

Wyoming County Schools



Program of Study

Grades 9 - 12



Revised 2-20-20

Wyoming County Schools

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Grades 9-12

Student Handbook

The basis of this Student Handbook is derived from the requirements of West Virginia State Board of Education Policy 2510. Revisions to this handbook are dictated by revisions to Policy 2510. The complete policy can be accessed at the following website: <http://wvde.state.wv.us/policies>.

Descriptions for courses offered at Westside High School, Wyoming East High School, and the Wyoming County Career and Technical School can be found on the Wyoming County Board of Education website at: <http://boe.wyom.k12.wv.us/>.

26 credits are required for graduation for Class of 2019, 2020, and 2021.

24 credits are required for graduation for Class of 2022 and beyond.

Important Notes

Course offering capabilities are dictated by student requests and available staff. Not all courses listed in this book can be offered every year!

Students and Parents are urged to consult administrators, counselors, and/or advisers with any questions regarding available course options.

If a student is planning to participate in college athletics, please be advised that the NCAA may not accept Financial Algebra as a student's third math requirement. The NCAA may not accept Transitional English, Transitional Math, embedded English, or embedded math as a student's fourth English or math requirement. A student must take a higher level math in grade 11 and a higher level math and/or English in grade 12 to satisfy NCAA requirements. Please consult with your counselor.

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Important Terms

Advanced Careers (AC)	Curricula that blends learning experiences that advance students' literacy, math, science, and technical knowledge and skills, and that strengthen the habits and behavior and mind for success.
Advanced Placement (AP)	High school courses that offer college credit if student receives a passing score on AP exam.
Capstone	A multifaceted assignment that serves as a Culminating academic and intellectual experience for students. A long-term investigative project that culminates in a final product, presentation, or performance. Students will maintain a portfolio and be required to do an oral presentation. Capstone projects are generally designed to encourage students to think critically, solve challenging problems, and develop skills such as oral communication, public speaking, research skills, media literacy, teamwork, planning, self-sufficiency, or goal setting which are all skills that will help prepare them for college, modern careers, and adult life.
Career Cluster	A wide grouping of related occupations representative of types of occupations available in the world of work. Career Clusters identify the knowledge and skills Needed to follow a pathway toward career goals and provide a content for exploring the many occupational options available. Wyoming County has identified 16 national career clusters. Students will choose an occupational cluster on their PEP.
Concentration Classes	Concentration classes are four classes that a student Takes based upon their selected Career Cluster. Students must complete the four concentration classes in their chosen pathway as a requirement for graduation.
Dual Credit	Dual credit is a program that allows high school students to enroll in college courses for credit prior to high school graduation. College credits earned through dual credit can be applied toward high school and college graduation.
E.D.G.E.	(Earn a Degree, Graduate Early) A WV Higher Education Tech Prep program that allows students to take high school courses for community and technical college credit. The courses are connected to the skilled pathway in the career cluster. Most courses at the Career and Technical Center are EDGE courses.
Embedded Credit	The approved content standards and objectives for a credit bearing high school course that are embedded within a second course or two courses to receive credit for both courses. Embedded credit does not allow for two courses in the same content area to be embedded into one course.

Embedded Credit Course	Course that incorporates content standards and objectives for an embedded credit from one credit bearing high school course into another host course(s) and allows students to earn credit for both.
Personalized Education Plan PEP	A plan developed to guide students and their parent and/or guardian to thoughtfully explore individual interest and aptitude in relation to academic and career planning. Each student's course selections are based on individual career aspirations and post-secondary plans.
Simulated Workplace	Workplace environmental protocols have been implemented that align with West Virginia workforce requirements, including random drug testing, professionalism, attendance, and safety. Workplace has not only enhanced instructional delivery of career education, but has created a more engaged career and technical student. The simulated workplace environment permits students the opportunity to take ownership of their individual performance as it impacts the overall success of their education, while thriving in an authentic workplace culture. Local business and industry experts are encouraged to join onsite review teams to assist schools in meeting their workforce needs and expectations.
S.T.E.M.	STEM is an acronym for Science, Technology, Engineering, and Mathematics education. These four areas are focused on together not only because the skills and knowledge in each discipline are essential for student success, but also because these fields are deeply intertwined in the real world and in how students learn most effectively.
S.T.E.A.M.	STEAM is an acronym for Science, Technology, Engineering, Arts, and Mathematics education.

Foundations for High Quality Developmentally Appropriate High School Programming

Courses needed for graduation require mastery of approved content standards. Students should consult their chosen post-secondary educational/training institution when choosing course options and electives. 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 workplace training program, or job placement. (WV Policy 2510)

Class of 2022 and beyond

24 total credits required--	12 Prescribed	10 Personalized	2 Electives
English Language Arts (ELA)—4 credits	3 prescribed/1 personalized		
Mathematics—4 credits	2 prescribed/2 personalized		
Science—3 credits	2 prescribed/1 personalized		
Social Studies—4 credits	3 prescribed/1 personalized		
Physical Education—1 credit	1 prescribed		
Health—1 credit	1 prescribed		
The Arts—1 credit	1 personalized		
Personalized Education Plan—4 credits	4 personalized core concentration courses		
Electives—2 credits	2 personalized		

Adolescent Education (Grades 9-12)

Under the direction of and with assistance from school counselors, teachers, parents, and mentors, students should determine the requirements for entering technical programs, colleges, or universities they plan to attend. This information, along with high school graduation requirements, should guide students as they create their Personalized Education Plan (PEP) and schedule high school courses.

Student must make the following decisions when completing the PEP:

1. Identify career interest.
2. Choose CTE Option 1, Non-CTE Option 2, or Non-CTE Option 3.
3. Select a career cluster from the 16 clusters defined as West Virginia Career Clusters.
4. Select a concentration option aligned with chosen career cluster.
5. Identify what four courses will be taken to fulfill concentration option.
6. Identify plans for first year after high school: 4-year college, 2-year college, technical school, military, workforce, or other.
7. Identify 4 personalized credits at either CTE or 4 credits that lead to post-secondary goals.

Non-CTE:

<u>Grade 9</u>	<u>Grade 10</u>	<u>Grade 11</u>	<u>Grade 12</u>
English 9	English 10	English 11	English 12
World Studies	U.S. History	Cont. Studies	Civics
Earth & Space	Biology	Science	Science
Algebra I*	Geometry	Math	Math
Fine Art	P.E.	Elective	Elective
Foreign Language	Elective	Elective	Elective
Health	Elective	Elective	Elective
Elective	Elective	Elective	Elective

AP or Capstone can be completed in grade 11 or 12.

A student has the option of attending CTE as electives are available.

CTE:

<u>Grade 9</u>	<u>Grade 10</u>	<u>Grade 11</u>	<u>Grade 12</u>
English 9	English 10	English 11	CTC
World Studies	U.S. History	Cont. Studies	CTC
Earth & Space	Biology	Science	CTC
Algebra I*	Geometry	Math	CTC
Fine Art	P.E.	CTC	English 12
Health	Elective	CTC	Civics
Elective	Elective	CTC	Math
Elective	Elective	CTC	Elective

*Based upon 8th grade STAR benchmark scores, student may also have to take Algebra I Support in grade 9.

Transcript Analysis

By Core Area

Student: _____ **Student No.:** _____

*A check mark indicates that the class has been completed.

***Disclaimer:** This list of requirements is subject to change without notice at any given time.

*Not all classes listed under Required Classes will apply to every student. Write NA beside classes that are non-applicable.

*A student must take and pass four classes within career cluster as specified in the Program of Study in order to graduate.

***26 credits are required for graduation (effective for Class of 2019).**

*24 credits are required for graduation (effective for Class of 2022).

Required Class:

Electives:

English 9 or English 9 Honors

English 10 or English 10 Honors

English 11 or AP English 11

English 12 or AP English 12

or Transition ELA for Seniors

Algebra I

Algebra I Support

Geometry

Algebra II

Math

Math

or Transition Math for Seniors

Earth and Space Science

Biology

Science

Science

World Studies

US History

Contemporary Studies or AP Social Studies

Civics or AP U.S. Gov & Pol

Fine Art

Foreign Language

Foreign Language

Foreign Health

Physical Education

AP or Capstone

4 Personalized Credits

4 Core Concentration Courses:

Grading Scale/Quality Points

<u>Scale</u>	<u>Letter Grade</u>	<u>Non-Weighted Quality Points</u>	<u>Weighted Quality Points</u>
90 – 100	A	4	5
80 – 89	B	3	4
70 – 79	C	2	3
60 – 69	D	1	2
0 – 59	F	0	0

Weighted Classes

Note: All classes on this list may not be offered every year or at both high schools or Career Center.

- Advanced Placement classes
- Dual Credit classes
- Advanced Career (WCCTC) Courses must be taken in sequential order.
- Trigonometry/Pre-Calculus
- Calculus
- Physics
- Probability and Statistics
- Discrete Math
- STEM Readiness Math
- Architecture (WCCTC)
- Digital and Computer Concepts (WCCTC)
- Medical Terminology (WCCTC)
- Body Structures and Functions (WCCTC)

Advanced Placement Classes

Note: All classes on this list may not be offered every year or at both high schools every year.

- AP English Language and Composition 11
- AP English Literature 12
- AP Calculus
- AP Biology
- AP Chemistry
- AP Environmental Science
- AP U.S. Government & Politics
- AP Psychology
- AP US History
- AP World History
- AP Music Theory

Dual Credit Classes

Dual credit course offerings vary from year to year. Also, dual credit courses *may not* be available. See administrator and/or counselor for current list of available dual credit course offerings. The following is a list of currently approved dual credit courses:

<u>College Course</u>	<u>High School Course</u>
➤ English 101 (Beginning Composition)	English 12, 1 st Semester
➤ English 201 (Advanced Composition)	English 12, 2 nd Semester
➤ Geography 100 (Intro Human Geography)	Geography
➤ Math 122 (Plane Trigonometry)	Trig/Pre-Calc
➤ Math 127 (College Algebra—Expanded)	STEM Readiness Math
➤ PY 201 (General Psychology)	Psychology

E.D.G.E. Credit

Most courses at the Wyoming County Career and Technical Center are E.D.G.E. credit bearing courses.

Embedded Credit

Note: Other embedded credit courses may be added.

High School Courses Eligible for Embedded Credit:

- Transition English Language Arts for Seniors
- Transition Mathematics for Seniors

Wyoming County Career and Technical Center Programs Eligible for Embedded Credit:

- *CTE-English Language Arts Embedded Credit Opportunity*
 - Therapeutic Services (Completer: 4 required courses)
 - Hair Stylist (Completer: 4 required courses and 4 elective courses)
- *CTE-Mathematics Embedded Credit Opportunity*
 - Automotive Technology (Completer: 4 required courses)
 - Carpentry (Completer: 4 required courses)
 - Drafting (Completer: 4 required courses)
 - Electrical Technician (Completer: 4 required courses)
 - Welding (Completer: 4 required courses)

Virtual Courses

Virtual courses may be available if a desired course *is not* offered at the high school. See administrator and/or counselor for more information.

Requirements for Graduation

<u>Option 1</u> <u>CTE</u>	<u>Option 2</u> <u>Non-CTE</u>	<u>Option 3</u> <u>Non-CTE</u>
4 - English	4 - English	4 - English
4 - Math	4 - Math	4 - Math
3 - Science	4 - Science	4 - Science
4 - Social Studies	4 - Social Studies	4 - Social Studies
1 - Fine Art	1 - Fine Art	1 - Fine Art
1 - Health	1 - Health	1 - Health
1 - Physical Ed	1 - Physical Ed	1 - Physical Ed
4 - Core Concentration	2 - World Language	1 - Capstone
	1 - AP/AC/Dual Credit or Capstone	2 - Cluster Courses

Best practices recommends 2 courses of the same world language for college bound students. Students should check with their post-secondary institution because some individual programs and out of state institutions may require two years of world language.

English Language Arts Courses

English 9 or English 9 Honors

English 10 or English 10 Honors

English 11 (*AP English Language 11 can be substituted.*)

English 12 or Transition ELA for Seniors (*AP English Literature 12 can be substituted.*)

Mathematics Courses

Grade 9 Algebra I

Algebra I Support (Placement determined by grade 8 STAR Benchmark.)

Grade 10 Geometry

Grade 11 Algebra II or Financial Algebra

Grade 12 Math* or Transition Math for Seniors**

**Select from following course options: AP Calculus, Algebra II, Trig/Pre-Calculus, Advanced Mathematical Modeling, STEM Readiness Mathematics.*

***Placement in Transition Math for Seniors determined by College and Career Readiness Benchmarks on State Summative Assessment.*

Social Studies Courses

Grade 9 World Studies

Grade 10 U.S. History

Grade 11 Contemporary Studies or AP Social Studies

Grade 12 Civics or AP U.S. Government/Politics—US

Electives: AP Psychology, AP U.S. Studies, AP World Studies, Contemporary Studies, Economics, Geography, Psychology, Sociology

Science Courses

Earth and Space Science (*required freshman course*)

Biology (*required sophomore course*)

Physical Science (*recommended 3rd science option for non-STEM college path*)

Chemistry (*recommended 3rd science option for STEM college path*)

Physics

Environmental Science

Forensic Science

Human Anatomy and Physiology

Additional science electives include AP and dual credit science courses.

Career and/or Technical Path

A student on the Career and Technical Path may begin with the model presented below. Physical Science is recommended for the 11th grade because it provides a student with a third major discipline in science on the high school level. However, the student can take any science offered in WVBOE Policy 2520.3C, an AP course, or dual credit course. Students may also take additional science courses.

Grade 9 Earth and Space Science

Grade 10 Biology

Grade 11 3rd Science choice (*Physical Science recommended*)

Non-STEM College Path

A student in this path plans to attend a college or university but does not plan to major in a STEM field. Physical Science is recommended for the 11th grade because it provides a student with a third major discipline in science on the high school level.

Grade 9 Earth and Space Science

Grade 10 Biology

Grade 11 3rd Science choice (*Physical Science recommended*)

Grade 12 4th Science optional

STEM College Path

A student in this path plans to attend a college or university to pursue a career in science, technology, engineering, or mathematics. Research has provided evidence that a correlation exists between math skills and success in Chemistry and Physics. Since students have had math courses to support these challenging sciences. Chemistry is recommended for the 11th grade and Physics is recommended for the 12th grade. Students are also encouraged to take AP science courses.

Grade 9 Earth and Space Science

Grade 10 Biology

Grade 11 3rd Science choice (*Chemistry recommended*)

Grade 12 4th Science choice (*Physics recommended*)

Course Options/Electives

This list of course options and electives is a combination of Westside High School and Wyoming East High School offerings. Elective offerings often vary from high school to high school. Some electives are offered on alternating years based upon numerous possible conditions. Elective offerings may change due to revisions of WVBOE Policy 2510. Elective offerings put on the schedule are based upon standards and student requests. Please consult your School Counselor for a list of electives common to your high school. The courses with double asterisks (**) are weighted classes. Honors courses are not weighted.

Career Exploration

During Career Exploration, the student will attend the Career & Technical Center two semesters to explore and experience two programs. See Career & Technical electives for options. *Health Occupations and Cosmetology are not available during Career Exploration.*

English

AP English Language and Composition 11**
AP English Literature 12**
Creative Writing
Journalism
Journalism-Video
Speech/Oral Communications
Transition English Language (*seniors only*)
Yearbook I
Yearbook II

Mathematics

AP Calculus**
Advanced Mathematical Modeling
Algebra II
Financial Algebra
Probability & Statistics**
STEM Readiness Mathematics**
Trig/Pre-Calculus**

Science

AP Biology**
AP Chemistry**
AP Environmental Science**
Chemistry
Environmental Science
Forensic Science
Human Anatomy/Physiology
Physical Science
Physics**

Social Studies

AP Govt & Politics** (*seniors only*)
AP Psychology**
AP US History**
AP World History**
Contemporary Studies
Economics
Geography
Intro to Majors
Psychology
Sociology

Honors Courses

English 9 Honors
English 10 Honors
World Studies Honors
U.S. History Honors
Earth and Space Honors
Biology Honors
Algebra I Honors
Geometry Honors

Computer Science

General Computer Applications I
General Computer Applications II
Computer and Information Sciences
Computer Science/Programming

Driver Education

Driver Education

Fine Arts

AP Music Theory**
Art Appreciation
Art I
Art II
Art III
Art IV
Band I (Marching/Concert)
Band II (Marching/Concert)
Band III (Marching/Concert)
Band IV (Marching/Concert)
Chorus I
Chorus II
Chorus III
Chorus IV
Crafts
Dance I
Dance II
Dance III
Dance IV
Digital Imaging/Multimedia (WCCTC)
Drafting Techniques (WCCTC)
Guitar
Instrumental Ensemble
Music Appreciation
Ornamental Metalwork (WCCTC)
Piano
Theatre I
Theatre II
Theatre III
Theatre IV
Theatre/Stagecraft

Future Leaders

Future Leaders 1 (7795)
Future Leaders 2 (7796)
Future Leaders 3 (7797)
Future Leaders 4 (7798)

Wellness Education

Fitness and Conditioning
Food Preparation
Lifetime Fitness Education
Parenting
Recreation Sports
Safety and First Aid
Weight Training

World Language

Spanish I
Spanish II
virtual selections

3rd Science Credit

Therapeutic Services
Available at WCCTC
Upon completion of the following:
3 required courses (0711, 1715,
and any Clinical Specialty)

**Placement based on College
and Career Readiness indicators:**
Transition ELA for Seniors
Transition Math for Seniors

**Placement based on General
Summative Assessment or STAR
benchmark scores:**

Algebra I Support

Career and Technical Center Courses

The courses listed in the left column are core concentration and required for completion of graduation requirement. The courses listed in the right column are electives for that shop. The applicable career cluster for each shop is identified immediately below the shop name. Students can also receive E.D.G.E. credit for most courses taken at the CTC.

The credentials listed are not comprehensive for each program. Detailed lists for each program are available upon request. The WCCTC is school wide simulated workplace.

Disclaimers: Core classes and/or electives are subject to change.
Concentration courses for all clusters are not available at the CTC.

****denotes weighted credit**

Career Exploration (10th Grade)

All shops available except Cosmetology due to student licensure requirement. Health Sciences is not available second semester or in the PM. Health Sciences is available first semester in the AM only.

Aesthetics

Human Services (HU)

Credential: State of WV Board of Barbers and Cosmetologists licensure after completion of 600 hours.

PREREQUISITE: Barber & Cosmetology Foundation (1737E0)

SENIOR year

Core:

General Aesthetics I (1714E0)

Aesthetics Science (1731E0)

Skin Sciences I (1732E0)

General Aesthetics II (1739E0)

Automotive Technology

Transportation, Distribution, and Logistics (TR)

Credential: NATEF, ASE, OSHA10

JUNIOR year

Core:

Auto Technology MLR 1 (1631E0)

Auto Technology MLR 3 (1625E0)

Auto Technology MLR 4 (1637E0)

Electives:

Auto Tech Assistant 4 (1627E0)

SENIOR year

Core:

Auto Technology MLR 2 (1623E0)

Electives:

Auto Tech Assistant 1 (1629E0)

Auto Tech Assistant 2 (1633E0)

Auto Tech Assistant 3 (1635E0)

Baking and Pastry

Human Services

Credential: ServSafe Certification and 10 others

JUNIOR year preferred

Core:

Baking and Pastry Foundations (1980E0)

Baking and Pastry I (1024E0)

Baking and Pastry II (1025E0)

Baking and Pastry Advanced (1026E0)

Carpentry

Architecture and Construction (AR)

Credential: NCCER, OSHA10

JUNIOR year

Core:

Carpentry I (1842E0)

Carpentry II (1843E0)

Carpentry III (1844E0)

Carpentry IV (1845E0)

SENIOR year

Electives:

Applications Commercial Construction (1820E0)

Concrete Finishing (1821E0)

Blueprint Reading for Construction (1822E0)

Masonry and Plumbing (1829E0)

Coding, App, and Game Design (PM Only)

Information Technology (IT)

Credential: Adobe Certified Associate, Microsoft 98-374 Game Development Fundamentals

JUNIOR or SENIOR year

Core:

Digital Imaging/Multimedia I (1431E0)

Digital Imaging/Multimedia II (1432E0)

Coding, App, and Game Design I (1456E0)

Coding, App, and Game Design II (1457E0)

Diesel Equipment Technology

Transportation, Distribution, and Logistics (TR)

Credential: ASE-NATEF, OSHA10, Cummins, Bendix

JUNIOR year

Core:

Fundamentals Diesel Equipment Tech (1751E0)

Diesel Engine Components (1741E0)

Diesel Support Systems (1747E0)

Electronic Engine Controls (1744E0)

SENIOR year

Electives:

Diesel Engine Tune Up & Troubleshoot (1743E0)

Diesel Equipment Electrical Systems (1742E0)

Diesel Preventive Maint. & Inspection (1745E0)

Diesel Truck Chassis Concepts (1749E0)

Drafting

Architecture and Construction (AR)

Credential: American Design and Drafting Association

JUNIOR year preferred

Core:

Fundamentals of Drafting (1729E0)

Drafting Techniques (1727E0)

Mechanical Drafting (1725E0)

Architectural Drafting (1721E0)**

ECG/Phlebotomy (0720E0)

Health Science (HE)

Credential: American Society of Electrocardiograph Technicians

Electrical Technician

Architecture and Construction (AR)

Credential: NCCER, OSHA10, Journeyman Electrical License

JUNIOR year

Core:

Electrical Trades I (1756E0)

Electrical Trades II (1757E0)

Electrical Trades III (1758E0)

Electrical Trades IV (1759E0)

SENIOR year

Electives:

Blueprint Reading for Electricians (1762E0)

Residential Wiring (1769E0)

National Electric Code (1767E0)

Integrated Electrical Lab (1766E0)

Electronics Technician (AM Only)

Manufacturing (MA)

Credential: ETA, COMPTIA

JUNIOR or SENIOR year

Core:

DC Circuits and Concepts (1666E0)

AC Circuits and Concepts (1667E0)

Analog Circuits and Systems (1668E0)

*Digital and Computer Concepts (1669E0)***

Engineering Design and Automated Systems (Advanced Careers)

Manufacturing (MA)

Credential: OSHA10, Industry Certification

Notes: SREB recommends 4 or more English and Math courses plus 3 lab-based science courses.

Courses must be taken in sequential order.

Weight granted upon completion of all four courses.

SENIOR year

Core:

*Introduction to Mechanical Design—EDAS I (157500)***

*Mechanical Simulation and Design Analysis—EDAS II (157600)***

Electrical and Electronic Systems for Automation-- EDAS III (157700)

Pneumatic Systems for Automation—EDAS IV (157800)

Hair Styling

Human Services (HU)

Credential: State of WV Board of Barbers and Cosmetologists licensure after completion of 1000 hours.

Year 1

Core:

Barber & Cosmetology Foundations (1737E0)

Cosmetology Professional I (1734E0)

Cosmetology Professional II (1735E0)

Cosmetology Professional Advanced (1736E0)

Year 2

Electives:

Cosmetology Science I (1738E0)

Cosmetology Science II (1740E0)

Cosmetology Chemicals I (1730E0)

Cosmetology Chemicals II (175000)

Information Management (AM Only)

Information Technology (IT)

Credential: Microsoft Office Specialist: Word, Excel, Access, Powerpoint

JUNIOR or SENIOR year

Core:

Business Computer Applications I: Word and Powerpoint (1411E0)

Desktop Publishing (1429E0)

Digital Imaging/Multimedia I (1431E0)

Webpage Publishing (1455E0)

Industrial Equipment Maintenance

Manufacturing (MA)

Credential: OSHA10, AIM Program, Industry Certifications

JUNIOR year

Core:

Fundamentals of Industrial Equip Maint (1873E0)

Fundamentals of Welding Technology (1985E0)

Hydraulics and Pneumatic Systems (1875E0)

Electrical Maintenance (1871E0)

SENIOR year

Electives:

Rotating Devices & Control Circuitry (1771E0)

Industrial and Commercial Wiring (1765E0)

Heating Systems (1607E0)

Basic Control Circuits (1601E0)

Nail Technician (PM Only)

Human Services (HU)

Credential: State of WV Board of Barbers and Cosmetologists licensure after completion of 400 hours.

JUNIOR or SENIOR year

Core:

Barber and Cosmetology Foundations (1737E0)

Nail Technology Science and Procedure (1716E0)

Art of Nail Technology (1717E0)

Nail Technology Chemical Experience (1719E0)

Pro-Start Restaurant Management

Hospitality & Tourism (HO)

Credential: National Restaurant Association – ProSTART

SENIOR year preferred

Core:

Restaurant and Culinary Foundations (1013E0)

Restaurant Management Essentials (1014E0)

Advanced Principles Food Preparation (1019E0)

Restaurant Professionals (1020E0)

Robotics (PM Only)

Manufacturing (MA)

Credential: ETA, OSHA10, IND, FAA 107 UAS Certificate

JUNIOR or SENIOR year

Core:

Robotics I (1866E0)

Robotics II (1867E0)

FAA 107 Ground Operations (188700)

FAA 107 Flight Operations (188800)

Therapeutic Services (CNA) (Senior or 17 years old)

Health Science (HE)

Credential: WV State Nursing Board: Certified Nursing Assistant, CPR, First Aid, HIPPA, Direct Care Worker/Home Health Aide, Certified Phlebotomist

JUNIOR year

Electives:

Body Structures and Functions (0716E0)**
ECG/Phlebotomy (0720E0)
Essentials of Addiction and Prevention (106000)
Medical Terminology (0721E0)**

SENIOR year

Core:

Foundations of Health Science (0711E0)
Advanced Principles of Health Science (0715E0)
Clinical Specialty I (0789E0)
Clinical Specialty II (0790E0)

Vocational Development

JUNIOR year

Core:

Alternate Process/Workplace Skills I (760300)
Alternate Process/Workplace Skills III (760600)

Electives:

Learning Skills (765300)
Custodial Services I (224000)

SENIOR year

Core:

Alternate Process/Workplace Skills II (760500)
Alternate Process/Workplace Skills IV (760700)

Electives:

Test Strategies (766100)
Custodial Services II (225200)

Welding

Manufacturing (MA)

Credential: American Welding Society--Entry Level, NCCER, OSHA10

JUNIOR year

Core:

Welding I (1862E0)
Welding II (1863E0)

Electives:

Gas Metal ARC Welding (1987E0)
Ornamental Metalwork (1982E0)

SENIOR year

Core:

Welding III (1864E0)
Welding IV (1865E0)

Electives:

Blueprint Reading and Metallurgy (1983E0)
Gas Tungsten ARC Welding (1989E0)

Core Concentration Options

Four concentration courses directly related to a student's chosen career cluster and post-secondary goals are a requirement for graduation. *Best practices encourage students to take: an AP course, a fourth science, and two credits in one world language.*

Changing a Career Cluster is not recommended after entering grade 12.

Core Concentration Courses		
Option 1--CTE	Option 2—Non-CTE	Option 3—Non-CTE
4 Career Center Core classes	World Language I World Language II 4 th Science class 1 AP/AC/Dual Credit Or Capstone	4 th Science class 1 Capstone class 2 Cluster Courses

4 Core Concentration Courses

Option 1

CTE

(Required for Graduation)

Career and technical concentration. Students must successfully complete four core classes. Most programs also have four required electives.

4 Core Concentration Courses

Option 2

Non-CTE

(Required for Graduation)

Concentration classes:

- 1) 2 courses in same World Language
- 2) 4th science class
- 3) AP/AC/Dual Credit or Capstone

Highly recommended for college bound students.

4 Core Concentration Courses

Option 3

Non-CTE

(Required for Graduation)

Concentration classes:

- 1) 4th science class
- 2) Capstone class
- 3) 2 Cluster classes

Advanced Placement Courses

- The AP class should be related to student's career cluster.
- An AP class are designed for rigor. Classes require self-discipline and investment of time.
- Students in grades 11 and 12 are eligible to take AP courses.
- AP course offerings vary from high school to high school and year to year.

Courses:

AP English Language and Composition	AP Music Theory
AP English Literature and Composition	AP U.S. Government & Politics
AP Calculus	AP Psychology
AP Biology	AP US Studies
AP Chemistry	AP World Studies
AP Environmental Science	

Capstone Courses

- A Capstone class will consist of regular course work and an additional project that must meet specific guidelines
- The purpose of the capstone assessment is to showcase mastery of skill set and knowledge from all courses in a concentration.
- Timelines and bi-weekly status reports will be provided to guide project.
- The Capstone class must be related to student's career cluster.
- A Capstone class must be recommended by a counselor and approved by the principal.
- The Capstone class cannot be a class used to fulfill one of the basic requirements for graduation.
- The Capstone can be completed in grade 11 or grade 12.

Capstone Courses:

5 th English class	5 th Science class	CTC course
5 th Math class	5 th Social Studies class	2nd Fine Arts class

Cluster Courses

Student may select 2 courses from list below *related to their career cluster* as specified on their PEP. Courses are in addition to credits used to fulfill basic requirements for graduation.

AP/Capstone/Dual Credit	2 nd Fine Art	5 th Science
Computer course	5 th ELA	5 th Social Studies
CTE course	5 th Math	World Language

Dual Credit Courses

Course offerings may vary from semester to semester and are dependent on college schedules. See a Counselor for a list of Dual Credit course options. Approved courses:

Art 112	MTH 127—College Algebra
English 101	MTH 122—Plane Trigonometry
English 201	PY 201—General Psychology
Geography 100	

West Virginia Career Clusters

Agriculture, Food & Natural Resources (AG)

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

Agribusiness Systems

Animal Systems

Environmental Service Systems

Food Products and Processing Systems

Natural Resource Systems

Plant Systems

Power, Structural and Technical Systems

AP, Capstone, or CTC* Course Options:

Home Economics, Math, Pro-Start*, Science, Social Studies

Architecture and Construction (AR)

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

Design/Pre-Construction

Construction

Maintenance and Operations

AP, Capstone, or CTC* Course Options:

Carpentry*, Drafting*, Electrical Technician*, Plumbing*, Math, Science, Social Studies

Arts, A/V Technology & Communications (AV)

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

Audio/Video Technology and Film

Journalism and Broadcasting

Performing Arts

Printing Technology

Telecommunications

Visual Arts

AP, Capstone, or CTC Course Options:

English, Fine Arts, Math, Science, Social Studies

Business Management & Administration (BM)

Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. These career opportunities are available in every sector of the economy.

Administrative Support
Business Finance and Accounting
Management
Human Resources Management
Operations Management

AP, Capstone, or CTC Course Options:
English, Math, Social Studies

Education and Training (ED)

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

Administration and Administration Support
Professional Support Services
Teaching/Training

AP, Capstone, or CTC Course Options:
English, Fine Arts, Math, Science, Social Studies

Finance (FI)

Planning, services for financial and investment planning, banking, insurance, and business financial management.

Banking Services
Insurance
Securities and Investments

AP, Capstone, or CTC Course Options:
English, Math, Social Studies

Government and Public Administration (GO)

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.

Foreign Service

Governance

National Security

Planning

Public Management and Administration

Regulation

Revenue and Taxation

AP, Capstone, or CTC Course Options:

English, Math, Science, Social Studies

Health Science (HE)

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

Biotechnology Research and Development

Diagnostic Services

Health Informatics

Support Services

Therapeutic Services

AP, Capstone, or CTC* Course Options:

Certified ECG Technician*, Certified Phlebotomy Technician*, Certified Nursing Assistant*,

Direct Care Worker*, Math, Science, Social Studies

Hospitality & Tourism (HO)

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

Lodging

Recreation, Amusements and Attractions

Restaurants and Food/Beverage Services

Travel and Tourism

AP, Capstone, or CTC* Course Options:

Cosmetology*, English, Fine Arts, Math, Pro-Start*, Social Studies

Human Services (HU)

Preparing individuals for employment in career pathways that relate to families and human needs.

Consumer Services
Counseling and Mental Health Services
Family and Community Services
Personal Care Service

AP, Capstone, or CTC Course Options:
English, Fine Arts, Math, Science, Social Studies

Information Technology (IT)

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.

Information Support and Services
Network Systems
Programming and Software Development

AP, Capstone, or CTC* Course Options:
Certified Internet Webmaster*, English, Math, Simulation and Game Design*, Social Studies

Law, Public Safety, Corrections & Security (LA)

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

Correction Services
Emergency and Fire Management Services
Law Enforcement Services
Legal Services
Security and Protective Services

AP, Capstone, or CTC Course Options:
English, Math, Science, Social Studies

Manufacturing (MA)

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.

Health, Safety and Environmental Assurance
Logistics and Inventory Control
Maintenance, Installation and Repair
Manufacturing Production Process Development
Production
Quality Assurance

AP, Capstone, or CTC* Course Options:

Electronics Technician*, Industrial Equipment Maintenance*, Math, Robotics*, Science, Social Studies, Welding*

Marketing (MK)

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

Marketing Communications
Marketing Management
Marketing Research
Merchandising
Professional Sales

AP, Capstone, or CTC Course Options:

English, Fine Arts, Math, Social Studies

Science, Technology, Engineering & Mathematics (ST)

Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

Engineering and Technology
Science and Mathematics

AP, Capstone, or CTC Course Options:

English, Math, Science, Social Studies

Transportation, Distribution & Logistics (TR)

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

Health, Safety, and Environmental Management

Logistics Planning and Management Services

Sales and Service

Transportation Operations

Transportation Systems/Infrastructure Planning, Management and Regulation

Warehousing and Distribution Center Operations

AP, Capstone, or CTC* Course Options:

Automotive Technology*, Diesel Equipment Technology*, Math, Science, Social Studies

Note: Visit <http://careertech.k12.wv.us/> for detailed information about each of the 16 career clusters.