## John Handley High School Program of Studies



425 Handley Boulevard
2024-2025

Winchester, Virginia 22601
(540) 662-3471
jhhs.wps.k12.va.us

Grades 9-12

Dear Winchester Public Schools Families:

The Winchester Public Schools High School Program of Studies contains important information to help you understand the opportunities available for your middle and/or high school student. WPS offers a wide variety of academic, elective, and programmatic courses that meet the needs of all learners. Offering a wide array of courses and programs that students can choose from is an essential component of our commitment to helping students reach their goals.

This handbook provides information regarding the Profile of a Graduate and cohort graduation requirements. Any new course offerings or changes to this document will be communicated and updated in the online version.

Please take the time to review the information presented in this handbook. The information ranges from specific course selection options and the different academic levels, academic and post-secondary career planning, specialized WPS programs such as the Mountain Vista Governor's School (MVGS), National Collegiate Athletic Association (NCAA) eligibility requirements, Virginia Standards of Learning (SOL) information, graduation requirements, promotion and retention guidelines, and grade point average calculation criteria. The handbook also includes various policies and procedures.

Developing a comprehensive academic and career plan is best accomplished through collaboration between students, parents, school counselors, teachers and principals. A well developed plan will ensure that graduation requirements are met on time and that academic and personal growth are supported in preparation for post-secondary options such as college, vocational training, military service, or employment.

Through these course offerings and our partnership with families, each student will be on the path to achieve their hopes and dreams. Best wishes for a successful school year.

Sincerely,


Jason Van Heukelum, Ed.D.
Superintendent



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## GENERAL INFORMATION

The John Handley High School Program of Studies provides comprehensive information regarding graduation requirements, diploma programs, and course offerings. Course descriptions, credits, and prerequisites are also included in the Program of Studies. Students should check with their school counselor to ensure a class is available for the upcoming school year. John Handley High School is a member of the Virginia High School League and is accredited by the Virginia Department of Education.

## Graduation Requirements

All students must earn a minimum number of units of credit in grades nine through twelve based upon their diploma requirement. Typically, students are scheduled to take eight (8) credits per year. Verified credit means that the student has passed the state required Standards of Learning (SOL) test in addition to the course.
Verified credits may be earned in the following courses:

| English | Math | Science | Social Studies |
| :--- | :--- | :--- | :--- |
| Reading <br> Writing | Algebra I <br> Geometry <br> Algebra II | Biology <br> Chemistry <br> Earth Science | World Geography <br> World History \& Geography to 1500 <br> World History \& Geography 1500 to Present <br> Virginia \& U.S. History |

## Promotion

Students working toward a Standard or Advanced Studies Diploma will be promoted based on credits earned:

| Grade Level | Credits Required | Credit Information |
| :---: | :---: | :--- |
| Tenth Grade <br> (Sophomore) | $\mathbf{5}$ | A student must have earned a minimum of five (5) credits. |
| Eleventh Grade <br> (Junior) | $\mathbf{1 1}$ | A student must have earned a minimum of eleven (11) <br> credits. |
| Twelfth Grade <br> (Senior) | A student must have earned a minimum of seventeen <br> (17) credits. |  |

Grade level advancement for students working towards an Applied Studies Diploma, including those receiving instruction following the Virginia Essentialized Standards of Learning (VESOL), who participate in the Virginia Alternate Assessment Program (VAAP), will be assigned a gravel level based on the student's four year cohort.
Grading Scale

| Grade | Meaning | Value | GPA Points |
| :---: | :---: | :---: | :---: |
| A | Superior | $90-100$ | 4 |
| B | Good | $80-89$ | 3 |
| C | Satisfactory | $70-79$ | 2 |
| D | Poor | $60-69$ | 1 |
| F | Failing | 59 and below | 0 |

## Class Rank

John Handley High School does not rank students.

## GPA

Grade point average (GPA) is calculated by adding up the GPA point value for all final grades and then dividing by the total number of courses taken. Weighted courses require additional calculations to determine GPA. See page 10.

## NOTES:

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## Diploma Programs

The Virginia Department of Education (VDOE) and John Handley High School offer three diploma programs to meet the goals of the individual student:

- Advanced Studies
- Standard Studies
- Applied Studies
- Other Diplomas \& Certificates



# Advanced Studies Diploma 

Advanced Studies Diploma Course Requirements for Students Entering Ninth Grade for the First Time in 2018-19 and Beyond (8 VAC 20-131-51)

| Subject Area | $\begin{array}{c}\text { Standard } \\ \text { Credits }\end{array}$ | $\begin{array}{c}\text { Verified } \\ \text { Credits }\end{array}$ | Specifications |
| :---: | :--- | :---: | :--- |
| Mathematics | 4 | 2 | N/A |
| Laboratory | 4 | 1 | $\begin{array}{l}\text { Courses completed to satisfy this requirement shall include at least three different } \\ \text { Science } \\ \text { course selections from among: algebra I, geometry, algebra II, or other mathematics } \\ \text { requirement. An approved of algebra II. The board shall approve courses to satisfy this } \\ \text { considered a mathematics course credit. }\end{array}$ |
| Histo course credit earned by students may be |  |  |  |$]$| Sciences Social |
| :--- |

## Additional Requirements for Graduation

- AP, Honors, IB, Dual Enrollment, Work-Based Learning, or CTE Credential - Students shall (i) complete an Advanced Placement, honors, International Baccalaureate, or dual enrollment course; or (ii) complete a high-quality work-based learning experience, as established by Board guidance on work-based learning; or (iii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the advanced studies diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.
- Virtual Course - Students shall successfully complete one virtual course, which may be a non-credit-bearing course or a required or elective credit-bearing course that is offered online. Guidance on this requirement is provided in the Guidance Document Governing Certain Provisions of the SOA (8VAC20-131) (Word).
- First Aid, CPR, and AED Training - Students shall be trained in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED), including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in 8VAC20-131-420(B).
- Demonstration of the 5 C's - In accordance with the Profile of a Virginia Graduate, students shall acquire and demonstrate foundational skills in Virginia's 5 C's: critical thinking, creative thinking, collaboration, communication, and citizenship.


# Standard Studies Diploma 

Standard Diploma Course Requirements for Students Entering Ninth Grade for the First Time in 2018-19 and Beyond (8 VAC20-131-51)

| Subject Area | Standard Credits | Verified Credits | Specifications |
| :---: | :---: | :---: | :---: |
| English | 4 | 2 | N/A |
| Mathematics | 3 | 1 | Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I; Geometry; Algebra, Functions and Data Analysis; Algebra II, or other mathematics courses approved by the board to satisfy this requirement. A computer science course credit earned by students may be considered a mathematics course credit. |
| Laboratory Science | 3 | 1 | Courses completed to satisfy this requirement shall include course selection from at least two different science disciplines: earth sciences, biology, chemistry, or physics. The board shall approve courses to satisfy this requirement. An approved computer science course credit earned by students may be considered a science course credit. <br> A laboratory science verified credit may be awarded to students who complete a career and technical education (CTE) program sequence and (i) pass two examinations or occupational competency assessments in a CTE field that confers certification or an occupational competency credential from a recognized industry, trade, or professional association; (ii) acquire two professional licenses in a CTE field from the Commonwealth of Virginia; or (iii) pass one examination or competency assessment from clause (i) and acquire one license from clause (ii). The examination or occupational competency assessment must be approved by the board as an additional test to verify student achievement. |
| History \& Social Sciences | 3 | 1 | Courses completed to satisfy this requirement shall include Virginia and U.S. history, Virginia and U.S. government, and one course in either world history or geography or both. The board shall approve courses to satisfy this requirement. |
| Health \& Physical Ed. | 2 | 0 | N/A |
| World Language, Fine Arts or Career Tech | 2 | 0 | Credits earned for this requirement shall include one credit in fine or performing arts or career and technical education. An approved computer science course credit earned by students may be considered a career and technical course credit. |
| Economics \& Personal Finance | 1 | 0 | N/A |
| Electives | 4 | 0 | Courses to satisfy this requirement shall include at least two sequential electives. |
| Total | 22 | 5 | N/A |

## Additional Requirements for Graduation

- AP, Honors, IB, Dual Enrollment, Work-Based Learning, or CTE Credential - Students shall (i) complete an Advanced Placement, honors, International Baccalaureate, or dual enrollment course; or (ii) complete a high-quality work-based learning experience, as established by Board guidance on work-based learning; or (iii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the advanced studies diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.
- Virtual Course - Students shall successfully complete one virtual course, which may be a non-credit-bearing course or a required or elective credit-bearing course that is offered online. Guidance on this requirement is provided in the Guidance Document Governing Certain Provisions of the SOA (8VAC20-131) (Word).
- First Aid, CPR, and AED Training - Students shall be trained in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED), including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in 8VAC20-131-420(B).
- Demonstration of the 5 C's - In accordance with the Profile of a Virginia Graduate, students shall acquire and demonstrate foundational skills in Virginia's 5 C's: critical thinking, creative thinking, collaboration, communication, and citizenship.


## Applied Studies Diploma

The Applied Studies Diploma is a diploma option available to students identified as having a disability who complete the requirements of their individualized education programs (IEPs) and meet certain requirements prescribed by the Board of Education pursuant to regulations, but do not meet the requirements for any named diploma.

## Other Diplomas \& Certificates

## General Educational Development Certificates (GED)

The only Virginia board-approved High School Equivalency (HSE) examination in Virginia is the General Educational Development (GED) test. The GED consists of four subject tests including Reasoning Through Language Arts, Mathematical Reasoning, Science, and Social Studies.

## Individual Student Alternative Education Plan (ISAEP) Program

The ISAEP program prepares students at risk of dropping out of public high school to take the General Educational Development (GED) test while developing career and technical education skills. The ISAEP program fulfills compulsory attendance requirements for students who are between 16 and 18 years of age.

## Computation of GPA and Weighted Grades

## A student's grade point average (GPA) will be computed in the normal way as follows:

To calculate the GPA for a given semester, total the Quality Points (QP) earned for the grade in each class. Divide this sum by the number of classes taken. For example, if a student had 4 graded classes and earned two "A's" and two "B's," the calculation would be $4+4+3+3=14$ Total Quality Points which, when divided by four total classes, yields a semester GPA of 3.5.

If a student takes an Advanced Placement (AP), Dual Enrollment (DE) (even if community college enrollment was not completed), or Mountain Vista Governor's School (MVGS) course, each grade is worth more QP; however, MVGS courses which are not AP, DE, or do not have a comparable weighted course at John Handley High School will not be weighted. Using the previous example, if the first "A" was in an AP/DE course and the last "B" was in an AP/DE course, the calculation would be $4.5+4+3+3.5=15$ Total Quality Points. When divided by four classes, this total yields a semester GPA of 3.75. If the student took the AP exam, the calculation would be $5+4+3+4=16$ Total Quality Points. When divided by four classes, this total yields a semester GPA of 4.0.

The current High School Program of Studies includes a complete listing of AP and DE courses. The Grade Point Average weight for every course in the program of studies is listed in the course description. Additionally, if the course is weighted at 4.5 or 5.0 for an " A ", the weight is reflected in the course title as well. In order to receive full weighted credit for an AP course, the student must take the associated AP exam. Students enrolled in AP courses that elect not to take the associated AP exam will be awarded .5 quality points.

Students' grade point average will be determined by assigning point values to courses as follows: Quality Points Per Credit
\(\left.$$
\begin{array}{ccc}\begin{array}{c}\text { Advanced Placement and } \\
\text { AP Exam }\end{array}
$$ \& Dual Enrollment, MVGS, or JHHS Advanced Placement <br>

Courses, w/o Exam\end{array}\right]\)| All Other Courses |  |
| :---: | :---: |
| A - 5 | $\mathrm{~A}-4.5$ |
| $\mathrm{~B}-4$ | $\mathrm{~B}-3.5$ |
| $\mathrm{C}-3$ | $\mathrm{C}-2.5$ |
| $\mathrm{D}-2$ | $\mathrm{D}-1.5$ |
| $\mathrm{~F}-0$ | $\mathrm{~F}-0$ |

## Academic Honors

Students are eligible for the following academic honors based upon a cumulative grade point average. Students must meet the requirements set forth for a standard or advanced studies diploma.

- Summa Cum Laude (Graduate with Highest Honors) - Students with a grade point average of 4.0 and above.
- Magna Cum Laude (Graduate with High Honors) - Students with a grade point average between 3.75-3.99.
- Cum Laude (Graduate with Honors) - Students with a grade point of 3.50-3.74 will receive recognition prior to graduation.


## Repeating Courses

Students may repeat a course to earn credit and/or improve skills. The original and repeat courses and grades will be reflected on the student's transcript. The original course grade will not be calculated into the student's grade point average. The repeat course grade will be calculated into the student's grade point average.

## Transfer Students

1. If a particular grade is weighted at the school from which a student transfers, and Winchester Public Schools weights the grade for the same course, the transferred grade will be weighted.
2. If a particular grade is weighted at the school from which a student transfers, but Winchester Public Schools does not weight the grade for the same course, the transferred grade will not be weighted.
3. If a course is noted as an Advanced Placement or Dual Enrollment course, and the same course is weighted in Winchester Public Schools, the grade will be weighted even if the other division did not weight the course.
4. If a course is not weighted and is not noted as an AP or DE course, the grade will not be weighted.
5. In any case in which the appropriate GPA weight for a transfer course is unclear, the Superintendent's designee will research the content and rigor of the course in question and will determine the weight of the course.

## Diploma Seals

Students meeting specific requirements for graduation and demonstrating exemplary performance may receive diploma seals for recognition. The Virginia Department of Education makes available to local school divisions the following seals:

Governor's Seal - Awarded to students who meet the following:

- Complete the requirements for an Advanced Studies Diploma with an average grade of "B" or better and
- Successfully complete college-level coursework that will earn the student at least nine transferable college credits in Advanced Placement (AP), International Baccalaureate (IB), Cambridge, or dual enrollment courses.

Board of Education Seal - Awarded to students who complete the requirements for a Standard Diploma or Advanced Studies Diploma with an average grade of "A" beginning with the ninth-grade class of 2006-2007 and beyond.

Board of Education's Career \& Technical Education Seal - Awarded to students who:

- Earn a Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain a "B" or better average in those courses.
- OR pass an examination or an occupational competency assessment in a career and technical education concentration or specialization that confers certification or occupational competency credential from a recognized industry, trade or professional association.
- OR acquire a professional license in that career and technical education field from the Commonwealth of Virginia.
- The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.

Board of Education's Excellence in Civics Education Seal - Awarded to students who meet each of the following four criteria:

- Satisfy the requirement to earn a Modified Standard Diploma, a Standard Diploma or an Advanced Studies Diploma
- Complete Virginia \& United States History and Virginia \& United States Government courses with a grade of "B" or higher
- Complete 50 hours of voluntary participation in community service or extracurricular activities, such as volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate; participating in Boy Scouts, Girl Scouts or similar youth organizations; participating in Junior Reserve Officer Training Corps (JROTC); participating in political campaigns, government internships, Boys State, Girls State or Model General Assembly; and participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.
- Have good attendance and no disciplinary infractions as determined by local school board policies.

Board of Education's Biliteracy Seal - This seal certifies attainment of a high level of proficiency by a graduating high school student in one or more languages in addition to English, and certifies that the graduate meets of the following criteria:

- Earn a Board of Education-approved diploma.
- Pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level.
- Be proficient at the intermediate-mid level or higher in one or more languages other than English, as demonstrated through an assessment from a list to be approved by the Superintendent of Public Instruction. American Sign Language qualifies as a language other than English.

Board of Education's Diploma Seal for Science, Technology, Engineering, and Mathematics
(STEM)- The Board of Education's STEM Seal shall be awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and satisfy all Math and Science requirements for the Advanced Studies diploma with a "B" average or better in all course work, and

- Successfully complete a 50 hour or more work-based learning opportunity in a STEM area, and
- Satisfy all requirements for a Career and Technical Education concentration. A concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the CTE Administrative Planning Guide $\sqrt{\top}$,
and
- Pass one of the following:
- A Board of Education CTE STEM-H credential examination, or
- An examination approved by the Board that confers a college-level credit in a STEM field.

Board of Education's Seal for Excellence in Science and the Environment (AVAILABLE TO STUDENTS WHO ENTERED 9TH GRADE IN 2018-2019 OR THEREAFTER)- Is awarded to students who meet each of the following criteria:

- Earn either a Standard or Advanced Studies Diploma
- Complete at least three different first-level board-approved laboratory science courses and at least one rigorous advanced-level or postsecondary-level laboratory science course, each with a grade of "B" or higher
- Complete laboratory or field-science research and present that research in a formal, juried setting
- Complete at least 50 hours of voluntary participation in community service or extracurricular activities that involve the application of science such as environmental monitoring, protection, management, or restoration.

For more information can be found at VDOE Graduation (Diploma) Seals of Achievement.

## Scheduling and Special Course Information

## Daily Schedule and Selection of Courses

John Handley High School runs a hybrid schedule that includes 4 x 4 (four classes each semester), A/B (alternating-day block schedule), and skinny classes (approximately 45 minute classes). Students have the ability to earn 8 credits by the end of the school year. All students should select classes that maximize their learning opportunities. When making a decision about which class level to choose, parents and students should consider the following:

- Previous class performance in the subject area;
- Standardized test scores;
- Commitment level of the student; and
- Recommendation from teachers and counselors.

Students have the opportunity to take Extended Study Time, a non-credit activity, during the school day to work independently or receive academic assistance such as preparing for a test or quiz, completion of a project, or homework. The students do not receive a credit for that class period.

## VA Education Wizard

The VA Education Wizard allows students of all ages and stages to explore careers and find the best fit. Their career exploration tools meet specific VDOE standards and Academic and Career Plan (ACP) requirements. All WPS students will have access to VA Wizard using Classlink.

- A student's Wizard account is always theirs, even if they transfer to a school, district, or state not using Wizard. The Wizard helps students gather career artifacts and see their progression of career based choices. Students can log in to see their data and print their resume, ACP, or Career Portfolio.
- Middle and high school students will utilize the ACP function of the VA Wizard to document courses completed, courses the students plan to take in future high school years, career interests and pathways, as well as, post-secondary plans.


## Student Schedule Adjustments

A specific deadline date for course request changes will be established each school year. After the first two weeks of instruction students will not be allowed to drop from a course unless extenuating circumstances exist as determined by the principal. Special circumstances may necessitate a change in course selections after this deadline such as:

- Incomplete schedule;
- Unmet prerequisite requirement;
- Completion of coursework during summer academy; or
- Level changes may be considered on a case-by-case basis in consultation with the student, parent, teacher and school counselor.

Other guidelines for schedule adjustments include:

- Requests from students or their parents for a change in teachers will not be honored because such changes impact master schedule balance;
- Considerations will be given to requests from students assigned to repeat a course with a teacher under whom they have previously failed;
- Second semester schedule adjustments may be required if a student did not earn credit for a first semester course and no longer meets prerequisite requirements; and
- Final approval for schedule change requests rests with the principal.


## Expungement

Grade/course expungement for high school courses taken in middle school is designed for students who are not performing at the proficient level and would benefit from taking the course over. The decision to expunge a grade /course should be made in consultation with the course's teacher and their counselor. In some cases parents elect to have a grade/course expunged although the student was performing at a proficient level. Although this is allowable it is not recommended as the student may have to repeat the non-weighted course in high school. The parent of any student who, while in middle school, took a high school credit-bearing course may elect to have the grade and credit permanently expunged (removed) from the student's transcript. If the parent elects to have such a grade permanently expunged, written notice of such election must be given by the parent to the student's middle school counselor by the end of their first semester of their eighth grade year so that they can be scheduled to repeat the course. If the parent elects to expunge the grade/course after completing the course they must notify the school counseling department of John Handley High School (rising 9th graders), on or before August 1st of the year in which the student finishes 8th grade. Parents of students eligible to make this election shall be provided written notice thereof and a form to be used for such election when the student receives the final report card from the middle school. For other expungement questions see WPS Policy JO - School Records.

## Judges IX

Students entering 9th grade will begin their educational experience in Judges IX to promote an effective and positive transition from middle school to high school. Judges IX is designed to help students adjust to high school expectations, routines, and standards in a supportive, nurturing environment.

The following courses will be offered to rising 9th grade students in Judges IX. Each core class (English, Math, Science, Social Studies) will be pre-determined based on student data from 8th grade. Parents/guardians will have the opportunity to review the student's schedule to request a change during an allotted window of time. Electives will be offered to rising 9th grade students if there is room in their schedule.


## Dual Enrollment (DE)

Students at John Handley High School may earn college credit from Laurel Ridge Community College or other area colleges/universities through dual enrollment. Prior to enrolling in dual enrollment courses students may need to pass the Virginia Placement Test (VPT). Dual enrollment provides a wider range of course options, sharpens students' general preparedness for college, and allows high school students to earn college credit which may be transferred to other colleges and universities.

The transferability of a college course to another college or university for credit is determined by the receiving institution. Normally, academic courses intended for transfer with a grade of " C " or better will transfer to four-year institutions of higher learning; however, no guarantee can be made to students regarding transferability to all colleges and universities. This information may be found on most college and university websites or by contacting the office of admissions.

In all cases, the particular courses to be offered shall be determined through the mutual agreement of the Winchester Public Schools and the respective college. Dual enrollment opportunities vary in format including:

- Courses taught at the college;
- Courses taught at the local high schools by credentialed high school instructors.

College credits will be awarded according to the college catalog. High school credit will be awarded according to the guidelines established by the Virginia Department of Education. Course fees will be assessed by the college, and the student portion of the payment is the responsibility of the student and the family. Laurel Ridge Community College offers a reduced fee per course for John Handley High School students. Contact the counseling department for more information.

Winchester Public Schools, JHHS and Laurel Ridge Community College are working collaboratively to expand opportunities that would enable students to complete an associate's degree or general education certificate concurrently with a high school diploma. Additional information is available through the JHHS Counseling Department. Dual enrollment offerings may vary from year to year. Projected dual enrollment courses for the upcoming school year are noted as such within the department course descriptions and are subject to change based on the credentials of teaching staff.

Laurel Ridge Community College is not bound by WPS 504 or IEP accommodations already established. Questions about these accommodations can be found at Accommodations and Disability Services at Laurel Ridge Community College.

## Advanced Placement (AP)

AP courses, taught by dedicated and committed high school teachers, lay the groundwork for students to succeed at the collegiate level. Students are strongly encouraged to participate in the AP examinations. More information about the AP examinations can be found on page 22.

## Trades Academy

Upon successful completion of this one-year course sequence, students will be Career and Technical Education Completers in Industrial Maintenance Technician I and Maintenance Technician II. The program provides students the opportunity to learn skills in welding, HVAC, hydraulics/pneumatics and electricity. Students will also learn skills related to a variety of industrial processes. Students will earn 31 college credits and complete a Career Studies Certificate in EPA CFC (Environmental Protection Agency Chlorofluorocarbon Certificate) and Electricity. Students participate in 4.5 hours of instruction each day at Laurel Ridge Community College and return to Handley for afternoon coursework and/or related job experiences. These courses are intended for seniors and require an application and acceptance process for the 3 seats that are available to John Handley High School students.

## Mountain Vista Governor's School (MVGS)

The mission of MVGS is to engage students in a technology-enhanced program, exploring connections within an integrated curriculum of advanced mathematics, science, and the humanities through collaborative research. MVGS challenges students to grow as critical thinkers, leaders, and innovators to maximize their future roles in a constantly changing global society. MVGS serves over 100 students from the region on two campuses. Handley students, grades 10-12, attend the Middletown, VA site located at Laurel Ridge Community College. Students participate in 4.5 hours of instruction each day at MVGS and return to Handley for afternoon coursework. MVGS courses which are not AP dual enrollment and do not have comparable weighted at JHHS will not be weighted
Additional information can be found at www.mvgshome.org

| Courses | AP Test Option | Graduation Credit |
| :--- | :--- | :--- |
| MVGS Collegiate Chemistry | AP Chemistry | Science |
| MVGS Physics 1C: Mechanics | AP Physics C/ Mech | Science |
| MVGS Physics 2C: Electricity \& Magnetism | AP Physics C/ Elect. \& Mag. | Science |
| MVGS Biology 1: Collegiate Biology | AP Biology | Science |
| MVGS Biology 2: Advanced Topics | AP+ (beyond AP) | Science |
| MVGS Environmental Science | AP Environmental Science | Science |
| MVGS Math Analysis | AP Precalculus | Math |
| MVGS Calculus 1 | AP Calculus AB | Math |
| MVGS Calculus 2/3 | AP Calculus BC | Math |
| MVGS Statistics | AP Statistics | Math |
| MVGS Computer Science 1 | AP Computer Science A | Elective |
| MVGS Computer Science 2 | AP+ (beyond AP) | Elective |
| MVGS Humanities 10/ English 10 | N/A | English |
| MVGS US Humanities 11/ English 11 \& Research 2 | AP Language and Comp. | English |
| MVGS US Humanities 12/ US Government | AP Government | Elective |
| MVGS Economics | AP Macroeconomics |  |
| MVGS Research 1 | N/A | Government |

## Online Courses

Online courses are available to students for the following reasons:

1. A course is not available to the student because it is not offered at Handley;
2. A course is not available to the student due to a scheduling conflict;
3. A student misses an opportunity for academic acceleration.

Online courses provide a variety of academic options throughout the calendar year. Applications for all online courses are available in the School Counseling Office. Eligible students need to apply by the appropriate deadline. Students can take Virtual Virginia courses during the academic calendar year at no cost to the student. For all other online courses, students are responsible for the payment of the courses. The school division will not be responsible for payment of the courses, unless approved by the Assistant Superintendent.

Online courses can be taken through the following platforms. For more information on courses and prerequisites, please visit the associated website.

- Virtual Virginia: www.virtualvirginia.org
- Whitmore School:https://www.whitmoreschool.org/
- BYU (Brigham Young University) Independent Study: www.is.byu.edu
- APEX Learning Virtual School: www.apexlearningvs.com
- Laurel Ridge Community College: https://laurelridge.edu/
- Liberty University Online Academy: www.liberty.edu/online-academy


## Academic Guidelines for Athletics

## Virginia High School League (VHSL) Eligibility

In order for a student to participate on a Winchester Public Schools athletic team, each athlete must have satisfied all academic eligibility requirements as listed below.

- The student must pass three of four classes to be eligible the following semester.
- The student may not repeat courses for eligibility purposes for which credit has been previously awarded.
- The student must be in good standing and abide by the school activity's rules and regulations.
- The student cannot be 19 years of age on or before August 1st of the current year.
- The student has only eight consecutive semesters of eligibility after they enter the 9 th grade for the first time.

Additional guidelines can be found at handley pride.org, located in the VHSL handbook. All questions regarding athletics and activities should be directed to the Director of Student Activities.

## National Collegiate Athletic Association (NCAA) Eligibility

Students who wish to participate in NCAA Division I or II athletics in college must be certified by the NCAA Eligibility Center. Students must qualify academically and be cleared as an amateur student-athlete. NCAA academic eligibility is determined, in part, by performance in approved core courses as reflected on the student's official transcript. JHHS approved core courses are designated NCAA in the course catalog.

For more information, students should visit www.eligibilitycenter.org.

## Independent Study and Credit Recovery Policy

## Independent Study

WPS School Board may elect to offer independent courses that provide fewer than 140 clock-hours of instruction and award a standard 1.0 credit if the course meets the conditions outlined in this section of the regulation (Policy IKFD-R). The total number of standard credits that can be achieved via this waiver is four. If extenuating circumstances require additional standard credits that can be achieved via this waiver, approval by the superintendent's designee is required.

With the exception of the clock-hour requirements, these courses shall meet all existing WPS regulations governing high school credit courses. Independent Study courses shall be graded on a pass-fail basis only. Students who wish to retake a course to improve their grade point average shall not be allowed to use Independent Study as an option and instead should repeat the full course in a subsequent school year or in a summer session.

## Credit Recovery Option

With principal approval, high school students may pursue the Credit Recovery Option if the following criteria are met:

- The student previously completed the course through a WPS program and earned a failing grade (F);
- The high school is able to provide the resources, including a teacher with the required licensure and endorsements (in the area of the coursework) to facilitate the study for credit recovery;
- The assigned teacher shall consider the standards a student previously mastered, as indicated by the previous teacher, standardized assessment, or other locally developed assessment and may tailor course requirements based on previous learning;
- Successful completion of Credit Recovery Option will be assigned a grade of 60/D; and
- Credit Recovery Option must be completed in the subsequent semester.


## Standardized Exams and Assessments

## Preliminary SAT (PSAT)

The PSAT measures verbal and math reasoning skills as well as writing skills. Students benefit from practice in taking the test and can identify academic strengths and weaknesses while they have time to work to improve their scores. The PSAT is required for all $10^{\text {th }}$ graders and $11^{\text {th }}$ graders are given the opportunity to retest if they choose to do so. The testing takes place in the fall during the school day at no cost to the student. $11^{\text {th }}$ grade students can enter special scholarship competitions such as the National Merit Scholarship Qualifying Test.

## SAT

The SAT Reasoning Test measures critical reading, mathematics, and writing skills. Standardized test scores such as the SAT are often required as part of the college admissions process. Students are encouraged to sit for the SAT in $11^{\text {th }}$ grade and may repeat the test two or more times.The SAT test is given several times each year at local high schools. Students must register online approximately four weeks prior to the test date at www.collegeboard.com. Fee waivers are available for eligible students.

## American College Test (ACT)

The ACT measures academic achievement in English, mathematics, reading, and science. Students may elect to take the writing subtest (students should check with their colleges of interest to see if the writing test is required). Most colleges accept ACT and/or SAT scores for admission purposes. Registration materials and study guides are available in the school counseling office and online at www.actstudent.org. Students may find it advantageous to take both the ACT and SAT as colleges will generally utilize the best scores.

## Advanced Placement (AP)

AP courses, taught by dedicated and committed high school teachers, lay the groundwork for students to succeed at the collegiate level. Students are strongly encouraged to participate in AP examinations. WPS will assume the cost of AP testing for all students who choose to take an AP exam. AP exams are administered in May of each year on national test dates set by the AP Program. Students who wish to sit for an AP exam, but are not enrolled in the corresponding JHHS AP course should see the high school AP Coordinator at the start of the school year. Careful consideration should be given in selecting AP courses as they are designed for students who have mastered the basic skills and are able to learn independently. Completion of these courses, with acceptable AP exam scores, may lead to credit and/or advanced placement at colleges and universities.

## Career and Technical Education (CTE)

Career and Technical Education (CTE) provides students with an abundance of opportunities to explore career options in settings that anticipate and address every student's needs. Our students are entering a highly competitive workforce and to be career and college ready they need to be able to integrate 21 st Century skills, technical knowledge and skills, and core academic knowledge.

With an emphasis on real world, problem-based learning, and real life skills we strive to provide the opportunities for all students to get the exposure they desire to graduate from Winchester Public Schools ready for what's next in life. There is nothing more exciting than seeing students engaged in studies and real world projects that spark their imaginations. From carpentry, welding, applied materials, to medical labs, to materials and processing we are providing hands-on courses that are aligned with rigorous industry and academic standards.

To learn more about the Emil and Grace Shihadeh Innovation Center, the academies, and associated career pathways and sample career options go to page 89.

## Career and Technical Education (CTE) Courses and Completers

The following pages contain CTE courses and available completer courses. A CTE Completer is a student who has earned two or more standard high school credits for state-approved courses in a CTE concentration and meets the requirements for high school graduation. A concentration is a coherent sequence of two or more courses within a program area as defined by the Virginia Department of Education (VDOE).

Bold level entry courses are considered complete with one of the bulleted courses listed below it.

| Business and Information Technology Department |  |  |
| :---: | :---: | :---: |
| Accounting | Computer Information Systems | Medical Administration |
| Advanced Accounting <br> Computer Information Systems <br> Advanced Computer Information Systems <br> Design, Multimedia, \& Web Technologies <br> Advanced Design, Multimedia, \& Web Technologies <br> Entrepreneurship <br> Medical Administration <br> Principles of Business \& Marketing | Accounting <br> Advanced Accounting <br> Advanced Computer Information Systems <br> Design, Multimedia, \& Web Technologies <br> Advanced Design, Multimedia, \& Web Technologies <br> Entrepreneurship <br> Information Technology Fundamentals <br> Medical Administration <br> Principles of Business \& Marketing <br> Computer Programming <br> Advanced Computer Programming | Accounting \& Advanced Accounting <br> Computer Information Systems <br> Advanced Computer Information Systems <br> Design, Multimedia, \& Web Technologies <br> Advanced Design, Multimedia, \& Web Technologies <br> Information Technology Fundamentals <br> Introduction to Health \& Medical Sciences <br> Principles of Business \& Marketing |

## Business and Information Technology Department

| Entrepreneurship | Design, Multimedia, and Web Technologies | Principles of Business \& Marketing |
| :---: | :---: | :---: |
| Accounting <br> Advanced Accounting <br> Computer Information Systems <br> Advanced Computer Information Systems <br> Marketing <br> Advanced Marketing <br> Principles of Business \& Marketing <br> Sports and Entertainment Marketing | Accounting and Advanced Accounting <br> Computer Information Systems <br> Advanced Computer Information Systems <br> Advanced Design, Multimedia, \& Web Technologies <br> Information Technology Fundamentals <br> Medical Administration <br> Principles of Business \& Marketing <br> Computer Programming <br> Advanced Computer Programming | Accounting <br> Advanced Accounting <br> Computer Information Systems <br> Advanced Computer Information Systems <br> Design, Multimedia, \& Web Technologies <br> Advanced Design, Multimedia, \& Web Technologies <br> Entrepreneurship <br> Marketing <br> Advanced Marketing <br> Medical Administration |


| Information Technology Fundamentals | Computer Programming |
| :--- | :--- |
| Computer Information Systems | Computer Information Systems |
| Advanced Computer Information Systems | Advanced Computer Information Systems |
| Design, Multimedia, \& Web Technologies | Design, Multimedia, \& Web Technologies |
| Advanced Design, Multimedia, \& Web Technologies | Advanced Design, Multimedia, \& Web Technologies |
| Medical Administration | Advanced Computer Programming |

## Career Connections Department

Virginia Teachers for Tomorrow I
Virginia Teachers for Tomorrow II

## Marketing Department

| Principles of Business \& Marketing | Marketing |
| :--- | :--- |
| Accounting | Entrepreneurship |
| Advanced Accounting | Advanced Marketing |
| Computer Information Systems | Principles of Business \& Marketing |
| Advanced Computer Information Systems |  |
| Design, Multimedia, \& Web Technologies |  |
| Advanced Design, Multimedia, \& Web Technologies |  |
| Entrepreneurship |  |
| Marketing |  |
| Advanced Marketing |  |
| Medical Administration |  |

## Technology / Trade and Industrial Education

| Industrial Maintenance I | Imaging Technology | Video \& Media Technology |
| :--- | :--- | :--- |
| Industrial Maintenance II | Video \& Media Technology | Imaging Technology |

## Advanced Technologies Academy

| Cybersecurity Fundamentals | Cybersecurity Technology I | Electronic Systems I |
| :--- | :--- | :--- |
| Cybersecurity Technology I <br> Advanced Cybersecurity Technology II | Advanced Cybersecurity Technology II | Electronic Systems II |


| Professional Skills Academy |  |  |
| :--- | :--- | :--- |
| Materials \& Processes Technology | Welding I | Carpentry I |
| Technical Drawing and Design | Welding II | Carpentry II |
| Technical Drawing \& Design |  |  |
| Architectural Drawing and Design | Electricity I |  |


| Health Science Academy |  |  |
| :--- | :--- | :--- |
| Introduction to Health \& Medical <br> Sciences | Emergency Medical Technician I | Firefighting I |
| Medical Administration <br> Medical Laboratory I <br> Nurse Aide I <br> Physical/Occupational Therapy I | Emergency Medical Technician II | Firefighting II |
| Medical Laboratory Technology I | Nurse Aide I | Nurse Aide II |
| Medical Laboratory Technology II | Introduction to Health \& Medical <br> Sciences <br> Nurse Aide II | Patient Care Technician |

## High-Quality Work-Based Learning

High-Quality Work-Based Learning (HQWBL) consists of school-coordinated workplace experiences related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations. WBL experiences are opportunities for students to apply and refine knowledge, attitudes, and skills through professionally coordinated and supervised work experience directly related to career goals. The Virginia Department of Education (VDOE) recognizes 11 types of WBL experiences, and certain experiences are eligible for high school credit. The below provides an overview of the types of learning experiences.

| Course <br> Number if Credit may be Earned | Method | Description | Paid or Unpaid | Work Experience Hours Required | Credit Awarded | Meets Graduation Requirement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Not Applicable | Job Shadowing | Short-term experience that allows a student to explore a career or cluster | Unpaid | At least four hours | No | No |
| Not Applicable | Externship | Longer-term job shadow that allows more in depth career exploration at a business or industry site | Unpaid | 40 hours | No | Yes (at least 40 hours) |
| H9190EY | Mentorship | In depth opportunity to learn about an industry through visits and completion of a related project | Unpaid | Varies by program | 0.5 for <br> every 140 <br> hours <br> completed | Yes (at least 140 hours) |
| Not Applicable | Service Learning | Community service planned by students and directly related to their CTE course and instruction | Unpaid | Varies by program | No | Yes |
| Not Applicable | School-Based Enterprise | A school-based enterprise is an ongoing, student-managed, entrepreneurial operation within the school setting. | Unpaid | Varies by program | No | Yes |
| H9180EY | Internship | Hands-on experience for students to prepare for a career. | *Could be either <br> Refer to FLSA <br> Criteria | 280 hours | 1 credit for every 280 hours completed | Yes |
| Not applicable | Entrepreneurship | The student plans, implements, operates, and assumes financial risks in a business that produces goods or delivers services. | Paid | Varies according to type | 1 credit for 280 hours | Yes |
| Not applicable | Clinical Experience | Clinical experience allows health and medical science students to integrate knowledge acquired in the classroom with clinical practice. | Unpaid | 36 Weeks/280 Hours | No | Yes |
| H9210EY, <br> H9120EY, <br> H9160EY, <br> H9130EY, <br> C9140EY, <br> H9200EY | Cooperative <br> Education | Hands-on work experience directly related to a CTE course | Paid | 280 hours | 1 credit for every 280 hours completed | Yes |
| Not Applicable | Youth Registered Apprenticeship | Enrollment in a CTE course with related on-the-job training provided by the employer | Paid | 280 hours | 1 credit for every 280 hours completed | Yes |
| Not Applicable | Registered Apprenticeship | Related instruction and on-the-job training both provided by the employer | Paid | Varies by Program |  | Yes |

## Industry Credentials Opportunities

Industry Credentials provide students the opportunity to earn an industry recognized certification that demonstrates the skills attained while in high school. Credentials earned should be added to a student's resume when applying for future jobs


## Continuous Non-Discrimination Notice

The Winchester Public School Board is committed to nondiscrimination with regard to sex, sexual orientation, gender, gender identity, race, color, national origin, disability, religion, ancestry, age, marital status, pregnancy, childbirth or related medical conditions, disability, status as a veteran, genetic information or any other characteristic protected by law or based on a belief that such characteristic exists.

This commitment prevails in all of its policies and practices concerning staff, students, educational programs and services, and individuals and entities with whom the Board does business.

Please contact the individuals below regarding inquiries on our non-discrimination policies:

# IX Coordinator 

Jennifer Buckley
Director of Student Services
598 N. Kent Street
Winchester, VA 22601
(540) 667-4253

Dr. Hayley Mullins
Director of Special Education
598 N. Kent Street
Winchester, VA 22601
(540) 667-4253

## Section 504 Coordinator

Dr. Erin Kirkland
Coordinator of Special Education
598 N. Kent Street
Winchester, VA 22601
(540) 667-4253

## COURSE OFFERINGS

## This page contains a listing of all courses in the high school curriculum.

## Academic Support

- Study Skills I
- Study Skills I
- Study Skills for Success in Advanced Courses


## Adaptive/Special Education

- Essentialized Science
- Essentialized Math
- Essentialized English
- Essentialized History and Social Studies
- Life-Skills Math
- Life-Skills Reading
- Community Skills
- Recreation \& Leisure Skills
- Vocational Skills
- Independent Living Skills
- Personal Living and Finance
- ELA Seminar
- Math Seminar
- SEL Seminar
- Study \& Organization Skills Seminar
- Extended Study Seminar
- Foundations of Algebra
- Reading I
- Reading II
- Adaptive Physical Education
- Education for Employment I
- Education for Employment II
- Practical Assessment Exploration System
- Practical Assessment Exploration System II


## Business \& Information Technology

## - Accounting

- Advanced Accounting
- Computer Information Systems (CIS)
- Advanced Computer Information Systems*
- Economics \& Personal Finance
- Medical Administration*
- Design, Multimedia, \& Web Technologies*
- Advanced Design, Multimedia, \& Web Technologies
- Information Technology Fundamentals
- Computer Programming

Advanced Computer Programming*

## Career Connections

- Virginia Teachers for Tomorrow I**
- Virginia Teachers for Tomorrow II**


## English

- English 9
- Honors English 9
- English 10
- Honors English 10
- English 11
- AP English Language and Composition*
- English 12
- AP English Literature and Composition*
- Forensics Speech
- Debate
- Creative Writing \& Miscellanea*
- Yearbook (Fall)

Yearbook (Spring)

## English Learners

- English as a Second Language I
- English as a Second Language II
- English as a Second Language III
- Transitional English for ELs (9/10)
- Transitional English for ELs $(11 / 12)$
- English 9 for ELs
- EL Literacy Skills
- EL Integrated Science
- Biology for ELs (Part 1 \& Part 2)
- Algebra 1 for ELs (Part 1 and Part 2)
- EL Algebra Readiness
- EL Strategies for Success

Fine Arts

## Art Courses

- Art Foundations
- Drawing \& Painting I
- Drawing \& Painting II
- Sculpture I
- Sculpture II
- AP Studio Art: 2-D Design
- AP Studio Art: 3-D Design
- AP Studio Art: Drawing

Fine Arts Cont'd.
Music Courses

- Symphonic Band I
- Symphonic Band II
- Beginning Guitar
- Intermediate Guitar
- Jazz Ensemble and Improvisation
- Basic Ukulele

Vocal Music Courses

- Treble Ensemble I
- Treble Ensemble II
- Concert Choir I
- Concert Choir II
- Chamber Choir I

Theatre Arts Courses

- Theatre I
- Theatre II
- Theatre III
- Theatre IV
- Technical Theatre

Kinesiology \& Health

- Kinesiology 9 - Health \& PE
- Kinesiology 10 - Driver Education, Health \& PE
- Advanced Kinesiology - Team Sports
- Advanced Kinesiology-Team Sports II
- Advanced Kinesiology - Weight Training
- Advanced Kinesiology-Weight Training II
- Recreational \& Lifetime Fitness I
- Recreational \& Lifetime Fitness II
- Sport, Exercise, and Health Science

Marketing

- Marketing
- Advanced Marketing
- Entrepreneurship
- Principles of Business and Marketing


## Mathematics

## - Algebra I

- Algebra I Part 1 and Part 2
- Computer Math
- Geometry
- Honors Geometry
- Algebra, Functions and Data Analysis
- Data Science
- Algebra II
- Honors Algebra II
- Probability and Statistics
- Pre-Calculus*
- Calculus A\&B*
- AP Statistics*
- AP Calculus AB ${ }^{*}$

Science

- Environmental Science
- Biology
- Honors Biology
- Biology II: Ecology
- AP Biology*
- Anatomy \& Physiology
- Chemistry
- Honors Chemistry
- AP Chemistry*
- Astronomy
- AP Environmental Science
- Physics
- AP Physics 1 - Algebra Based*
- AP Physics 2 - Algebra Based*
- AP Physics C (Mechanics)*


## Social Studies

- World Geography
- World History \& Geography to 1500
- Honors World History \& Geography to 1500
- World History and Geography 1500 - Present
- AP World History: Modern*
- Virginia \& U.S. History
- AP U.S. History*
- Virginia \& U.S. Government
- AP Government and Politics*
- Introduction to Psychology
- History of Latin America
- AP African American History
- AP Microeconomics/ AP Macroeconomics


## Work-Based Learning

- Advanced Technologies Academy Cooperative Education
- Cooperative Office Education
- Health Science Cooperative Education
- Internship
- Library Student Aide
- Marketing Cooperative Education
- Mentorship
- Nurse Aide Cooperative Education

Professional Skills Academy Cooperative Education

## World Language

- German I, German II, German III, German IV
- AP German Language and Culture
- French I, French II, French III, French IV
- AP French Language and Culture
- Spanish I, Spanish II, Spanish III, Spanish IV
- AP Spanish Language and Culture
- AP Spanish Literature and Culture
- Spanish for Heritage Speakers I
- Spanish for Heritage Speakers II
- Spanish for Heritage Speakers III

Advanced Technologies Academy

- Cybersecurity Fundamentals
- Cybersecurity Technology I*
- Advanced Cybersecurity Technology II*
- Electronic Systems I
- Electronic Systems II
- Imaging Technology
- Video and Media Technology

Professional Skills Academy

- Materials and Processes Technology
- Welding I/II
- Carpentry I/II
- Electricity I/II
- Architectural Drawing and Design
- Technical Drawing and Design
- Industrial Maintenance I

Health Sciences Academy
Introduction to Health and Medical Sciences

- Emergency Medical Technician I/II
- Firefighting I/II
- Physical / Occupation Therapy I/II
- Medical Laboratory Technology I / II*
- Nurse Aide I / II
- Patient Care Technician
- Physical / Occupational Therapy I /II
- Mental Health Assisting Careers
*DE with Laurel Ridge Community College
**DE with Shenandoah University


## ACADEMIC SUPPORT

## Study Skills I

Course No. H9171EY

| Elective | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course includes a review of content standards covered on specific SOL tests. This course will focus on specific content measured on the test and on study and test taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer-assisted instruction targeting each student's knowledge and skills deficits.
This class shall be graded on a pass-fail basis.

## Study Skills II

Course No. H9171EY

| Elective | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course continues application of skills for the review of content standards covered on specific SOL tests. This course will focus on specific content measured on the test and on study and test taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer-assisted instruction targeting each student's knowledge and skills deficits. This course also teaches students to select specific study skills that match their learning styles and how to apply creativity, communication, critical thinking, collaboration, and citizenship skills to future courses and their post-secondary experiences.
This class shall be graded on a pass-fail basis.
Study Skills for Success in Advanced Courses
Course No. H9172EY

| Elective | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |
| This course is designed to support students who are taking an advanced, AP, or Dual Enrollment course with |  |  |  |
| study skills for enhanced success in the advanced course. |  |  |  |
| This class shall be graded on a pass-fail basis. |  |  |  |

## ADAPTIVE and SPECIAL EDUCATION

These courses are designed for qualifying students.
Essentialized Science
Course No. H3061EY

| Elective | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course is designed to support the Virginia Essentialized Standards of Learning in Science. Students may enroll in this class each year of high school participation, as appropriate. Instruction and pacing are individualized based on the needs of the student, including needs identified in the Individual Education Program (IEP). Participation in this course will support students in fulfilling the requirements for the Virginia Alternate Assessment Program (VAAP).

| Essentialized Math | Prerequisite: none | Course No. H2004SY |
| :--- | :--- | ---: | ---: |
| Elective | Semester | $\mathbf{1}$ credit |
| This course is designed to support the Virginia Essentialized Standards of Learning in Mathematics. Students may |  |  |
| enroll in this class each year of high school participation, as appropriate. Instruction and pacing are |  |  |
| individualized based on the needs of the student, including needs identified in the Individual Education Program |  |  |
| (IEP). Participation in this course will support students in fulfilling the requirements for the Virginia Alternate |  |  |
| Assessment Program (VAAP). |  |  |


| Essentialized English | Prerequisite: none | Course No.H1001SY |
| :--- | :--- | :--- | :--- |
| Elective | Semester | $\mathbf{1}$ credit |
| This course is designed to support the Virginia Essentialized Standards of Learning in English including areas of |  |  |
| reading and writing. Students may enroll in this class each year of high school participation, as appropriate. |  |  |
| Instruction and pacing are individualized based on the needs of the student, including needs identified in the |  |  |
| Individual Education Program (IEP). Participation in this course will support students in fulfilling the <br> requirements for the Virginia Alternate Assessment Program (VAAP). |  |  |

## Essentialized History and Social Science

Course No. H4033SY Elective

Prerequisite: none
Semester 1 credit
This course is designed to support the Virginia Essentialized Standards of Learning in History and Social Science. Students may enroll in this class each year of high school participation, as appropriate. Instruction and pacing are individualized based on the needs of the student, including needs identified in the Individual Education Program (IEP). Participation in this course will support students in fulfilling the requirements for the Virginia Alternate Assessment Program (VAAP) or other specialized assessment as mandated by the Virginia Department of Education.

## Life-Skills Math

Course No. H9012SY

| Elective | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This adapted curriculum course is designed to reinforce basic mathematical skills with real world applications for students who have sufficed the requirements for an Applied Studies Diploma based upon VAAP qualifications. Instruction and pacing are individualized based on the needs of the student, including needs identified in the Individual Education Program (IEP).

## Life-Skills Reading

This adapted curriculum course is designed to reinforce basic reading and writing skills with real world applications for students who have sufficed the requirements for an Applied Studies Diploma based upon VAAP qualifications. Instruction and pacing are individualized based on the needs of the student, including needs identified in the Individual Education Program (IEP).

## Community Skills

## Course No.H4002SY

 ElectivePrerequisite: none
Semester
This adapted curriculum course is designed to develop functional skills necessary for community integration with maximum independent functioning. Instruction and pacing are individualized based on the needs of the student, including needs identified in the Individual Education Program (IEP) in the areas of community access such as money handling, social skills, self-management, and self-advocacy. This course is designed for students who have sufficed the requirements for an Applied Studies Diploma following the Virginia Essentialized Standards of Learning.

## Recreation and Leisure Skills

## Course No. H9173EY

## Elective

Prerequisite: none
Semester
1 credit
This adapted curriculum course is designed to prepare students to participate in age-appropriate activities that promote well-being, socialization, and community access. Instruction and pacing are individualized based on the needs of the student, including needs identified in the Individual Education Program (IEP). This course is designed for students who have sufficed the requirements for an Applied Studies Diploma following the Virginia Essentialized Standards of Learning.

| Vocational Skills | Prerequisite: none | Course No. H9174EY |
| :--- | :--- | :--- | :--- |
| Elective | Semester | $\mathbf{1}$ credit |
| This adapted curriculum course is designed to develop appropriate work-related behaviors in order to prepare |  |  |
| students for participation in community-based work sites or employment. Instruction and pacing are |  |  |
| individualized based on the needs of the student, including needs identified in the Individual Education Program |  |  |
| (IEP) in the areas of vocational skills identification, exploration, and development with real-world applications. |  |  |
| This course is designed for students working towards an Applied Studies Diploma following the Virginia |  |  |
| Essentialized Standards of Learning. |  |  |

## Independent Living Skills

## Course No. H9021SY

| Elective | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This adapted curriculum course is designed to develop functional skills necessary for independent living. Instruction and pacing are individualized based on the needs of the student, including needs identified in the Individual Education Program (IEP) in areas of independent living such as housekeeping, meal planning and preparation, hygiene and self-management. This course is designed for students working towards an Applied Studies Diploma following the Virginia Essentialized Standards of Learning.

This course includes computing and understanding taxes, preparing and balancing a personal/family budget, managing debt, comparing various savings options, and identifying consumer rights and responsibilities.

## ELA Seminar

Course No. H9001SY

## Elective

Co-requisite: Student's english class

Semester
1 credit
This course provides targeted academic assistance in the areas of reading and writing. Instruction and support are based on the student's current English course and reading and writing goals identified in the student's Individualized Education Program (IEP).

## Math Seminar

Course No. H9002SY
Elective

## Co-requisite: Student's math class

Semester
1 credit
This course provides targeted academic assistance in the area of mathematics. Instruction and support are based on the student's current math course and mathematics goals identified in the student's Individualized Education Program (IEP).

| SEL Seminar | Prerequisite: none | Course No. H9003SY |  |
| :--- | :--- | :--- | :--- |
| Elective | Semester | $\mathbf{1}$ credit |  |
| This course provides targeted instruction and assistance in the area of social skills. Instruction and support are <br> based on the social skills and behavioral goals identified in the student's Individualized Education Program (IEP). |  |  |  |

## Study and Organization Skills Seminar

Course No. H9004SY Elective

Prerequisite: none
Semester
1 credit
The course provides targeted instruction and assistance in the areas of executive functioning, study skills, and organizational skills. Instruction and support are based on the study and organizational goals identified in the student's Individualized Education Program (IEP).

## Extended Study Seminar

Course No.H9963EY
Elective
Prerequisite: none
Semester
1 credit
The course provides targeted support based on the study and organization and behavioral goals identified in the student's Individualized Education Program (IEP).

## Foundations of Algebra

Course No. H2011SY
Elective
Prerequisite: none
Semester
1 credit
This course is a first year high school mathematics course option for students with an Individualized Education Program (IEP) who need substantial support to bolster success in high school mathematics. The course is aimed at students who have reported low standardized test performance in prior grades and/or have demonstrated significant difficulties in previous mathematics classes. Foundations of Algebra will provide many opportunities to revisit and expand the understanding of foundational algebra concepts, will employ diagnostic means to offer focused interventions, and will incorporate varied instructional strategies to prepare students for required high school mathematics courses.

This course is designed for students with an Individualized Education Program (IEP) who have demonstrated significant difficulties in the areas of reading, writing and spelling. Instruction will focus on decoding, word structure, roots, prefixes, suffixes, spelling, vocabulary, background knowledge, and listening comprehension.

| Reading II | Prerequisite: none | Course No. H1102SY |
| :--- | :--- | :--- | :--- |
| Elective | Semester | $\mathbf{1}$ credit |
| This course is designed for students with an Individualized Education Program (IEP) who have demonstrated <br> significant difficulties in the areas of reading, writing and spelling. It is a progression course, building on the skills <br> acquired in Reading I. Instruction will emphasize accurate and fluent word recognition, reading with expression <br> and meaning, writing, and proofreading. The goal of the class is to increase independent reading skills. |  |  |

## Adaptive Physical Education

Course No. H5002SY
Elective
Prerequisite: none
Semester 1 credit
This adapted physical education course is designed for students who have an Individual Education Program (IEP) identifying adapted physical education services in the special education setting. Students may enroll in this class each year of high school participation, as appropriate. Emphasis is on modified fitness and wellness activities.

## Education for Employment I

Course No.H9111EY
Elective: Grade 9-11 $\quad$ Prerequisite: none
Semester
1 credit
This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self advocacy, customer-service, and life skills. This course offers students integrated labor market needs through an applied employment education format.

## Education for Employment II

## Course No. H9112EY

## Elective: Grade 10-12

Prerequisite: none
Semester
This course continues to teach students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self advocacy, customer-service, and life skills. This course offers practical learning opportunities for students to enter the work force with acquired workplace readiness skills and knowledge and to create economic opportunity.

## PAES LAB: Practical Assessment Exploration System I

Course No. H9113EY

## Elective

Prerequisite: none
Semester
This course is a research-based career training program. PAES provides training in both employment and independent living skills. The performance-based assessment provides progress monitoring and measures performance in a broad range of career pathways. The PAES program addresses functional math and reading skills in a broad range of career areas. Strict work procedures will be followed so the student can get a sense of the real working world. Five areas assessed are Computer Technology, Construction/Industrial, Processing/Production, Consumer/Service, and Business Marketing. The PAES curriculum is for students with an Individual Education Program (IEP).

| Elective | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

In this subsequent course students continue to explore the PAES Lab, a research-based career training program. PAES provides training in both employment and independent living skills. The performance-based assessment provides progress monitoring and measures performance in a broad range of career pathways. The PAES program addresses functional math and reading skills in a broad range of career areas. Strict work procedures will be followed so the student can get a sense of the real working world. Five areas assessed are Computer Technology, Construction/Industrial, Processing/Production, Consumer/Service, and Business Marketing. The PAES curriculum is for students with an Individual Education Program (IEP).

## BUSINESS \& INFORMATION TECHNOLOGY



## Accounting

Course No.H6091SY
Elective: Grades 10-12
Prerequisite: none
Semester
1 credit
In this course, students will study the basic principles, concepts, and practices of the accounting cycle for a service business and a merchandising business. Topics covered include analyzing transactions, journalizing and posting entries, preparing payroll records and financial statements, and managing cash systems. Ethics and professional conduct are emphasized. Students learn fundamental accounting procedures using both manual and electronic systems. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

| Advanced Accounting | Course No.H6092VY |  |  |
| :--- | :--- | :--- | :--- |
| Elective: Grades 11-12 | Prerequisite: Accounting | Semester | $\mathbf{1}$ credit |
| In this course, students will gain knowledge of advanced accounting principles, procedures, and techniques used |  |  |  |
| to solve business problems and make financial decisions. Students work in a technology-integrated environment, |  |  |  |
| using accounting and spreadsheet software to analyze, synthesize, evaluate, and interpret business financial data |  |  |  |
| related to inventory, fixed assets, notes/accounts payable and receivable, implementation of a partnership and a |  |  |  |
| corporation, and other specialized accounting systems. Using authentic workplace scenarios that reflect current |  |  |  |
| industry trends and standards, students analyze financial data and acquire knowledge of business ethics. The |  |  |  |
| cooperative education method is available for this course. Students combine classroom instruction and |  |  |  |
| supervised on-the-job training in an approved position with continuing supervision throughout the |  |  |  |
| school year. |  |  |  |

This course is recommended for all students whether they plan to enter the work force or enter college upon graduation. Students are introduced to the use of Microsoft Office $\circledR$, which includes word processing, spreadsheets, databases, and graphics. Students apply problem-solving skills to complete integrated activities on the computer. This course prepares students for industry certification tests. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

## Advanced Computer Information Systems

## Course No.H6202DY

Elective: Grades 10-12; DE
Prerequisite: CIS
Semester
1 credit
In this course, students build on skills learned in Computer Information Systems to create advanced documents prepared in Word, Excel, Access, and PowerPoint. Desktop Publishing will be taught using Microsoft Publisher ${ }^{\circledR}$ and InDesign. Instruction and use of a scanner will allow students to enhance documents and presentations. Using the Internet, students will learn to create Web pages using a programming language. This course prepares students for industry certification tests. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of each semester. Students who wish to take this course as a dual enrollment course can earn three college credits through Laurel Ridge Community College (Laurel Ridge Community College BUS 226). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

## Economics \& Personal Finance

## Course No.H6010RY

| Required: Grades 10-12 | Recommended Grade Level: 10 and 11 | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

In this course, students will learn how to navigate the financial decisions they must face and to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. In addition to developing personal finance skills, students will also study basic occupational skills and concepts in preparation for entry-level employment in the field of finance. The course incorporates all economics and financial literacy objectives included in the Code of Virginia §22.1-200-03B. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

In this course, students seeking to gain employment in the medical field will learn how to function effectively in a medical office environment by performing computerized account management activities using medical account management software. Along with medical terminology and human anatomy and physiology, units of instruction will include customer service activities, managing office activities, legal and business ethics, and employability skills. Students will be exposed to real-world situations during the year from representatives from the business community and through field trips. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of each semester. Students who wish to take this course as a dual enrollment course can earn six college credits through Laurel Ridge Community College (Laurel Ridge Community College HIM 111 \& 112). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

## Design, Multimedia, \& Web Technologies (DMW) Course No.H6221Dy

| Elective: Grades 10-12; DE | Prerequisite: none | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

In this course, students develop proficiency in creating Desktop Publications, multimedia presentation/projects, and Web sites using industry standard application software. Students incorporate principles of layout and design in completing publications and projects. Students design portfolios that may include business cards, newsletters, mini-pages, Web pages, multimedia presentations/projects, calendars, and graphics. Students will earn industry certification in Microsoft PPT and Adobe. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn three college credits through Laurel Ridge Community College (Laurel Ridge Community College ITD 110). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

## Advanced Design, Multimedia, \& Web Technologies Course No.H6222VY

| Elective: Grades 11-12 | Prerequisite: DMW | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

In this course, students develop advanced skills in creating interactive media, Web sites, and publications for print and electronic distribution. Students work with sophisticated hardware and software, applying skills learned to real-world projects. Students will earn industry certification in Adobe CC. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

## Information Technology Fundamentals

This course introduces the essential technical and professional skills required for students to pursue programs leading to professional careers and information technology certifications. The course introduces skills related to digital technology, digital applications, maintenance/upgrading/troubleshooting, and networking fundamentals. Students also explore ethical issues related to computers and Internet technology and examine web page and game design. This course is also offered at the middle school.

| Computer Programming | Course No. H6211EY |  |
| :--- | :--- | :--- |
| Elective: Grades 10-12 | Prerequisite: none | Semester |
| This credit |  |  |
| skills to solve problems and create applications. Students will be using Python as the programming language of |  |  |
| this course. Python is a general-purpose programming language that emphasizes readability and algorithmic |  |  |
| clarity. Student's programs will use basic programming concepts to solve problems and to create graphical |  |  |
| programs. They will design, implement, and test their own programs. The class will include open-ended projects |  |  |
| in which students will apply and extend their learning to make creative applications to problems they see in |  |  |
| their own lives. The goal of this course is to provide the best possible introduction to learning programming |  |  |
| languages and, therefore, prepare the student for more advanced computer science courses. |  |  |

Advanced Computer Programming Course No. H6212VY

| Elective: Grades 11-12; DE | Prerequisite: Computer Programming | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

In this course, students will learn the fundamentals of the Java language, learn how to use classes to create programs, and then learn how to write our own classes. Platform-independence of Java has allowed programmers to create applications for the masses making it one of the most utilized of programming languages. Inheritance and polymorphism along with abstract classes and interfaces will be studied. Students will use the concepts studied to write programs that use the Windows graphical user interface. Students will extend their programming skills to develop database applications, interactive multimedia applications including game applications, mobile applications, and Web applications. The goal of this course is to provide the best possible introduction to learning the Java programming language and, therefore, prepare the student for more advanced computer science courses.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn six college credits through Laurel Ridge Community College (Laurel Ridge Community College ITP 120 and Laurel Ridge Community College ITP 220). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

## CAREER CONNECTIONS

| Virginia Teachers for Tomorrow I | Course No.H6921EY |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Elective: Grades 11-12; DE | Prerequisite: none <br> Co-requisite: English at Innovation Center | Semester | $\mathbf{1}$ credit |
| In this course, students build a foundation for teaching; learn the history, structure and governance of teaching; <br> apply professional teaching techniques in the VTFT classroom; and reflect on their teaching experiences. This <br> course fosters student interest, understanding, and appreciation of the teaching profession and allows secondary <br> students to explore careers in education. Additional educational leadership opportunities are offered through <br> the student organization, Future Educators Association. <br> Students must complete the following eligibility requirements to be considered for enrollment in the program: <br> ■ Have and maintain a minimum 2.7 grade point average or its equivalent; <br> ■ Submit three satisfactory teacher recommendations; and <br> ■ Submit a brief essay and application. <br> This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. <br> Students who wish to take this course as a dual enrollment course can earn three college credits through <br> Shenandoah University. Students must satisfy enrollment criteria and pay a reduced college tuition rate to be <br> eligible for college credits. |  |  |  |

## Virginia Teachers for Tomorrow II

## Course No.H6922EY

| Elective: Grades 11-12; DE | Prerequisite: VA Teachers for Tomorrow I <br> Co-requisite: English at Innovation Center | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

In this subsequent course students continue to explore careers in the Education and Training Cluster and pathways. This course provides the opportunity for students to prepare for careers in education as they research postsecondary options, learn about the process of teacher certification in Virginia, and participate in a practicum experience.

Students must complete the following eligibility requirements to be considered for enrollment in the program:

- Have and maintain a minimum 2.7 grade point average or its equivalent;
- Submit three satisfactory teacher recommendations; and
- Submit a brief essay and application.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn three college credits through Shenandoah University. Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

## ENGLISH

## Standard Diploma and Advanced Diploma

4 Credits Required, 2 Verified Credits


Available English Electives
Forensics Speech
Debate
Creative Writing and Miscellanea
Yearbook

## English 9

## Course No.H1010RY

| Required: NCAA | Prerequisite: none |
| :--- | :--- |

Year-Long
1 credit
This course emphasizes skills in oral communication, writing, and literary analysis. Students will analyze a variety of texts including fiction, non-fiction, drama, and poetry. Students will learn to cite sources and incorporate them in a research product. Word origins, derivations, and figurative language study will enhance vocabulary. Context clues and inference practice will be emphasized. The writing component will include blending multiple forms of writing including embedding a narrative while developing a central idea, tone, and voice with intention and purpose. Mechanics and grammar with sentence, paragraph, and essay structure are a primary focus.

## Honors English 9

This course will engage students in analytical reading, writing, discussion, and research. The course will focus on texts requiring annotative reading and contextual understanding. Students will understand the importance of small decisions made by authors that significantly enhance literature. Literature study will center around essays, short stories, novels, and poetry in both nonfiction and fiction. Students will engage in Socratic discussion while learning to write analytical responses to literature. Students will produce, analyze, and evaluate a variety of media and extend vocabulary through study. Students will write recursively in a variety of forms using enhanced mechanics and structures. Note that oral presentation and discussion are a coursework requirement.

## English 10

## Course No.H1022RY

| Required: NCAA | Prerequisite: English 9 | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

In this course students will participate in varied learning activities. Students will analyze, produce, and examine differences in visual, auditory, and written messages. Students will extend vocabulary through study of word origins and derivatives. Reading will encompass interpretation of non-fiction texts as well as literature from different cultures and eras. Students will research and organize ideas and evidence to support a well written thesis that incorporates an embedded narrative. Students will employ the recursive writing process to create a focused, organized, and coherent piece of writing to address a specific audience and purpose. Students will write persuasively using examples, ideas, specific details, and word choice to support a clear and focused positional claim. Students will be preparing for the state mandated EOC Writing SOL during this course.

## Honors English 10

Course No.H1022HY
Required: NCAA

## Prerequisite: English 9 Recommendation: Honors English 9

Year-Long

This course will engage students to think deeply and richly about both fiction and nonfiction texts. Skills from English 9 will be further developed as the course focuses on various forms of literary media and writing. The study of different literature forms, such as poetry, novels, short stories, and non-fiction essays, will result in analytical writing and socratic discussion. The course places a heavy emphasis on a variety of writing skills, with a focus on persuasion. Instructional strategies and lessons will provide students with the vocabulary to begin the art of literature analysis. Because this course is a prep course for AP English courses, emphasis is placed on preparing students for success in the upcoming AP Language and AP Literature courses. Note that oral presentation and discussion are a coursework requirement. Students will be preparing for the state mandated EOC writing SOL during this course.

## English 11

## Course No.H1033RY

| Required: NCAA | Prerequisite: English 10 | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

In this course, the student will read, comprehend, and analyze relationships among American literature, history, and culture while preparing for the SOL EOC reading test to be taken at the conclusion of the course. Utilizing the recursive process, students will focus on creating multiple reading responsive compositions that include supporting evidence for expanded American literary themes. Through authentic texts, the student will learn word origins, derivations, and figurative language to expand vocabulary and enhance their understanding of the organic connections between culture and literature. Bias, false premise, appeals, and media literacy will be studied and analyzed.

## AP English Language and Composition

| Required: DE; NCAA | Prerequisite: successful completion of Honors English 9 <br> AND/OR English 10 OR English teacher recommendation | Year-Long | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course is based on the AP English Language and Composition curriculum established by the College Board. Students will read a variety of fiction and nonfiction texts meant to spark rich discussion about debatable real world issues and how an author's rhetoric impacts what we believe about them. In addition, this course focuses intensely on academic writing with specific instruction relating to analysis and argumentation. The skills taught in this course will thoroughly prepare students, not only for the associated AP exam, but also for the classes they will take at the college level.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of each semester. Students who wish to take this course as a dual enrollment course can earn six college credits through Laurel Ridge Community College (Laurel Ridge Community College ENG 111 \& 112). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

## English 12

| Required: NCAA | Prerequisite: English 11 or <br> AP English Language and Composition |
| :--- | :--- |

## Course No.H1044RY

In this course students will survey British literature while learning oral and written communication skills needed in the work place and post secondary training. Students will develop and enhance their previous study of media literacy and evaluate sources including advertisements, editorials, blogs, Web sites, and other media for relationships between intent, factual content, and opinion. Students will use the writing process to create essays, resumes, evaluations, and other workplace written and presentation material. Students will synthesize the reading, writing and thinking and develop a project focusing on an authentic worldly issue of importance while incorporating connections between literature and society.

## AP English Literature and Composition

Course No.H1052BY

| Required: DE; NCAA | Prerequisite: English 11 or AP English Language <br> and Composition and Grade of B or higher in <br> previous English course and English teacher <br> consultation. | Year-Long | 1 credit |
| :--- | :--- | :--- | :--- |

This course is based on the AP curriculum suggested by the College Board as well as the British Literature course description at Laurel Ridge Community College. Students engage in the intensive study of literary works, and the study and practice of writing about literary works; they will continue writing essays in exposition and argument.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn three college credits through Laurel Ridge Community College (Laurel Ridge Community College ENG 245). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits

This course is for students who are creative and articulate and are interested in competing as a part of the Forensics Team. Students will be introduced to competition events approved by the Shenandoah Valley Forensics League, the Virginia High School League, and the National Speech and Debate League. For persuasive speeches used in original oratory, class time will involve researching topics using Modern Language Association (MLA) rules and format and learning effective speech delivery techniques. For those students interested in interpretation, the course will focus on selecting, cutting, editing and delivering interpretations of literary works in dramatic, humorous, poetry, prose and duo events. Impromptu speaking will also be a focus of the class. Assessment of progress may involve both writing- and performance-based methods. In addition to competing with the team, students will be expected to participate in one other event such as Poetry Out Loud, working as a judge at the middle school forensics event, or speaking at a school assembly.

## Debate

## Course No.H1082EY

| Elective: Grades 9-12 | Prerequisite: none | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

In Debate, students must be articulate, argumentative, and willing to put forth the effort needed to be competitive in debate events in the Shenandoah Valley Forensics League, the Virginia High School League, and the National Speech and Debate League. This is a performance based course, thus it is anticipated that students taking the course will attend and perform in debate tournaments. To that end, class time will be spent preparing for upcoming debate tournaments through research, writing, editing, and delivering speeches. Progress towards objectives will be measured by both written and performance-based methods. Instruction on the following events may be included in this class: public forum debate, Lincoln Douglas Debate, Student Congress, Class Policy, and Extemporaneous Speaking.

## Creative Writing \& Miscellanea

## Course No.H1090EY

| Elective: Grades 10-12; NCAA | Co-requisite for Dual Enrollment: AP English <br> Language and Composition (ENG. 111 and <br> 112) | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course is for students in grades 9-12 interested in developing their creative writing skills. Students will get the opportunity to write in a variety of genres, receive feedback from their peers and extensively revise a finished collection of their work. Students must be open to sharing their writings and critiquing the works of others. Students will also create and publish the literary/art magazine Miscellanea.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn three college credits through Laurel Ridge Community College (Laurel Ridge Community College 211). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits

## Yearbook - Fall

## Course No. H11104EY

Elective: Grades 10-12 $\quad$ Prerequisite: Instructor approval
Semester - Fall 1 credit
This course helps produce the annual student publication, The Handlian. In this phase of the course, students will design the style and theme of that year's publication. They will provide journalistic and photographic coverage for fall athletics, events, and academics. Students will create layouts using graphic design techniques. They will gain skills in marketing, teamwork, time management, sales, and leadership.

## Elective: Grades 10-12 $\quad$ Prerequisite: Instructor approval

Semester - Spring 1 credit
This course helps produce the annual student publication, The Handlian. In this phase of the course, students continue to provide journalistic and photographic coverage for winter/spring athletics, events, and academics. They will gain skills in copywriting, editing, publishing techniques, time management, teamwork, and leadership. Students are tasked with producing a timeless, creative, and innovative publication which will record our school's community, memories, and events.

## ENGLISH LEARNERS

The English as a Second Language Program is designed for students entering John Handley High School who are still acquiring English as a native speaker of another language. Students who arrive at John Handley High School as new transfer students with a language other than English recorded on their Home Language Survey will be screened using the WIDA MODEL Screening test. This test will provide scores for listening, speaking, reading, and writing, and it will give the student an overall English proficiency level which helps to determine placement. The EL Program offers self-contained classes for students to work on developing English language skills, fluency, and content area skills. The program also offers co-taught support classes in several content areas.

## English Learner Identification

There is a process to identify students as multilingual learners. The first step is to review the home language survey. If the survey indicates a language other than English spoken in the home then the student will move on to the screening process. The second step is screening a student utilizing the WIDA Model assessment tool. Students that score less than 5.0 in literacy and less than 5.0 overall are considered multilingual learners. Students that are identified as multilingual learners are placed in courses based on their WIDA Model scores and prior education.

## Procedure for Students 18+

Individuals that are 18 or older may attend John Handley High School if they have not earned a diploma from another country or in the United States. However, a meeting with the principal to discuss the amount of time to earn a high school diploma and other educational options may be required.

## Home Country Credit

Enrolling students are encouraged to provide any documentation, such as transcripts, in order to assist in course selection. Some courses may be transcribed to provide credits towards graduation. Other documentation may provide John Handley High School with a better understanding of the students educational background, for example their strengths in content areas such as math, english, science, and/or history.
If a student/family is unable to provide documentation from the home country, then a structured interview will be conducted. This information will be used in the same way documentation would. If documentation or a structured interview indicates that a student graduated from their home country then the student will be unable to enroll.

## Liaisons

The primary role of the parent liaisons at John Handley High School is to provide language support to communicate between the school and families. This would include assisting with completing registration documents, scheduling meetings, and providing interpretive services during meetings. When a parent or guardian needs to communicate with the school, the parent or guardian should reach out to one of the liaisons.

## Sample Newcomer Schedule

Year 1

| Semester 1 | Semester 2 |
| :--- | :--- |
| English as a Second Language I | EL Integrated Science |
| English as a Second Language II | English as a Second Language III |
| EL Algebra Readiness Part 1 | EL Algebra Readiness Part 2 |
| Kinesiology or 9th Grade Elective | Kinesiology or 9th Grade Elective |

Year 2

| Semester 1 |  |
| :--- | :--- |
| Transitional English for ELs | English 9 for ELs |
| Algebra I Part 1 | Algebra I Part 2 |
| World History I | Environmental Science |
| Kinesiology 10 | Elective |

## English Learner Courses

## English as a Second Language I

Course No.H1003LS

| Elective | Co-requisite with English as a Second Language II | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

This course is designed to provide an intensive introduction to English for Newcomer English Learners with an overall proficiency level 1, based on the WIDA ACCESS test, or the WIDA MODEL Screener. Students will take English as a Second Language I and English as a Second Language II during their first semester in the U.S. The goals of the additional block of English as a Second Language will be for these newcomer students to develop confidence with English Oral language in the social and instructional areas, otherwise known as survival English. The goals of this course will be an introduction to academic language in English listening, speaking, reading, and writing which are needed for success in high school coursework.
${ }^{* *}$ Students will receive an elective credit in the area of World Language for this class
English as a Second Language II
Course No.H1006LS

This course is designed to provide instruction for English Learners with an overall proficiency of a level 1 or 2, based on the WIDA ACCESS test or WIDA MODEL Screener. Students will develop English vocabulary in both social/instructional and academic language discourse. The goals of this course will be an introduction to academic language in English listening, speaking, reading, and writing which are needed for success in high school coursework.
**Students will receive an elective credit in the area of World Language for this class

## English as a Second Language III

Course No.H1007LS

| Elective | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |
| This course is designed to provide instruction for English Learners to enter content classes. Students will |  |  |  |
| develop English vocabulary with a focus on academic language. The goals of this course will be an introduction |  |  |  |
| to academic language in English listening, speaking, reading, and writing which are needed for success in high |  |  |  |
| school coursework. |  |  |  |
| **Students will receive an elective credit in the area of World Language for this class |  |  |  |

## Transitional English for ELs (9/10)

Course No.H1004LS

| Elective | Prerequisite: none | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

This course will provide a transition to English 9 for English Learners. The pace, writing, and reading skills will be adjusted to meet the needs of the learners, building up their skills to move into higher courses. Emphasis will be on skills in oral communication, writing, and the genres of literature. Paraphrasing, summarizing, giving and following directions, relaying opinions and responding to books will be stressed. Writing includes note-taking, completing standardized forms, understanding instructions, grammar, mechanics and usage as they relate to paragraphs, letters, essays, and longer compositions. Students will analyze a variety of media and study a variety of texts including fiction, non-fiction, drama, and poetry. Students will learn to cite sources and incorporate them in a research product.

[^1]
## Elective

This course will provide a transition to English 9 for English Learners. The pace, writing, and reading skills will be adjusted to meet the needs of the learners, building up their skills to move into higher courses. Emphasis will be on skills in oral communication, writing, and the genres of literature. Paraphrasing, summarizing, giving and following directions, relaying opinions and responding to books will be stressed. Writing includes note-taking, completing standardized forms, understanding instructions, grammar, mechanics and usage as they relate to paragraphs, letters, essays, and longer compositions. Students will analyze a variety of media and study a variety of texts including fiction, non-fiction, drama, and poetry. Students will learn to cite sources and incorporate them in a research product.
**Students will receive an English credit for this class

## English 9 for ELs

## Course No.H1005LS

| Elective: NCAA | Prerequisite: Transitional English for ELs | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

This course runs in sequence following Transitional English for ELs (9/10, 11/12) and provides English 9 credit. This course will only be offered in the spring for students who are learning the English language and require language acquisition support to understand the content. Skills emphasized are in oral communication, writing, literature, paraphrasing, summarizing, giving and following directions, relaying opinions, and responding to books. Writing includes note taking, completing standardized forms, understanding instructions, grammar, mechanics and usage as they apply to paragraphs, letters, essays, and longer compositions. Students will analyze a variety of media, and study a variety of texts including fiction, non-fiction, drama, and poetry. Students will learn to cite sources and incorporate them in a research project.
**Students will receive an English credit for this class

| EL Literacy Skills | Prerequisite: none | Course No. H1001LS |
| :--- | :--- | :--- | :--- |
| Elective | Semester | $\mathbf{1}$ credit |
| This course is intended for eligible English Learners to support their acquisition of English. The goal of the course |  |  |
| is to increase reading levels, and increase language acquisition with a focus on the overall literacy language |  |  |
| domains (reading and writing). Comprehension, decoding, and writing strategies will be supported to better |  |  |
| enable students for academic success with high school course work. |  |  |
| ${ }^{* *}$ Students will receive an English credit for this class |  |  |


| EL Integrated Science | Course No.H3000LS |  |  |
| :--- | :--- | :--- | :--- |
| Elective | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| This course is designed to provide some background knowledge in English of Science terms and concepts. In |  |  |  |
| particular instruction will focus on front-loading the vocabulary and initial concepts of Biology since this is the |  |  |  |
| first required course English Learners must successfully complete toward graduation requirements. This course |  |  |  |
| is designed to support English Learners who are an overall level 1 on the WIDA ACCESS test or WIDA Model |  |  |  |
| Screener. |  |  |  |
| **Students will receive an elective credit for this class. |  |  |  |

## Biology for ELs (Part 1 and Part 2)

| Elective | Prerequisite: none | Year-Long | $\mathbf{2}$ credits |
| :--- | :--- | :--- | :--- |

This course is designed to cover all required Biology course requirements and material, but paced over a full school year in order to allow English Learners the time it takes to fully immerse themselves in the vocabulary and concepts. Biology provides students with the fundamental concepts needed to give them a broad background in basic biology. Although some knowledge of detail is always necessary to a course of this type, every effort is made to stress overall concepts at the expense of detail. Students begin the course by studying how biologists solve a scientific (biological) problem. This is accomplished by studying the thinking (both correct and incorrect) that went into formulating some of our basic biological theories. Other major topics include: basic morphology and physiology of the cell, photosynthesis and cellular respiration, the biology of representative plant and animal groups, heredity and evolution and basic ecological principles. Laboratory activities serve to give practical applications of some of the basic concepts formed through the course. Placement will be based upon student request, teacher recommendations, and previous science/WIDA assessments.

Students will take the EOC Biology SOL at the end of the school year.
**Students will receive an elective credit (part 1) and a science (part 2) credit for this class
** Students with an IEP or 504 will receive 2 science credits for the successful completion of this class

## Algebra 1 for ELs (Part 1 and Part 2)

## Course No. H2011LS,

 H2012LS| Elective | Prerequisite: $\mathbf{8}^{\text {th }}$ grade math or EL Algebra <br> Readiness | Year-Long <br> -2 Blocks | 2 credits |
| :--- | :--- | :--- | :--- |

This course is for students who are still learning the English language and require native language support or EL support to understand the required mathematical concepts. Students will use algebra as a tool for representing and solving a variety of practical problems. Content will involve making connections between Algebra, arithmetic, geometry, as well as probability and statistics in order to attach meaning to abstract concepts. Problem-solving skills will be emphasized. The use of technology and other EL support methods will be implemented to enhance student learning.

Students will take the EOC Algebra I SOL at the end of the school year.
**Students will receive an elective credit (part 1) and a math credit (part 2) for this class
** Students with an IEP or 504 will receive 2 math credits for the successful completion of this class

## EL Algebra Readiness

Course No.H2002LY

| Elective | Prerequisite: none | Year-Long - <br> 2 Blocks | 2 Credits |
| :--- | :--- | :--- | :--- |

This course is for English Learners that are new to English or are two or more years behind in math. Basic math skills will be reviewed and vocabulary will be practiced throughout the school year. This course provides specific strategies for introducing and developing language in mathematics that will help students build skills essential to comprehending higher level math classes. Concrete and collaborative learning experiences using technology are emphasized throughout the course. Placement will be based upon student request, teacher recommendations, and previous math/WIDA assessments.
**Students will receive 2 elective credits for this class

## EL Strategies for Success

## Course No.H9031LY

Elective
Prerequisite: none
Semester
1 credit
This course is for eligible EL students to help them succeed in high school. The course will focus on note taking skills, development of study strategy skills using various genres and text types as well as various writing forms and purposes. The course will also focus on skill development within all four domains of language development (listening, reading, writing, and speaking).
**Students will receive 1 elective credit for this class

## FINE ARTS <br> Art Courses

| Art Foundations |  | Course No.H8070EY |  |
| :---: | :---: | :---: | :---: |
| Elective | Prerequisite: none | Semester | 1 credit |
| This is an introductory art course. Students will explore a wide variety of artistic methods and media with an emphasis on the elements and principles of design. Drawing is stressed in the preparation for each project in the course. Composition, design, ceramics, sculpture, and printmaking techniques as well as the study of the history of art and contemporary art will be included. Students will be required to keep a sketchbook with drawing and writing assignments throughout the year. |  |  |  |
| Drawing \& Painting I |  | Course No.H8081EY |  |
| Elective | Prerequisite: Art Foundations | Semester | 1 credit |
| In this course students will develop techniques in various types of media including charcoal, pastel, colored pencil, graphite, watercolor, and acrylic paint. Through research, experimentation, and critique, they master basic drawing and painting skills and begin to address art's relationship to contemporary issues and ideas. Students will be required to keep a sketchbook with drawing and writing assignments throughout the year. |  |  |  |

## Drawing \& Painting II

Course No.H8082EY

| Elective | Prerequisite: Drawing \& Painting I | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

This course helps students improve on skills \& techniques learned from Drawing \& Painting I. Through traditional subject matter, students explore a range of drawing \& painting materials and techniques. Composition and rendering skills are emphasized, various wet and dry mediums are used. Students will begin to work on projects based on themes with an end goal of producing a portfolio. Students will be required to keep a sketchbook with drawing and writing assignments throughout the year.

## Sculpture I

Course No.H8091EY

| Elective | Prerequisite: Art Foundations | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course explores ceramics, plaster, figure modeling, cardboard and ordinary object assemblage, and fabrication. The sculpture program covers a broad range of technical areas and conceptual thinking. This course will give the student a foundation in both the traditional and contemporary concepts of sculpture; to develop a thinking and working vocabulary in the language of form and space; to acquire the skills to fabricate, carve, model and cast the forms that a sculptor develops in the creation of art. Students will be required to keep a sketchbook with drawing and writing assignments throughout the year.

## Sculpture II

## Course No.H8092EY

| Elective | Prerequisite: Sculpture I | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

This course helps students improve on skills \& techniques learned from Sculpture I. Through traditional subject matter, students explore a range of sculpture materials and techniques. Composition and skills are emphasized, as well as various mediums are used. Students will begin to work on projects based on themes with an end goal of producing a portfolio. Students will be required to keep a sketchbook with drawing and writing assignments throughout the year.

| Elective: Grades 11-12 | Recommended: Art Foundations, Drawing <br> and Painting I \& II <br> Required: Portfolio Review | Year-Long - <br> 2 Blocks | 2 credits |
| :--- | :--- | :--- | :--- |

The course is designed as a performance based studio experience for the dedicated Advanced Art student who wishes to continue a rigorous study of 2-D Art. The 2-D portfolio contains two sections: Sustained Investigation ( $60 \%$ ) and Selected Works (40\%). The Sustained Investigation section is designed to demonstrate the student's in-depth investigation through practice, experimentation, and revision. Students will investigate and synthesize materials, processes, and ideas and improve 2-D art and design skills. This section requires 15 images. Students will document in writing: the questions that guided sustained investigation and how the sustained investigation shows evidence of practice, experimentation, and revision guided by inquiry questions. For the selected works section, the students will submit five pieces that best demonstrate excellence in art making. Any subject, content, style, media, and technique is acceptable.

## AP Studio Art: 3-D Design

Course No.H8102AY

| Ele | Required: Portfolio R | Year-Long - 2 Blocks | 2 credits |
| :---: | :---: | :---: | :---: |
| The course is designed as a performance based studio experience for the dedicated Advanced Art student who wishes to continue a rigorous study of 3-D Art. The 3-D portfolio contains two sections: Sustained Investigation $(60 \%)$ and Selected Works (40\%). The Sustained Investigation section is designed to demonstrate the student's in-depth investigation through practice, experimentation, and revision. Students will investigate and synthesize materials, processes, and ideas and improve 3-D art and design skills. This section requires 15 images. Students will document in writing: the questions that guided sustained investigation and how the sustained investigation shows evidence of practice, experimentation, and revision guided by inquiry questions. For the selected works section, the students will submit 10 images of five sculptures that best demonstrate excellence in art making. Any subject, content, style, media, and technique is acceptable. |  |  |  |

## AP Studio Art: Drawing

Course No. H8111AY
Elective: Grades 11-12

Recommended: Art Foundations, Drawing and Painting I \& II Required: Portfolio Review

| Year-Long - <br> 2 Blocks | 2 credits |
| :--- | :--- |

The course is designed as a performance based studio experience for the dedicated Advanced Art student who wishes to continue a rigorous study of Drawing. The Drawing portfolio contains two sections: Sustained Investigation (60\%) and Selected Works (40\%). The Sustained Investigation section is designed to demonstrate the student's in-depth investigation through practice, experimentation, and revision. Students will investigate and synthesize materials, processes, and ideas and improve drawing and design skills. This section requires 15 images. Students will document in writing: the questions that guided sustained investigation and how the sustained investigation shows evidence of practice, experimentation, and revision guided by inquiry questions. For the selected works section, the students will submit five pieces that best demonstrate excellence in art making. Any subject, content, style, media, and technique is acceptable.

## Music Courses

## Symphonic Band I

Course No. H8020EY

## Elective

## Prerequisite: DMMS Band or successful audition

 SemesterIn this course, students will learn and practice the fundamentals of music in a concert band setting. Concert band instrumentation includes, flute, clarinet, saxophone, oboe, bassoon, horn, trumpet, trombone, baritone, tuba and concert percussion. Special attention will be given to tone production, tuning, melody, harmony, rhythm and form as we listen to, practice and create music in an ensemble setting. The symphonic band will perform a fall and spring concert in the Patsy Cline Auditorium and will perform at the district concert band festival and at community events. Students will practice and perform music at intermediate to advanced levels.

## Symphonic Band II

Course No. H8021EY
Elective
Prerequisite: Symphonic Band I
Semester
1 credit
In this course, students will continue to learn and practice the fundamentals of music in a concert band setting. Concert band instrumentation includes, flute, clarinet, saxophone, oboe, bassoon, horn, trumpet, trombone, baritone, tuba and concert percussion. Special attention will be given to tone production, tuning, melody, harmony, rhythm and form as we listen to, practice and create music in an ensemble setting. The symphonic band will perform a fall and spring concert in the Patsy Cline Auditorium and will perform at the district concert band festival and at community events. Students will practice and perform music at intermediate to advanced levels.

## Beginning Guitar

## Course No. H8031EY

## Elective

Prerequisite: none
Semester
1 credit
This course is for guitarists with little or no experience. Students will learn open chords, power chords, movable chords, melodic playing, accompaniment techniques, and a variety of playing techniques. Students will learn music fundamentals, music theory, read standard music notation and some tablature. Participation in concerts is mandatory. Students must own either a nylon or steel string acoustic guitar.

## Intermediate Guitar

Course No. H8032EY

| Elective | Prerequisite: Beginning Guitar or successful audition | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

In this course, students will continue to improve their understanding and ability to read and play different staff notations, tablature, chord grids, and chord symbols. Students will also learn to utilize various right hand styles such as flat picking, pick-strumming, finger picking and finger strumming. A variety of music styles will be used including classical, jazz, rock and more. Students should own a full size nylon or steel string guitar. All after school rehearsals and performances are required.

## Jazz Ensemble and Improvisation

Course No. H8041EY
Elective $\quad$ Prerequisite: DMMS band, JHHS band/guitar, or successful audition

Semester
1 credit
In this course, students will learn and practice the fundamentals of music in a jazz ensemble setting. Jazz ensemble instrumentation includes, but is not limited to, piano, electric guitar, drums, electric or acoustic bass guitar, alto, tenor and bari saxophone, trombone and bass trombone, and trumpet. Special attention will be given to tone production, tuning, melody, harmony, form and improvisation as we listen to, practice and create music in an ensemble setting. The jazz ensemble will give performances throughout the year in the Patsy Cline Auditorium and at community events.

## Basic Ukulele

Elective
Prerequisite: none
Semester 1 credit
In this course, the basics of playing the ukulele are presented in an ensemble-based, blended learning class format. Ukulele is a small 4 stringed guitar of Hawaiian origin. This includes group music learning, solo repertoire, and multi-part arrangements of original and traditional songs. Students will learn music fundamentals, music theory, guitar tablature and standard notation. Participation in concerts is mandatory. School ukuleles are available though having your own instrument is highly recommended.

## Handley Choir Program



10th - 12th Graders
Soprano/Alto/Tenor/Bass
By audition

## Treble Ensemble I

| Elective: Grades 9-12 | Prerequisite: none | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

This ensemble is composed of Treble (high) voices and is for anyone who wants to continue singing or learn to sing. The ensemble is designed to offer the opportunity to develop skills and perform 2-4 part music. Vocal development and musicianship in the field of choral literature are stressed. Performance in all concerts presented by this ensemble is required.

| Treble Ensemble II | Course No. H8042VY |  |  |
| :--- | :--- | :--- | :--- |
| Elective: Grades 10-12 | Prerequisite: Treble Ensemble I or successful <br> audition | Semester | $\mathbf{1}$ credit |
| This ensemble is a select ensemble of advanced treble singers. The ensemble is a performance-oriented group <br> designed to offer the talented singer the opportunity to perform challenging music. Music will be performed from a <br> variety of genres with special emphasis on the correct performance technique for each period. The students will <br> perform throughout the community and participate in district and state choruses, assessments, and competitions. <br> Vocal development and musicianship in the field of choral literature are stressed. Performance in all concerts <br> presented by this ensemble is required. |  |  |  |

This ensemble is a large ensemble of beginning Bass (low) voices combined with advanced Treble (high) voices. The ensemble is a performance-oriented group designed to offer the talented singer the opportunity to perform challenging music. The students will perform throughout the community and participate in district and state choruses, assessments, and competitions. Vocal development and musicianship in the field of choral literature are stressed. Performance in all concerts presented by this ensemble is required.

## Concert Choir II

Course No. H8051EY

| Elective: Grades 10-12 | Prerequisite: Concert Choir I or successful <br> audition | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

This ensemble is a large ensemble of advanced singers. The ensemble is a performance-oriented group designed to offer the talented singer the opportunity to perform challenging music. The students will perform throughout the community and participate in district and state choruses, assessments, and competitions. Vocal development and musicianship in the field of choral literature are stressed. Performance in all concerts presented by this ensemble is required.

## Chamber Choir I

## Course No. H8060EY

Elective: Grades 10-12

> Prerequisite: Successful audition and one year experience in the choral program at Handley, or advanced skills as determined by the director

| Semester <br> - Fall | 1 credit |
| :--- | :--- |

This ensemble is a select small ensemble of advanced singers. The ensemble is a performance-oriented group designed to offer the talented singer the opportunity to perform challenging music. Music will be performed from a variety of genres with special emphasis on the correct performance technique for each period. The students will perform throughout the community and participate in district and state choruses, assessments, and competitions. Vocal development and musicianship in the field of choral literature are stressed. Performance in all concerts presented by this ensemble is required.

## Chamber Choir II

Course No. H8061EY
Elective: Grades 10-12

> Prerequisite: Successful audition and one year experience in the choral program at Handley, or advanced skills as determined by the director

| Semester <br> - Spring | 1 credit |
| :--- | :--- |

This ensemble is a select small ensemble of advanced singers. The ensemble is a performance-oriented group designed to offer the talented singer the opportunity to perform challenging music. Music will be performed from a variety of genres with special emphasis on the correct performance technique for each period. The students will perform throughout the community and participate in district and state choruses, assessments, and competitions. Students will be expected to dance as part of the curriculum. Vocal development and musicianship in the field of choral literature are stressed. Performance in all concerts presented by this ensemble is required.

## Theatre Arts Courses


#### Abstract

Theatre I Course No. H1070EY Elective: Grades 9-12 Prerequisite: none Semester In this course students will explore theatre as an ensemble art by developing communication strategies, collaborating to implement personal artistic choices and respecting the ideas and viewpoints of others. Students will create and strengthen trust and expand listening skills through participation in theatre games and improvisations (e.g., solo and group dramatizations, portrayals of characters in conflict, experiments in rhythm and imagery, pantomimes). Students will demonstrate the skills necessary to perform theatrical works by creating and maintaining an imagined reality using the body and voice as expressive tools and employing diction and projection. The student will apply the creative process in storytelling, playwriting, and acting by creating and writing a monologue and/or scene, analyzing the physical, emotional, and social dimensions of characters, employing voice, body, and imagination in role playing, presenting a memorized monologue and/or scene from a published work. The student will demonstrate theatrical direction, including blocking and staging a scene. The student will become familiar with the principles of technical theatre and theatre management.


## Theatre II

Course No. H1071EY

\section*{| Elective: Grades 9-12 | Recommendation: Theatre I |
| :--- | :--- |}

In this course students will refine skills learned in Theatre I and use these skills to create theatre projects and productions through collaboration,respecting the ideas and points of view of others. Students will continue to create and strengthen trust through participation in theatre games and improvisations that incorporate dialogue and listening skills to express character relationships. Students will apply principles of directing by selecting scenes and participating in script analysis, casting, staging, and rehearsing. Students will communicate directorial choices, including pacing, mood, concept, and style employing ethical standards in script selection, revision/adaptation, and presentation. Students will demonstrate mastery of theatre production by assisting with a live production.

## Theatre III

Course No. H1072EY

| Elective: Grades 9-12 | Recommendation: Theatre II | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

In this course students will build on skills learned in Theatre I and II. Theatre III students will be expected to employ self evaluation and critique. Playwriting/Analysis and Directing become a focus for this level as well as greater responsibility for class ensemble work. Students in Theatre III will make production decisions for live JHHS performances and many become officers in Drama Club and participate in the VHSL One Act Competition.

| Theatre IV |  | Recommendation: Theatre III | Course No. H1073EY |  |
| :--- | :--- | :--- | :--- | :---: |
| Elective: Grades 9-12 | Semester | $\mathbf{1}$ credit |  |  |
| In this course, students will build on Theatre I, Theatre II, and Theatre III by adding career and college <br> connections which may include portfolio work for college auditions. Theatre IV students will assist as student <br> directors and play a major role in show selection and venue choices. |  |  |  |  |

## Technical Theatre

## Course No. H1076EY

In this course, students will be exposed to aspects of technical theatre including; lighting, sound, design, construction, painting, prop construction, costume creation and promotional materials. The goal of this class will be to provide support for real life projects in the building and to give students a look at careers in theatre tech.

## KINESIOLOGY \& HEALTH

All students participating in Kinesiology at John Handley High School must wear tennis shoes that provide support to the foot and ankle, laces must be tied, closed-toed, and have rubber soles. Students are not allowed to participate if they are wearing flip-flops, slides, Crocs, or any footwear related to these types of shoes. Students will be given an alternative assignment for the day if they do not have the appropriate footwear. If students forget appropriate shoes and athletic wear, the Kinesiology department has items to borrow for the class period. These items are sanitized and/or washed after each use.


## Kinesiology 9 - Health \& PE

## Course No.H5010RY

## Required

Prerequisite: none
Semester
1 credit
This course covers a variety of individual, recreational and team sports in the gym setting. Participation in a variety of sports/movements activities will assist the student in attaining their own individual fitness goals. Students should be able to identify the five components of physical fitness and find life-long fitness activities that promote their own health and well-being. Health topics of study include nutrition, fitness, CPR, drugs and alcohol, mental health, and family life education.
For graduation verification, students are required to pass training in emergency first aid, CPR and the use of AEDs.

## Kinesiology 10 - Drivers Education, Health \& PE

| Required | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course covers a variety of individual, recreational and team sports in the gym setting. Participation in a variety of sports and activities will assist the student in attaining their own individual fitness goals. Students should be able to identify the five components of physical fitness and find life-long fitness activities that promote their own health and well-being. Health topics of study include mental health and family life education.

## Driver's Education:

Classroom driver's education consists of a minimum of 36 hours of structured learning experience aimed at developing safe and responsible drivers. Successful completion of this course will earn the student their DEC-1 certificate, which is necessary in the process of obtaining a Driver's License before the age of 18. Students need to pass this course with a $70 \%$ and attend the Parent/Teen 90 Minute Meeting to pass the Driver's Education portion of Health 10. Completion of a driver education course through a private instruction is certainly allowed, but that participation does not exempt the student from any of the school course objectives/credits.

## Advanced Kinesiology - Team Sports I

## Course No. H5031EY

| Elective: Grades 10-12 | Prerequisite: Kinesiology 9 | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course is for students that have the basic understanding of team sports and concepts. The environment in this class will be a competitive environment, along with learning sportsmanship. Students will focus on rules of the sports, strategies and skill application through various games. Students will be expected to challenge themselves physically.

## Advanced Kinesiology - Team Sports II

Course No. H5032EY

| Elective: Grades 11-12* | Prerequisite: Advanced Kinesiology - Team Sports I | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- | :--- |

This course is for students that have completed Advanced Kinesiology I. The environment in this class will be a competitive environment, along with learning sportsmanship. Students will focus on rules of the sports, strategies and skill application through various games. Students will be expected to challenge themselves physically.
*This course may be repeated for additional credits with no more than one per year.

## Advanced Kinesiology-Weight Training I

Course No. H5041EY

| Elective: Grades 10-12 | Prerequisite: Kinesiology 9 | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course is for students who want to continue to develop in the weight room. Students will follow a structured fitness and resistance training program with the goal of personal improvements in several areas. This will include, but not be limited to, strength endurance, strength, range of motion, speed, BMI, core integrity and balance. Students will take these training concepts and apply them into an effective designed workout program to improve their overall fitness level. Proper technique and safety will be taught and maintained throughout this course. Students should be prepared to push themselves throughout this course and be able to see the benefits of the lifting program.

## Advanced Kinesiology-Weight Training II

| Elective: Grades 11-12* | Prerequisite: Advanced Kinesiology - Weight <br> Training I | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |
| This course is for students who want to continue to develop their skills in the weight room. Students will follow a |  |  |  |
| structured fitness and resistance training program with the goal of personal improvements in several areas. This |  |  |  |
| will include, but not be limited to, strength endurance, strength, range of motion, speed, BMI, core integrity and |  |  |  |
| balance. Students will take these training concepts and apply them into an effective designed workout program to |  |  |  |
| improve their overall fitness level. Proper technique and safety will be taught and maintained throughout this |  |  |  |
| course. Students should be prepared to push themselves throughout this course and be able to see the benefits of |  |  |  |
| the lifting program. |  |  |  |
| *This course may be repeated for additional credits with no more than one per year. |  |  |  |

## Recreational \& Lifetime Fitness I

## Course No.

| Elective: Grades 11-12 | Prerequisite: Kinesiology 9 and Kinesiology 10 | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

In this course, students will explore and learn various ways to promote and develop an approach to achieving physical well being and emphasizing lifelong habits that contribute to overall health and fitness. This class encourages individuals of all fitness levels and backgrounds to engage in enjoyable physical activities, fostering a positive attitude toward exercise and promoting a balanced lifestyle. Activities in this course may include: fitness training, weight training, outdoor education, yoga, dance, aerobics, cycling, swimming, self defense, and lifetime sports.

## Recreational \& Lifetime Fitness II

Course No.

| Elective: Grades 11-12 | Prerequisite: Recreational \& Lifetime Fitness I | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |
| In this course, students will continue to explore and learn various ways to promote and develop an approach to |  |  |  |
| achieving physical well being and emphasizing lifelong habits that contribute to the overall health and fitness. |  |  |  |
| This class encourages individuals of all fitness levels and backgrounds to engage in enjoyable physical activities, |  |  |  |
| fostering a positive attitude toward exercise and promoting a balanced lifestyle. Activities in this course may |  |  |  |
| include: fitness training, weight training, outdoor education, yoga, dance, aerobics, cycling, swimming, self |  |  |  |
| defense, and lifetime sports. |  |  |  |

## Sport, Exercise, \& Health Science

Course No. H5043EY

| Elective: Grades 11-12 | Prerequisite: Kinesiology 9 and Kinesiology 10 | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

In this course, students will investigate how physical fitness, health, and sport interconnect. Students will work collaboratively to learn various genres of athletics, recreation, coaching, sports broadcasting, safety in sports, athletic training, mental health in sports. A capstone project will be a requirement of this course.

## MARKETING

## Sample Course Pathways

## Marketing Track

Retail Track


## Marketing

Course No.H6213EY
Elective: Grades 10-12
Prerequisite: none
Semester 1 credit
In this course, students examine activities in marketing and business important for success in marketing employment and postsecondary education. Students will learn how products are developed, branded, and sold to businesses and consumers. Students will analyze industry trends and gain hands-on experience in the marketing of goods, services, and ideas. Topics will include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and the impact of technology on the marketplace. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOL).

Distributive Education Clubs of America (DECA), the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Students will be expected to attend DECA after school meetings twice a month. If a student has a conflict attending the meeting they need to notify the instructor and attend a make-up meeting.

The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

| Advanced Marketing |  | Course No.H6232VY |  |
| :--- | :--- | :--- | :--- |
| Elective: Grades 11-12 | Prerequisite: Marketing or Entrepreneurship | Semester | 1 credit |

In this course students build on knowledge gained in a prior Marketing course. Students participate in supervisory and management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing, and emerging technologies. Students will prepare for advancement in marketing careers and postsecondary education.

Distributive Education Clubs of America (DECA), the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Students will be expected to attend DECA after school meetings twice a month. If a student has a conflict attending the meeting they need to notify the instructor and attend a make-up meeting.

The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

## Entrepreneurship

Course No.H6260EY

| Elective: Grades 11-12 | Recommended: Principles of Business and <br> Marketing | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

This course introduces students to the exciting world of creating, owning, and launching their own business. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle.

Distributive Education Clubs of America (DECA), the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Students will be expected to attend DECA after school meetings twice a month. If a student has a conflict attending the meeting they need to notify the instructor and attend a make-up meeting.

The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

| Elective: Grades 9-10 | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

In the course students discover the roles of business and marketing in the free enterprise system and the global economy. Basic financial concepts of banking, insurance, credit, inheritance, taxation, and investments are investigated to provide a strong background as students prepare to make sound decisions and consumers, wage earners, and citizens. The real-world impact of technology, effective communication, and interpersonal skills is evident throughout the course. This course also supports career development skills and explores career options.

Distributive Education Clubs of America (DECA), the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Students will be expected to attend DECA after school meetings twice a month. If a student has a conflict attending the meeting they need to notify the instructor and attend a make-up meeting.

The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

## MATHEMATICS


*Course Selections: Courses completed to satisfy this requirement shall indude at least two different course selections from among algebral , geometry, algebra functions, and data analysis, algebra II,

"Course Selections: Courses completed to satisfy this requirement shall include at least three different course selections from among: algebra I, geometry, algebra II, or other mathematics courses above the level of algebra ll.

## Algebra I

## Course No.H2010RY

Required: NCAA
Prerequisite: none
Semester 1 credit
This course is the introductory academic mathematics course at Handley. Students will use algebra as a tool for representing and solving a variety of practical problems. Content will involve making connections between arithmetic reasoning, algebraic expressions, algebraic equations, and coordinate geometry in order to attach meaning to abstract concepts. Problem solving skills will be emphasized. The use of technology will be implemented to enhance student learning. This course is also offered at the middle school.

Prerequisite: none

| Year-Long - <br> 2 <br> 2 Blocks | 2 credits |
| :--- | :--- |

This course is a daily Algebra course that runs all school year. It supports and promotes student success in mathematics coursework necessary to fulfill graduation requirements. While strengthening prerequisite skills, algebraic concepts are solidified through modeling and the use of manipulatives, graphing calculators, and computer software where appropriate. A concentration on improving problem solving and communication in mathematics builds student confidence.
$\left({ }^{*}\right)$ This course is offered for 1 elective credit and 1 mathematics credit. Students with an IEP or 504 with credit accommodations may enroll in Algebra I Part 1 and Algebra I Part 2 and receive 2 mathematics credits.

| Computer Math | Course No. H2090EY |  |  |
| :--- | :--- | :--- | :--- |
| Elective | Prerequisite: Algebra I | Semester | $\mathbf{1}$ credit |

This course is intended to provide students with experiences in using computer programming techniques and skills to solve problems that can be set up as mathematical models. Students enrolled in Computer Math should have the skills necessary for readiness to enroll in Algebra 1. Students who successfully complete this course will earn a math credit towards meeting the Virginia mathematics graduation requirement. Students will be using Python as the programming language of this course. Python is a general-purpose programming language that emphasizes readability and algorithmic clarity. Student's programs will use basic programming concepts to solve problems using mathematical problem solving skills. They will be designing, implementing, and testing their own programs. A portion of the class has a focus on using data to solve problems and answer questions.

Computer Mathematics may be used in conjunction with Algebra I and Geometry to satisfy mathematics graduation requirements if the student also completes a career and technical concentration.

## Geometry

Course No. H2020RY
Required: NCAA

## Prerequisite: Algebra I

This course includes properties of geometric figures, trigonometric relationships, and reasoning to justify conclusions. Methods of justification will include deductive reasoning, proofs, algebraic methods, and verbal arguments. This course includes emphasis on two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. Applications and some general problem-solving techniques, including algebraic skills, will be used. Technology will be used to enhance student learning.

## Honors Geometry

Course No.H2020HY
Required: NCAA
Prerequisite: Algebra I Semester 1 credit
This course focuses on helping students independently discover and construct theorems while building a deeper and more rigorous understanding of the material. Topics will include deriving properties of geometric figures, applying trigonometric relationships, and utilizing reasoning to justify conclusions. Methods of justification will include inductive and deductive reasoning, proofs, algebraic methods, and verbal arguments. This course includes an emphasis on two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. Applications and many problem-solving techniques will be used. The practical use of technology will enhance student learning.

| Algebra, Functions and Data Analysis |  | Course No.H2010EY |  |
| :---: | :---: | :---: | :---: |
| Elective: NCAA | Pr | Semester | 1 credit |
| This course is designed for students who have successfully completed the standards for Algebra I and Geometry. Through the investigation of mathematical models and interpretation/analysis of data from real life situations, students will strengthen conceptual understandings in mathematics and further develop connections between algebra and statistics. Students will study functions, systems of inequalities, probability, and analysis of data. Data will be generated by practical applications, arising from science, business, and finance. Students will solve problems that require formulation of linear, quadratic, exponential or logarithmic equations. |  |  |  |

## Data Science

## Course No. H2031EY

| Elective: NCAA | Prerequisite: Algebra I and Geometry | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |
| Through the use of open source technology tools, students will identify and explore problems that involve the |  |  |  |
| use of relational database concepts and data-intensive computing to find solutions and make generalizations. |  |  |  |
| Students will engage in a data science problem-solving structure to interact with large data sets as a means to |  |  |  |
| formulate problems, collect and clean data, visualize data, model using data, and communicate effectively about |  |  |  |
| data formulated solutions. This class is primarily project-based with a component of public speaking. |  |  |  |


| Algebra II | Prerequisite: Geometry | Course No. H2030RY |
| :--- | :--- | :--- | :--- |
| Elective: NCAA | Semester | 1 credit |
| This course will examine advanced algebraic concepts through the study of functions, "families of functions", |  |  |
| polynomials, rational and radical equations, complex numbers, probability and statistics, and sequences and |  |  |
| series. Quadratic, logarithmic, and exponential functions are also studied. Practical use of technology will |  |  |
| enhance student learning. |  |  |


| Honors Algebra II | Course No.H2030HY |  |  |
| :--- | :--- | :--- | :--- |
| Elective: NCAA | Prerequisite: Geometry | Semester | $\mathbf{1}$ credit |
| This course teaches mathematical models and interpretation/analysis of data from real life situations, students |  |  |  |
| will strengthen conceptual understandings in mathematics and further develop connections between algebra |  |  |  |
| and statistics. Encompassing an accelerated pace, students will study functions, systems of inequalities, |  |  |  |
| probability, and analysis of data. Data will be generated by practical applications, arising from science, business, |  |  |  |
| and finance. Students will solve problems that require formulation of linear, quadratic, exponential or |  |  |  |
| logarithmic equations. In addition, an introduction to trigonometry will be presented. |  |  |  |

## Probability and Statistics

This course presents basic concepts and techniques for collecting and analyzing data, drawing conclusions, and making predictions. Students will use probability and statistics in real-world application of mathematics. Emphasis will be placed on appropriate methods for collecting data and analyzing data with some measure of certainty about results.

| Pre-Calculus |  | Course No. H2044DY |
| :--- | :--- | :--- | :--- |
| Elective: DE; NCAA | Pemester | $\mathbf{1}$ credit |
| This course teaches students trigonometry and exponential and logarithmic functions. Other topics will include |  |  |
| algebraic and transcendental functions, parametric and polar equations, sequences and series, vectors and further |  |  |
| application of probability, statistics and matrix algebra. Students will be introduced to mathematical limits and |  |  |
| their applications. |  |  |
| This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of each |  |  |
| semester. Students who wish to take this course as a dual enrollment course can earn six college credits through |  |  |
| Laurel Ridge Community College (Laurel Ridge Community College MTH 161 and 162). Students must satisfy |  |  |
| enrollment criteria and pay a reduced college tuition rate to be eligible for college credits. |  |  |

## Calculus A \& B

## Course No.H2055DY

| Elective: DE; NCAA | Prerequisite: Pre-Calculus | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course covers mathematical limits, continuity, differentiation techniques, and techniques of integration for algebraic and transcendental functions. Differentiation and integration will be applied in a variety of ways for several fields of study. Applications of the definite integral will be explored.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of each semester. Students who wish to take this course as a dual enrollment course can earn six college credits through Laurel Ridge Community College (Laurel Ridge Community College MTH 261 \& 262). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.


#### Abstract

AP Statistics Course No.H2070BY Elective: DE; NCAA Prerequisite: Pre-Calculus or Probability and Statistics

Semester 1 credit

This course is designed to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The main topics covered in this course are exploratory data analysis, experimental design, probability and inferential statistics. Emphasis is placed on techniques for the interpretation of data. Technology will be used for calculation so that students may focus on the validity and meaning of appropriate conclusions.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of each school year. Students who wish to take this course as a dual enrollment course can earn three college credits through Laurel Ridge Community College (Laurel Ridge Community College MTH 245). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.


| AP Calculus AB | Prerequisite: Pre-Calculus | Course No H2051BY |
| :--- | :--- | :--- | :--- |
| Elective: DE; NCAA | Semester | $\mathbf{1}$ credit |
| This course will begin with an in depth study of limits of all function types. Derivatives and their applications |  |  |
| will then be studied including analyzing graphs using the first and second derivatives and an extensive analysis of |  |  |
| the position, velocity, and acceleration functions. The first semester will end with an introduction to integration |  |  |
| and the definite integral. |  |  |
| The second semester of the course picks up with a review of integration techniques and continues with |  |  |
| applications of the definite integral including area of volumes of solids. A study of first order separable |  |  |
| differential equations follows along with real-life applications of exponential and logarithmic growth functions. |  |  |
| This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. |  |  |
| Students who wish to take this course as a dual enrollment course can earn four college credits through Laurel |  |  |
| Ridge Community College (Laurel Ridge Community College MTH 263). Students must satisfy enrollment criteria |  |  |
| and pay a reduced college tuition rate to be eligible for college credits. |  |  |


\section*{AP Calculus BC <br> Course No.H2053BY <br> | Elective: DE; NCAA | Prerequisite: AP Calculus-AB | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |}

This course provides the student a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, and verbally. Considerable mathematical ability and individual initiative of the student is expected. The course begins with a thorough review of AB Calculus topics. It will continue with the study of parametric, vector valued and polar functions, their derivatives and applications. This will be followed by an extensive study of Taylor Polynomials and power series including bounding the approximation of a transcendental function using Lagrange error.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn four college credits through Laurel Ridge Community College (Laurel Ridge Community College MTH 264). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

## SCIENCE

| Standard Diploma | Credits | Advanced Studies Diploma | Credits |
| :--- | :--- | :--- | :--- |
| Laboratory Sciences | 3 | Laboratory Sciences | 4 |
| Students must earn at least 3 science credits that <br> include courses from 2 different science disciplines: <br> Earth Science, Biology, Chemistry, and Physics. | Students must earn at least 4 science credits that <br> include courses from 3 different science disciplines: <br> Earth Science, Biology, Chemistry, and Physics. |  |  |



## Environmental Science

## Course No.H3060EY

## Elective: Grades 9-10, NCAA

Prerequisite: none
Semester 1 credit
This course is an introductory course that focuses on exploring the human dependence on Earth for a variety of resources. Students will examine how human actions have changed the environment and promote civic responsibility. This course will show the connection between science, technology, and society. Students will apply prior scientific knowledge to current environmental issues and will become a better-informed citizen and decision-maker. In this class there will be an emphasis on hands-on activities and laboratory exercises that promote problem solving, refine laboratory procedure, and reinforce reading, writing, and math skills.

This course provides students with the fundamental concepts needed to give them a broad background in basic biology. An overarching theme is the nature of science and how we need to approach questions scientifically. Important topics include life at the molecular level and cellular level, inheritance and change, life at the systems and organisms level, and interaction of life forms. If a laboratory investigation includes an animal dissection, an alternative assignment will be provided to students objecting to this activity. At the end of this course students will be tested on the Biology Standards of Learning. Laboratory activities serve to give practical applications of some of the basic concepts formed throughout the course.

## Honors Biology

Course No.H3021HY
Required: NCAA
Prerequisite: none
Semester 1 credit

This course provides students with the fundamental concepts needed to give them a broad background in basic biology. The differences include a more in-depth look at concepts through class discussions, laboratory experiences and projects; more cross-curricular connections; higher-level critical thinking activities; and more individual projects to allow for individualized learning. This course includes an inquiry-based independent research project. At the end of this course students will be tested on the Biology Standards of Learning.

## Biology II: Ecology

Course No.H3022VY
Elective: NCAA
Prerequisite: Biology
Semester
1 credit
In this course, students will build upon knowledge and skills from Biology to explore the ecological levels of individual, population, species, community, and ecosystem. Topics include: Historical Foundations; Adaptations to the Environment; Population, Community, \& Global Ecology. Students will participate in laboratory and field studies as well as online learning experiences.

| AP Biology | Prerequisite: Biology and Chemistry | Course No.H3021BY |
| :--- | :--- | :--- | :--- |
| Elective: DE; NCAA | Credit |  |
| The course is designed in accordance with the requirements of the College Board and places high demands on |  |  |
| students with regards to time, energy and academic preparation. Emphasis is placed on "overarching concepts |  |  |
| which recur, connect and unify our understanding of topics" central to the study of living organisms as well as |  |  |
| specific concepts which "enhance understanding of how and why particular processes or patterns occur" (College |  |  |
| Board, 2005). Major themes stressed throughout AP Biology, in both classroom and laboratory settings, include: |  |  |
| science as a process, evolution, energy transfer, continuity and change, relationship of structure to function, |  |  |
| regulation, interdependence in nature and science, technology and society. Students in AP Science courses may be |  |  |
| expected to complete some activities outside of class time. |  |  |
| This course is only offered at Emil \& Grace Shihadeh Innovation Center (EGSIC). |  |  |
| This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of each |  |  |
| semester. Students who wish to take this course as a dual enrollment course can earn eight college credits through |  |  |
| Laurel Ridge Community College (Laurel Ridge Community College BIO 101 \& 102). Students must satisfy enrollment |  |  |
| criteria, complete labs, and pay a reduced college tuition rate to be eligible for college credits. |  |  |

Anatomy \& Physiology
Grades 10-12; DE; NCAA

Prerequisite: Biology/Honors Biology Recommended: Chemistry

Course No.C3070DY
Semester 1 credits

This course is an introductory course designed for students who have an interest in entering a health-related field. Students will review basic chemical concepts and then progress to detailed investigations of cellular physiology and the anatomy and physiology of human organs and organ systems. Required laboratory applications include the use of real and virtual dissection and the extensive use of anatomical models.

This course is only offered at Emil \& Grace Shihadeh Innovation Center (EGSIC).

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn four college credits through Laurel Ridge Community College (Laurel Ridge Community College BIO 145). Students must satisfy enrollment criteria, complete labs, and pay a reduced college tuition rate to be eligible for college credits.

# Course Descriptions by Discipline: Chemistry 

## Chemistry

| Elective: NCAA | Prerequisite: Biology and Algebra 1 | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |
| This course includes classification of matter, chemical equations, atomic structure, chemical bonding, acid-base |  |  |  |
| chemistry, nuclear chemistry, and organic chemistry. Students complete a variety of laboratory experiments |  |  |  |
| designed to reinforce and expand upon classroom discussions. Specific math concepts are briefly reviewed prior |  |  |  |
| to their application. |  |  |  |

## Honors Chemistry

## Course No.

Elective: NCAA
Prerequisite: Biology and Algebra 1 Semester
1 credit
This course emphasizes writing formulas, naming compounds, writing chemical equations, performing laboratory investigations, communicating laboratory findings, and describing the structure of matter and its behavior. A strong math background in which the student has acquired competence in formula writing and solving equations is essential for success. It is designed to challenge the more advanced students and is taught at an accelerated pace. An individual or group research project is required.

| AP Chemistry | Prerequisite: Chemistry and Algebra II | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |
| Elective: NCAA | Course No.H3031BY |  |  |
| The course is designed in accordance with the requirements of the College Board and may be taken only after the |  |  |  |
| successful completion of Chemistry with an "A" or "B" grade. Emphasis is placed on quantitative aspects of |  |  |  |
| chemical systems and the mathematical formulation of principles. The topics covered are stoichiometry, |  |  |  |
| thermochemistry, electron arrangement, bonding, molecular geometry, aqueous reactions, kinetics, equilibrium, |  |  |  |
| acids and bases, oxidation and reduction, electrochemistry, nuclear chemistry, and organic chemistry. Students in |  |  |  |
| AP Science courses may be expected to complete some activities outside of class time. |  |  |  |

## Course Descriptions by Discipline: Earth Science

| Earth Science | Prerequisite: Biology | Course No.H3011EY |
| :--- | :--- | :--- | :--- |
| Elective: NCAA | Semester | $\mathbf{1}$ credit |
| This course is designed for students to investigate Earth's development and its relationship in space. The <br> curriculum investigates the disciplines of Geology, Meteorology, Oceanography, and Astronomy. Students will gain <br> a deeper understanding of many natural processes occurring around them. This curriculum is reinforced by <br> hands-on-activities, demonstrations, research and investigation, as well as individual activities. This course is also <br> offered at the middle school. |  |  |
|     <br> Astronomy Prerequisite: Earth Science Course No.H3070EY  <br> Elective Semester 1 credit  <br> This course provides a quantitative introduction to the science of astronomy. Course themes are chosen from a <br> variety of astronomical observations and models, the main topics of the course are exploration, the solar system, <br> stars, universe, and cosmology. Exploring the sky section includes origins of modern astronomy, gravity, light, and <br> telescopes. The solar system section includes the origin of the solar system, planets, moons, asteroids, meteorites, <br> and comets. Star section includes stellar evolution, death of stars, interstellar medium, neutron stars, and black <br> holes. The universe section includes galaxies, supermassive black holes, quasars, and dark matter. The cosmology <br> section includes the expanse of the universe, Big Bang Theory, dark energy, and the future of the universe. <br> Students will be expected to research, write detailed scientific papers, and present on astronomical topics.    |  |  |

## AP Environmental Science

## Course No.H3060AY

| Elective: NCAA | Prerequisite: Biology and Chemistry | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course is designed for students who want to gain a greater understanding of the complex relationship between human societies and problems that face our environment today. Through global case studies, students will gain a broad perspective on the causes and consequences of environmental degradation and possible solutions that may create a more sustainable world. The course will include discussions on ethical, economic and social choices as they relate to our environment, including an historical perspective, population growth models and understanding environmental policies. Students will also examine our interaction and reliance on natural systems and resources including those of the atmosphere, water, soil and Earth's energy sources.

## Course Descriptions by Discipline: Physics

| Physics | Prerequisite: Algebra I, Geometry | Course No.H3040EY |
| :--- | :--- | :--- | :--- |
| Elective: NCAA | Semester | $\mathbf{1}$ credit |
| This course is a study of complex experimentation, data analysis, using reasoning and logic to evaluate evidence. |  |  |
| The use of mathematics is important, but conceptual understanding of the physical systems is the primary |  |  |
| concern. Key areas include force and motion, energy transformations, wave phenomena and electromagnetic |  |  |
| spectrum, light, electricity, fields, and non-Newtonian physics. This course stresses practical application of physics |  |  |
| and problem solving. |  |  |

## AP Physics 1 - Algebra-Based

## Course No. H3043AY

| Elective: DE; NCAA | Prerequisite: Algebra I, Geometry <br> Recommended Co-requisite: Algebra II | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |
| This course is an algebra-based, introductory college-level physics course. Students cultivate their understanding <br> of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular <br> motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric <br> charge and electric force, DC circuits, and mechanical waves and sound. |  |  |  |
| This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. <br> Students who wish to take this course as a dual enrollment course can earn four college credits through Laurel Ridge <br> Community College (Laurel Ridge Community College PHY 201). Students must satisfy enrollment criteria, complete <br> labs, and pay a reduced college tuition rate to be eligible for college credits. |  |  |  |

AP Physics 2 - Algebra-Based
Course No. H3044AY

| Elective: DE; NCAA | Prerequisite: AP Physics 1 <br> Recommended Co-requisite: Pre-Calculus |
| :--- | :--- |

Semester 1 credit
This course is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: fluids; thermodynamics; electrical force, field, and potential; electric circuits; magnetism and electromagnetic induction; geometric and physical optics; and quantum, atomic, and nuclear physics.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn four college credits through Laurel Ridge Community College (Laurel Ridge Community College PHY 202). Students must satisfy enrollment criteria, complete labs, and pay a reduced college tuition rate to be eligible for college credits.

## AP Physics C (Mechanics)

## Elective: Grades 11-12; DE; NCAA $\quad$ Co-requisite: Calculus or AP Calculus

This course serves as the foundation for students planning on majoring in science or mathematics in college. The course is structured to mirror the topics a 1st semester calculus based physics class would cover in college. These topics include: rectilinear kinematics, motion of rigid bodies in multiple dimensions, fundamental concepts of vectors, Newtonian mechanics, simple harmonic oscillators, dynamics of systems of particles, conservation of mechanical energy, and gravitational forces.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn four college credits through Laurel Ridge Community College (Laurel Ridge Community College PHY 241). Students must satisfy enrollment criteria, complete labs, and pay a reduced college tuition rate to be eligible for college credits.

## SOCIAL STUDIES



## World Geography

| Required: NCAA | Prerequisite: none | Year-Long | 1 credit |
| :--- | :--- | :--- | :--- |

This course will focus on the study of the world's peoples, places and environments, with an emphasis on world regions. The knowledge, skills, and perspectives of the course are centered on the world's population and cultural characteristics, landscapes, and climates, economic development, and migration and settlement patterns. Geographical concepts will be used as a framework for studying interactions between humans and their environments. Students will develop the skills of using geographic resources, employing various research methods, and utilizing technology when asking as well as answering geographic questions. A particular emphasis will be placed on students' understanding and applying geographic concepts and skills to their daily lives.

This course is designed to introduce students to the origin of Western and non-Western Civilizations from prehistory through approximately 1550 CE (Common Era). Students will be introduced to concepts and techniques employed by historians, archaeologists, and other social scientists. Topics covered include Human Origins and Early Civilizations, Prehistory to 1000 B.C., Classical Civilizations and Rise of Religious Traditions, 1000B.C. to 500 A.D., and Postclassical Civilizations, 300 to 1000 A.D., and Regional Interactions, 1000 to 1500 A.D.. Analysis and interpretation critical thinking skills are used throughout the course.

## Honors World History \& Geography to 1500

Course No.H4011HY
Required: NCAA
Prerequisite: none
Year-Long
1 credit
This course is designed to introduce students to the origins of Western and Non-Western Civilizations through 1550 CE. Students will explore the concepts and techniques employed by historians with special emphasis on historical inquiry. Topics covered include Human Origins and Early Civilizations, Prehistory to 1000 B.C., Classical Civilizations and Rise of Religious Traditions, 1000B.C. to 500 A.D., and Postclassical Civilizations, 300 to 1000 A.D., and Regional Interactions, 1000 to 1500 A.D.. Stressed throughout the course are such critical thinking skills as analysis and interpretation. This course is a writing, reading, and research intensive course. Although not a prerequisite, this course is highly recommended for students wishing to take AP World History: Modern in the future, as well as for students who wish to more deeply explore the ancient, classical, and medieval worlds.

## World History \& Geography 1500 - Present

Course No.H4022EY

| Elective: NCAA | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course will enable students to examine history and geography from 1500 A.D. (C.E.) to the present, with emphasis on development of the modern world. Geographic influences on history will continue to be explored, but increasing attention will be given to political boundaries that developed with the evolution of nations. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. Noteworthy people and events of the nineteenth and twentieth centuries will be emphasized for their strong connections to contemporary issues.

## AP World History: Modern

## Course No.H4010BY

| Elective: DE; NCAA | Prerequisite: none | Year-Long | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course covers the World History curriculum as it is described by the College Board. It focuses on the years 1200 CE (Common Era) to the present. Then the class will move on to a thematic survey of modern world history from the Post-Classical to the contemporary era. In AP World History: Modern, the students study the sweeping themes that tell the history of the world. It focuses on trends, cultures, and movements in addition to facts, events and chronologies.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn three college credits through Laurel Ridge Community College (Laurel Ridge Community College HIS 112). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

## Virginia \& U.S. History

## Course No.H4030RY

| Required: NCAA | Prerequisite: World History \& Geography to 1500 or <br> World History \& Geography 1500-Present |
| :--- | :--- |

Semester
1 credit World History \& Geography 1500-Present
This course is designed to help students develop foundational knowledge of American History. It provides opportunities for independent research, creativity, debate, oral reporting, field trips, drama, and practice in written argumentation and composition. Topics to be covered include: early Spanish, French, and English colonization in America, Puritanism and its effects on American life, slavery and the plantation system, the growth of democratic institutions, events leading to the American Revolution, the Revolutionary War, the formation of our federal government, Jeffersonian democracy, War of 1812, Monroe Doctrine, Jacksonian democracy, reform movements, expansion and the rise of sectionalism, Civil War, Reconstruction, westward migration, industrialism, and imperialism. The course will also cover all aspects of life in twentieth century America including Jim Crow, the Civil Rights Movement, WWI and WWII, the Cold War, and Modern America.

## AP U.S. History

Course No.H4030BY
Required: DE; NCAA

> Prerequisite: World History \& Geography to 1500 or World History \& Geography 1500-Present

This course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and material in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. The program also introduces those skills necessary to deal effectively with the AP History Exam. Among the key topics to be discussed and examined: colonial development, establishing the nation, reforms, enlarging the national state, sectionalism, imperialism, prosperity and depression, global war, the Cold War, and contemporary American history.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of each semester. Students who wish to take this course as a dual enrollment course can earn six college credits through Laurel Ridge Community College (Laurel Ridge Community College HIS 121 \& 122). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

## Virginia \& U.S. Government

Course No.H4040RY

| Required: NCAA | Prerequisite: Virginia \& U.S. History | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

This course is designed for twelfth grade students. It will consist of the study of the following units: foundations of the American political system, the Constitution, structure and powers of the three branches of the national government, civil liberties and civil rights, political parties, elections and voting behavior, domestic and foreign policies, the politics of regulation, and state and local government.

## AP Government \& Politics

Course No.H4050BY
Required: DE; NCAA
Prerequisite: Virginia \& U.S. History Year-Long 1 credit
The course is designed to give a student a critical perspective on U.S. government and politics. It involves the study of the general concepts of government and politics, as well as the study of the nature of the American political system, its development, and how it works. In addition, the course examines the principal processes, institutions, and the making and implementation of public policies at the national level. Among the key topics that will be discussed and examined are: constitutional underpinnings of the U.S. government, democratic theory, political parties and interest groups, institutions and policy processes of national government, and civil liberties and civil rights.

This course may be dual enrolled. A final grade and/or creditfor this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn three college credits through Laurel Ridge Community College (Laurel Ridge Community College HIS 268). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

| Introduction to Psychology |
| :--- |
| Elective: Grades 11-12; NCAA | Prerequisite: none $\quad$ Course No.H4060EY

## History of Latin America

## Course No.H4070EY

Elective: 10-12; NCAA $\quad$| Recommended: World History \& Geography to 1500 |
| :--- |
| and World History \& Geography 1500-Present |$\quad$ Semester $\quad 1$ credit

This course explores the social, cultural, political, environmental, and economic developments of Latin America. The course will discuss the settlement of the region by Amerindians, the rise of Amerindian Empires, arrival and impact of European colonizers, the Latin American Independence movement, post-colonial developments, Neocolonialism, Latin American Nationalism, the Age of Revolution, and Post-Revolutionary Reactions. Borrowing from the AP Themes of History, students will explore Human-Environmental Interaction; Development and Interaction of Cultures; State Building, Expansion and Conflict; Creation, Interaction, and Expansion of Economic Systems; and Development and Transformation of Social Structures. This course will be reading, writing, and research intensive.

AP African American History
Course No. H4080EY

| Elective: Grades <br> $10-12$ NCAA | Recommended: Completion or current enrollment in <br> Virginia \& U.S. History | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course is an interdisciplinary course that examines the diversity of African American experiences through direct encounters with authentic and varied sources. Students explore key topics that extend from the early African kingdoms to the ongoing challenges and achievements of the contemporary moment. Given the interdisciplinary character of African American studies, students in this course will develop skills across multiple fields, with an emphasis on developing historical, literary, visual, and data analysis skills. This course foregrounds a study of the diversity of Black communities in the United States within the broader context and the African diaspora.

A project is required for this course. Students will define and execute a research project of their choice, drawn from topics of themes in the course or from the broader field of African American studies. This project is submitted by students in combination with their AP exam, to be scored by processors and teachers at the annual AP reading.

AP Microeconomics / AP Macroeconomics Course No.

| Elective: Grades 10-12 | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

The course will fulfill the Economics and Personal Finance graduation requirement.
The microeconomic component of this AP course provides students with a thorough understanding of the principles of economics that apply to individual decision makers, both consumers and producers, within the economic system. The primary focus of the course is to help individuals develop an understanding of markets and the role the government plays promoting greater efficiency and equity in the economy.

The macroeconomic component of this course provides students with a thorough understanding of the principles of economics as they apply to the economic system as a whole. This portion of the course focuses on national income and price-level determination and develops students' familiarity with economic performance measures, the financial sector, economic growth and stabilization policies, and international economics. In this course, students are required to think critically about the complex issues surrounding a world with limited resources.

## WORK-BASED LEARNING

## Advanced Technologies Academy Cooperative Education

Course No. H9210EY
Elective: Grades 11-12 $\quad$ Co-requisite: enrollment in an Advanced Technologies Academy course
This course is a WBL experience, specifically for the Advanced Technologies Academy at the Emil \& Grace Shihadeh Innovation Center, that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and goals. Cooperative education combines a rigorous and relevant curriculum with an occupational specialty. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered. Students must be at least 16 years old, unless an employment certificate is secured. This class shall be graded on a pass-fail basis.
*Students may earn one credit toward graduation for cooperative education experiences of at least a 280-hour duration and by working continuously throughout the school year.

## Cooperative Office Education (COE) <br> Course No.H9120EY

Elective: Grades 11-12 $\quad$| Co-requisite: enrollment in a business |
| :--- |
| course |$\quad$ Semester $\quad 1$ credit*

This course is a career preparation WBL method that combines Career \& Technical Education classroom instruction with paid employment that is directly related to the student's plan of study. The school and the employer plan, coordinate, and supervise the instruction and employment so that each contributes directly to the student's career objectives and employability. Students earn credit toward graduation for cooperative education experiences, and they normally work between 11 and 15 hours per week to achieve a minimum of 280 hours. Applications for the COE program are available from the School Counseling Office or the COE Coordinator. Students must be at least 16 years old, unless an employment certificate is secured. This class shall be graded on a pass-fail basis.
*Students may earn one credit toward graduation for cooperative education experiences of at least a 280-hour duration and by working continuously throughout the school year.

## Health Science Academy Cooperative Education

Course No. H9160EY
Elective: Grades 11-12

> Co-requisite: enrollment in a Health Science Academy course

This course is a WBL experience, specifically for the Health Science Academy at the Emil \& Grace Shihadeh Innovation Center, that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and goals. Cooperative education combines a rigorous and relevant curriculum with an occupational specialty. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered. Students must be at least 16 years old, unless an employment certificate is secured. This class shall be graded on a pass-fail basis.
*Students may earn one credit toward graduation for cooperative education experiences of at least a 280-hour duration and by working continuously throughout the school year.

This course is a WBL experience that places the student in a real workplace environment to develop and practice career-related knowledge and skills for a specific career field related to the student's career interests, abilities, and goals. Internships may be paid or unpaid. It is connected to classroom learning and accompanied by structured reflection activities. Students participating in internships are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered. This class shall be graded on a pass-fail basis.
*Students may earn one credit toward graduation for internships of at least a 280-hour duration and by working continuously throughout the school year. Internships of shorter duration do not earn a credit outside of that already earned for the related CTE course.

| Library Student Aide | Course No. H9220EY |  |  |
| :--- | :--- | :--- | :--- |
| Elective: Grades 11-12 | Prerequisite: application \& instructor <br> approval | Semester | $\mathbf{1}$ credit |
| This course will provide students with experience in providing library media services for students and teachers. <br> Students will have the opportunity to read books, write reviews, create promotional materials and displays, and <br> participate in global project-based learning opportunities. This course is highly recommended for students <br> considering careers as library media specialists, teachers, writers, and instructional technology specialists. |  |  |  |

## Marketing Cooperative Education

## Course No.H9130EY

| Elective: Grades 11-12 | Co-requisite: enrollment in a marketing class | Semester | $\mathbf{1}$ credit* |
| :--- | :--- | :--- | :--- |

This course is a career preparation WBL method that combines Career \& Technical Education classroom instruction with paid employment that is directly related to the student's plan of study. The school and the employer plan, coordinate, and supervise the instruction and employment so that each contributes directly to the student's career objectives and employability. Students earn credit toward graduation for cooperative education experiences, and they normally work between 11 and 15 hours per week to achieve a minimum of 280 hours. Applications for the Co-Op program are available from the School Counseling Office or the Co-op Coordinator. Students must be at least 16 years old, unless an employment certificate is secured. This class shall be graded on a pass-fail basis.
*Students may earn one credit toward graduation for cooperative education experiences of at least a 280-hour duration and by working continuously throughout the school year.

This course is a WBL experience that consists of a long-term relationship focused on supporting the growth and development of students as they learn about a particular industry and workplace. The student is paired with a community professional who has a recognized record of achievement and first-hand experience in the occupational field or career cluster of the student's choice. The mentor becomes a source of guidance, motivation, wisdom, teaching, role modeling, and support. The knowledge, advice, and resources shared depend on the format and goals of the mentoring relationship. Mentor support can provide a wide range of personal and professional benefits, which ultimately lead to improved performance in the workplace. Mentorship requires student preparation, including career exploration, prior to the experience. Students will also be required to complete a reflection exercise once the experience has been completed. This class shall be graded on a pass-fail basis.
*Students may earn . 5 credit toward graduation for mentorships of at least a 140-hour duration. Mentorships of shorter duration do not earn a credit outside of that already earned for the related CTE course.

| Nurse Aide Cooperative Education | Course No. C9140EY |  |  |
| :--- | :--- | :--- | :--- |
| Elective: Grades $\mathbf{1 2}$ | Co-requisite: enrollment in Patient Care <br> Technician | Semester | $\mathbf{1 . 5}$ credits |
| This course is a WBL experience, specifically for the Nurse Aide program at the Emil \& Grace Shihadeh Innovation <br> Center, that connects CTE classroom instruction with paid workplace experience directly related to the student's <br> interests, abilities, and goals. Cooperative education combines a rigorous and relevant curriculum with an <br> occupational specialty. Students participating in cooperative education are guided by a formal, written training <br> plan that defines specific academic and workplace skills to be mastered. Students must be at least 16 years old, <br> unless an employment certificate is secured. This class shall be graded on a pass-fail basis. |  |  |  |

## Professional Skills Academy Cooperative Education

Course No. H9200EY
Elective: Grades 11-12

> Co-requisite: enrollment in a Professional Skills Academy course

This course is a WBL experience, specifically for the Professional Skills Academy at the Emil \& Grace Shihadeh Innovation Center, that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and goals. Cooperative education combines a rigorous and relevant curriculum with an occupational specialty. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered. Students must be at least 16 years old, unless an employment certificate is secured. This class shall be graded on a pass-fail basis.
*Students may earn one credit toward graduation for cooperative education experiences of at least a 280-hour duration and by working continuously throughout the school year.

## WORLD LANGUAGES

## Course Descriptions by Language: German

| German I | Prerequisite: none | Course No.H7031EY |
| :--- | :--- | :--- | :--- |
| Elective: NCAA | Semester | 1 credit |
| This course introduces students to beginning German with emphasis on basic grammar and the vocabulary of |  |  |
| family life and tourism. In addition, students learn about German culture and customs through interactive |  |  |
| assignments and activities. By the end of the course, students will be able to speak, understand, write and read |  |  |
| German at an entry level. German and English are the languages of instruction in the classroom. |  |  |


| German II |  | Prerequisite: German I | Course No.H7032EY |
| :--- | :--- | :--- | :--- |
| Elective: NCAA | Semester | 1 credit |  |
| This course builds on skills acquired in German I. Students learn more sophisticated grammar and vocabulary; <br> write essays on topics of interest, such as sports and politics; engage in frequent conversations in German in the <br> classroom as well as prepare and present formal oral presentations; and study German history, literature and <br> culture. German and English are the languages of instruction. |  |  |  |


| German III | Prerequisite: German II | Course No.H7033EY |
| :--- | :--- | :--- | :--- |
| Elective: NCAA | Semester | $\mathbf{1}$ credit |
| This course focuses on the daily life, interests, and concerns of teenagers in German-speaking countries, students |  |  |
| review, refine, and expand their knowledge of German vocabulary and grammar. Debate and discussion skills and |  |  |
| essay writing are emphasized while studying topics such as media and advertising, rights and responsibilities, |  |  |
| intercultural awareness, and the environment. German is the primary language of the classroom. |  |  |


| German IV | Prerequisite: German III | Course No.H7034DY |
| :--- | :--- | :--- | :--- |
| Elective: NCAA | Semester | $\mathbf{1}$ credit |
| In this course, German students hone skills in writing, reading, listening and speaking through the study of <br> contemporary and classical German literature; current events and culture in German-speaking lands. Students <br> will be expected to do both independent and group work and take advantage of technology-assisted learning <br> opportunities. German is the language of the classroom. |  |  |

## AP German Language and Culture

## Course No.H7035AY

| Elective: NCAA | Prerequisite: German IV | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

In this course, German students continue to build and demonstrate their writing, reading, speaking and listening skills. Emphasis will be on written and oral analysis of a variety of fiction and non-fiction works as well as various aspects of contemporary culture of German-speaking lands. Students will hone grammar skills, build vocabulary, make use of technology and participate in exercises to prepare them for the AP German Language Examination. German is the language of the classroom.

## Course Descriptions by Language: French

| French I | Prerequisite: none | Course No.H7021EY |
| :--- | :--- | :--- | :--- | :--- |
| Elective: NCAA | Semester | 1 credit |
| This course is designed with an emphasis in communication in speaking, reading, writing, and listening <br> activities. Speaking and writing is an interactive process whereas reading and listening is a receptive process. <br> Students will learn in a real life process through partner exchange and online writing to discover French culture <br> and language from across the globe. French and English are the languages used in the high school classroom. |  |  |
|  |  |  |
| French II | Prerequisite: French I | Course No.H7022EY |
| Elective: NCAA | Semester | 1 credit |
| The course builds upon the skills attained in French I. Students will continue to expand their communication <br> skills with presentational opportunities, writing dialogues, speaking with partners in a group context to learn <br> about France and African Francophone culture, reading novice to intermediate stories, and interactive <br> exchanges. |  |  |

## French III

Course No.H7023EY

| Elective: NCAA | Prerequisite: French II | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

This course emphasizes more advanced comprehension in Reading and Speaking, Writing and Listening skills. Investigating French History and intermediate level stories will expand student comprehension in the target language. Daily speaking, learning poetry, project-based learning assignments are examples of practice for cultural understanding. Listening exercises online and podcasts are a few of the tools used to facilitate student's ability to communicate in French.

## French IV

Course No.H7024EY

| Elective: NCAA | Prerequisite: French III | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course is taught primarily in French in order for student's ability to think and communicate in the target language effectively. Going from the intermediate to advanced level of comprehension is the focus through speaking in dialogue daily, writing and reviewing grammar and sentence structures, and cultural research within the Francophone world. Students are expected to read about target issues and participate in interactive exchanges about contemporary issues.

## AP French Language and Culture

Course No.H7025AY

| Elective: NCAA | Prerequisite: French IV | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |
| This course is taught completely in French in preparation for college level training and AP testing in May of the |  |  |  |
| academic year. Students build their speaking and listening comprehension as well as deepen their skills in |  |  |  |
| research and writing using French in the contemporary world. There is a writing emphasis using email and essay |  |  |  |
| writing. Speaking in dialogue format and comprehension from audio and literary writings are also methods |  |  |  |
| utilized throughout the course. |  |  |  |

Course Descriptions by Language: Spanish


In this course, students will successfully begin their language acquisition process through consistent and constant exposure to Spanish language, comprehensible input. This course will introduce students to high frequency Spanish vocabulary in order to begin communication about a broad range of authentic topics. Language and culture are taught simultaneously, allowing Spanish students the opportunity to develop cultural understanding.

Spanish II
Course No.H7012EY
Elective: NCAA
Prerequisite: Spanish I or Spanish for Heritage Semester

In this course, students will advance in their language acquisition process through consistent and constant exposure to the Spanish language with the use of high frequency Spanish vocabulary. This course continues to explore language and culture simultaneously in order to increase cultural awareness and develop global citizenship.

Spanish III

In this course, students will refine their Spanish language skills through the continuous use of comprehensible input by being exposed to more advanced grammar and language structures, and authentic reading materials. As in Spanish I and II, culture is an essential part of the curriculum.

| Spanish IV | Prerequisite: Spanish III or Spanish for Heritage <br> Speakers III | Semester | 1 credit |
| :--- | :--- | :--- | :--- |
| Elective: NCAA |  |  |  |
| This course is considered a pre-AP course which emphasizes communication (understanding and being |  |  |  |
| understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. |  |  |  |
| This includes vocabulary usage, language control, communication strategies, and cultural awareness. The course |  |  |  |
| strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study |  |  |  |
| of language and culture and to prepare for the AP Spanish Language and Culture course, Spanish IV is taught |  |  |  |
| almost exclusively in Spanish. Spanish IV is approximately equivalent to an upper-intermediate college or |  |  |  |
| university course in Spanish language and culture. |  |  |  |

## AP Spanish Language and Culture

Course No.H7015AY

| Elective: NCAA | Recommended: Spanish IV or teacher <br> recommendation | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- | | This course emphasizes communication (understanding and being understood by others) by applying |
| :--- |
| interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, |
| language control, communication strategies, and cultural awareness. This course strives not to overemphasize |
| grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the |
| course is taught almost exclusively in Spanish. |

## AP Spanish Literature and Culture

Course No. H7016AY
Elective: NCAA

## Recommended: Spanish IV or teacher recommendation

Semester 1 credit

This course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, plays, and essays) from Peninsular Spanish, Latin American, and U.S. Hispanic literature. Students develop proficiencies across the three modes of communication (interpretive, interpersonal, and presentational) in the range of Intermediate High to Advanced Mid of the American Council on the Teaching of Foreign Languages' (ACTFL) Proficiency Guidelines. Through careful examination of the required readings and other texts, students work to hone their critical reading and analytical writing skills. Literature is explored within the contexts of its time and place, and students gain insights on the many voices, historical periods, and cultures' represented in the required readings and other texts.

| Spanish for Heritage Speakers I | Course No.H7001LY |  |  |
| :--- | :--- | :--- | :--- |
| Elective | Prerequisite: none | Semester | $\mathbf{1}$ credit |
| In this course, students will reinforce their comprehension and production of the Spanish language through |  |  |  |
| Comprehensible Input. They will explore culturally relevant issues while developing a sense of cultural pride. |  |  |  |
| This class will be taught exclusively in Spanish. |  |  |  |

Spanish for Heritage Speakers II
Course No.H7002LY

| Elective | Prerequisite: Spanish I or Spanish for Heritage <br> Speakers I | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |
| This course continues to explore language and cultural issues through authentic and fictional resources. <br> Students will benefit from further instruction in reading, writing, basic principles of grammar, spelling, sentence <br> structure, punctuation, accents, and paragraph organization. This class will be taught exclusively in Spanish. |  |  |  |


| Spanish for Heritage Speakers III | Course No.H7003LY |  |  |
| :--- | :--- | :--- | :--- |
| Elective | Prerequisite: Spanish II or Spanish for Heritage <br> Speakers II | Semester | $\mathbf{1}$ credit |
| In this course, students will refine their Spanish language skills through the continuous use of comprehensible <br> input by being exposed to more advanced grammatical and language structures, and authentic reading <br> materials. As in Spanish I and II, culture is an essential part of the curriculum. This class will be taught <br> exclusively in Spanish. |  |  |  |

## Emil \& Grace Shihadeh Innovation Center at John Handley High School

## Expanding Education to Meet the Workforce Needs of Tomorrow

According to the US Bureau of Labor and Statistics, over the next ten years, the labor market is projected to expand by 6 million new jobs. By 2032 one in four people will be aged 65 and older, leading to a large portion of the workforce exiting the labor market, creating opportunities for those starting out on their career pathways. The Emil and Grace Shihadeh Innovation Center prepares Winchester students and community members for the in-demand, skilled workforce of tomorrow. The goal of the center is to ensure every student is prepared and empowered with marketable skills which lead to full-time, high-paying sustainable employment; and in doing so, every regional industry is fully supplied with dedicated, skilled workers who will strengthen and enhance their business model.

A joint venture with Laurel Ridge Community College and local industry partners, the Innovation Center trains and equips youth and adults to meet the demands of the regional job market while also preparing students for global opportunities. Using hands-on learning strategies, students develop the necessary skills leading to marketable certifications. Industry partners play an active role in the development of the program of study, while also committing to work-based learning opportunities for students. Also, Laurel Ridge Community College provides instructors and equipment for certification and credit bearing courses. Incorporating these strategies, the Innovation Center has become a hub of workforce development for the community.

The instructional culture at the Innovation Center is interdisciplinary and organized into industry themes where Career \& Technical Education (CTE) teachers, core literacy teachers, and students collaborate on authentic, real-world problems. While attending the Innovation Center, students take one CTE course and one core class. All JHHS students have an opportunity to have an experience at the Innovation Center, and the center is open to help train adults in cooperation with Laurel Ridge Workforce.

Three academies are housed at the Innovation Center -- Advanced Technologies Academy, Professional Skills Academy, and Health Sciences Academy -- each offering programs designed to cultivate students with the skills and credentials needed for a career in their respective, chosen field.

The table below includes CTE courses available at the Innovation Center. Please note that courses may not be available every semester and course offerings will be continually updated.

| Advanced Technologies Academy | Professional Skills Academy | Health Sciences Academy |
| :--- | :--- | :--- |
| Computer Programming | Materials \& Processes Technology | Intro. to Health and Medical Sciences |
| Emergency Medical Technician I |  |  |
| Cybersecurity Fundamentals | Electricity I | Emergency Medical Technician II |
| Adversecurity Technology I (DE) | Electricity II | Medical Laboratory Technology I |
| (DE) | Welding I | Medical Laboratory Technology II |
| Electronic Systems I | Welding II | (DE) |
| Electronic Systems II | Carpentry I | Nurse Aide I |
| Imaging Technology | Carpentry II | Nurse Aide II |
| Video and Media Technology | Technical Drawing \& Design | Patient Care Technician |
|  | Architecture Drawing \& Design |  |
|  | Electricity I (LRCC Workforce) |  |
|  | Electricity II (LRCC Workforce) | Physical/Occupational Therapy I |
|  |  | Firefighting I |
|  | Firefightional Therapy II |  |
|  | Mental Heal II Careers |  |

Core and CTE class offerings are based on availability and VDOE credit requirements. Core subjects will be taught using a blend of personalized learning and project-based learning to enhance academic performance. Students will design their criteria for success and negotiate their time and learning with teachers.

## ADVANCED TECHNOLOGIES ACADEMY

## Career Pathway Opportunities \& Sample Career Options



## Cybersecurity Fundamentals

This course focuses on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity.

## Cybersecurity Technology I

## Course No. C60501DY

| Elective: Grades 9-12; DE | Recommended: Cybersecurity Fundamentals | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

In this course, students enter the world of computer technology and gain practical experience in assembling a computer system. Students will install, configure, and secure various operating systems. Students will install, configure, and secure various operating systems. Students will troubleshoot computers and peripherals and use system tools and diagnostic software. They develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer components. Upon successful completion of the course, students may qualify to take the CompTIA A+ certification exam.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of each semester. Students who wish to take this course as a dual enrollment course can earn three college credits through Laurel Ridge Community College (Laurel Ridge Community College ITN 107). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

| Elective: Grades 10-12; DE | Prerequisite: Cybersecurity Technology I | Year-Long - <br> 2 Blocks | 2 credits |
| :--- | :--- | :--- | :--- |

In this course, students will gain a basic understanding of emerging technologies including unified communications, mobile, cloud, and virtualization technologies. The course prepares students for postsecondary education and training and a successful career in information technology. Upon successful completion of the course, students may qualify to take CompTIA's A+ and Network+ certification exams.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of each semester. Students who wish to take this course as a dual enrollment course can earn six college credits through Laurel Ridge Community College (Laurel Ridge Community College ITN 106). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.

## Electronic Systems I

Course No.C6131EY
Elective: Grades 9-12
Recommended: none
Co-requisite: English at Innovation Center

Semester
1 credit
This course engages students in electricity and electronic experiments that focus on the application of scientific theories and mathematics principles. Students solve problems using simple electrical devices and circuits, and design and build electronic projects using DC and AC devices and circuits. Students learn basic soldering techniques and will build an electronic device. Students will examine how electricity and electronics are involved in all aspects of industry, including planning, finance, management, technical and production skills and community, safety and environmental issues.

| Electronic Systems II |  | Course No.C6132EY |  |
| :--- | :--- | :--- | :--- |
| Elective: Grades 10-12 | Prerequisite: Electronics Systems I <br> Co-requisite: English at Innovation Center | Semester | $\mathbf{1}$ credit |

In this course, students work with electronics devices, instruments, and circuits, building and designing devices to apply theories and laws with electronic components such as resistors, capacitors, and transistors. They also study integrated circuits used in computers, amplifiers, television, and other equipment. Students will build an AM/FM radio and various robotic devices. Students will examine how electricity and electronics are involved in all aspects of industry, including planning, finance, management, technical and production skills and community, safety and environmental issues.

## Imaging Technology

Course No.H6100EY
Elective: Grades 10-12
Prerequisite: none
Co-requisite: English at Innovation Center

This course introduces students to the basic principles of photography while providing a strong emphasis on digital imaging. Students study the development of photography as a communication medium and its evolution into the digital realm. Students learn to use image-editing software to manipulate digital images.

This course offers students an opportunity to study all aspects of video and media production, from planning and writing for production to operating studio and editing equipment. Students practice various methods of gathering news and information from individuals, research, and online resources. In addition, students are introduced to analog and digital principals of film production. The course will consist of independent student work outside the normal class day, computer lab hands-on demonstrations, and discussions of student work. Students will be required to keep a journal with drawing and writing assignments throughout the semester.

## PROFESSIONAL SKILLS ACADEMY

## Career Pathway Opportunities \& Sample Career Options



In this introductory course, students focus on industrial/technical materials and processes as they fabricate usable products and conduct experiments. Learning experiences include career analysis as well as the use of tools and equipment related to analysis, testing, and processing of metals, plastics, woods, ceramics, and composite materials. This single-period laboratory course is recommended for students interested in technical careers and others wishing to improve their consumer knowledge and technological literacy. This course is also offered at the middle school.

## Carpentry I

Course No.C6030EY
Elective: Grades 9-12

Recommended: Materials and Processes Technology Co-requisite: English at Innovation Center

Semester 1credit
-

This course is foundational for achieving high-level construction industry skills that can result in an exciting and lucrative career. With an emphasis on safety, students are taught to use hand and power tools, cut stock, apply construction mathematics, interpret blueprints, and understand basic rigging. Students will become proficient in identifying types of residential construction components to frame walls, floors, ceilings, roofs, doors, and windows. All students will obtain the required Construction Industry OSHA 10 safety credential.

| Elective: Grades 10-12 |  <br> Complete application <br> Co-requisite: English at Innovation Center | Semester - <br> 2 Blocks | 2 credits |
| :--- | :--- | :--- | :--- |
| This course leads to a successful transition into postsecondary education for careers in carpentry and related <br> fields such as construction management, architecture, and others. Students are taught the safe use of hand and |  |  |  |
| power tools common to the industry to complement their OSHA 10 safety credential earned in Carpentry I. <br> Students will become proficient in assembling and installing various types of residential construction components <br> that are current with industry standards, including rigging and job-estimating procedures, forming foundations, <br> framing floors, walls, ceiling, roofs, trusses, roofing materials, stairs, exterior doors and windows, decks, and <br> porches. Successfully passing this course leads to CTE program completion. |  |  |  |

## Welding I

Course No.C6070DY
Elective: Grades 9-12

| Recommended: Materials and Processes Technology <br> Co-requisite: English at Innovation Center | Semester |
| :--- | :--- |

1 credit
This course is a hands-on, skill building class designed to introduce the student to the basics of manufacturing. Students learn to safely and accurately use a variety of machine tools, jigs, and fixtures, and precision measuring tools. Students are provided with the opportunity to develop entry-level skills in machining, welding and fabricating using a variety of processes. Students work individually and in groups to complete activities and projects. Students gain hands-on experiences enabling them to develop employability skills and make informed career choices in manufacturing and related technical fields.

## Welding II

## Course No. C6081EY

Elective: Grades 10-12

> Prerequisite: Prerequisite: Welding I, OSHA 10 \& Complete application Co-requisite: English at Innovation Center

## Semester - 2 credits 2 Blocks

This course teaches advanced welding students to fine-tune their craft and to perform V-groove welds in all positions, using multiple welding processes. Students prepare to pass relevant industry certifications. Welding is required by a wide variety of industries, anywhere fusible materials and high heat are needed to manufacture, repair, or alter products. Professional welders are in high-demand and can earn accordingly.

## Electricity I

Course No. C6134EY

| Elective: Grades 10-12 | Prerequisite: none <br> Co-requisite: English at Innovation Center |
| :--- | :--- |


| Semester - <br> 2 Blocks |
| :--- |

Students develop fundamental electrical skills to help them prepare for a career in the installation, operation, maintenance, and repair of residential, commercial, and industrial systems. Students will engage in hands-on activities in a lab setting. They will be introduced to residential wiring of houses and apartments; commercial wiring of retailers, schools, businesses, and hospitals; and industrial wiring of factories. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.
Note: This course may be a Youth Registered Apprenticeship and may count as progress toward a Registered Apprenticeship.

| Elective: Grades 11-12 | Prerequisite: Electricity I | Semester - <br> 2 Blocks | 2 credits |
| :--- | :--- | :--- | :--- |

Students will continue to develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. Students will also study electrical theory and mathematical problems related to electricity; apply requirements of the National Electrical Code (NEC); select and install conductors; examine lighting, communication, and power systems; and work with conduits and raceways, panelboards, switchboards, grounding systems, and generators. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.
Note: This course may be a Youth Registered Apprenticeship and may count as progress toward a Registered Apprenticeship

## Technical Drawing and Design <br> Course No.C6110EY

Elective: Grades 9-12

> Prerequisite: none
> Grades 10-12 Co-requisite: English at Innovation Center

This course provides the student with an introductory background to one of the basic communication techniques used by almost every industry. Students study and apply basic drafting skills and gain a background in fundamental drafting principles. Students will plan, design, and construct a prototype model of a new invention or innovation. Autodesk Design Academy software will be used to provide the student with the latest in computer-aided design (CAD) technology. The student will learn how CAD applications are used in industry. It is recommended as a course for future architectural design, construction and manufacturing students.

## Architectural Drawing and Design

Course No. C6120EY

| Elective: Grades 10-12 | Prerequisite: Technical Drawing and Design <br> Co-requisite: English at Innovation Center | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course provides students the opportunity to learn more about the principles of architecture and related design practices and techniques. It provides information that will be beneficial to future architects, interior designers, homebuilders and any homeowner. Students will explore careers in architecture by creating a set of building plans for residential and/or commercial buildings. They will also plan, design, and construct a scale model of a residential or commercial structure and prepare a 3D computer animated walk-through of a building. AutoCAD Architecture and Autodesk Revit Architecture software will be used to provide the student with the latest in computer-aided design (CAD) technology. The student will learn how CAD applications are used in industry.

## Industrial Maintenance I

Elective: Grade 12; DE

Course No H6151ES
Semester - 2 credits 2 Blocks

In this course, students are taught safety and precision measurement skills and gain hands-on, practical experience in welding, hydraulics, pneumatics, HVAC, electricity, mechanical fundamentals, machine alignment, technical drawings, and quality control. Industrial maintenance technicians repair and maintain commercial or industrial equipment in buildings. This course is held off-site at Laurel Ridge Community College.

This course may be Dual Enrolled with Laurel Ridge Community College.

> | Industrial Maintenance II | Course No H6152ES |  |  |
| :--- | :--- | :--- | :--- |
| Elective: Grade 12; DE | $\begin{array}{l}\text { Prerequisite: acceptance into the Trades } \\ \text { Academy }\end{array}$ | $\begin{array}{l}\text { Semester } \\ -2 \text { 2 Blocks }\end{array}$ | $\mathbf{2}$ credits |
| In this course, students are taught safety and precision measurement skills and gain hands-on, practical |  |  |  |
| experience in welding, hydraulics, pneumatics, HVAC, electricity, mechanical fundamentals, machine alignment, |  |  |  |
| technical drawings, and quality control. Industrial maintenance technicians repair and maintain commercial or |  |  |  |
| industrial equipment in buildings. This course is held off-site at Laurel Ridge Community College. |  |  |  |

This course may be Dual Enrolled with Laurel Ridge Community College.

Career Pathway Opportunities \& Sample Career Options


Students participating in health science programs will engage in clinical settings (possible examples are the Winchester Medical Center and the Winchester Fire \& Rescue Department). As a result, students will be taught how to safely manage situations that deal with actual patients and be privy to patient information requiring maturity, confidentiality, and important safety protocols. All of these are skills students will learn through the programs and be able to implement in the live setting.

Students in the Nurse Aide, EMT and Medical Laboratory Technologies, Physical/Occupational Therapy courses will be required to have updated immunization records and are subject to a criminal background check and drug testing. Students must have a clean criminal background check and must provide a non-positive drug test.

## Introduction to Health \& Medical Sciences

## Course No.C6170ES

Elective: Grades 9-12

> Recommended: Algebra I and Biology Grades 10-12 Co-requisite: English at Innovation Center

This course introduces the student to a variety of health care careers and develops basic skills required in all health and medical sciences. It is designed to help students understand the key elements of the U.S. health care system and to learn basic health care terminology, anatomy and physiology for each body system, pathologies, diagnostic and clinical procedures, therapeutic interventions, and the fundamentals of traumatic and medical emergency care. Throughout the course, instruction emphasizes safety, cleanliness, asepsis, professionalism, accountability, and efficiency within the health care environment. Students also begin gaining job-seeking skills for entry into the health and medical sciences field. In addition, instruction may include the basics of medical laboratory procedures, pharmacology fundamentals, biotechnology concepts, and communication skills essential for providing quality patient care.

## Emergency Medical Technician I

# Recommended: Intro to Health Sciences <br> * See Notation <br> Co-requisite: EMT II and English at Innovation Center 

This course includes tasks from the National Emergency Medical Services Educational Standards. Students explore and apply the fundamentals of emergency medical services, anatomy, physiology, and medical terminology while demonstrating skills in assessing and managing patient care, including assessing the scene and understanding shock, resuscitation, and trauma. Supervised field experience outside of school hours is required.
Note: Students must be at least 16 years old by the first day of the course offering. Students should take Emergency Medical Technician I first-semester and Emergency Medical Technician II second-semester.
*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97.
Students need to read and comply with the course enrollment requirements on Page 97.
Emergency Medical Technician II
Course No. C6160EQ

| Elective: Grades 11-12 | Prerequisite: Emergency Medical Technician I <br> *See Notation <br> Co-requisite: English at Innovation Center | 0.5 Semester | 1 credit |
| :--- | :--- | :--- | :--- |

This course includes tasks from the National and Virginia Emergency Medical Services (EMS) Educational Standards. Students build on their knowledge and skills for providing basic life support by focusing on the areas of EMS operations, medical emergencies, and management of special patient populations. Supervised field experience that includes at least 10 patient contacts outside of school hours is required. Successful completion of all course requirements and instructor endorsement may lead to eligibility to take the Virginia State Psychomotor Exam and the National Registry of Emergency Medical Technicians (NREMT) cognitive exam. Students must meet the requirements of the Functional Position Description for the Basic Life Support Provider (refer to EMS.TR.14B and 12VAC5-31-1501 in the Code of Virginia). Students must complete a minimum of 85 percent of the didactic and lab aspects of the course, per 12VAC5-31-1501 in the Code of Virginia.
Note: Students must be at least 16 years old by the first day of the course offering.
*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97. Students need to read and comply with the course enrollment requirements on Page 97.

Firefighting requires discipline and attention to academic and professional standards to successfully fight live fires, address hazardous-materials (HAZMAT) incidents, and conduct search-and-rescue operations. Students will become familiar with the procedures, equipment, and technologies used by fire departments. This course challenges students academically, mentally, and physically and meets the standards of National Fire Protection Association (NFPA) 1001-2013 leading to the opportunity to obtain a Firefighter I certification. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.
Students must be at least 16 years old (Code of Virginia 40-1.79.1) by the first day of the course offering. Enrollment also requires parental consent. Additional requirements, including CPR, HAZMAT operations, and Mayday Awareness, are stipulated for those students seeking NFPA 1001-2013 Firefighter I certification.
*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97. Students need to read and comply with the course enrollment requirements on Page 97.

## Firefighting II

Course No. C6134EQ
Elective: Grades 11-12
Prerequisite: Firefighting I
Co-requisite: English at Innovation Center
0.5 Semester 1 credit

This course builds on the professional knowledge and skills gained in Firefighting I. Students respond to situations caused by simulated terrorism, accidents, and natural disasters by managing resources such as medevac helicopters, emergency medical personnel, technical rescue teams, and community-based organizations. Students will become familiar with the procedures, equipment, and technologies used by current fire departments. This course challenges students academically, mentally, and physically and meets the standards of National Fire Protection Association (NFPA) leading to the opportunity to obtain Firefighter II certification. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations. Students must be at least 16 years old (Code of Virginia 40-1.79.1) by the first day of the course offering. Enrollment also requires parental consent. Additional requirements, including CPR, HAZMAT operations, and Mayday Awareness, are stipulated for those students seeking NFPA 1001-2013 Firefighter I certification.

[^2]| Elective: Grades 11-12 | Recommended: Intro to Health Sciences <br> * See Notation <br> Co-requisite: English at Innovation Center | Semester | $\mathbf{1}$ credit |
| :--- | :--- | :--- | :--- |

This course gives students an overview of the clinical lab, hematology, urinalysis, and clinical chemistry. Students gain foundational knowledge and skills appropriate for a variety of medical-related career paths in the field of medical laboratory technology. They are introduced to diagnostic and therapeutic laboratory procedures that support medical practice and research, and investigate safety, quality assurance, and ethical concerns associated with the field of medical laboratory technology.
*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97. Students need to read and comply with the course enrollment requirements on Page 97.

## Medical Laboratory Technology II

Course No.C6182DS

| Elective: Grades 11-12; DE | Prerequisite: Medical Laboratory Technology I <br> * See Notation <br> Co-requisite: English at Innovation Center | Semester | 1 credit |
| :--- | :--- | :--- | :--- |

In this hands-on course, students perform tests normally seen in the clinical setting as they build on the foundational knowledge and skills obtained in Medical Laboratory Technology I. The students will use the basic principles necessary to perform competently in the areas of clinical microbiology, immunohematology, and immunology/serology, coagulation/hemostasis, and molecular diagnostics. Competency includes performing the technique correctly, understanding the theory of the procedures, and interpreting the results.

This course may be dual enrolled. A final grade and/or credit for this course will be earned at the end of the year. Students who wish to take this course as a dual enrollment course can earn three college credits through Laurel Ridge Community College (Laurel Ridge Community College MDL 101). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.
*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97. Students need to read and comply with the course enrollment requirements on Page 97.

## Prerequisite: Application \& Instructor Approval Recommended: Intro to Health Sciences Co-requisite: Nurse Aide II and English at Innovation Center

This course is offered as an occupational preparation course which emphasizes the study of nursing occupations as related to the health care system. Students study normal growth and development, simple body structure and function, and medical terminology and are introduced to microbes and disease. They receive elementary skill training in patient-nursing assistant relationships; taking and recording of vital signs; cardiopulmonary resuscitation; and bathing, feeding, dressing, and transporting of patients in hospitals and nursing homes. Limited on-the-job instruction in nursing homes and hospitals is part of the course. This course can be used as an introduction to practical nursing or to prepare the student for Nurse Aide II so that all competencies for a certified nursing assistant are met. Students should take Nurse Aide I first-semester and Nurse Aide II second-semester.
*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97. Students need to read and comply with the course enrollment requirements on Page 97.

## Nurse Aide II

Course No. C6192EQ
Elective: Grades 11-12

| Prerequisite: Nurse Aide I |
| :--- |
| * See Notation |
| Co-requisite: English at Innovation Center |

0.5 Semester 1 credit

* See Notation

Co-requisite: English at Innovation Center

| Course No. C6192EQ |  |  |
| :--- | :--- | :--- |
| 0.5 Semester | 1 credit |  |
|  |  |  |

This course is an occupational preparation course, emphasizing advanced skill training in areas such as catheter care, range of motion, bowel and bladder training, care of the dying, selected procedures for maternal and infant care, and admission and discharge procedures. Students learn diseases and body systems as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. On-the-job instruction in a licensed nursing home is part of the course. Upon completion of the nurse aide program, the student is eligible to take the nurse aide certification exam that leads to employment as a certified nurse aide in hospitals and nursing homes. Upon completion of the course, students will sit for the Nurse Aide Exam given by the Board of Nursing. Students should take Nurse Aide I first-semester and Nurse Aide II second-semester.
*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97. Students need to read and comply with the course enrollment requirements on Page 97.

## Patient Care Technician

Course No. C6193ES
Elective: Grades 12 Prerequisite: Nurse Aide II \& CNA credential Co-requisite: Nurse Aide Cooperative Education
This course emphasizes the study of nursing occupations as related to the healthcare system. Students study normal growth and development, simple body structure and function, and medical terminology and are introduced to microbes and disease. Upon completion of the course, students will master skills performing ECGs, basic medical, lab and exam procedures, drawing blood, and providing basic patient care. Students may be eligible to take the National Certification exams to become a Certified Phlebotomy Technician, Certified EKG Technician, and Certified Patient Care Technician.
*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97. Students need to read and comply with the course enrollment requirements on Page 97.

## Physical/Occupational Therapy I

## Course No. C6175EY

Elective: Grades 11-12 | Recommended: Intro to Health Sciences and Anatomy |
| :--- |
| and Physiology |
| Co-requisite: English at Innovation Center |

Semester 2 Blocks

The course is designed to provide an introduction to the professions of physical and occupational therapy. Students explore the principles and practices of therapists in the healthcare industry and participate in clinical observation under the direct supervision of a licensed physical and/or occupational therapist. Clinical skills in the areas of physical therapy and occupational therapy enable students to gain understanding of rehabilitative care, which is practiced throughout the continuum of care and across the life span of individuals. After successful completion of this course, students may seek higher education for specific degrees/licensure in a variety of fields such as physical therapy, occupational therapy, speech therapy, sports medicine, athletic training, chiropractic medicine, biology, or exercise science.
*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97. Students need to read and comply with the course enrollment requirements on Page 97.

## Physical/Occupational Therapy II

Course No.C6176EY
Elective: Grades 11-12

## Required: Physical/Occupational Therapy I <br> Recommended: Intro to Health Sciences and Anatomy and Physiology <br> Co-requisite: English at Innovation Center

| Year-Long - <br> 2 Blocks | 2 Credits |
| :--- | :--- |
|  |  |

The course is designed to provide an introduction to the professions of physical and occupational therapy. Students explore the principles and practices of therapists in the healthcare industry and participate in clinical observation under the direct supervision of a licensed physical and/or occupational therapist. Clinical skills in the areas of physical therapy and occupational therapy enable students to gain understanding of rehabilitative care, which is practiced throughout the continuum of care and across the life span of individuals. After successful completion of this course, students may seek higher education for specific degrees/licensure in a variety of fields such as physical therapy, occupational therapy, speech therapy, sports medicine, athletic training, chiropractic medicine, biology, or exercise science.
*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97. Students need to read and comply with the course enrollment requirements on Page 97.

## Mental Health Assisting Careers

## Course No.

Elective: Grades 11-12

## Recommended: Introduction to Health \& Medical Sciences <br> Co-requisite: English at Innovation Center

Students experience classroom instruction and hands-on learning in preparation for a career as a mental health technician or in the mental health field. Students gain understanding of routine care and therapeutic procedures, responding to emergency situations, patient rehabilitation, and patient recreational activities. Students prepare to assist physicians, therapists, and other mental health professionals in hospitals, outpatient clinics, and community mental health facilities. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.
*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97. Students need to read and comply with the course enrollment requirements on Page 97.

## Sequential Electives

The following sequences are approved to meet the sequential electives requirement for graduation. Only courses not needed for graduation can count as a sequential elective. Please see the graduation requirements charts for more detailed information.
There may be additional sequential electives as approved by administration.

## Academic Support

| Study Skills I | Followed by | Study Skills 2 |
| :--- | :--- | :--- |
| Reading I | Followed by | Reading II |

## Business and Information Technology

| Accounting | Followed by | Advanced Accounting, Computer Information Systems, Advanced <br> Computer Information Systems, Design, Multimedia, \& Web <br> Technologies, Adv. Desin, Multimedia, \& Web Technologies, <br> Entrepreneurship, Medical Administration, Principles of Business <br> \&Marketing |
| :--- | :--- | :--- |
| Computer Information Systems | Followed by | Accounting, Advanced Accounting, Advanced Computer Information <br> Systems, Design, Multimedia, \& Web Technologies, Adv. Design, <br> Multimedia, \& Web Technologies, Entrepreneurship, Information <br> Technolog Fundamentals, Medical Administration, Principles of <br> Business \& Marketing Computer Programming, Advanced <br> Computer Programming |
| Computer Programming | Followed by | lomputer Information Systems, Advanced Computer Information <br> Systems, Design, Multimedia, \& Web Technologies, Adv. Design, <br> Multimedia, \& Web Technologies, Advanced Computer <br> Programming |
| Design, Multimedia, \& Web <br> Technologies | Followed by | Accounting and Advanced Accounting, Computer Information <br> Systems, Advanced Computer Information Systems, Adv. Design, <br> Multimedia, \& Web Technologies, Information Technology <br>  <br> Marketing, Computer Programming, Advanced Computer <br> Programming |
| Principles of Business \& Marketing | Followed by | Accounting, Advanced Accounting, Computer Information Systems, <br>  <br> Web Technologies, Advanced Design, Multimedia, \& Web <br> Technologies, Entrepreneurship, Marketing, Advanced Marketing, <br> Medical Administration |

## Career Connections

| Virginia Teachers for Tomorrow I | Followed by | Virginia Teachers for Tomorrow II |
| :--- | :--- | :--- |
| English | Followed by | Debate |
| Forensics Speech |  |  |
| English Learners | Followed by | English as a Second Language II, English as a Second Language III |
| English as a Second Language I |  |  |

## Fine Arts

| Art Foundations | Followed by | Drawing and Painting I, Drawing and Painting II, Sculpture I, <br> Sculpture II, AP Studio 2-D, AP Studio 3-D, AP Studio Art: Drawing |
| :--- | :--- | :--- |
| Treble Ensemble I | Followed by | Treble Ensemble II, Chamber Choir I, Chamber Choir II |
| Concert Choir I | Followed by | Concert Choir II, Chamber Choir I, Chamber Choir II |
| Chamber Choir I | Followed by | Chamber Choir II |
| Beginning Guitar | Followed by | Intermediate Guitar |
| Theatre I | Followed by | Theatre II, Theatre III, Theatre IV |

## Kinesiology and Health

| Advanced Kinesiology Team Sports I | Followed by | Advanced Kinesiology Team Sports II |
| :--- | :--- | :--- |
| Advanced Kinesiology Weight <br> Training I | Followed by | Advanced Kinesiology Weight Training II |
| Recreational \& Lifetime Fitness I | Followed by | Recreational \& Lifetime Fitness II |
| Marketing | Followed by |  <br> Marketing |
| Marketing | Followed by | Accounting, Advanced Accounting, Computer Information Systems, <br>  <br> Web Technologies, Advanced Design, Multimedia, \& Web <br> Technologies, Entrepreneurship, Marketing, Advanced Marketing, |
| Principles of Business \& Marketing |  |  |
| Medical Administration |  |  |

## Social Studies

| Introduction to Psychology | Followed by | AP Psychology (Virtual Virginia) |
| :--- | :--- | :--- |
| World Languages (only courses not needed for graduation can count as a sequential elective) <br> Sequential electives for the Advanced Studies Diploma using World Languages may only be counted as such, after the graduation requirement for World <br> Language has been met (ex. Levels AP) |  |  |
| French I | Followed by | French II |
| German I | Followed by | German II |
| Spanish I | Followed by | Spanish II |
| French IV | Followed by | AP French Language and Culture |
| German IV | Followed by | AP German Language and Culture |
| Spanish IV | Followed by | AP Spanish Language and Culture, AP Spanish Literature and Culture |
| Advanced Technologies Academy |  |  |


| Cybersecurity Fundamentals | Followed by | Cybersecurity Technology I, Advanced Cybersecurity Technology II |
| :---: | :---: | :---: |
| Cybersecurity Technology I | Followed by | Advanced Cybersecurity Technology II |
| Electronic Systems I | Followed by | Electronic Systems II |
| Industrial Maintenance I | Followed by | Industrial Maintenance II |
| Imaging Technology | Followed by | Video and Media Technology |
| Professional Skills Academy |  |  |
| Materials and Processes Technology | Followed by | Technical Drawing and Design, Carpentry I |
| Carpentry I | Followed by | Carpentry II |
| Welding I | Followed by | Welding II |
| Technical Drawing and Design | Followed by | Architectural Drawing and Design |
| Electricity I | Followed by | Electricity II |
| Health Sciences Academy |  |  |
| Emergency Medical Technician (EMT) I | Followed by | Emergency Medical Technician (EMT) II |
| Introduction to Health and Medical Sciences | Followed by | Medical Administration, Medical Laboratory I, Nurse Aide I, Physical/Occupational Therapy I |
| Firefighting I | Followed by | Firefighting II |
| Medical Laboratory Technology I | Followed by | Medical Laboratory Technology II |
| Nurse Aide I | Followed by | Nurse Aide II, Patient Care Technician |
| Physical / Occupational Therapy I | Followed by | Physical / Occupational Therapy II |

For all students, a fine arts or career and technical education (CTE) course may be used to partially satisfy the sequential elective requirement (i.e. may be used as one of the two required sequential electives) while also being used as one of the courses to meet the Fine Arts/CTE requirement for the Advanced Studies diploma or the World Language/Fine Arts/CTE requirement for the Standard diploma. This reincorporates CTE courses as an option for partial satisfaction.



[^0]:    - High school credit is awarded for high school subjects taken in middle school (e.g. Earth Science, Algebra I, Geometry, world language, and certain career/technical courses).
     the student's grade point average. The repeat course grade will be calculated into the student's grade point average.

[^1]:    **Students will receive an English credit for this class

[^2]:    *Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 97. Students need to read and comply with the course enrollment requirements on Page 97.

