Offered: \*

### **APPLIED STATISTICS – 3028**

1 Credit; Prerequisite: Algebra I and Geometry. Applied Statistics provides authentic experiences in statistics designed to strengthen students' application of the statistical method. Four broad concepts are emphasized: Exploring Data, Designing Studies, Functions and Modeling and Probability and Informed Decisions all while using the math practices.

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## PHYSICAL EDUCATION

### **PHYSICAL EDUCATION--6609**

1 credit; open to grades 10-12. Prerequisite: none. This course involves learning the basics of team sports and lifetime sports while improving the physical fitness of the student. Offered: \*

### **HEALTH--6909**

1 credit; open to grade 9. This course provides information concerning the mental, physical, and social aspects of health. Areas taught include personal health and fitness, getting along with others, chemical abuse, body systems, social health, consumer health, safety and emergency care, environmental concerns, and disease prevention. Offered:

### **WEIGHT TRAINING INTRODUCTION—6765, WEIGHT TRAINING – 6766, WEIGHT TRAINING INTERMEDIATE – 6767, WEIGHT TRAINING ADVANCED - 6768**

1 credit; open to grades 10-12. Prerequisite: none. A course designed to promote total body fitness. Included are neuromuscular and cardiovascular efficiency, muscular strength and flexibility through the teaching of plyometrics and



## Courses Offered and Descriptions

running form. Drills and skills tests will be used. Offered: \*

### **TEAM SPORTS—6757, TEAM SPORTS 2 - 6758**

1 credit; open to grades 11-12. Prerequisite: Physical Education. Sports may include flag football, soccer, speedball, team handball, volleyball, basketball, floor hockey, gatorball, whiffle ball, pilo polo, speed-a-way, all American ball, Frisbee football, cricket, and softball. Goals are to include physical fitness through study of personal healthy habits, experience tournaments and the importance of teamwork and sportsmanship. Offered: \*

### **ATHLETIC TRAINING--6750**

1 credit; open to grades 11-12. Prerequisite: Health 9, Physical Education 10; Human Anatomy and Physiology (recommended but not required). This course is suggested for the student interested in the medical field, sports medicine and coaching fields. The many facets of sports medicine are explored. Practical labs and field trips to various sports medicine facilities are taken. Students will be involved with the various high school athletic teams as student trainers. Offered: \*

### **ATHLETIC LEADERSHIP (formerly Sports Management)— 7713**

1 credit; open to grades 11-12. Prerequisite: Physical Education 10 and 1 year of varsity sports experience. This course is recommended for students who have a desire to pursue an athletic related program in college. It is also helpful for students who may one day coach or officiate in youth league programs. Practical lab work is a strong part of this class. Offered: \*

### **LIFETIME FITNESS AND EDUCATION— 6733**

1 credit. Open to grades 11-12. No prerequisite. Students of low to middle-athletic ability will understand the importance of maintaining a life-long healthy lifestyle and learn how to incorporate fitness activities while maintaining an everyday work schedule. They will learn to develop a personalized fitness plan that meets an individual's specific needs and provides the opportunity for enjoyment, challenge, self-expression, and social interaction. They shall participate in fitness activities that promote and improve individual health. They will apply concepts and principles to human movement to the development of motor skills needed to perform various fitness activities, Offered: \*

### **INTEGRATED PHYSICAL EDUCATION--7949**

1 credit. Open to 10<sup>th</sup> only. The PE requirement must be completed by the end of a student's junior year. If not, the student will be placed into a Physical Education (66090) course during the senior year. Prerequisite: Both the student and parent must read and sign a contract before the student enters this course. This course is a blended approach that emphasizes lifetime activities where a virtual/online PE course, monitored by a PE teacher, is combined with a physically active credit bearing course. The virtual/online PE course and the physically active credit bearing course MUST be taken CONCURRENTLY. The PE teacher will administer the virtual/online course and provide a grade and credit for that course. The teacher of the physically active credit bearing course will provide a grade and credit for that course. The student must complete and pass both courses to receive the Integrated PE credit. The physically active credit bearing elective courses that may be combined with the virtual/online PE course are: Band I, II, III, IV, Show Choir and Dance. Offered: \*

### **EXTRACURRICULAR INTERSCHOLASTIC PHYSICAL EDUCATION--7948**

1 credit. Open to 9-11. The requirement must be completed by the end of a student's junior year. If not, the student will be placed into a Physical Education (66090) course during the senior year. This course will be listed on a transcript as a non-graded credit. Therefore, it will not affect GPA or help with athletic eligibility. A student must complete 3 seasons of a WVSSAC sponsored sport in order to receive the credit. Students will have the coach complete paperwork confirming that they have finished the season in a WVSSAC sponsored sport. The paperwork must be turned into the student's counselor during the same semester in which the sport finishes its season. Once a student has three verifications, the counselor will award the credit. Students who play sports in the 8<sup>th</sup> grade may not count that as a completed season for this PE course. Offered: \*

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## SCIENCE

\* **EARTH AND SPACE SCIENCE (9<sup>th</sup> grade course) --62011** credit; required course for all incoming 9<sup>th</sup> graders. The

## Courses Offered and Descriptions

ninth grade Earth and Space Science (ESS) course builds upon science concepts from middle school by revealing the complexity of Earth's interacting systems, evaluating and using current data to explain Earth's place in the universe and enabling students to relate Earth Science to many aspect of human society. Students will focus on five ESS content topics: Space Systems, History of Earth, Earth's Systems, Weather and Climate, and Human Sustainability. Students will engage in active inquiries, investigations, and hands-on activities as they develop and demonstrate conceptual understandings and research and laboratory skills described in the objectives. Offered: \*

### \* EARTH AND SPACE HONORS --6201H

1 credit; required course for all incoming 9<sup>th</sup> graders. Course description is similar to Ninth Grade Earth and Space Science with more in-depth study. Additional papers and projects may be required. Offered: \*

### \* BIOLOGY (10<sup>th</sup> grade course) --6021

1 credit; required course for all sophomores. Prerequisite: Earth and Space Science 9. This course is designed for students desiring a broader but more in-depth study of content found in many biological fields of endeavor. This course is designed to build upon the concepts, skills, and knowledge completed in the thematic science program. This course is intended for students interested in scientific and health related careers. Offered: \*

### \* BIOLOGY H --6021H

1 credit; open to grade 10. Course description is similar to Biology with more in depth study. Additional papers and projects may be required. Offered: \*

### \* AP BIOLOGY --6121

1 credit; open to grades 11-12. Prerequisite: Biology (Chemistry is also helpful). This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. Three general areas are covered: (1) Molecules and Cells, (2) Heredity and Evolution, and (3) Organisms and Populations. Offered: \*

### \* WVU COLLEGE BIOLOGY —6021

1 credit; open to 11-12. This course will be a dual credit course through WVU; however, it will be taught by a high school science teacher. Offering this course allows our students an opportunity to take their first year of college Biology while still in the high school setting. Upon successful completion of the course, students will earn 8 college credits for Biology 101-104 as well as a year of high school credit for advanced biology. Offered: \*

### \* CHEMISTRY --6031

1 credit; 1 year; open to grades 10-12. Prerequisite: Algebra I & II. This course is a study of the composition of matter and the reactions of one substance with another. It covers the major areas of inorganic chemistry from formula writing to the mole concept and stoichiometry. Additional topics include bonding, behavior of gases, solution chemistry, kinetics and equilibrium, and acid-base chemistry. Chemistry is designed to prepare students for college chemistry and to give background information needed for careers in science, medicine, home economics, engineering and related fields. Offered: \*

### CHEMISTRY HONORS – 6031H

1 credit, 1 year; open to grades 10 – 12. Prerequisite: Algebra I & II. . Course description is similar to Chemistry with more in depth study. Additional papers and projects may be required. Offered: \*

### \* AP CHEMISTRY --6321

1 credit. Prerequisite: Chemistry. This course is designed to be the equivalent of the general chemistry course usually taken during the first college year. The AP Chemistry course is designed to be taken only after the successful completion of a first course in high school chemistry and the successful completion of Math II. The following topic areas are: (1) Structure of Matter, (2) States of Matter, (3) Reactions, (4) Descriptive Chemistry, and (5) Laboratory. Offered: \*

### \* PHYSICS --6041

1 credit; 1 year; open to grades 11-12. Prerequisite: Math I (Math II recommended). This is the study of energy and matter and their relationship with each other. The examination of motion, light, sound, electricity and magnetism, and

## Courses Offered and Descriptions

nuclear energy are also studied. The content provides a solid foundation in physics. A science project can be required. This course is recommended for students interested in engineering, technological and scientific fields. Offered: \*

### \* AP PHYSICS --6326

1 credit; open to grades 11-12. Prerequisite: Math II. In AP Physics students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); energy and power; mechanical waves and sound; and introductory, simple circuits. Offered: \*

### \* HUMAN ANATOMY AND PHYSIOLOGY --6103

1 credit; 1 year; open to grades 11-12. This course is suggested for students interested in the human and medical aspects of biology. The body structures are identified along with the exploration of body chemistry and mechanics. Labs deal with the nature of microscopic studies of cells and tissue, human pathology, blood morphology and physiology, and small animal dissections for system identification. Individualized work is stressed, and science project(s) can be required. Offered: \*

### \* ENVIRONMENTAL SCIENCE --6312

1 credit; open to grades 11-12. This class is an advanced level lab course which builds on foundational knowledge of the chemical, physical, biological, geological processes and focuses on the natural world. Through an inquiry-based program of study, all students will demonstrate environmental literacy as they explore the economic, social, political, and ecological interdependence in urban and rural areas. Students will synthesize information and experiences across disciplines as they acquire knowledge, values, and skills needed to protect and improve the environment. Offered: \*

### \* AP ENVIRONMENTAL SCIENCE --6221

1 credit; open to grades 11-12. Prerequisite: Biology and Chemistry. This course 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 man-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Offered: \*

### \* FORENSIC SCIENCE—6044

1 credit; open to grades 11-12. Prerequisite: 2 years of Science. A hands-on class designed to investigate all the science disciplines through the forensic science processes. Offered: \*

### \* PHYSICAL SCIENCE (Recommended 3<sup>rd</sup> course for juniors not in STEM Pathway) -6011

1 credit; Prerequisite: Earth and Space Science and Biology. The Physical Science course develops understandings of the core concepts from chemistry and physics: Structure and Properties of Matter; Chemical Reactions; Forces and Interactions; Energy; and Waves and Electromagnetic Radiation. The objectives in Physical Science allow high school students to explain more in-depth phenomena central not only to the physical sciences, but to life and earth and space sciences, as well. These objectives blend the core ideas with scientific and engineering practices and crosscutting concepts to support students in developing useable knowledge to explain ideas across the science disciplines. Offered: \*

**\*Most colleges and universities will count these courses as a lab science.  
However, check with the institution to be sure.**

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## SOCIAL STUDIES

\*\*\* Beginning with class of 2020-2021, students who take US Studies must take Contemporary Studies. \*\*\*

### WORLD HISTORY--7010

1 credit; required for grade 9. The World: To the Age of Exploration (1500 AD) is the foundation course on which the subsequent social studies courses are built. This area of study emphasizes the historical, economic, geographic, political, and social structure of various cultural regions of the world beginning with the dawn of civilization and ending

## Courses Offered and Descriptions

with the period of the western world's exploration and conquest. Offered: \*

### **WORLD HISTORY H--7010H**

1 credit. Prerequisite: teacher approval and grade qualification. Students meeting the state criteria may elect this course. The course covers the content of the specific area and in-depth pursuit of chosen topics. Additional projects and papers may be required. Offered: \*

### **AP WORLD HISTORY--7048**

1 credit; open to grades 9-12. A college-level class, AP World History will develop greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. Using periodization, the course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. 8000 BC to present. Offered: \*

### **UNITED STATES STUDIES--7009**

1 credit; required for grade 10. The emergence of the United States into the world encompasses a concentrated study of the United States from its inception until its emergence into world affairs. This is an initial course leading into *The World to the Age of Exploration* and *The United States in the World: The 20th Century*. Social Studies concepts such as colonialism, imperialism, and nationalism are common threads to understanding that the unfolding of chronological events is, a study in cause and effect. The course concludes with the Industrial Revolution as stimulus for imperialism and sets the stage for the emergence of the United States as a world power. Offered: \*

### **UNITED STATES STUDIES HONORS – 7009H**

1 credit; open to grade 10. Prerequisite: Students must have teacher approval and grade qualification. The course covers the content of the specific subject area and in-depth pursuit of chosen topics. Additional projects and papers may be required. Offered: \*

### **CONTEMPORARY STUDIES--7011**

1 credit; required for grade 11. *The United States and the World: The 20th Century*, the capstone course for the three-year plan of study, provides students with an understanding of the major events and people that have shaped the world in which they live. A chronological review of these events and people provides students a framework to examine political, economic, social and technological changes which have occurred during this century. Students use geographic concepts to see how men and women have shaped and been shaped by their environment. Students demonstrate an understanding of the interdependency of the United States within the affairs of the world. The course concludes with students evaluating current world concerns and suggesting ideas dealing with those concerns. Offered: \*

### **CONTEMPORARY STUDIES H – 7011H**

1 credit; open to grade 11. Students must have teacher approval for this course. The course covers the content of the specific subject area and in-depth pursuit of chosen topics. Additional projects and papers may be required. Offered: \*

### **AP US HISTORY--7046**

1 credit; open to grade 11. Prerequisite: student must have approval of teacher and meets state guidelines. This is a college level introduction to United States history from colonial times to the present. This class may be a substitute for the 11th grade social studies requirement. Offered: \*

### **COMPREHENSIVE STUDIES--7012**

1 credit; open to grades 10-12. This course examines the evolution of the *U.S. Constitution* as a living document and the role of participatory democracy in the development of a rapidly changing technological society. This study of the United States is an examination of the formative years for the colonization of what would be the United States to present day. Offered: \*

### **CIVICS/GOVERNMENT--7031**

1 credit; required, open to grade 12. In this course, students develop the knowledge, skills and dispositions to engage in civic life, financial literacy, politics and government and analyze the personal, political and economic roles of responsible citizens in American democracy. Students explain and give examples of the traits of public character of informed, effective and responsible citizens and demonstrate through explanation and example how responsible citizens interact, monitor and influence public policy. Offered: \*

## Courses Offered and Descriptions

### **CIVICS/GOVERNMENT H--7031H**

1 credit; required, open to grade 12. Prerequisite: Teacher approval from US History II teacher. Students will develop the knowledge, skills, and dispositions to engage in civic life, financial literacy, politics and government and analyze the personal, political, and economic roles of responsible citizens in American Democracy. In addition, this class would provide a more in-depth view of state content standards. Also, the instructor may require additional projects and papers. Offered: \*

### **AP GOVERNMENT & POLITICS--7044**

1 credit; open to grades 11-12. Civics education is essential for active participation by informed citizens. This course emphasizes a study of government and individual rights and responsibilities. Examination of rules and laws, the need for authority to maintain a safe society, financial literacy, the ability to resolve conflicts peacefully, articulate and defend positions, and to engage in the civic and political life of the community is all imbedded in this course. This class may be a substitute for the 12th grade civics/government requirement. Offered: \*

### **GEOGRAPHY--7033**

1 credit; open to grades 10-12. Prerequisite: none. Geography education is essential for students to understand the values and roles of groups and individuals in a "Global Village" where economics, cultures, and environmental concerns are inextricably connected. This course enables students to view the world from their perspective as United States citizens. The study of geography contributes to the development of workplace skills and career choices. Offered: \*

### **PSYCHOLOGY—73210**

1 credit; open to grades 11-12. Prerequisite: none. The study of man's behavior motivation, intelligence, and personality. Offered: \*

### **AP PSYCHOLOGY--7047**

1 credit; open to grades 11-12. Prerequisite: student must have approval of teacher and has acceptable standardized test scores. This is a college level introduction to psychology. Students study the biological components of behavior, human development, learning intelligence, personality, abnormal behavior, therapeutic intervention, and social psychology. Offered: \*

### **SOCIOLOGY--7341**

1 credit; open to grades 10-12. This course is concerned with how people behave in groups and how group interaction shapes behavior. Offered: \*

### **ECONOMICS--7032**

1 credit; open to grades 10-12. This course emphasizes the need to make sense of the array of economic facts, events, observations, and issues in everyday life and the ability to make effective decisions about economic issues. Offered: \*

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## **TECHNICAL EDUCATION**

### **Business and Marketing Education**

#### **ACCOUNTING PRINCIPLES--1401**

1 credit; open to grades 10-12. A "C" average in a math course is suggested. This course is designed to develop student understanding and skills in such areas as the basic principles, concepts, and practices of the accounting cycle. Journalizing, posting, and analyzing of financial statements as well as banking and payroll procedures are included. The importance of ethics and confidentiality, as well as an introduction to careers and types of business ownership are incorporated. Offered: \*

#### **BUSINESS LAW AND ETHICS--1417**

½ credit; open to grades 10-12. This course focuses on the impact of law as it relates to business and individuals.

## Courses Offered and Descriptions

Students examine criminal and civil law with a concentration on consumer, contract, property, and employment laws while assessing ethics as they relate to each. Offered: \*

### **DIVERSIFIED COOPERATIVE EDUCATION--7686**

1-2 credits (work experience); open to grade 12 students. Cooperative Education is a method of instruction for students to receive on-job-training which contributes to the overall instructional program. The instruction, through written agreement between school and employers, is a combination of study in school and employment in the appropriate field. Offered: \*

### **BUSINESS RECORD KEEPING—1421 (Until 2026)**

½ credit; open to grades 10-12. The course prepares the student with entry level skills which enables them to process business forms and financial records. Offered: \*

### **BUSINESS AND MARKETING ESSENTIALS--1439**

1 credit; open to grades 9-12. This course is designed to develop student understanding and skills in such areas as business law, communication skills, customer relations, economics, emotional intelligence, financial analysis, human resources management, information management, marketing, operations, professional development, and strategic management. Students acquire knowledge of fundamental business activities and factors affecting business, develop verbal and written communication skills, use information literacy skills, utilize job-seeking strategies, and participate in career planning. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Offered: \*

### **OFFICE PROCEDURES--1449**

1 credit; open to grades 10-12. This area of study is designed to aid students in becoming skillful in the operation of an office. Major instructional areas include personal development and employability skills, managing records, processing mail, communication duties, keeping financial records, applying computing accounting, and data skills, processing business correspondence, operating office equipment, using management skills, and completing office support activities. Offered: \*

### **KEYBOARDING--1441**

½ credit; open to grades 10-12. This area of study is designed as a one-semester course that provides learners with keyboarding skills required for success in academic and occupational areas. Concepts in this area include keyboard operation, formatting skills, computer skills, appropriate work habits, and career awareness. Offered: \*

### **BUSINESS COMPUTER APPLICATIONS I--1411**

1 credit; open to grades 9-12. This area of study provides the learner with the opportunity to understand and apply integrated software to business applications (Microsoft Word and Power Point). Offered: \*

### **BUSINESS COMPUTER APPLICATIONS II--1413**

1 credit; open to grades 10-12. Prerequisite: Business Computer Applications I. This area of study is designed to develop skills appropriate to an area of specialization in information systems (Microsoft Excel and Access). Offered: \*

### **DESKTOP PUBLISHING--1429**

1 credit; open to grades 10-12. This course is designed to develop student understanding and skills in such areas as journalistic principles in design and layout of print and Web publications including integration of text and graphics and use of sophisticated hardware and software to develop and create quality materials for business-related tasks. Students will analyze the information and the audience and combine appropriate text, graphics, and design to communicate the desired message effectively. Planning and design principles are used to analyze and organize information, set up a design structure, and to select or create appropriate visuals. Instructional strategies may include computer/technology applications, teacher demonstrations, collaborative instruction, interdisciplinary and/or culminating projects, problem-solving and critical thinking activities, simulations, and project-based learning activities. Offered: \*

### **INTRO TO FINANCE – 1470**

1 credit; open to 9 – 11. This course is designed to develop student understanding and skills essential to become a financially capable consumer. Emphasis is placed on Career Exploration of Finance Careers and skill development necessary for those careers. Students utilize problem-solving techniques and participate in hands-on activities to

## Courses Offered and Descriptions

develop an understanding of course concepts. Teachers should provide each student with real-world learning opportunities and instruction. The West Virginia Standards for Global 21 Learning include the following components: Global 21 Content, Literacy and Numeracy, Entrepreneurship, and Technology Standards. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and content standards and objectives. Offered: \*

### **BUSINESS FINANCE – 1471**

1 credit; open to grades 10 – 12. Topics include money and capital markets, financial management of working capital, capital budgeting and fixed asset management, cost of capital, and short-term and long-term financing by means of debt and equity capital.. Offered:\*

### **ACCOUNTING PRINCIPLES II--1403**

1 credit; open to grades 11-12. Prerequisite: Accounting Principles. This course is designed to develop student understanding and skills in such areas as advanced accounting procedures and techniques utilizing both manual and computer-based accounting. There is a strong emphasis on problem solving, analysis, and financial decision-making. Students study the advanced principles, concepts, and practices of the accounting cycle and partnerships, corporations, cost accounting, inventory, and tax accounting. Offered: \*

### **PERSONAL FINANCE--1451**

1 credit; open to 10-12. This course is designed to develop student understanding and skills in such areas such as money management, budgeting, financial goal attainment, credit, insurance, investments and consumer rights and responsibilities. The course culminates in a personal financial literacy workshop requiring students to share their knowledge with others. This course features a variety of activities, assessments (including multiple-choice test items) and resource lists for instructional use. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Offered: \*

### **TECHNICAL COMPUTER APPLICATIONS I – 1700**

1 credit; open to 9-11. This course introduces the students to a variety of applications for workplace productivity. Students will learn to use email/calendar manager software, presentation software, word processing, and spreadsheets. Offered: \*

### **TECHNICAL COMPUTER APPLICATIONS II – 1709**

1 credit; open to grades 10-12. This course introduces the students to a variety of applications for workplace productivity. Areas of study include individual applications including word processing, spreadsheet, database management, presentations, and personal information management. Students will demonstrate knowledge and technical expertise in the efficient use of software and application integration. Offered: \*

### **DIGITAL IMAGING/MULTIMEDIA I--1431**

1 credit; open to grades 10-12. This course is designed to develop student knowledge and skills in such areas as producing images, operating a digital camera, using imaging software, using drawing software, creating simple animations, and manipulating video images. **Course is a fulfillment for 1 art credit (not transcribed).** Offered: \*

### **MARKETING PRINCIPLES--0422**

1 credit. This course is designed to develop student understanding and skills in such areas as channel management, marketing-information management, market planning, pricing, product/service management, promotion, and selling. Through the use of three projects, students acquire an understanding and appreciation of marketing activities. Current technology will be used to acquire information and to complete the projects. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an on-going component of the course. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Offered: \*

### **MARKETING APPLICATIONS--0425**

1 credit. Teacher permission. Prerequisite: Marketing Principles. This course is designed to develop student understanding and skills in such areas as the various marketing functions. Students coordinate channel management with other marketing activities, discuss the nature of marketing plans, generate product ideas, coordinate activities in the promotional mix, and demonstrate specialized sales processes and techniques. Economic and financial concepts

## Courses Offered and Descriptions

are also stressed throughout the course. Current technology will be used to acquire information and to complete the projects. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Offered: \*

### **CROSS-MEDIA PUBLISHING – 0426**

1 credit; open to grades 10-12. This course is designed to develop students understanding of advertising, promotion, marketing; communications; technology in retail merchandising; customer service and sales; digital marketing; digital media communication and marketing strategies. Offered: \*

### **MARKETING WORK EXPERIENCE/INTERNSHIP--0428**

1-2 credits - work experience – However, if this course is taken as a program course within the Marketing CTE Cluster, only one credit will count toward becoming a CTE Completer. This class must be taken in conjunction with Marketing Principles II or with teacher permission. Offered: \*

### **MANAGEMENT & ENTREPRENEURSHIP--1445**

1 credit; open to grades 11-12. This course provides a background for the development and operation of a business, starting with the role of the entrepreneur in our economy to development of a business plan and the application of specific marketing skills, and concepts within the business environment. This course also explores the planning, organizing, and controlling of a business, including organizational and human aspects, with the emphasis on various theories of management, the knowledge and understanding necessary for managing people and functions and decision-making. Offered: \*

### **WEB PAGE PUBLISH--1455**

1 credit; open to grades 10-12. Students will study the West Virginia and Berkeley County Internet Acceptable Use Policies. This course is designed to develop student understanding and skills in such areas as Web page design including using Web page development software, creating page layouts, adding images and frames, creating elements and components, creating tables, managing files, publishing to the Internet, creating hyperlinks, organizing tasks, and using codes (markup languages). Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Offered: \*

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## **FAMILY & CONSUMER SCIENCE**

### **LIFE 0929--(LEARNING FOR INDEPENDENCE, FAMILY, & EMPLOYMENT)**

1 credit; open to grades 9-10. Prerequisite: none. This class will focus on the development of skills which will enable students to assume their role in society as productive, successful individuals. Offered: \*

### **BAKING AND PASTRY FOUNDATIONS --1980**

1 credit; open to grade 9. This course focuses on the basic preparation and service of safe food, basic introduction to industry safety standards, restaurant equipment, kitchen essentials, and communication concepts in the baking industry. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, DECA or FCCLA. Offered: \*

### **BAKING AND PASTRY I—1024**

1 credit, open to grades 10-12. Prerequisite: Baking and Pastry Foundations. This course will educate students on the basics of the industry. This course starts with teaching students about the various ingredients used for baking and pastry arts and how these ingredients react to each other to make products. It will also instruct students on various breads such as quick breads, artisan and yeast breads, and laminated doughs. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, DECA, FCCLA, or SkillsUSA. Offered: \*



## Courses Offered and Descriptions

### **BAKING AND PASTRY II—1025**

1 credit, open to grades 10-12. Prerequisite: Baking and Pastry Foundations and Baking and Pastry I. This course will instruct students on how to make cookies, pies, and cakes. It educates students about the various types of icings and frostings and introduces them to custards, sauces, and creams. This course also teaches students how to make ice cream and gives them some knowledge of how to adapt recipes to meet special dietary needs. Students utilize problem solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, DECA, FCCLA, or Skills USA. Offered: \*

### **BAKING AND PASTRY ADVANCED – 1026**

1 credit, open to 11-12. Prerequisite: Baking and Pastry Foundations, Baking and Pastry I and II. This course will educate students on how to make some of the more intricate products of the industry. It will introduce students to tortes and specialty cakes, petits fours, and plated desserts. This course also will give students some experience with chocolate and sugar work. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, DECA, FCCLA, or SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

### **HUMAN DEVELOPMENT I--0904**

½ credit; open to grades 10-12. Prerequisite: none. This course is designed to focus on principles of human development across the life-span including developmental concepts, theories, principles and issues relating to growth, development and behavior. Emphasis will be placed on normal growth and milestones and cognitive, social, emotional, cultural and physical influences. Offered: \*

### **HUMAN DEVELOPMENT II--0904**

½ credit; open to grades 10-12. Prerequisite: none. The implications of developmental theory on parenting, education, social policy formation and self-understanding will be examined. Students will use reasoning processes, individually and collaboratively, to take responsible action in families, workplaces and communities. Offered: \*

### **PARENTING AND STRONG FAMILIES--0903**

½ credit; open to grades 10-12. Prerequisite: None. This course is designed to help students evaluate readiness for parenting while examining appropriate Parenting and Strong Families practices. Students will develop an awareness of societal issues affecting families and explore support systems. Students will use reasoning processes, individually and collaboratively to take responsible action in families, workplaces, and communities. Offered: 1

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## **Technology Education/Mechanical Drawing/Architecture & Construction**

### **FUNDAMENTALS OF DRAFTING--1729**

1 credit; open to grades 9-12. Prerequisite: none. This course will introduce students to the basic fundamentals of drafting and geometric construction. Students will become familiar with drafting and methodology used in industry. This course will provide basic understanding of drafting techniques necessary to allow students to progress in CAD. A lab fee will be required. The combination of Fundamental Drafting and one other Drafting class is equivalent to one Art credit. Offered: 3, 4

### **ARCHITECTURAL DRAFTING--1721**

1 credit; open to grades 10-12. Prerequisite: Fundamentals of Drawing: Fundamentals of Drafting/CAD. This course will provide students the opportunity to specialize in architectural drawing and design, including plumbing, electrical and HVAC systems. The student will choose one of these areas to do in-depth study during this course. A lab fee will be required. The combination of Fundamental Drafting and one other Drafting class is equivalent to one Art credit. Offered: 3, 4

### **MECHANICAL DRAFTING--1725**

1 credit; open to grades 10-12. Prerequisite: Fundamentals of Drafting/CAD. This course will introduce students to

## Courses Offered and Descriptions

mechanical drafting, including the application of dimensioning assembly and detail drawings, pictorial views and common threads and fasteners. This course will provide the training to apply these applications using a CAD system. A lab fee will be required. The combination of Fundamental Drafting and one other Drafting class is equivalent to one Art credit. Offered: 3, 4

### **DRAFTING TECHNIQUES--1727**

1 credit; open to grades 11-12. Prerequisite: Drafting Specialization-Mechanical/CAD. This course will introduce students to techniques used in advanced orthographic projection, including dimensioning, sectioning auxiliary views, revolutions, pattern development and advanced CAD. A lab fee will be required. **Drafting Techniques is a fulfillment for 1 Art class (not transcribed).** Offered: 3, 4

### **MILLWORK & CABINETMAKING I--2126**

1 credit; open to grades 9-12. Prerequisite: none. This course introduces the student to the knowledge base and technical skills of the Millwork and Cabinetmaking industry. It begins with the NCCER Core Curriculum which is the prerequisite to all Level 1 completions. The students will complete modules in Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power tools; Introduction to Construction Drawings; Basic Rigging; Basic Communication Skills; Basic Employability Skills; and Introduction to Materials Handling. Students will begin developing skill sets in the fundamentals of Millwork and Cabinetmaking such as Introduction to the Trade; and Woods and Materials used in Cabinet Construction. **Course is a fulfillment for 1 art credit beginning with class of 2026-27 (not transcribed).** Offered: \*

### **MILLWORK & CABINETMAKING II--2127**

1 credit; open to 10-12. Prerequisite: Millwork and Cabinetmaking I. Millwork and Cabinetmaking II will continue to build student skill sets in areas such as Shop Tools Used in Cabinetmaking; Joints; Assembling the Cabinet; and Sanding & Finishing. **Course is a fulfillment for 1 art credit beginning with class of 2026-27 (not transcribed).** Offered: \*

### **MILLWORK & CABINETMAKING III--2128**

1 credit. Prerequisite: permission of teacher. Millwork and Cabinetmaking III will continue to build student skill sets in areas of Applying Plastic Laminate to a Countertop; Cabinet Doors; and Cabinet Drawers. **Course is a fulfillment for 1 art credit beginning with class of 2026-27 (not transcribed).** Offered: \*

### **MILLWORK & CABINETMAKING IV--2129**

1 credit. Prerequisite: permission of teacher. Millwork and Cabinetmaking IV will continue to build student skill sets in areas of Cabinet Doors and Drawer Hardware; Cabinet Shelves and Shelf Hardware; and Mass Production Cabinetmaking. **Course is a fulfillment for 1 art credit beginning with class of 2026-27 (not transcribed).** Offered: \*

### **BUILDING MAINTENANCE & OPERATIONS 1 – 1774**

1 credit; Open to grades This course introduces the student to the knowledge base and technical skills of the Building Maintenance and Operations industry. Building Maintenance and Operations I begins with the NCCER Core curriculum which is a prerequisite to all Level I completions. The students will complete modules in Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Introduction to Construction Drawings; Basic Rigging; Basic Communication Skills; Basic Employability Skills; and Introduction to Materials Handling. Offered:

### **BUILDING MAINTENANCE & OPERATIONS 2 – 1775**

1 credit; Open to grades Building Maintenance and Operations II will continue to build student skill sets in areas such as Handling and Placing Concrete; Introduction to Masonry; and Masonry Units and Installation Techniques. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Offered:

### **BUILDING MAINTENANCE & OPERATIONS 3 – 1776**

1 credit; Open to grades Building Maintenance and Operations III will continue to build student skill sets in areas of Floor Systems; Wall and Ceiling Framing; Roof Framing; and Roofing Applications. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Offered:

### **BUILDING MAINTENANCE & OPERATIONS – 1777**

1 credit; Open to grades Building Maintenance and Operations will continue to build student skill sets in areas of Exterior Finishing; Basic Stair Layout; Electrical Safety; and Residential Electrical Services. Offered:

## Courses Offered and Descriptions

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### **Agricultural Education**

**\*\*\*\* Students who have taken a Vo Ag Completer course or who are currently enrolled in a Vo Ag Completer course can take Natural Resource Management and receive an embedded science course. \*\*\*\*\***

#### **INTRODUCTION TO AGRICULTURE, FOOD & NATURAL RESOURCES--0101**

1 credit; open to grades 9-12. This is a core course for the Agriculture, Food and Natural Resources Career Cluster that builds a knowledge base and technical skills in all aspects of the industry. Learners will be exposed to a broad range of agriculture, food, and natural resources careers. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization, FFA. Offered: \*

#### **SCIENCE OF AGRICULTURE--0102**

1 credit; open to grades 10-12. This course focuses on the basic scientific principles and processes related to the production of plants and animals for the food and fiber systems. Topics of instruction include basic understanding of the livestock/poultry industry and its various components, career opportunities, soil science, crop science/agronomy, weed science, basic agricultural mechanics and related industry careers, environmental stewardship, entrepreneurship, and leadership/personal development. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization, FFA. Offered: \*

#### **AGRICULTURE COOPERATIVE EDUCATION--0133**

1-2 credits; open to grade 12. This course is designed for seniors in agricultural education classes. Students must be in their third or fourth year with satisfactory grades. Students will be placed in an agricultural occupation and will receive wages, credits towards graduation, and receive school release time up to a maximum of three hours per day. Students who wish to enroll will need approval from program coordinator and an attendance contract will be required. The contract will be signed by the student, parent/guardian, administrator and program coordinator. The course will give students experience in a potential agricultural career. Offered: \*

#### **FUNDAMENTALS OF AGRICULTURE MECHANICS--0112**

1 credit; open to grades 10-12. This course introduces the knowledge and skills for applying the physical science principals and principles of operation and maintenance to mechanical equipment, welding and fabrication, structures, plumbing, electrical wiring, power utilization, and entrepreneurship. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization, FFA. Offered: \*

#### **AGRICULTURE STRUCTURES--0113**

1 credit; open to grades 11-12. Students will use computer skills to develop simple sketches and plans, read and relate structural plans to specifications and building codes, estimate project costs, use construction/fabrication equipment and tools, and plan and design machinery, equipment, buildings and facilities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization, FFA. Offered: \*

#### **AGRICULTURE EQUIPMENT AND REPAIR--0114**

1 credit, open to grades 11-12. This course builds on the principles of the previous course and provides more in-depth knowledge and skills as they relate to energy sources, lubricants, service and maintenance of machinery and equipment, and equipment operation. Students will apply principles of service and repair by troubleshooting problems and evaluating engine performance, follow guidelines to service and repair power transmission systems, hydraulic systems, and entrepreneurship. Tools used with these procedures will allow students to demonstrate proper skills and safety. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FFA. Offered: \*

## Courses Offered and Descriptions

### **NATURAL RESOURCE MANAGEMENT--0200**

1 credit; open to 11 -12. This specialization course covers topics on soil and water conservation, basic wildlife management, environmental law and regulations, basic forestry, and land management. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FFA. **Course is a fulfillment for 1 elective science credit (not transcribed).** Offered: \*

### **HORTICULTURE--0212**

1 credit; open to grades 10-12. This course provides instruction in the broad field of horticulture with emphasis on the scientific and technical knowledge for a career in horticulture. Topics in this course include plant growth and development, plant nutrition, media selection, basic plant identification, pest management, chemical disposal, customer relations, career opportunities, leadership development and entrepreneurial skills. Students utilize problem-solving techniques and participate in hands-on activities to develop and understanding of course concepts. Students are encouraged to become active members of the student organization, FFA. Offered: \*

### **GREENHOUSE PRODUCTION & MANAGEMENT--0214**

1 credit; open to grades 10-12. This specialization course covers instruction that expands the scientific knowledge and skills to include more advanced scientific computations and communication skills needed in the horticulture industry. Topics include greenhouse plant production and management, bedding plant production, watering systems light effects, career planning, leadership development and entrepreneurial skills. Students utilize problem –solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization, FFA. Offered: \*

### **COMPANION ANIMAL CARE (Odd Years) --0149**

1 credit; open to grades 10-12. This is a specialization course designed for students interested in entering the companion animal industry as a pet groomer, animal care giver and/or companion animal entrepreneur. The course will cover topics on grooming, animal restraint, developing feed rations, business planning, developing marketing plans and animal facilities as they apply to various companion animals such as dogs, cats, rodents, birds, reptiles, amphibians and fish. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization, FFA. Offered: \*

### **LIVESTOCK PRODUCTION (Even Years) --0230**

1 credit; open to grades 10-12. This is a specialization course designed for students interested in entering the livestock industry as a herd manager or livestock entrepreneur. The course will cover topics on nutrient management, farm planning, business planning, developing marketing plans, developing feed rations, forages, grassland management, embryo transfer and animal facilities as they apply to various livestock such as cattle, swine, sheep, goats, poultry and horses. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization, FFA. Offered: \*

**\*Random drug testing will occur in this course.**

### **ANIMAL PRODUCTION & MANAGEMENT--0140**

1 credit; open to grades 10-12. This course is designed to be a core course in the Animal Systems concentration. The course will cover topics on animal restraint, animal management techniques, animal health and welfare, balancing rations, pedigree analysis and entrepreneurship. Students will utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization, FFA. Offered: \*

### **AGRICULTURAL EXPERIENCE PROGRAM (SAE)--0134**

½ credit; open to grades 9-12. Students enrolled in agricultural education courses have the unique opportunity for experiential and contextual learning on a grand scale. Students may select and participate in appropriate agricultural enterprises which provide opportunity to acquire skills, earn money, and develop responsibility while also earning high school credit. Must be enrolled in another approved class by instructor. **In order to become a completer, students will need 2 semester credits of SAE for a full credit.** Offered: \*

## Courses Offered and Descriptions

**\*\*\* Some of these courses are offered on alternate years. Please see rotation following this section.**

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### **AF JROTC**

**\*\*\*\*\* Students can receive fulfillment PE credit after taking and passing both ROTC I and II (course will not be transcribed).**

**\*\*\*\*\* Students who take and pass ROTC I, II, III and IV can earn a fulfillment elective Social Studies credit. However, if a student is required to take both US Studies and Contemporary Studies, instead of the AP or the US Comprehensive course, JROTC could be substituted in place of Contemporary Studies, but it cannot replace Civics (the course will not be transcribed).**

#### **JROTC I- Traditions, Wellness & Foundations of Citizenship--1065**

1 credit, MHS; 1.5 credits for schools that travel. Open to grades 9-12. Prerequisite: none. Air Force Junior ROTC is a course in aerospace and leadership education. The course of study includes an aviation history course focusing on the development of flight, leadership education instilling elements of good citizenship, basic drill, and wellness. 40% of student hours are devoted to aerospace science, 40% to leadership education, and 20% to wellness. Uniforms and textbooks are provided by the Air Force. Students do not incur any service obligations by taking Junior ROTC. JROTC provides cadets with many school and community service opportunities. Students are eligible for 4-year AFJROTC scholarships and additional rank if they enlist in any branch of the military services. Offered: \*

#### **JROTC II-Communication, Awareness & Leadership -1066-, JROTC III-Life Skills & Career Opportunities—1080, JROTC IV-Fundamentals of Leadership--1081**

1 credit, MHS; 1.5 credits for schools that travel. Open to grades 10-12. Prerequisite: AFJROTC I, II, or III. The curriculum includes aerospace science and leadership education. The course of study includes cultural studies, survival, drill, communications, life skills, management, and career opportunities in military services. Practicum in leadership experiences is mandatory for all students. 40% of student hours are devoted to aerospace science, 40% to leadership education, and 20% to wellness. All Work-Based Learning points can be earned through JROTC. Seniors completing their 4<sup>th</sup> year of JROTC can earn CTE completer credit. Students are eligible for 4-year AFJROTC scholarships and additional rank if they enlist in any branch of the military services. Offered: \*

**\*Random drug testing will occur in courses III and IV.**

#### **AFJROTC Junior Course— (1064)**

½ credit. Prerequisite: 1 year AFJROTC. This summer Junior course is for cadets attending CLC for the first time. Total supervised (academic) time from Sunday to Saturday is 95 hours. Course content includes instruction on: leadership, management, personal standards, character education/ethics, education and careers, Air Force customs and courtesies, physical training, athletic competition, drill and ceremonies, orienteering, and survival skills. Course content may vary slightly from year to year, but will maintain AFJROTC standards. Offered: \*

#### **AFJROTC Senior Course— (0520)**

½ credit. Prerequisite: 2 years AFJROTC. This summer course is for cadets returning to CLC in a leadership position. Cadets enrolled attend more in-depth classes and assist instructors with operating the school. Total supervised (academic) time from Sunday to Saturday is 101 hours. The course begins with a 6-hour training session in preparation for the leadership role cadet will assume. Course content includes instruction on: leadership, management, personal standards, character education/ethics, education and careers, Air Force customs and courtesies, physical training, athletic competition, drill and ceremonies, orienteering, and survival skills. Course content may vary slightly from year to year, but will maintain AFJROTC standards. Offered: \*

## Courses Offered and Descriptions

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### PRE-ENGINEERING COURSES

**\*\*\*\*\* Students can receive an embedded Science credit after taking and passing both Introduction to Engineering and Design and Principles of Engineering.**

**\*\*\*\*\* Students who take and pass Introduction to Engineering, Principles of Engineering, and Engineering Design and Development can earn an embedded Advanced Math Modeling credit.**

To be a completer in the Pre-Engineering Concentration, it is required to take Introduction to Engineering Design, Principles of Engineering, Engineering Design and Development AND either Environmental Sustainability OR Aerospace Engineering.

#### **INTRODUCTION TO ENGINEERING DESIGN--2461**

1 credit. Open to grades 9-10. Prerequisite: Algebra I. This course is a component of the Project Lead the Way (PLTW) pre-engineering curriculum. This course teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed, and communicated using solid computer design software. Offered: 4

#### **PRINCIPLES OF ENGINEERING--2463**

1 credit. Open to grades 10-11. Prerequisite: Must have had Intro to Engineering or be enrolled concurrently. This course will help students understand the field of engineering and engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. This course also includes concerns about social and political consequences of technological change. Offered: 4

#### **ENVIRONMENTAL SUSTAINABILITY--2469**

1 credit. Junior year. Prerequisite: Intro to Engineering Design and Principles of Engineering. Students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply issues, and renewable energy. Applying their knowledge through hands-on activities and simulations, students research and design potential solutions to these true-to life challenges. Offered: 4

**\*Random drug testing will occur in this course.**

#### **ENGINEERING DESIGN AND DEVELOPMENT--2464**

1 credit. Senior year. Prerequisite: Intro to Engineering Design and Principles of Engineering. This is an engineering research course in which students work in teams to research, design, and construct a solution to an open-ended engineering problem. Students apply principles developed in the four preceding courses and are guided by a community mentor. They must present progress reports, submit a final written report, and defend their solutions to a panel of outsider reviewers at the end of the school year. Offered: 4

#### **AEROSPACE ENGINEERING--2468**

1 credit. Junior year. Prerequisite: Intro to Engineering Design and Principles of Engineering. This course propels students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, propulsion system, and rockets. They learn basic orbital mechanics using industry-standard software. They also explore robot systems through projects such as remotely operated vehicles. Offered: 4

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### Broadcasting Technology Courses

#### **Fundamentals of Broadcasting--1681**

1 credit; open to grades 9 -12. Prerequisite: None. This course introduces the student to the knowledge base and technical skills for all courses in the Broadcasting Technology Program of Study. Areas of study include

## Courses Offered and Descriptions

fundamentals of broadcasting, broadcasting equipment, on-air presentation skills, and student organizations. Emphasis will be placed on career exploration, job seeking skills, and personal and professional ethics. Safety instruction is integrated into all activities. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts, and teachers should provide each student with real world learning opportunities and instruction related to broadcasting occupations. Students are encouraged to become active members of Skills USA for additional co-curricular opportunities that enhance student achievement, develop student leadership, and support experiential learning. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skillsets. Offered: 3, 4

### **Radio Broadcasting Presentations—1683**

1 credit; open to grades 10 -12. Prerequisite: Fundamentals of Broadcasting. This course will provide students with the knowledge to perform, either in a live or mock setting, a radio broadcast. Areas of study include on-air news presentations, deejay presentations, radio production and management, and student organizations. Students will demonstrate knowledge and technical expertise in the preproduction and performance of a live 30-minute show. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts, and teachers should provide each student with real world learning opportunities and instruction related to broadcasting occupations. Safety instruction is integrated into all activities. Students are encouraged to become active members of Skills USA for additional co-curricular opportunities that enhance student achievement, develop student leadership, and support experiential learning. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets. Offered: 3

### **Television Production Applications—1685**

1 credit; open to grades 10 – 12. Prerequisite: Fundamentals of Broadcasting. This course will provide students with the knowledge to perform, either in a live or mock setting, or a television broadcast. Areas of study include writing television news, conducting interviews, preproduction, production, and student organizations. Students will demonstrate knowledge and technical expertise in the use of television production equipment and applications. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts, and teachers should provide each student with real world learning opportunities and instruction related to broadcasting occupations. Safety instruction is integrated into all activities. Students are encouraged to become active members of Skills USA for additional co-curricular opportunities that. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skillsets. Offered: 3

### **Producing Live TV—1689**

1 credit; open to grades 10 – 12. Prerequisite: Fundamentals of Broadcasting and teacher approval. Part of the grade will be based on after school activities. Students will learn all aspects of live television production through hands-on application. This includes showing how to produce, direct, operate cameras, audio equipment and other technical aspects of products. On-air duties such as anchor, reporter, announcer will also be examined in this course. Students will gain knowledge of directing, newsroom, production and performance. Offered: 3

### **Video Editing—1684**

1 credit; open to grades 10 – 12. Prerequisite: Fundamentals of Broadcasting and teacher approval. Part of the grade will be based on after school activities. This course is an introduction to the techniques, equipment, and applications used in Video Editing. Areas of study include the production process, ingestion, non-linear editing, final package distribution, and student organizations. Students will demonstrate technical expertise in non-linear video editing techniques. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts, and teachers should provide each student with real world learning opportunities and instruction related to broadcasting occupations. Safety instruction is integrated into all activities. Students are encouraged to become active members of Skills USA for additional co-curricular opportunities that enhance student achievement, develop student leadership, and support experiential learning. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skillsets. Offered: 3

## Courses Offered and Descriptions

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### **SOCIAL JOURNALISM**

#### **FUNDAMENTALS OF MEDIA WRITING – 1518**

1 credit; open to grades 9 – 12. This course introduces the students to the fundamentals of storytelling for Media Publishing. Students will explore various methods of researching stories, identifying their audience, and writing for specific audiences. Students will also identify ethical and legal issues related to media production including freedom of press, censorship, ethical standards, and journalistic responsibilities. Offered: \*

#### **CROSS-MEDIA PUBLISHING – 1517**

1 credit; open to grades 10-12. This is a journalism class designed to produce the yearbook. Layout, design copywriting, and photography are included. Offered: \*

\*\*\* To complete this Program of Study, students also need to take AP English Language and Composition 11 and AP English Literature and Composition or Dual Credit English 101 and 102.

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### **TOURISM**

#### **INTRODUCTION TO TOURISM – 1211**

1 credit; open to 9 – 12. This course is designed to provide necessary skills for successful employment in the hospitality industry. This course provides students with a comprehensive tour through the travel and tourism environment. Offered: \*

#### **TRAVEL WEST VIRGINIA – 7663**

1 credit; open to 9 – 12. This course is designed to provide students with the awareness of the impact of tourism in WV and how tourism effects the WV economy. Offered: \*

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### **CAREER AND WORK SKILLS TRAINING (CWST)**

#### **CAREER AND WORK SKILLS TRAINING I -0511**

1 credit; open to seniors. This course is designed as the first course to develop student understanding and skills essential for job success. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets. Offered: \*

#### **CAREER AND WORK SKILLS TRAINING II – 0512**

1 credit; open to seniors. This course is designed as the second course to develop student understanding and skills that are essential for work success. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets. Offered: \*

#### **CWST WORK EXPERIENCE I – 0513**

1 credit: open to seniors. This course is designed as the first course to develop student understanding and skills using on-the-job training that contributes to the over-all instructional program. The instruction, through written agreement between school and employers, is a combination of study in school with employment in the appropriate field. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets. Offered: \*



## Courses Offered and Descriptions

### **CWST WORK EXPERIENCE II – 0514**

1 credit; open to seniors. This course is designed as the second course to develop student understanding and skills using on-the-job training that contributes to the over-all instructional program. The instruction, through written agreement between school and employers, is a combination of study in school with employment in the appropriate field. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets. Offered: \*

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## **BUILDING MAINTENANCE AND OPERATIONS**

### **BUILDING MAINTENANCE AND OPERATIONS I – 1774**

1 credit; open to 9 – 10. This course introduces the students to knowledge base and technical skills of the Building Maintenance and Operations industry. Students will complete modules in Basic Safety, Introduction to Construction Math, Introduction to Hand tools, Power Tools and construction drawings. Offered: 3

### **BUILDING MAINTENANCE AND OPERATIONS I – 1775**

1 credit; open to 9 – 10. This course introduces the students to knowledge base and technical skills of the Building Maintenance and Operations industry. Students will complete modules in Basic Rigging, Basic Communication Skills, Basic Employability Skills, and Introduction to Materials Handling.. Offered: 3

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## **ADDITIONAL COURSES**

### **ACT/SAT TEST PREP— (7677)**

½ credit. This class is designed to prepare college-bound juniors and seniors for college admission testing practices by practicing vocabulary, analogies, reading, comprehension, and verbal skills. Offered: \*

### **AFRICANA STUDIES – 7535**

.5 credits; open to 10 – 12. Prerequisite: None. This course initiates students into the interdisciplinary study of the African experience on the continent, across diaspora, and in the United States. The course is designed to integrate the student with knowledge of the accomplishments, influences, and history of Africans and African Americans. It provides students with opportunities to engage with the social, economic, cultural, historical and political realities of the African and African American experience. The course will place great emphasis on the teaching of ancient African History and its' connections to the modern-day African American experience, while also contributing to the uplifting, understanding, and respecting of this rich cultural heritage and history. This introductory course provides the student with concise, but substantive, intellectual foundation for critical thinking and understanding of Africana Studies and the various focuses that have impacted the world and nationally. There are 7 major curriculum focus areas in the teaching of African American History, namely: 1.) Ancient Africa: Pre-Columbus; 2.) African Explorations of the World: Pre-Columbus; 3.) Invasions and weakening of Africa: European Colonialism; 4.) Slavery in the Americas: Post Columbus; 5.) Neo-slavery: abolition, Civil Rights and Constitutional Rights; 6.) the soul of African Americans; and 7.) Contributions of African Americans to the United States of America with an emphasis on West Virginia and the world. Offered: \*

### **AP COMPUTER SCIENCE PRINCIPLES--2806**

1 credit; Prerequisite: None. This course introduces students to the foundational concepts of computer science and explores the impact computing and technology has on our society. It covers the big ideas and computational thinking practices required in the AP Computer Science Principles curriculum framework using an easy to learn blocks based programming language called Snap! (based on Scratch), and powerful computer science ideas like recursion, higher order functions and computability. Through the course, students learn to create beautiful images, and realize that code itself can be beautiful. This is NOT just a programming course; students will and many other CS Principles big ideas: creativity, abstraction, data and information, algorithms, the Internet, and global impact. When discussing the social implications of computing, the course balances optimism about technology with a critical stance toward any

## Courses Offered and Descriptions

particular technology. Offered: \*

### **AP RESEARCH--4046**

1 credit. Senior year. Students develop the skills and discipline to conduct independent research to produce and defend a scholarly academic thesis. This second course in the AP Capstone experience allows students to explore deeply and academic topic, problem, or issue of individual interest and through this inquiry, students design, plan, and conduct a year-long mentored, research-based investigation. The course culminates in an academic thesis paper of approximately 5,000 words, and a presentation, performance, or exhibition with an oral defense. Offered: 1, 2 & 4

### **AP SEMINAR--4045**

1 credit. Junior year. This course provides sustained practice of investigating issues from multiple perspectives and cultivates writing abilities so they can craft, communicate, and defend evidence-based arguments. Students are empowered to collect and analyze information with accuracy and precision and are assessed through a team project and presentation, an individual written essay and presentation, and a written exam. Offered: 1, 2 & 4

### **CIVIL WAR (Will not count as a Social Studies course to graduate. This is an elective credit only.)— (7237)**

½ credit; open to grades 11-12. This course is an in-depth study of the events, people, and places of the Civil War era. May require field trips. Offered: \*

### **COMMUNITY SERVICE--7631**

1 credit; open to grades 9-12. Community service objectives extend the students' perspective and activities beyond the traditional academic courses. These voluntary programs provide community assistance in the non-paid service to others. These programs can take place for approval to receive credit from this course. Students may apply through the SAT. 60 verified volunteer hours equals a half credit. Maximum of one full credit per year is allowed. Offered: \*

### **DRIVER EDUCATION--6811**

½ credit; open to grades 9-12. Prerequisite: must be 15 years of age or older. This course is given to teach safe driving. Grade - 75% driving rules, and 25% lab and textbook. Students must pass both phases to receive credit. If students are unable to enroll during their 10th grade year as is recommended, it may be possible to take the course during summer school. Offered: \*

### **WORLD RELIGIONS (formerly History of the Bible)— 7013**

1 credit; This course utilizes the Bible as a primary resource to examine the history of the Hebrew nation and roots of the Christian movement. The course uses the history, geography, literature and language that are contained within the Bible to help students understand these movements. The influence of the two historical segments, and the Bible itself, is then evaluated within several contexts: world history, world politics, foundations of American government and law, American history, American community life and culture. This exploration is done without imposing the doctrine of any particular religious sect. Offered: \*

### **INDEPENDENT STUDY**

English-4122, Visual Art-3361, Dance-3421, Fine Arts-3511, Music-3751, Theatre-3875

The purpose of Independent Study is to allow **juniors** and **seniors** to explore areas of interest beyond the established curriculum on a one-year basis. The junior/senior student must obtain the approval of a faculty sponsor. The student must have an acceptable admission grade point average, a portfolio of their work in the program, and a journal/time-log of their studies/activities related to the study. The student must make an oral presentation to the committee four times during the school year and have principal approval. Offered: \*

### **INTRODUCTION TO COMPUTER SCIENCE— 1408**

1 credit; This course is designed to offer an introduction to computer science. Students will learn the basics of computer programming along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science. It gives a foundation in the tools used in computer science and prepares students for further study in computer science, including AP Computer Science Principles and AP Computer Science A courses. Offered: \*

### **LEADERSHIP--7651**

1 credit; open to grades 11-12. Prerequisite: teacher approval. An application must be completed for enrollment. The student must be a member of a student organization. A 3.0 grade point average or better in all classes is

## Courses Offered and Descriptions

recommended. Offered: \*

### **LEARNING SKILLS--7653**

Students who score below mastery in total math, total reading or total language on the achievement tests in their eighth, ninth, tenth or eleventh grade years are encouraged to attend a Learning Skills class provided during school, summer school or after school. Students who meet course requirements receive ½ elective credit. Offered: \*

### **MEDIEVAL & RENAISSANCE HISTORY (Will not count as a Social Studies course to graduate. This is an elective credit only.) - (7243)**

½ credit; open to grades 11-12. Prerequisite: World History. This course will explore the turbulent time of the Middle Ages in Europe to the Renaissance of arts and ideas, culminating in the discovery of the New World and the birth of humanistic thought. Famous people and events will be studied, as well as scientific, technological, artistic, and literary developments. Offered: \*

### **MICROBIOLOGY (Will not count as a science course to graduate. This is an elective credit only course.) -- 7725**

1 credit. Prerequisite: Biology or Chemistry. This course considers the nature and importance of microorganisms, including bacteria, fungi, viruses, and protozoa. Additional studies include the examination of the microscopic components of animal and plant tissues. Activities include the studies of their morphological, physiological, and cultural characteristics along with staining techniques, leading to their identification. Special attention is given to pathogenic forms and continued basic aspects of microbiology in relation to man and his environment. The role of these microorganisms in health and medicine is also addressed. Offered: 2

### **CULTURAL ENRICHMENT (formerly Multicultural Studies) -- 7691**

1 credit; open to grades 10-12. This course is designed to increase multicultural awareness and understanding by familiarizing students with the concept of culture and how ethnic, religious, and geographic factors have created cultural diversity. The course provides a basic overview of cultures in the U.S. today that include African American, Hispanic American, Native American, Asian American and European American. Offered: \*

### **PHOTOGRAPHY--3343 (Semester) 33430 (Full Year- Musselman and Martinsburg and SMHS)**

½ credit or 1 credit when available; open to grades 10-12. Limit to 15 students. Requirement: students enrolled must have access to a 35 mm camera and a digital camera. A small supply of cameras may be available for loan. Students will earn an art credit while learning the elements of art and principles of design through photography. Students will learn camera function and technique through film, darkroom, and/or digital, Photoshop instruction. Students can enroll in a semester course or a full year course when available. Offered: \*

### **SCIENCE LAB ASSISTANT (Will not count as a science course to graduate. This is an elective credit only course.) – (7631)**

½ credit. Prerequisite: Earth and Space Science & teacher recommendation. The science laboratory assistant is directly supervised by the sponsoring teacher. The lab assistant prepares equipment and materials for student labs, assists in lab instruction, and reviews student lab results as directed by the teacher. The lab assistant must be competent handling chemicals, laboratory equipment, specimens and any other related materials or equipment in the course he/she chooses to assist. Offered: \*

### **ZOOLOGY (Will not count as a science course to graduate. This is an elective credit only course.) --6270**

1 credit; open to grades 11-12. This course is a study of the structural and functional characteristics of animals with an in-depth examination of the habitat, identification classification, and dissection of representative animals. Invertebrates are covered first semester and vertebrates are covered second semester. Students may take either semester for 1/2 credit or both semesters for 1 credit. Offered: \*



**James Rumsey**  
Technical Institute

***Program of Studies***  
***2024 – 2025***

## JAMES RUMSEY TECHNICAL INSTITUTE

### Concentration and Course Descriptions

The West Virginia Standards for 21st Century Learning include the following components: Content Standards, Learning Skills, and Technology Tools. Classroom instruction integrates learning skills, technology tools, and content standards and objectives. Group and individual activities engage students in problem-solving techniques and manipulative skills while completing industry related activities.

Through Simulated Workplace, students are prepared for the various jobs common in the industry. Students will be responsible for job duties which may include safety, customer service, management, estimating, and production. Emphasis will be placed on leadership development and soft skills as students learn how these various roles interact with each other to create an effective simulated company.

#### **Career and College Prep Programs for Students Who Like To:**

**Work with Computers and Technology: Aerospace Engineering; Applied Engineering – Integrated Production Technologies; Coding, App & Game Design; Cyber Security/Cisco Networking Academies; Informatics; Multimedia Publishing**

**Help People: Early Childhood Classroom Teacher Assistant; Emergency/Firefighting Services; Law and Public Safety; Therapeutic Services (Health Care)**

**Work with Their Hands: Automotive Technology; Carpentry; Diesel Technology; Electrical Technician; Masonry, ProStart (Culinary); Welding**

**Be Creative: Graphic Design; Multimedia Publishing; ProStart (Culinary)**

## Arts, Audio/Video, Communications Cluster

**Cluster Description:** Activities in this cluster prepare students for careers in designing, producing, exhibiting, performing, writing and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services, arts and communication, including writing, editing, radio and television broadcasting, acting, and music.

### Program of Studies: AV1850 Graphic Design

**Program of Studies Description:** Pre-requisite for this course is prior art experience and an interview with the instructor which includes the student's art portfolio. Student learn to transfer their sketches to electronic media as they learn the creative and technical aspects of commercial art/graphic design including the basics of national retail trade, industrial and professional advertising, layout; and computer graphics. Students utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts, and teachers provide each student with real-world learning opportunities and instruction related to occupations in graphic design.

*First year students should schedule for the PM session and second year students should schedule for the AM session.*

#### Course Descriptions:

##### **Semester 1: Fundamentals of Illustration 1 Credit**

**WVEIS Code: 1851**

This course introduces the student to the knowledge base and technical skills necessary for all courses in the Graphic Design Program of Studies. Areas of study include media applications, perspective, drawing and painting, and student organizations. Students demonstrate knowledge and technical expertise in illustration.

##### **Semester 2: Illustration**

**1 Credit**

**WVEIS Code: 1861**

This course introduces the student to advanced topics in illustration. Areas of study include color theory, proportion, portfolios, and student organizations. Students demonstrate knowledge and technical expertise in advanced illustration techniques.

##### **Semester 3: Fundamentals of Graphic Design 1 Credit**

**WVEIS Code: 1857**

This course introduces the student to the knowledge base and technical skills for all courses in the Graphic Design Program of Studies. Areas of study include equipment and materials, computer skills, copyright, design principles, customer specifications, and student organizations. Emphasis is placed on personal and professional ethics, and students explore a variety of career opportunities.

##### **Semester 4: Graphic Design Applications 1 Credit**

**WVEIS Code: 1859**

This course introduces the student to basic advertising concepts and advanced layout procedures. Areas of study include demographics, mechanical preparation, vector and raster graphics, and student organizations. Students demonstrate knowledge and technical expertise in the mechanical preparation of design projects.

#### First Year Electives:

**Fundamentals of Computer Graphics 1 Credit WVEIS Code: 1853**

**Fundamentals of Desktop Publishing 1 Credit WVEIS Code: 1855**

#### Second Year Elective:

**Computer Graphics 1 Credit WVEIS Code: 1854**

**Desktop Publishing 1 Credit WVEIS Code: 1856**

**Example Job Titles:** Graphic Designer, Desktop Publisher, Print Shop Employee, Screen Printer, Sign-Shop Employee, Photographer, Industrial Designer, Web Designer, Medical Illustrator, Computer Animator,

**Related College Programs:** Graphic Design, Game Art & Design, Digital Arts & Design

**Successful completion of one of the following fulfills the one art credit graduation requirement: 1851, 1859, 1857 or 1861**

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## **Program of Study: AV1684 Multimedia Publishing**

Program of Study Description: The Multimedia Publishing Program of Study prepares students for college Communications and Journalism programs, as well as various media production jobs such as Copy Center Printing, Photography and Video Production Assistant, and Print, Television, and Online Journalism.

***First and Second Year Students are both scheduled together in the AM and PM.***

### **Courses:**

1514 Introduction to Visual Communication	1514 (2024-25) - First Semester
1515 Digital Photography	1515 (2024-25) – Second Semester
1516 Videography	1516 (2025-26) - First Semester
1517 Cross-Media Publishing	1517 (2025-26) – Second Semester

### **Electives Courses:**

1518 Fundamentals of Media Writing	1518 (2024-25)
1432 Digital Imaging – Multimedia II	1432 (2024-25)
1519 Information Graphics	1519 (2025-26)
1431 Digital Imaging – Multimedia I	1431 (2025-26)

### **Course Descriptions:**

#### **Semester 1: Introduction to Visual Communication 1 Credit WVEIS Code: 1514**

This course introduces the student to the skills required for visual communication in the 21st Century. Students will use digital cameras and professional software tools to create publications for print and the web. Units of Study: Page Layout, Desktop Publishing, Digital Publishing.

#### **Semester 2: Digital Photography 1 Credit WVEIS Code: 1515**

This course introduces the student to the skills required to produce professional quality photographs. Students will use DSLR cameras, various accessories such as filters and tripods, photo editing software, and an inkjet printer. Emphasis will be placed on photojournalism and advertising photography. Units of Study: Camera Basics, Photo Editing, Photo Printing.

#### **Semester 3: Videography 1 Credit WVEIS Code: 1516**

This course introduces the student to the skills required for multimedia production. Students will utilize digital camcorders as well as video editing, and sound recording software to create multimedia projects. Areas of study include video and sound editing, and motion graphics and effects. Units of Study: Videography Basics, Video Editing, Motion Graphics

#### **Semester 4: Cross-Media Publishing 1 Credit WVEIS Code: 1517**

This course introduces students to the emerging field of cross-media publishing. Students will explore the use of blogging, video sharing, and social media services as journalism and marketing tools. Students will research, write, and produce multimedia content to be disseminated across various platforms (print, video, and digital publishing). Units of Study: 21st Century Publishing, Marketing across Media, Content Marketing



**2024-25 Electives:**

**Fundamentals of Media Writing** 1 Credit WVEIS Code: 1518

**Digital Imaging – Multimedia II** 1 Credit WVEIS Code: 1432

**2025-26 Electives:**

**Information Graphics** 1 Credit WVEIS Code: 1519

**Digital Imaging – Multimedia I** 1 Credit WVEIS Code: 1431

**Example Job Titles:** Film and Video Editors, Social Media Marketer, Multimedia Artists and Animators, Audio and Video Equipment Technicians, Technical Writers, Reporters, Correspondents, Search Marketing Strategists, Photojournalist, Production Assistant, Videographer, Copy and Print Associate.

**Related College Programs:** Communication Studies, Online Journalism, Communication Arts, Communication and New Media.

**Successful completion of 1431 fulfills the one art credit graduation requirement.**

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## Architecture & Construction Cluster

**Cluster Description:** Activities in this cluster prepare students for careers in designing, planning, managing, building and maintaining the built environment.

**Program of Studies: AR1820 Carpentry**

***First and Second Year Students are both scheduled together in the AM and PM.***

### **Courses:**

1842 Carpentry I	1842 (2024-25) - First Semester
1843 Carpentry II	1843 (2024-25) – Second Semester
1844 Carpentry III	1844 (2025-26) - First Semester
1845 Carpentry IV	1845 (2025-26) – Second Semester

### **Elective Courses:**

1828 Building and Construction Applications	1828 (2024-25)
1820 Applications in Commercial Construction	1820 (2024-25)
1824 Framing Practices and Applications	1824 (2025-26)
1822 Blueprint Reading For Construction	1822 (2025-26)

**Program of Studies Description:** The Carpentry Program of Studies focuses on building a knowledge base and technical skills in all aspects of the carpentry industry. Learners are exposed to a broad range of construction careers and foundation knowledge including basic safety; plan reading; use of tools and equipment; basic rigging; and how to employ positive work ethics in their careers. Students have the opportunity to earn NCCER certification for each skill set mastered.

### **Course Descriptions:**

#### **Semester 1: Carpentry I      1 Credit      WVEIS Code: 1842**

This course introduces the student to the knowledge base and technical skills of the carpentry industry. Carpentry I begins with the NCCER Core curriculum which is a prerequisite to all Level I completions. The students first complete modules in Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Introduction to Construction Drawings; Basic Rigging; Basic Communication Skills; Basic Employability Skills; and Introduction to Materials Handling.

#### **Semester 2: Carpentry II      1 Credit      WVEIS Code: 1843**

Carpentry II continues to build student skill sets in areas such as Reading Plans and Elevations; Floor Systems, Wall and Ceiling Framing; Roof Framing; Introduction to Concrete, Reinforcing Materials, and Forms; Windows and Exterior Doors; Basic Stair Layout.

#### **Semester 3: Carpentry III      1 Credit      WVEIS Code: 1844**

Carpentry III continues to build student skill sets in areas of Commercial Drawings; Roofing Applications; Thermal and Moisture Protection; and Exterior Finishing. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers provide each student with real-world learning opportunities and instruction.

**Semester 4: Carpentry IV 1 Credit WVEIS Code: 1845**

Carpentry IV continues to build student skill sets in areas of Cold-Formed Steel Framing; Drywall Installation; Drywall Finishing; Doors and Door Hardware; Suspended Ceilings; Window, Door, Floor, and Ceiling Trim; Cabinet Installation; and Cabinet Fabrication.

**Electives 2024-25:**

**Building and Construction Applications 1 Credit WVEIS Code: 1828**

**Applications in Commercial Construction 1 Credit WVEIS Code: 1820**

**Elective 2025-26:**

**Framing Practices and Applications 1 Credit WVEIS Code 1824**

**Blueprint Reading for Construction 1 Credit WVEIS Code: 1822**

**Example Job Titles:** Carpenter, Leadman, Framers, Installer, Roofer, Contractor, Entrepreneur, Real Estate Developer

**Related College Programs:** Construction Management, Construction Engineering & Management, Civil Engineering, Occupational Safety, Architecture and Environmental Design

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## Program of Studies: AR1760 Electrical Technician

***First and Second Year Students are both scheduled together in the AM and PM.***

### **Courses:**

1756 Electrical Trades I	1756 (2024-25) - First Semester
1757 Electrical Trades II	1759 (2024-25) – Second Semester
1758 Electrical Trades III	1758 (2025-26) - First Semester
1759 Electrical Trades IV	1759 (2025-26) – Second Semester

### **Electives:**

1769 Residential Wiring	1769 (2024-25) – First Semester
1767 National Electrical Code	1767 (2024-25) – Second Semester
1762 Blueprint Reading	1762 (2025-26) – First Semester
1771 Rotating Devices & Control Circuitry	1771 (2025-26) –Second Semester

**Students must be enrolled in a different elective every semester to meet the requirements to take the Journeyman Electrician Test.**

**Program of Studies Description:** The Electrical Technician Program of Studies focuses on building a knowledge base and technical skills in all aspects of the Electrical Trades industry. Students have the opportunity to earn NCCER certification for each skill set mastered and are exposed to skills that develop positive work ethics. ***Students wishing to attend the Electrical Technology Program should not be color blind, and should have the physical stamina for heavy lifting, bending, and working overhead.***

### **Course Descriptions:**

#### **Semester 1: Electrical Trades I      1 Credit      WVEIS Code: 1756**

This course introduces the student to the knowledge base and technical skills of the Electrical Trades industry. Electrical Trades I begins with the NCCER Core curriculum which is a prerequisite to all Level I completions. The students first complete modules in Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Introduction to Construction Drawings; Basic Rigging; Basic Communication Skills; Basic Employability Skills; and Introduction to Materials Handling. Students then begin developing skill sets related to the fundamentals of Electricity such as Orientation to the Electrical Trade; and Electrical Safety.

#### **Semester 2: Electrical Trades II      1 Credit      WVEIS Code: 1757**

Electrical Trades II continues to build student skill sets in areas such as Introduction to Electrical Circuits; Electrical Theory; Introduction to the *National Electrical Code®*; Device Boxes; Hand Bending; Raceways and Fittings; Conductors and Cables; Basic Electrical Construction Drawings; Residential Electrical Services; and Electrical Test Equipment.

#### **Semester 3: Electrical Trades III      1 Credit      WVEIS Code: 1758**

Electrical Trades III continues to build student skill sets in areas of Alternating Current; Motors: Theory and Application; Electric Lighting; and Conduit Bending.

**Semester 4: Electrical Trades IV    1 Credit    WVEIS Code: 1759**

Electrical Trades IV continues to build student skill sets in areas of Pull and Junction Boxes; Conductor Installations; Cable Tray; Conductor Terminations and Splices; Grounding and Bonding; Circuit Breakers and Fuses; and Control Systems and Fundamental Concepts.

**Electives 2024-25**

**Residential Wiring                    1 Credit                    WVEIS Code: 1769**

**National Electrical Code            1 Credit                    WVEIS Code: 1767**

**Electives 2025-26**

**Blueprint Reading                    1 Credit                    WVEIS Code: 1762**

**Rotating Devices and Control Circuitry    1 Credit                    WVEIS Code: 1771**

**Example Job Titles:** Electrician Apprentice, Electrician Journeyman, Electrician Master, Electrical Maintenance Technician, Lineman, Industrial Electrician  
Installation Technician, Electrical Engineer

**Related College Programs:** Electromechanical Technology, Electrical Engineering, Mechanical Engineering Technology, Electrical Distribution Technology

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## **Program of Studies: AR1910 Masonry**

**Program of Studies Description:** Masons are some of the highest paid workers in the construction industry. The demand for masons is projected to grow by 34% by the year 2022. Skilled masons can work anywhere in the world. The Masonry Program of Studies focuses on building a knowledge base and technical skills in all aspects of the Masonry industry. Students have the opportunity to earn NCCER certification for each skill set mastered and are exposed to skills that develop positive work ethics. Students in this class gain practical experience working on several projects, including jobs for the school and the community.

***First year students should schedule for the PM session and second year students should schedule for the AM session.***

### **Course Descriptions:**

#### **Semester 1: Masonry I            1 Credit            WVEIS Code: 1846**

This course introduces the student to the knowledge base and technical skills of the Masonry industry. Masonry I begins with the NCCER Core curriculum which is a prerequisite to all Level I completions. The students first complete modules in Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Introduction to Construction Drawings; Basic Rigging; Basic Communication Skills; Basic Employability Skills; and Introduction to Materials Handling. Students then begin developing skill sets related to the fundamentals of Masonry such as Introduction to Masonry; and Masonry Tools and Equipment.

#### **Semester 2: Masonry II            1 Credit            WVEIS Code: 1847**

Masonry II continues to build student skill sets in areas such as Measurements, Drawings, and Specifications; Mortar; and Masonry Units and Installation Techniques.

#### **Semester 3: Masonry III            1 Credit            WVEIS Code: 1848**

Masonry III continues to build student skill sets in areas of Residential Plans and Drawing Interpretation; Residential Masonry; Grout and Other Reinforcement; and Metal Work in Masonry.

#### **Semester 4: Masonry IV            1 Credit            WVEIS Code: 1849**

Masonry IV continues to build student skill sets in areas of Advanced Laying Techniques; Construction Techniques and Moisture Control; and Construction Inspection and Quality Control.

### **First Year Electives:**

**Bricklaying Applications            1 Credit            WVEIS Code: 1914**

**Decorative Masonry Work            1 Credit            WVEIS Code: 1916**

### **Second Year Elective:**

**Foundations and Footings            1 Credit            WVEIS Code: 1917**

**Concrete Finishing            1 Credit            WVEIS Code: 1821**

**Example Job Titles:** Apprentice, Bricklayer, Stonemason, Concrete Finisher, Tile Setter, Plasterer, Foreman, Project Manager, Structural Engineer

**Related College Programs:** Construction Management, Construction Engineering & Management, Civil Engineering, Occupational Safety, Architecture and Environmental Design

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## Education and Training Cluster

**Cluster Description:** Activities in this cluster prepare students for careers in pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care, and consumer services.

### **Program of Studies: ED1320 Early Childhood Classroom Teacher Assistant**

**Program of Studies Description:** This course is designed for students who want to pursue postsecondary training in early childhood education. Students learn childhood physical development, social-emotional development, language development, learning through play, developmental theory, and legal and ethical situations that may arise between caregiver and parent, caregiver and child, or caregiver and coworkers. Students will work with the children in the on-site day care. The ECE Program of Studies focuses on the (CDA) and/or AAFCS Pre-PAC Certification in Early Childhood Education.

***Dual Credit and/or articulation agreements will be available to students who successfully complete this course.***

***First year students should schedule for the PM session and second year students should schedule for the AM session.***

### **Course Descriptions:**

#### **Semester 1: Childhood Development                      1 Credit                      WVEIS Code: 1321**

This course is designed to focus on the various physical, cognitive, social, emotional, and moral development, environments and social institutions, family life, demographics, and culture influencing human growth and development. This course also provides information and activities for guiding behavior and meeting the needs of special age groups. This course includes organizational strategies and systems and the use of appropriate resources and assessments to advance learning in a variety of organizational structures. Observation in an approved school setting is a part of this course. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real-world learning opportunities and instruction. Students are encouraged to become active members of the Educators Rising Career Technical Student Organization. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

#### **Semester 2: Special Needs Inclusion                      1 Credit                      WVEIS Code: 1322**

This course is designed to focus on understanding how to facilitate activities that will promote learning within inclusive early childhood classrooms. The course provides information and activities on the IEP Process, modifications, and accommodations for students with disabilities, school readiness, confidentiality, and family communications. Observation in an approved school setting is a part of this course. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real-world learning opportunities and instruction. Students are encouraged to become active members of the Educators Rising Career Technical Student Organization. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

#### **Semester 3: Early Learning: Language and Literacy                      1 Credit WVEIS Code: 1323**

This course is designed to focus on understanding how to facilitate developmentally appropriate activities that will promote an understanding of language and literacy learning for early childhood students in their classes. The course provides information and activities on language development, read aloud and storytelling, phonological awareness, and creating a functional print rich

environment. Extensive observation and actual classroom teaching experience in an approved school setting is a part of this course. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real-world learning opportunities and instruction. Students are encouraged to become active members of the Educators Rising Career Technical Student Organization. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

**Semester 4: Early Learning: Numeracy 1 Credit WVEIS Code: 1324**

This course is designed to focus on understanding how to facilitate developmentally appropriate activities that will promote mathematical understandings for early childhood students in their classes. The course provides information and activities on counting and cardinality, shapes and space, and mathematical operations. This course also provides information on how to integrate mathematical habits of mind. Extensive observation and actual classroom teaching experience in an approved school setting is a part of this course. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real-world learning opportunities and instruction. Students are encouraged to become active members of the Educators Rising Career Technical Student Organization. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

**First Year Electives:**

**Human Development 1 Credit WVEIS Code: 0904**

**Work Based Integration and Transition 1 Credit WVEIS Code: 0520**

**Second Year Electives:**

**Learning for Independence Family & Employment 1 Credit WVEIS Code: 0929**

**Fundamentals of Human Services 1 Credit WVEIS Code: 0928**

**Example Job Titles:** Teacher, Child Care Worker, Licensing Specialist, Teacher Aide, Social Worker, Child Advocate, Interventionist, Speech and Language Pathologist, Special Needs Teacher, Curriculum Developer, Children's Entertainment.

**Related College Programs:** Occupational Development, Elementary/Early Childhood Education, Psychology, Social Work

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**



## Health Science Cluster

**Cluster Description:** Activities in this cluster prepare students for careers health care related services: diagnostic services, health informatics, support services, veterinary services and biotechnology research and development.

### **Program of Studies: HE0723 Therapeutic Services**

**Program of Studies Description:** The Therapeutic Services program allows the students to experience healthcare through exploring careers and being fully emerged into the world of healthcare. Students will learn Measuring/Assessing and Recording Vital Signs, Nursing Assistant Skills, First Aid, CPR, Medical Terminology, Patient Care such as bathing, grooming, and transporting. Students experience what it's like to work as a unit, make policy, use critical thinking to discuss ethical or medical scenarios, and educate the community around you. This course also prepares students who eventually want to enter into veterinary care.

**\*NOTE: A minimum course completion score of 80% is required to progress to the next course.**

### **Course Descriptions:**

#### **Semester 1: Foundations of Health Science                      1 Credit                      WVEIS Code: 0711**

This course is designed to allow instructional content to focus on basic medical terminology, growth and development, nutrition, health maintenance practices and health care delivery systems. It is designed to provide the student with knowledge and technical skills required for infection control and the prevention of disease transmission, CPR and First Aid. Students are provided with opportunity to acquire certificate on in these areas.

#### **Semester 2: Advanced Principles of Health Science                      1 Credit                      WVEIS Code: 0715**

Instructional content focuses on health care safety, environmental safety processes and procedures, ethical and legal responsibilities and mathematical computations. Medical terminology and the reinforcement, expansion and enhancement of biology content specific to diseases and disorders are an integral part of the course. Instruction incorporates project- and problem-based health care practices and procedures to demonstrate the importance of these skills. Students will develop basic technical skills required for all health care specialties including patient privacy, communication, teamwork and occupational safety and be provided with opportunities to obtain certifications in HIPPA/Data Privacy and health care safety.

#### **Semester 3: Clinical Specialty I                      1 Credit                      WVEIS Code: 0789**

This course is designed to allow the student to choose a career work-based experience from the following specializations: Select 1: Home Health Aide (A) Nursing Assistant (B) Certified Patient Care Technician (C) ECG Certified Technician (D) Health Unit Coordinator (E) Physical Therapy Aide(F) Veterinary Science Aide.

Upon successful completion of the prerequisite courses in the Health Science Education Program of Studies, students are provided the opportunity in Clinical Specialty to participate in a work-based clinical experience. Students choose a health career specialty for in-depth study and must complete a minimum of 25-55 hours in an applicable clinical rotation. Instruction is guided by career-specific content skill sets that must be mastered before students are eligible to attain established credentials and/or industry validation. Within this course, students focus upon leadership, employability skills and career development, and apply health care information technology and technical skills.

Instruction incorporates project- and problem-based healthcare practices and procedures to demonstrate the criticality of these skills. Due to health care industry standards, exemplary attendance is mandatory.

**Semester 4: Clinical Specialty II      1 Credit      WVEIS Code: 0790**

This course is designed to allow the student to choose a career work-based experience from the following specializations: Select 1: Patient Care Technician (G) Veterinary Aide (H) Health Unit Coordinator (M) Family Caregiver.

Upon successful completion of the prerequisite course, Clinical Specialty I, students are provided the opportunity in Clinical Specialty II to participate in a work-based clinical experience. Students choose a health career specialty for in-depth study and must complete a minimum of 25-55 hours in an applicable clinical rotation. Instruction is guided by career-specific content standards and skill sets that must be mastered before students are eligible to attain established credentials and/or industry validation. Within this course, students focus upon leadership, employability skills and career development, and apply health care information technology and technical skills. Instruction incorporates project- and problem-based health care practices and procedures to demonstrate the criticality of these skills. Due to health care industry standards, exemplary attendance is mandatory.

**First Year Electives:**

**Medical Terminology                      1 Credit    WVEIS Code: 0721**  
**Nutrition and Wellness                    1 Credit    WVEIS Code: 0739**

**Second Year Elective:**

**Health Science Clinical Experience 1 Credit    WVEIS Code: 0730**  
**Employment in Health Occupations 1 Credit    WVEIS Code 0710**

**Example Job Titles:** Nurse, Doctor, Therapist, Counselor, Veterinarian, Surgical Technician, Dietician/Nutritionist, Physical Therapist, Insurance Coder, Laboratory Technician

**Related College Programs:** Veterinary Science, Nursing, Pre-Medicine, Internal Medicine, Radiology, Physician Assistant, Resident Nursing Assistant, Surgical Technology, Physical Therapy, Sports Medicine, Psychology

**Successful completion of 0711, 0715 and either 0789 or 0790 fulfills the third science credit graduation requirement.**

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## Hospitality & Tourism Cluster

**Cluster Description:** Activities in this cluster prepare students for careers that relate to families and human needs such as restaurant and food/beverage services, lodging, travel and tourism, recreation, amusement and attractions.

**Program of Studies:** HO1010 ProStart Restaurant Management

**First and Second Year Students are both scheduled together in the AM and PM.**

### **Courses:**

1013 Restaurant and Culinary Foundations	1013 (2024-25) - First Semester
1014 Restaurant Management Essentials	1014 (2024-25) – Second Sem
1019 Advanced Principles in Food Production	1019 (2025-26) - First Semester
1020 The Restaurant Professional	1020 (2025-26) – Second Sem

### **Elective Courses:**

1015 Hospitality Products and Service	1015 (2024-25) – First Semester
0520 Work Based Integration and Transition	0520 (2024-25) – Second Sem
1016 Food Service Management Practice	1016 (2025-26) – First Semester
1018 Baking and Pastry Applications	1018 (2025-26) – Second Sem

**Program of Studies Description:** Students in this program will learn to create, plan, budget, cost, and execute menus, caterings, special events and run the class like a functioning professional kitchen, restaurant, cafeteria or food service establishment. Students will master cutting and chopping techniques, cooking and baking fundamentals, menu preparation, budgeting and costing, and event planning. ProStart is a restaurant industry-driven curriculum developed by the National Restaurant Association Educational Foundation.

### **Course Descriptions:**

**Semester 1: Restaurant and Culinary Foundations**      **1 Credit**      **WVEIS Code: 1013**

This course focuses on the basic preparation and service of safe food, basic introduction to industry safety standards, basic introduction to restaurant equipment, kitchen essentials in knife skills, stocks and sauces, and communication concepts in the restaurant industry.

**Semester 2: Restaurant Management Essentials**      **1 Credit**      **WVEIS Code: 1014**

This course is designed to focus management essentials in the restaurant industry, guest service, food production, and career exploration and pursuit. Students are encouraged to become active members of SkillsUSA, which is an integral component of the program and provides curricular opportunities that enhance student achievement. Teachers utilize relevant SkillsUSA activities to support experiential learning.

**Semester 3: Advanced Principles in Food Production.**      **1 Credit**      **WVEIS Code: 1019**

This course is designed to examine advanced food production, nutrition, and cost control. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

**Semester 4: The Restaurant Professional**      **1 Credit**      **WVEIS Code: 1020**

This course is designed to provide content related global cuisine, sustainability, desserts and baked goods, and marketing. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

**Electives 2024-25:**

**Hospitality Products and Service 1 Credit WVEIS Code: 1015**

**Work Based Integration and Transition 1 Credit WVEIS Code: 0520**

**Electives 2025-26:**

**Food Service Management Practice 1 Credit WVEIS Code: 1016**

**Baking and Pastry Application 1 Credit WVEIS Code: 1018**

**Example Job Titles:** Research Chef, Executive Chef, Food & Beverage Director, Beverage Manager, Dietitian, Executive Steward, Catering Manager, Food Stylist, Food Photographer, Banquet Manager

**Related College Programs:** Culinary Arts, Baking and Pastry, Food Service Management, Food & Beverage Management, Hospitality and Tourism Management

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## Information Technology Cluster

**Cluster Description:** Activities in this cluster prepare students interested in informational technology (IT) in careers related to the design, development, support & management of hardware, software, multimedia & systems integration services.

### **Program of Studies: IT1640 Cyber Security/Cisco Networking Academies**

The Cisco Networking Academies Program of Studies provides general networking theory, practical experience, and opportunities for career exploration and soft-skills development. The curriculum teaches networking based on application, covering networking concepts within the context of network environments students may encounter in their daily lives—from small office and home office (SOHO) networking to more complex enterprise and theoretical networking models later in the curriculum. CCNA Discovery is designed for students with basic PC skills and foundational math and problem-solving skills. CCNA Discovery helps prepare students for entry-level career opportunities, continuing education, and globally-recognized Cisco CCENT and CCNA certifications.

***Dual Credit and/or articulation agreements will be available to students who successfully complete this course.***

***First year students will schedule to attend the AM session and second year students will schedule to attend the PM session.***

### **Course Descriptions:**

#### **Semester 1: CCENT 1                      1 Credit                      WVEIS Code: 1654**

This course provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in the home and small business environment. Areas of study include computers and applications, operating systems, connecting to a network, connecting to the Internet, network addressing, network services, wireless technologies, basic securities, and troubleshooting. Students demonstrate knowledge and technical expertise necessary to plan and implement small networks across a range of applications. Emphasis is placed on personal and professional ethics and students explore a variety of career opportunities.

#### **Semester 2: CCENT 2                      1 Credit                      WVEIS Code: 1658**

This course provides an introduction to routing and remote access, addressing, and network services. Areas of study include the Internet and its uses, ISP support, planning a network upgrade, planning an addressing structure, configuring network devices, routing, ISP services, and ISP responsibilities. Students demonstrate knowledge and technical expertise necessary to provide customer support to users of small-to-medium-sized networks and across a range of applications.

#### **Semester 3: CCENT 3                      1 Credit                      WVEIS Code: 1659**

This course provides more advanced configurations of switching and routing protocols, configuration of access control lists, and basic implementation of WAN links. Areas of study include networking in the enterprise, infrastructure, switching, addressing, routing with a distance vector protocol, routing with a link-state protocol, implementing enterprise WAN links, filtering traffic by using access control lists, and troubleshooting. Students demonstrate knowledge and technical expertise in using protocols to maximize enterprise LAN and WAN performance.

#### **Semester 4: CCENT 4                      1 Credit                      WVEIS Code: 1660**

This course provides an introduction to collecting customer requirements, translating those requirements into equipment and protocol needs, and creating a network topology which addresses the needs of the customer. Areas of study include network design concepts, gathering network requirements, characterizing the existing network, identifying application impacts on network

designs, creating the network design, using IP addressing in the network design, prototyping campus networks, prototyping the WAN, and preparing the proposal.

**First Year Electives:**

**Computer Hardware** 1 Credit WVEIS Code: 1692  
**Networking** 1 Credit WVEIS Code: 1694 \

**Second Year Electives:**

**Security+** 1 Credit WVEIS Code: 1696 \  
**Fundamentals of Computer Systems** 1 Credit WVEIS Code: 1705 \

**Example Job Titles:** Data Center Support Specialist, Network Administrator, Network Systems Engineer, Network Service Technician, Database Administrator, Desktop Support Manager, Chief Information Officer, Computer and Information Systems Manager, Customer Support Specialist

**Related College Programs**

Cyber Security, Information Technology, Computer Information Technology, Information Security Major, Computer Engineering Comprehensive

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## **Program of Studies: IT1442 Coding, App and Game Design**

***First and Second Year Students are both scheduled together in the AM and PM.***

**Program of Studies Description:** Students with basic PC skills and foundational math and problem solving skills who plan on pursuing postsecondary studies in the computer and information technology fields will explore various technologies used to develop, design and build websites, app and games.

### **Course Descriptions:**

#### **Semester 1: Digital Imaging and Multimedia I 1 Credit WVEIS Code: 1431**

This course is designed to develop student knowledge and skills in such areas as producing images, operating a digital camera, using imaging software, using drawing software, creating simple animations and manipulating video images. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

#### **Semester 2: Coding, App and Game Design I 1 Credit WVEIS Code: 1456**

This course is designed to develop student knowledge and skills in programming and designing game and app ideas paper prototyping and other planning techniques. Using various design platforms, programming languages, drawing and animation techniques, students create an interactive demonstration of the games and apps.

#### **Semester 3: Digital Imaging and Multimedia II 1 Credit WVEIS Code: 1432**

This course is designed to further develop student knowledge and skills in such areas as producing images, operating a digital camera, using imaging software, using drawing software, creating simple animations and manipulating video images. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts

#### **Semester 4: Coding, App and Game Design II. 1 Credit WVEIS Code: 1457**

This course is designed to further develop student knowledge and skills in developing apps and games using more advanced coding and graphic design including both 2D and 3D elements. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

### **First Year Electives:**

**Foundations of Programming 1 Credit WVEIS Code: 2875**

**Computer Science/Programming 1 Credit WVEIS Code: 2831**

### **Second Year Electives:**

**Basic Programming 1 Credit WVEIS Code: 2816**

**Computer Technology 1 Credit WVEIS Code: 2841**

**Example Job Titles:** Web Designer, Web Developer, Application Development, Game Design, Game Development, IT Sales and Marketing, Project Management, Flash Developer, Javascript Programmer, Java Programmer

**Related College Programs:** Game Software Development, Game and Simulation Programming, Graphic Design, Audio Developer

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

**Program of Studies: IT2210 Informatics - Advanced Information Technology (SREB Advanced Careers Program)**

**Program of Studies Description:** Informatics leverages technology, data, and communication, instilling a new generation with the knowledge, imagination and flexibility to tackle complex issues in a digital world. There are a plethora of jobs available for professionals who have the ability to analyze information and use technology to communicate data in safe and effective ways, and students completing the Informatics program will be prepared to fill those positions. This program provides students with the knowledge and hands-on experiences to be successful in the new global workforce.

***Students will receive weighted Credit for grades earned in these courses. Dual Credit and/or articulation agreements will be available to students who successfully complete this course.***

***First-year students will schedule to attend the AM session and second year students will schedule to attend the PM session.***

**It is strongly recommended that students have successfully completed honors mathematics and/or English prior to enrolling in this program.**

**Course Descriptions:**

**Semester 1: AC Informatics I**

**1 Credit (Weighted)**

**WVEIS Code: 1550**

This course is designed to develop student knowledge and skills and engage students who are curious about systems that acquire, store and communicate data for a variety of career fields and how it relates to their world. In this project-based course, students will learn how to work collaboratively in teams to problem solve, think critically, be creative and communicate with each other and business partners. Students will participate in real-world experiences such as computer forensics, global businesses, animation and identity theft. The content covered will include the following topics: methods used in computer forensics, online business collaboration, social media, and digital citizenship.

**Semester 2: AC Informatics II**

**1 Credit (Weighted)**

**WVEIS Code: 1551**

This course is designed to develop student knowledge and skills and engage students who are interested in working collaboratively in teams on real world challenges such as designing, implementing, and testing programming languages, mobile devices, gaming and digital simulations, instructional technologies, mobile applications, health informatics solutions and applications of GPS/GIS technologies. In this project-based course, students will demonstrate their learned knowledge and skills by presenting their new and innovative ideas, techniques and solutions to business and industry partners.

**Semester 3: AC Informatics III**

**1 Credit (Weighted)**

**WVEIS Code: 1552**

This course is designed to develop student knowledge and skills and engage students who are interested in more complex challenges that business and industry face. This project-based learning course is for the more advanced students. Students at this level take more responsibility for their own learning, problem-solving, and thinking outside of the box. Real-world challenges require higher levels of research, building and testing, analyzing and improving systems such as voice and video infrastructures, network security systems, programming, robotics, green technology, computer and networks forensics, and GIS.



**Semester 4: AC Informatics IV****1 Credit (Weighted)****WVEIS Code: 1553**

This course provides an introduction to collecting customer requirements, translating those requirements into equipment and protocol needs, and creating a network topology which addresses the needs of the customer. Areas of study include network design concepts, gathering network requirements, characterizing the existing network, identifying application impacts on network designs, creating the network design, using IP addressing in the network design, prototyping campus networks, prototyping the WAN, and preparing the proposal.

**First Year Electives:****Business Comp. Applications I 1 Credit WVEIS Code: 1411****Business Comp. Applications II 1 Credit WVEIS Code: 1413****Second Year Electives:****Security+ 1 Credit WVEIS Code: 1696****Fundamentals of Computer Systems 1 Credit WVEIS Code: 1705**

**Example Job Titles:** Certified Technology Manager, IT Technician, Certified Information Professional, Certified Data Management Professional

**Related College Programs:** Information Technology, Computer Information Technology, Network Engineering, Computer and Information Sciences Computer and Information Technology

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## Law, Public Safety, Corrections & Security Cluster

**Cluster Description:** Activities in this cluster prepare students for careers in planning, managing, and providing legal, public safety, protective services and home security, including professional and technical support services

**Program of Studies:** LA2200 Emergency and Firefighting Management Services

### Program of Studies Description:

The Emergency and Firefighting Management Services Program of Studies focuses on the knowledge and skills to be first responders to fires and other emergencies and to manage services within the field.

***First year students should schedule for the PM session and second year students should schedule for the AM session.***

### Course Descriptions:

**Semester 1: Fire Fighting I**                      **1 Credit**                      **WVEIS Code: 2203**

Students will learn basic fundamentals of firefighting. Students demonstrate: proper procedures used in responding to a structure fire; safety procedures, lifting and carrying of equipment; forcible entry; rescue; use of radio equipment; working in hazardous environments; fire attack; advancement of hose lines and ventilation; disabling utilities; set up of supply lines and fire apparatus; and hazardous materials awareness.

**Semester 2: Industrial Hazardous Materials**                      **1 Credit**                      **WVEIS Code: 2251**

Students will learn the fundamentals of industrial management and industrial hazardous materials.

**Semester 3: Fire Fighting II**                      **1 Credit**                      **WVEIS Code: 2205**

Students will learn proper procedures for incident response involving automobile rescue, extrication, and fires; the role of emergency medical care in fire service; and basic emergency medical care. Students will analyze emergency scenes to develop and execute emergency action plans; cover a fire scene and demonstrate proper procedure to preserve property and the chain of evidence when presented with evidence of criminal activity; analyze the role of the first responder to acts of terrorism; and analyze and demonstrate the role of fire service in fire prevention and education in the community.

**Semester 4: Industrial Hazardous Command**                      **1 Credit**                      **WVEIS Code: 2250**

Students will learn the basic incident command fundamentals of the National Incident Management Systems (NIMS) protocols in response to industrial fire protection and industrial manufacturing and petrochemical incidents.

### First Year Electives:

**Fire Science Technology**                      **1 Credit**                      **WVEIS Code: 2202**

**Auto Extrication**                      **1 Credit**                      **WVEIS Code: 2208**

### Second Year Electives:

**Driver/Pump Operator**                      **1 Credit**                      **WVEIS Code: 2209**

**Work Based Integration and Transition**                      **1 Credit**                      **WVEIS Code 0520**

**Example Job Titles:** Firefighter, EMT, Health Care Provider, Fire Officer, Fire Investigator, Paramedic, Safety Officer, Haz-Mat Specialist

**Related College Programs:** Fire Prevention and Safety Technology, Fire Science / Fire-fighting, Occupational Safety, Safety Management

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

**Program of Studies: LA1020 Law and Public Safety**

**Program of Studies Description:** The Law and Public Safety Program of Studies focuses on methods used by public safety leaders to protect a democratic society.

A strong academic background is recommended for students interested in applying for this program. Students will participate in debates over legal and ethical issues, become a member of a CSI team and investigate staged crime scenes, participate in mock trials and intern in a criminal justice related field, learn and practice proper arrest procedures, practice tactical communication, operate a police car and conduct traffic stops.

***First year students will attend in the AM session and second year students will be scheduled in the PM session.***

**Course Descriptions:**

**Semester 1: Foundations of Public Safety Leadership      1 Credit      WVEIS Code: 1225**

This course is designed to present foundational principles of Public Safety Leadership including: how public safety leaders protect a democratic society; public policy issues such as crime and justice; history, organization and functions of components of public safety including the criminal justice system; and the issues and challenges relating to the administration of justice in a culturally diverse society. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

**Semester 2: Ethical Issues of Public Safety Leadership      1 Credit      WVEIS Code: 1226**

This course is designed to examine the philosophical issues and applications of the objectives and processes of Public Safety Leadership including: Constitutional limitations; accountability; civil liability; criminal investigation; criminal procedure; and forensics. By examining societal and psychological stressors that contribute to behavior, students will examine a variety of serious offenses and apply concepts of profiling, behavioral analysis and threat assessment within an ethical paradigm. Students will analyze and critique the system of dealing with convicted persons and the long term implications of corrections policy.

**Semester 3: Practical Applications Public Safety      1 Credit      WVEIS Code: 1039**

This course is designed to give students the opportunity to connect theory and practice by interacting with Public Safety professionals. Students will study various requirements for employability in the Public Safety (Criminal Justice) field including ethics, teamwork, and professionalism. Students may participate in activities associated with Public Safety agencies (such as county and local law enforcement, county judicial offices, correctional facilities, training academies, social services, etc.) for hands-on or work-based experiences. Preparation includes construction of a portfolio that can be utilized in obtaining employment upon completion of the student's program.

**Semester 4: Seminar in Courts and Legal System      1 Credit      WVEIS Code: 1031**

This course is designed to provide students with fundamental principles of the court system. Students will learn about the various levels of the judicial system, criminal law procedures, police concepts and skills, court processes and procedures, and legal case management. Students are encouraged to become active members of the student organization SkillsUSA.

**First Year Electives:**

**Strategic Security and Protection      1 Credit      WVEIS Code: 1037**

**Seminar in Law Enforcement      1 Credit      WVEIS Code: 1035**

**Second Year Electives:**

**Principles of Investigation    1 Credit    WVEIS Code 1032**

**Work Based Integration & Transition    1 Credit    WVEIS Code: 0520**

**Example Job Titles:** Police Officer, State Trooper, Game Warden, Detective, Crime Scene Investigator, FBI Special Agent, DEA Agent, Secret Service Special Agent, Border Patrol Agent, Correctional Officer

**Related College Programs:** Criminology, Criminal Justice, Administration of Justice, Criminal Justice, General Law

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## Manufacturing Cluster

**Cluster Description:** Activities in this cluster prepare students for careers in engineering through planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and the process of engineering.

**Program of Studies:** MA 2235 Applied Engineering – AC Integrated Production Technologies

*Students will receive weighted Credit for grades earned in the four core courses. Dual Credit and/or articulation agreements will be available to students who successfully complete this course.*

*Dual Credit and/or articulation agreements will be available to students who successfully complete this course.*

**It is strongly recommended that students have successfully completed honors mathematics and/or English prior to enrolling in this program.**

***First and Second Year Students are both scheduled together in the AM and PM.***

**Program of Studies Description:** The Applied Engineering – AC Integrated Production Technology/Robotics Program introduces students to a career in engineering. A strong academic background is recommended for students interested in applying for this program. Students are provided practical experiences in a variety of skills for continued learning in mechanical, robotic, electro mechanical, and computer aided machine controlled operations. Students will be actively engaged in hands-on engineering operations as well as classroom activities that utilize critical thinking skills.

### **Course Descriptions:**

#### **Semester 1: Advanced Manufacturing I 1 Credit WVEIS Code: 1575**

This course will engage students in the use of modern technologies in the design and improvement of products. Students will use three-dimensional CAD software in the creation and analysis process. Students will document designs using standards set by industry for design documentation. Students will implement methods of green production and just-in-time component supply which allow for the lowest cost and highest quality products. Students will design and troubleshoot data acquisition, programmable logic control, process monitoring, automation and robotic systems. Students will incorporate sensing and vision systems, utilizing cameras and sensors to control automated systems.

#### **Semester 2: Advanced Manufacturing II 1 Credit WVEIS Code: 1576**

In this course, students will apply the technologies that are found in modern clean, production environments. Students study effective and energy efficient control of pumping, conveyors, piping, pneumatic and hydraulic control systems. Students apply total quality management to production design to assure quality. Students also focus on properties of materials and material testing, creating documentation to support designs, examining properties and justifying material selections based on properties. Students learn that old products become the new raw materials for new products.

#### **Semester 3: Advanced Manufacturing III 1 Credit WVEIS Code: 1577**

Students will design cost-effective work cells incorporating automation and robotics to improve quality of final products. The advanced production in this course depends on the use and coordination of information, automation, network systems, vision and sensing systems. Students will

design and create mechatronic systems and automated tooling to accomplish these advanced tasks. Students produce authentic documentation about their cyber-mechanical systems and the integration with data to control and monitor processes.

**Semester 4: Advanced Manufacturing IV 1 Credit WVEIS Code: 1578**

Students will create plant designs to process and automatically assemble materials into new products. Students follow the process of developing and producing a new product from prototype to final product. They will accomplish this by creating a production flow plan that allows for the mass production of the product. Students will analyze and evaluate all aspects of the design and production processes with an emphasis on clean, lean and green production. Students will utilize data acquisition, quality control processes and Six Sigma methodology to control production

**First Year Electives:**

REC I 1 Credit WVEIS Code: 1866  
FANUC I 1 Credit WVEIS Code: 1889

**Second Year Electives:**

REC II 1 Credit WVEIS Code: 1867  
FAA Part 107 Ground School 1 Credit WVEIS Code: 1887

**Example Job Titles:** Mechanical Engineer, Electrical Engineer, Industrial Engineer, Civil Engineer, Aerospace Engineer, Chemical Engineer, Manufacturing Engineer, Computer Science Engineer, Electromechanical Engineer

**Related College Programs:** Engineering, Robotics, Electromechanical Technician, Mechatronics, Coding

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## Program of Studies: MA1980 Welding Technology

**First and Second Year Students are both scheduled together in the AM and PM.**

### Courses:

1862 Welding I	1862 (2024-25)- First Semester
1863 Welding II	1863 (2024-25) – Second Semester
1864 Welding III	1864 (2025-26) - First Semester
1865 Welding IV	1865 (2025-26) – Second Semester

### Elective Courses

1982 Ornamental Metalwork	1982 (2024-25) - First Semester
1909 Metal Trades Processes and Application	1909 (2024-25) - Second Semester
1983 Blueprint Reading and Metallurgy	1983 (2025-26) - First Semester
2146 Gas Piping	2146 (2025-26) - Second Semester

**Program of Studies Description:** The Welding Program of Studies focuses on building a knowledge base and technical skills in all aspects of the Welding industry. Students have the opportunity to earn both NCCER certification and the WV Welding Certification for each skill set mastered and are exposed to skills that develop positive work ethics.

### Course Descriptions:

#### **Semester I: Welding I                      1 Credit                      WVEIS Code: 1862**

This course is designed to introduce the student to the knowledge base and technical skills of the Welding industry. Welding I begins with the NCCER Core curriculum which is a prerequisite to all Level I completions. The students first complete modules in Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Introduction to Construction Drawings; Basic Rigging; Basic Communication Skills; Basic Employability Skills; and Introduction to Materials Handling. Students then begin developing skill sets in the fundamentals of Welding such as Welding Safety; Oxyfuel Cutting; and Plasma Arc Cutting.

#### **Semester 2: Welding II                      1 Credit                      WVEIS Code: 1863**

Welding II continues to build student skill sets in areas of Air Carbon Arc Cutting and Gouging; Base Metal Preparation; Weld Quality; SMAW Equipment and Setup; Shielded Metal Arc Electrodes; SMAW-Beads and Fillet Welds; Joint Fit Up and Alignment; SMAW-Groove Welds with Backing; and SMAW-Open V-Groove Welds.

#### **Semester 3: Welding III                      1 Credit                      WVEIS Code: 1864**

Welding III continues to build student skill sets in areas of Welding Symbols; Reading Welding Detail Drawings; Physical Characteristics and Mechanical Properties of Metals; Preheating and Post heating of Metals; GMAW and FCAW-Equipment and Filler Metals; and GMAW and FCAW- Plate.

#### **Semester 4: Welding IV                      1 Credit                      WVEIS Code: 1865**

Welding IV continues to build student skill sets in areas of GTAW-Equipment and Filler Metals; and GTAW-Plate. Students utilize problem- solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers provide each student with real-world learning opportunities and instruction.

### Electives 2024-25:

Ornamental Metalwork	1 Credit	WVEIS Code: 1982
Metal Trades Processes and Application	1 Credit	WVEIS Code: 1909



**Electives 2025-26:**

**Blueprint Reading & Metallurgy 1 Credit WVEIS Code: 1983**

**Gas Piping 1 Credit WVEIS Code: 2146**

**Example Job Titles:** Apprentice Welder, Commercial Welder, Journeyman Welder, Certified Pipe Welder, Nuclear Welder, Fabrication Welder, Pipefitter, Production Welder

**Related College Programs:** Welding Engineer, Welding Technology, Industrial Maintenance Technology

**Successful completion of 1982 fulfills the one art credit graduation requirement.**

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## Science, Technology, Engineering and Mathematics (STEM) Cluster

**Cluster Description:** Activities in this cluster prepare students interested in engineering fields by developing skills and knowledge base through the incorporation of science, technology, engineering, and mathematics in careers related to the design, development, support & management of manufacturing integration.

**Program of Studies:** ST2200 AC Aerospace Engineering (SREB Advanced Careers Program)

*First year students will attend in the AM session and second year students will be scheduled in the PM session.*

**Program of Studies Description:** The Aerospace Engineering programs of study is designed to prepare students for careers and further study in aerospace technologies and related industries. The program's course sequence will provide students with the opportunity to apply concepts and principles of atmospheric flight and space flight to authentic situations with an emphasis on propulsion systems, ballistic projectiles, airplane wing design, aerodynamic forces, pneumatic projectiles and quality management and enhance their knowledge of space through a series of projects that include in-depth research, concept application and prototype development.

*Students will receive weighted Credit for grades earned in these courses. Dual Credit and/or articulation agreements will be available to students who successfully complete this course.*

*For the first year of the program, students can be scheduled in either AM or PM.*

**It is strongly recommended that students have successfully completed honors mathematics and/or English prior to enrolling in this program.**

### Course Descriptions:

**Semester 1: AC Aerospace Engineering I      1 Credit (Weighted)      WVEIS Code: 1540**

This course is designed to prepare students for careers and further study in aerospace technologies and related industries. Students apply fundamental concepts and principles of atmospheric flight to authentic situations. Emphasis is placed on propulsion systems, ballistic projectiles, and airplane wing design.

**Semester 2: AC Aerospace Engineering II      1 Credit (Weighted)      WVEIS Code: 1541**

This course is designed to deepen students' preparation for careers and further study in aerospace technologies and related industries. Students apply advanced principles and theories of flight to authentic projects related to atmospheric and space flight. Emphasis is placed on pneumatic projectiles, aerodynamic forces, and quality management.

**Semester 3: AC Aerospace Engineering III      1 Credit (Weighted)      WVEIS Code: 1542**

This course allows students to further enhance their knowledge of space through a series of projects that include in-depth research, concept application, and prototype development. Students will begin to develop a capstone project, complete a prototype.

**Semester 4: AC Aerospace Engineering IV      1 Credit (Weighted)      WVEIS Code: 1543**

This course is designed to enhance students' knowledge of flight. Students will be engaged in projects that require extensive research, concept application and prototype development. The capstone project will be presented and defended before a select panel of reviewers.

**First Year Electives:**

**Aviation Fundamentals I 1 Credit WVEIS Code: 2012**

**Aviation Fundamentals I 1 Credit WVEIS Code: 2013**

**Second Year Electives:**

**FAA Part 107 Ground School 1 Credit WVEIS Code: 1887**

**FAA Part 107 Flight Operations 1 Credit WVEIS Code: 1888**

**Example Job Titles:** Aeronautical Engineer, Mechanical Engineer, Aircraft/Spacecraft Designer, Data Processing Manager, Military Aerospace Engineer, Inspector and Compliance Officer, Aeronautical Drafter, Aerospace Technician, Mission or Payload Specialist

**Related College Programs:** Aerospace Engineering, Mechanical Engineering, Physics, Mathematics, Space Studies

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## Transportation, Distribution, & Logistics Cluster

**Cluster Description:** Activities in this cluster prepare students for careers in planning, management and movement of people, materials, and goods by road, air, rail, and water as well as related professional and technical support services such as transportation infrastructure planning, management, logistics services, mobile equipment and facility maintenance.

### **Program of Studies: TR1620 Automotive Technology**

**Program of Studies Description:** The Automotive Technology Program of Studies focuses on building a knowledge base and technical skills in all aspects of the automotive industry. Students have the opportunity to acquire hours towards certification and be exposed to skills that develop positive work ethics.

*First year students should schedule for the AM session and second year students should schedule for the PM session.*

### **Course Descriptions:**

#### **Semester 1: Automotive Technology MLR-1 1 Credit WVEIS Code: 1631**

This course introduces the student to the knowledge base and technical skills as they relate to the field of Automotive Technology. In the Fundamentals of Automotive Technology class areas of study include career opportunities and practices, basic safety, tool and equipment, measuring tools and equipment, automotive specifications, electrical system basics, battery service, wheel and tire service, cooling and lubrication systems, and student organizations.

#### **Semester 2: Automotive Technology MLR-2 1 Credit WVEIS Code: 1623**

Basic Engine Concepts continues to build student skill sets in areas such as general engines, diagnosis of cylinder head and valve train, diagnosis and repair of engine block, and diagnosis and repair of lubrication and cooling systems. Students will also develop skills in diagnosing engine performance problems with handheld diagnostic computers, trouble Code charts and computer based programs.

#### **Semester 3: Automotive Technology MLR-3 1 Credit WVEIS Code: 1625**

Brake Systems continues to build student skill sets in areas such as diagnosis and repair of hydraulics systems, diagnosis and repair of drum brakes, diagnosis and repair of disc brakes, power assist systems, and antilock brake systems. Students will comply with personal and environmental safety practices associated with proper ventilation, handling, storage, and disposal of brake components.

#### **Semester 4: Automotive Technology MLR-4 1 Credit WVEIS Code: 1637**

Suspension and Steering continues to build student skill sets in areas such as diagnosis and repair of steering systems, diagnosis and repair of front suspension systems, diagnosis and repair of rear suspension systems, miscellaneous suspension and steering systems, and diagnosis and adjust wheel alignment.

### **First Year Electives:**

**Automotive Technology AST-1 1 Credit WVEIS Code: 1629**

**Automotive Technology AST-2 1 Credit WVEIS Code: 1633**

**Second Year Electives:**

**Automotive Technology AST-3 1 Credit WVEIS Code: 1635**

**Automotive Technology AST-4 1 Credit WVEIS Code: 1627**

**Example Job Titles:** ASE Master Automobile Technician, Service Writer, Shop Foreman, Service Manager, Parts Specialist, Parts Manager, Shop Owner

**Related College Programs:** Mechanical Engineering and Automotive Design, Automotive Technician, Analysis & Repair, Applied Technologies, Auto Technology

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

## **Program of Studies: TR1740 Diesel Equipment Technology**

**Program of Studies Description:** The Diesel Equipment Technology Program of Studies focuses on building a knowledge base and technical skills in all aspects of the Diesel Equipment Technology industry. Students have the opportunity to acquire hours towards industry ASE/NATEF certification and be exposed to skills that develop positive work ethics.

***First year students should schedule for the AM session and second year students should schedule for the PM session.***

### **Course Descriptions:**

#### **Semester 1: Fundamentals of Diesel Equipment Technology 1 Credit      WVEIS Code: 1751**

This course introduces the student to the knowledge base and technical skills as they relate to the field of Fundamentals of Diesel Equipment Technology. In the Fundamentals of Diesel Equipment Technology class areas of study include personal and shop safety, career opportunities in the diesel technology industry, the proper use of hand and power tools, basic oxyacetylene cutting, electric welding, and basic shop etiquette. Safety instruction is integrated into all activities.

#### **Semester 2: Diesel Engine Components      1 Credit      WVEIS Code: 1741**

This course introduces the student to the knowledge base and technical skills as they relate to the field of Diesel Equipment Technology. In the Diesel Engine Components class, areas of study include basic engine components, primary functions, service, inspection, and assembly procedures. Safety instruction is integrated into all activities.

#### **Semester 3: Diesel Support Systems      1 Credit      WVEIS Code: 1747**

This course introduces the student to the knowledge base and technical skills as they relate to Diesel Support Systems. In the Diesel Support Systems class areas of study include lubrication and cooling systems, air intake and exhaust systems, starting and charging systems, engine retarders, fuel systems, and governor operation. Safety instruction is integrated into all activities.

#### **Semester 4: Electronic Engine Controls      1 Credit      WVEIS Code: 1744**

This introduces the student to the knowledge base and technical skills for concepts in diesel electronic engine controls. Areas of study include electronic control modules, electronic fuel injection, and electronic control test equipment. Emphasis is placed on career exploration, job seeking skills, and personal and professional ethics. Safety instruction is integrated into all activities.

### **First Year Electives:**

**Diesel Preventive Maintenance and Inspection 1 Credit      WVEIS Code: 1745**

**Diesel Electrical System      1 Credit      WVEIS Code: 1742**

### **Second Year Electives:**

**Diesel Truck Chassis Concepts 1 Credit      WVEIS Code: 1749**

**Diesel Engine Tune-ups and Troubleshooting      1 Credit      WVEIS Code: 1743**

**Example Job Titles:** Mechanic, Diesel Mechanic, Bus Mechanic, General Repair Mechanic, Diesel Technician, Truck Mechanic, Service Technician, Preventive Maintenance Technician

**Related College Programs:** Diesel Technology, Automotive Technology, Applied Technologies, Aviation Maintenance Technology

**Students who complete this program and score 70% on the NOCTI assessment receive a College Credit Recommendation for local, state and national postsecondary institutions.**

*Berkeley County Schools*

**Statement of Non-Discrimination**

No person shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination in any educational program, activity, or employment available in any school on the basis of race, color, creed, ancestry, sex, religion, creed, political belief, age, national origin, linguistic and language differences, sexual orientation, gender, gender identity, gender expression, socioeconomic status, height, weight, marital or familial status, disability or veteran status.

The following persons have been designated to handle inquiries and regarding the application of nondiscrimination policies:

*Title IX/Gender/Sexual harassment*

*Title IX Coordinator*

Elice Gregory, Director of Student Support Services  
1453 Winchester Avenue  
Martinsburg, West Virginia 25405  
(304) 267-3500  
[emgregor@k12.wv.us](mailto:emgregor@k12.wv.us)

*Employees/Employment*

Dr. Justin Schooley, Assistant Superintendent of Human Resources  
1453 Winchester Avenue  
Martinsburg, West Virginia 25405  
(304) 267-3500  
[jschoole@k12.wv.us](mailto:jschoole@k12.wv.us)

*Students/Educational Programs*

Dr. Jessica Alfonso, Assistant Superintendent of Equity and Inclusion  
1453 Winchester Avenue  
Martinsburg, West Virginia 25405  
(304) 267-3500  
[jalfonso@k12.wv.us](mailto:jalfonso@k12.wv.us)

*Special Education*

David Dilly, Assistant Superintendent of Special Education  
401 South Queen Street  
Martinsburg, West Virginia 25401  
(304) 264-5055  
[ddilly@k12.wv.us](mailto:ddilly@k12.wv.us)