

# ***John Handley High School***

## ***Program of Studies***



**2023-2024**

***425 Handley Boulevard  
Winchester, Virginia 22601  
(540) 662-3471  
[jhhs.wps.k12.va.us](http://jhhs.wps.k12.va.us)***

**Grades 9-12**

*School Board Approved:*



WINCHESTER PUBLIC SCHOOLS

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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 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 Writing	Algebra I Geometry Algebra II	Biology Chemistry Earth Science	World History & Geography to 1500 World History & Geography 1500 to Present 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
<b>Tenth Grade</b> (Sophomore)	<b>5</b>	A student must have earned a minimum of five (5) credits.
<b>Eleventh Grade</b> (Junior)	<b>11</b>	A student must have earned a minimum of eleven (11) credits.
<b>Twelfth Grade</b> (Senior)	<b>17</b>	A student must have earned a minimum of seventeen (17) credits, and the student must have planned a program providing for sufficient credits and verified credits to ensure graduation by the end of the academic year.

For students earning an **Applied Studies Diploma**, promotion will be based on the completion of objectives rather than credit earned.

## 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 9.

#### NOTES:

- High school credit is awarded for high school subjects taken in middle school (e.g. Earth Science, Algebra I, Geometry, Algebra II, world language and certain career/technical 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.

# 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:

- Standard Studies
- Advanced Studies
- Applied Studies (reserved for qualifying students)

General education students who have successfully completed course work for a diploma, but who have not met verified credit requirements on the state SOL tests, may also receive a Certificate of Program Completion. Also, some students with Individual Education Plans (IEP) who do not meet the requirements for a diploma may receive a Certificate of Program Completion.

Please see pages 7-8 for the requirements for the Standard Studies and Advanced Studies diplomas.



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

Subject Area	Standard Credits	Verified Credits	Specifications
English	4	2	All students must take the SOL Reading and Writing (or equivalent) tests in high school.
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. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit. <b>All students must take a SOL math test in high school.</b>
Laboratory Science	3	1	Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines: earth sciences, biology, chemistry, or physics. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit.  Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association, or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for either a laboratory science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the board as an additional test to verify student achievement. <b>All students must take the SOL Biology test in high school.</b>
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.  Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association, or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for either a laboratory science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the board as an additional test to verify student achievement. <b>All students must take a SOL history test in high school.</b>
Health & Physical Ed.	2	0	N/A
World Language, Fine Arts or Career Tech	2	0	Per the Standards of Quality, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education. Per the Standards of Quality, a 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 as required by the Standards of Quality.
<b>Total</b>	<b>22</b>	<b>5</b>	N/A

**Additional Requirements for Graduation**

- **Advanced Placement, Honors, Dual Enrollment, Work-Based Learning, or CTE Credential (pg19)** - Students shall complete an Advanced Placement, honors, or dual enrollment course; or 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. The LCS Economics and Personal finance course has an online component that fulfills this requirement.
- **First Aid, CPR, and AED Training** - Students shall be trained in emergency first aid, CPR, and the use of 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 Cs** - Students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate approved by the board.

**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	Standard Credits	Verified Credits	Specifications
English	4	2	All students must take the SOL Reading and Writing (or equivalent) test in high school.
Mathematics	4	1	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 II. The board shall approve courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit. <b>All students must take a SOL math test in high school.</b>
Laboratory Science	4	1	Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit. <b>All students must take the SOL Biology test in high school.</b>
History & Social Sciences	4	1	Courses completed to satisfy this requirement shall include Virginia and U.S. history, Virginia and U.S. Government, and two courses in either world history or geography or both. The board shall approve additional courses to satisfy this requirement. <b>All students must take a SOL history test in high school.</b>
World Language	3	0	Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.
Health & Phys. Ed	2	0	N/A
Fine Arts or Career Tech	1	0	Per the Standards of Quality, a computer science course credit earned by students may be considered a career and technical credit.
Economics & Personal Finance	1	0	N/A
Electives	3	0	Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.
Total Credits	26	5	N/A

**Additional Requirements for Graduation**

- **Advanced Placement, Honors, Dual Enrollment, Work-Based Learning, or CTE Credential (pg19)** - Students shall complete an Advanced Placement, honors, or dual enrollment course; or 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. The LCS Economics and Personal finance course has an online component that fulfills this requirement.
- **First Aid, CPR, and AED Training** - Students shall be trained in emergency first aid, CPR, and the use of 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 Cs** - Students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate approved by the board.

# 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

Advanced Placement and AP Exam	Dual Enrollment, MVGS, or JHHS Advanced Placement Courses, w/o Exam	All Other Courses
A - 5	A - 4.5	A - 4
B - 4	B - 3.5	B - 3
C - 3	C - 2.5	C - 2
D - 2	D - 1.5	D - 1
F - 0	F - 0	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.

**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](#) ,  
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 uses an A/B or “alternating-day” block schedule in which students take eight classes that meet every other day. The classes are approximately 90-minutes in duration. 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 Plans (ACP). 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 four 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; and
- 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 would 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***.

## 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 must 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. John Handley High School offers over 20 dual-enrollment courses (core area, career and technical, and AP) during the 2022-2023 school year. Dual enrollment offerings may vary from year to year. Projected dual enrollment courses for the 2022-2023 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 18.

## Virtual Virginia

- Virtual Virginia provides a variety of Advanced Placement (AP) courses, enabling students to earn college credit for courses not offered through their high school
- Applications for Virtual Virginia courses are available in the School Counseling Office
- All Virtual Virginia applications must be turned in to the School Counseling Office two weeks prior to the end of the school year.
- Virtual Virginia enrollment closes in the beginning of August each school year.
- The Virginia Department of Education reimburses school divisions for tuition and test fees for students who sign an Early College Scholars Agreement

- The Early College Scholars program allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma
- To qualify for the Early College Scholars program, a student must:
  - Have a "B" average or higher;
  - Be pursuing an Advanced Studies Diploma; and
  - Take and complete college-level course work (e.g., Advanced Placement, International Baccalaureate, Cambridge, or dual enrollment) that will earn at least 15 transferable college credits.

### **Mountain Vista Governor's School (MVGS)**

- The mission of Mountain Vista Governor's School is to present a research-based, technology-enhanced, integrated program in mathematics, science, and the humanities.
- The program will challenge students to reach their full potential as independent thinkers capable of assuming leadership 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 a comparable weighted course at JHHS will not be weighted.
- Course offerings can be found at [www.mvgshome.org](http://www.mvgshome.org)

### **Trades Academy**

- Upon successful completion of this one-year course, 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 also will 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.
- This course is intended for seniors and requires an application and acceptance process for the 3 seats that are available to John Handley High School students.

# 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 be enrolled in no fewer than five subjects, or their equivalent, offered for credit and which may be used for graduation.
- The student must have passed five subjects, or their equivalent, offered for credit and which may be used for graduation the immediate preceding school year.
- 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 9th grade for the first time.
- Additional guidelines can be found at [handleypride.org](http://handleypride.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](http://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<sup>th</sup> graders and 11<sup>th</sup> graders are given the opportunity to retake if they choose to do so. The testing takes place in the fall during the school day at no cost to the student.
- 11<sup>th</sup> 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<sup>th</sup> 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](http://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](http://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.

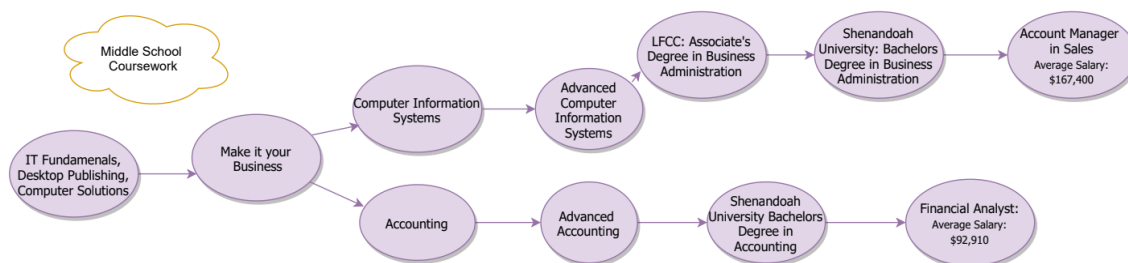
# Career and Technical Education (CTE)

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 21st Century skills, technical knowledge and skills, and core academic knowledge.

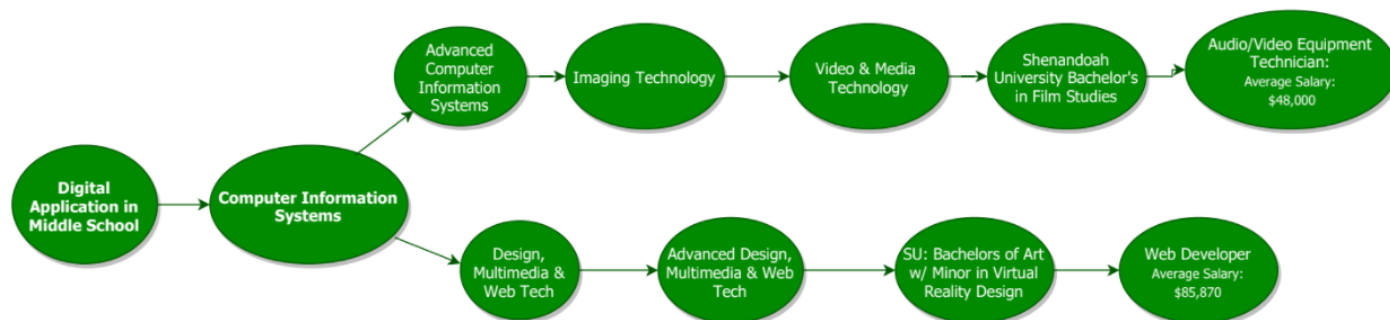
With an emphasis on real world, problem-based learning, and real life skills we strive to provide the opportunities for all students to get the exposure they desire to graduate from Winchester Public Schools ready for what's next in life. There is nothing more exciting than seeing students engaged in 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. Here you will see examples of the career pathway opportunities and some sample career options.

To learn more about the Emil and Grace Shihadeh Innovation Center, the academies, and associated career pathways and sample career options go to page 73.

## Business Information Technology



## Arts, Audio-Visual Technology, and Communications



## Marketing Strategy



# 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 course is completed by *one* of the bulleted courses listed below it.

## ***Business & Information Technology***

### **Accounting**

- Advanced Accounting
- Computer Information Systems
- Advanced Computer Information Systems
- Design, Multimedia, & Web Technologies
- Adv. Design, Multimedia, & Web Technologies
- Entrepreneurship
- Medical Systems Administration
- Principles of Business & Marketing

### **Advanced Accounting**

- Computer Information Systems
- Advanced Computer Information Systems
- Design, Multimedia, & Web Technologies
- Adv. Design, Multimedia, & Web Technologies
- Entrepreneurship
- Medical Systems Administration
- Principles of Business & Marketing

### **Computer Information Systems**

- Accounting
- Advanced Accounting
- Advanced Computer Information Systems
- Design, Multimedia, & Web Technologies
- Adv. Design, Multimedia, & Web Technologies
- Entrepreneurship
- Information Technology Fundamentals
- Medical Systems Administration
- Principles of Business & Marketing
- Computer Programming
- Advanced Computer Programming

### **Advanced Computer Information Systems**

- Accounting & Advanced Accounting
- Computer Information Systems
- Design, Multimedia, & Web Technologies
- Adv. Design, Multimedia, & Web Technologies
- Entrepreneurship
- Information Technology Fundamentals
- Medical Systems Administration
- Principles of Business & Marketing
- Computer Programming
- Advanced Computer Programming

### **Economics & Personal Finance**

- *Graduate Requirement- Not a completer course*

### **Medical Systems Administration**

- Accounting & Advanced Accounting
- Computer Information Systems
- Advanced Computer Information Systems
- Design, Multimedia, & Web Technologies
- Adv. Design, Multimedia, & Web Technologies
- Information Technology Fundamentals
- Introduction to Health & Medical Sciences
- Principles of Business & Marketing

### **Entrepreneurship**

- Accounting
- Advanced Accounting
- Computer Information Systems
- Advanced Computer Information Systems
- Marketing
- Advanced Marketing
- Principles of Business & Marketing
- Sports and Entertainment Marketing

### **Design, Multimedia, and Web Technologies**

- Accounting and Advanced Accounting
- Computer Information Systems
- Advanced Computer Information Systems
- Adv. Design, Multimedia, & Web Technologies
- Information Technology Fundamentals
- Medical Systems Administration
- Principles of Business & Marketing
- Computer Programming
- Advanced Computer Programming

### **Advanced Design, Multimedia, and Web Technologies**

- Accounting & Advanced Accounting
- Computer Information Systems
- Advanced Computer Information Systems
- Design, Multimedia, & Web Technologies
- Information Technology Fundamentals
- Medical Systems Administration
- Principles of Business & Marketing
- Computer Programming
- Advanced Computer Programming

### **Principles of Business & Marketing**

- Accounting
- Advanced Accounting
- Computer Information Systems
- Advanced Computer Information Systems
- Design, Multimedia, & Web Technologies
- Advanced Design, Multimedia, & Web Technologies
- Entrepreneurship
- Marketing
- Advanced Marketing
- Medical Systems Administration
- Sports Entertainment Marketing

### **Information Technology Fundamentals**

- Computer Information Systems
- Advanced Computer Information Systems
- Design, Multimedia, & Web Technologies
- Adv. Design, Multimedia, & Web Technologies
- Medical Systems Administration

### **Computer Programming**

- Computer Information Systems
- Advanced Computer Information Systems
- Design, Multimedia, & Web Technologies
- Adv. Design, Multimedia, & Web Technologies
- Advanced Computer Programming

***Continued***

### ***Business & Information Technology***

#### **Advanced Computer Programming**

- Computer Information Systems
- Advanced Computer Information Systems
- Design, Multimedia, & Web Technologies
- Adv. Design, Multimedia, & Web Technologies
- Computer Programming

#### ***Career Connections***

#### **Virginia Teachers for Tomorrow**

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

#### ***Marketing***

#### **Principles of Business & Marketing**

- Accounting
- Advanced Accounting
- Computer Information Systems
- Advanced Computer Information Systems
- Design, Multimedia, & Web Technologies
- Adv. Design, Multimedia, & Web Technologies
- Entrepreneurship
- Marketing
- Advanced Marketing
- Medical Systems Administration
- Sports Entertainment Marketing

#### **Marketing**

- Entrepreneurship
- Advanced Marketing
- Principles of Business & Marketing
- Sports Entertainment Marketing

#### **Advanced Marketing**

- Entrepreneurship
- Marketing
- Principles of Business & Marketing
- Sports Entertainment Marketing

#### **Sports Entertainment Marketing**

- Entrepreneurship
- Marketing
- Advanced Marketing
- Principles of Business & Marketing

### ***Technology / Trade and Industrial Education***

#### **Industrial Maintenance I**

- Industrial Maintenance II

#### **Industrial Maintenance II**

- Industrial Maintenance I

#### **Imaging Technology**

- Video & Media Technology

#### **Video & Media Technology**

- Imaging Technology

### ***Advanced Technologies Academy***

#### **Cybersecurity Fundamentals**

- Cybersecurity Systems Technology I

#### **Cybersecurity Technology I**

- Cyber Security Fundamentals
- Advanced Cyber Security Technology II

#### **Advanced Cybersecurity Technology II**

- Cybersecurity Technology I

#### **Electronic Systems I**

- Electronic Systems II

#### **Electronic Systems II**

- Electronic Systems I

### ***Professional Skills Academy***

#### **Materials & Processes Technology**

- Technical Drawing and Design

#### **Welding I**

- Welding II

#### **Welding II**

- Welding I

#### **Carpentry I**

- Carpentry II

#### **Carpentry II**

- Carpentry I

#### **Technical Drawing & Design**

- Materials & Processes Technology
- Architectural Drawing and Design

#### **Architectural Drawing and Design**

- Technical Drawing and Design

#### **Electricity I**

- Electricity II

### ***Health Science Academy***

#### **Introduction to Health & Medical Sciences**

- Medical Systems Administration
- Medical Laboratory I
- Nurse Aide I
- Physical/Occupational Therapy I

#### **Emergency Medical Technician I**

- Emergency Medical Technician II

#### **Emergency Medical Technician II**

- Emergency Medical Technician I

#### **Firefighting I**

- Firefighting II

#### **Medical Laboratory Technology I**

- Introduction to Health & Medical Sciences

#### **Medical Laboratory Technology II**

- Medical Laboratory Technology I

#### **Nurse Aide I**

- Introduction to Health & Medical Sciences
- Nurse Aide II

#### **Nurse Aide II**

- Nurse Aide I
- Patient Care Technician

#### **Patient Care Technician**

- Nurse Aide II

#### **Physical/Occupational Therapy I**

- Introduction to Health & Medical Sciences

# High-Quality Work-Based Learning

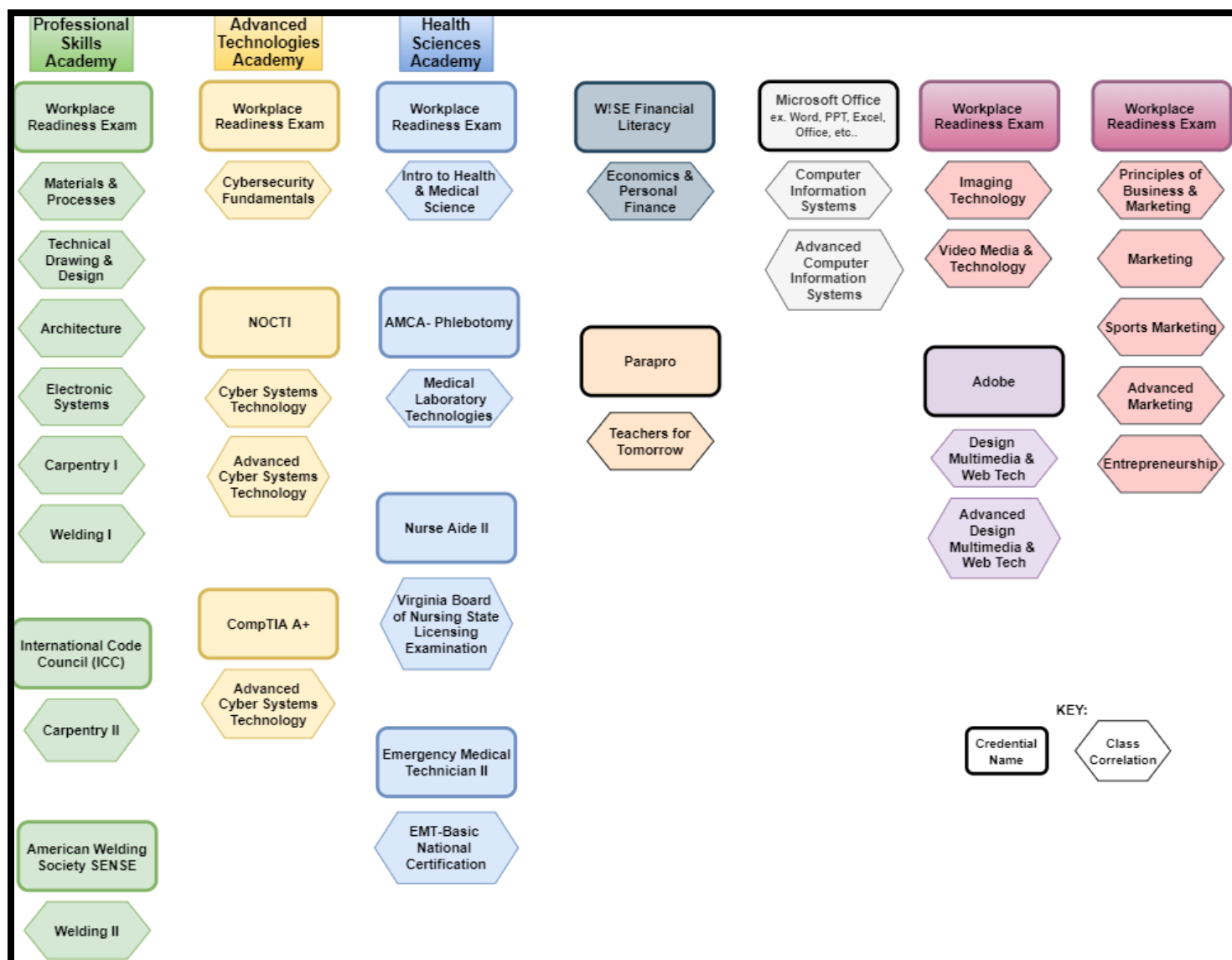
High-Quality Work-Based Learning (HQWBL) consists of school-coordinated workplace experiences related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations. WBL experiences are opportunities for students to apply 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. \* See the Test for Unpaid Interns and Students, Fact Sheet #71: [Internship programs Under the Fair Labor Standards Act](#).

Course 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 every 140 hours 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 Refer to FLSA 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, H9120EY, H9160EY, H9130EY, C9140EY, H9200EY	Cooperative 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
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# 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:

## **Title IX Coordinator**

Jennifer Buckley  
*Director of Student Services*  
12 N. Washington Street  
Winchester, VA 22601  
(540) 667-4253

## **Section 504 Coordinator**

Dr. Erin Kirkland  
*Coordinator of Special Education*  
12 N. Washington 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 II
- Study Skills for Success in Advanced Courses

## Adaptive/Special Education

- Essentialized English
- Essentialized Math
- Essentialized Science
- Essentialized History and Social Studies
- Life Skills Reading
- Life Skills Math
- Independent Living Skills
- Vocational Skills
- Community Skills
- Recreational and Leisure Skills
- Resource Reading
- Resource Math
- Resources Social Skills
- Foundations of Algebra
- Reading I
- Reading II
- Adaptive Physical Education
- Personal Living and Finance

## Business & Information Technology

- Accounting
- Advanced Accounting
- Computer Information Systems (CIS)
- Advanced Computer Information Systems\*
- Economics & Personal Finance
- Medical Systems Administration\*
- Entrepreneurship
- Design, Multimedia, & Web Technologies\*
- Advanced Design, Multimedia, & Web Technologies
- Principles of Business and Marketing
- 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

## 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
- 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

### Fine Arts Cont'd.

#### Art Courses Cont'd.

- Sculpture II
- AP Studio Art: 2-D Design
- AP Studio Art: 3-D Design
- AP Studio Art: Drawing

### Music Courses

- Symphonic Band

- Beginning Guitar
- Intermediate Guitar
- Jazz Ensemble and Improvisation

### Vocal Music Courses

- Treble Ensemble
- Advanced Treble Ensemble
- Concert Choir

## Professional Skills Academy

- Materials and Processes Technology
- Welding I/II
- Carpentry I/II
- Electricity I/II
- Architectural Drawing and Design
- Technical Drawing and Design
- Chamber Choir
- Gaveliers
- The Handley Singers

## Fine Arts Cont'd.

### Art Courses Cont'd.

- Sculpture II
- AP Studio Art: 2-D Design
- AP Studio Art: 3-D Design
- AP Studio Art: Drawing

### Music Courses

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

### Vocal Music Courses

- Treble Ensemble
- Advanced Treble Ensemble
- Concert Choir
- Chamber Choir
- Gaveliers
- The Handley Singers

### 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
- Sport, Exercise, and Health Science

## Marketing

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

## Mathematics

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

## Science

- Environmental Science
- Earth Science
- Biology
- Honors Biology
- Biology II: Ecology

- AP Biology\*
- Chemistry
- AP Chemistry\*
- Physics
- Astronomy
- AP Physics 1 - Algebra Based\*
- AP Physics 2 - Algebra Based\*
- AP Physics C (Mechanics)\*
- AP Environmental Science

## Health Sciences Academy

- Introduction to Health and Medical Sciences
- Emergency Medical Technician I/II
- Patient Care Technician
- Firefighting I/II
- Physical / Occupation Therapy I/II
- Medical Laboratory Technology II\*
- Nurse Aide I
- Nurse Aide II
- Anatomy & Physiology\*

## Social Studies

- 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
- African American History

## Technology / Trade and Industrial Education

- Industrial Maintenance I
- Industrial Maintenance II
- Imaging Technology
- Video and Media Technology

## 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
- Latin I, Latin II, Latin III
- AP Latin
- 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

\*DE with Laurel Ridge Community College

\*\*DE with Shenandoah University

\*\*\*dependent upon School Board approval

# ACADEMIC SUPPORT

Study Skills I			Course No. H9171EY
Elective	Prerequisite: none	Year-Long	1 credit
<p>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.</p> <p><i>This class shall be graded on a pass-fail basis.</i></p>			

Study Skills II			Course No. H9171EY
Elective	Prerequisite: none	Year-Long	1 credit
<p>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.</p> <p><i>This class shall be graded on a pass-fail basis.</i></p>			

Study Skills for Success in Advanced Courses			Cours No. H9172EY
Elective	Prerequisite: none	Year-Long	1 credit
<p>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.</p> <p><i>This class shall be graded on a pass-fail basis.</i></p>			

## ADAPTIVE and SPECIAL EDUCATION

*These courses are designed for qualifying students.*

Essentialized Science			Course No. H3061EY
Elective	Prerequisite: none	Year-Long	
<p>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 Plan (IEP). Participation in this course will support students in fulfilling the requirements for the Virginia Alternate Assessment Program (VAAP).</p>			

Essentialized Math			Course No. H2004SY
Elective	Prerequisite: none	Year-Long	
<p>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 Plan (IEP). Participation in this course will support students in fulfilling the requirements for the Virginia Alternate Assessment Program (VAAP).</p>			

<b>Essentialized English</b>		<b>Course No.H1001SY</b>	
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
<p>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 Plan (IEP). Participation in this course will support students in fulfilling the requirements for the Virginia Alternate Assessment Program (VAAP).</p>			

<b>Essentialized History and Social Science</b>		<b>Course No. H4033SY</b>	
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
<p>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 Plan (IEP). Participation in this course will support students in fulfilling the requirements for the Virginia Alternate Assessment Program (VAAP).</p>			

<b>Life-Skills Math</b>		<b>Course No. H9012SY</b>	
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
<p>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 Plan (IEP).</p>			

<b>Life-Skills Reading</b>		<b>Course No. H9011SY</b>	
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
<p>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 Plan (IEP).qualifications.</p>			

<b>Community Skills</b>		<b>Course No.H4002SY</b>	
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
<p>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 Plan (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. Ad</p>			

<b>Recreation and Leisure Skills</b>			<b>Course No. H9173EY</b>
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
This adapted curriculum course is designed to prepare students to participate in age-appropriate activities that promote well-being, socialization, and community access. Instruction is individualized to meet the needs of the student. Instruction and pacing are individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP). This course is designed for students who have sufficed the requirements for an Applied Studies Diploma following the Virginia Essentialized Standards of Learning.			

<b>Vocational Skills</b>			<b>Course No. H9174EY</b>
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
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 Plan (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.			

<b>Independent Living Skills</b>			<b>Course No. H9021SY</b>
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
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 Plan (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.			

<b>Personal Living and Finance</b>			<b>Course No. H2003SY</b>
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
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.			

<b>Resource R</b>			<b>Course No. H9001SY</b>
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
This course provides targeted reading academic assistance. Instruction is individualized to meet the needs of the student including identified needs in the Individual Education Plan (IEP). Students receive individualized according to needs and weaknesses within their academic classes.			

<b>Resource M</b>			<b>Course No. H9002SY</b>
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
This course provides targeted math academic assistance. Instruction is individualized to meet the needs of the student including identified needs in the Individual Education Plan (IEP). Students receive individualized according to needs and weaknesses within their academic classes.			

<b>Resource SS</b>		<b>Course No. H9003SY</b>	
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
This course provides targeted academic assistance. Instruction is individualized to meet the needs of the student including identified needs in the Individual Education Plan (IEP). Students receive individualized according to needs and weaknesses within their academic classes.			

<b>Resource</b>		<b>Course No. H9004SY</b>	
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
This course provides targeted academic assistance. Instruction is individualized to meet the needs of the student including identified needs in the Individual Education Plan (IEP). Students receive individualized according to needs and weaknesses within their academic classes.			

<b>Foundations of Algebra</b>		<b>Course No. H2011SY</b>	
<b>Elective</b>	<b>Co-requisite: enrolled in Algebra 1</b>	<b>Year-Long</b>	
This course is designed to reinforce and build prior knowledge for Algebra. Instruction will be based upon the following six sections that are reporting categories of the Virginia SOL for Mathematics: number and number sense, computation and estimation, measurement, geometry, probability and statistics, patterns, functions, and algebra.			

<b>Reading I</b>		<b>Course No. H1101SY</b>	
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
This course is for students to increase their reading skills/ability. This course will focus on phonics skills, fluency, accuracy, and comprehension. Throughout this semester students will also work on spelling skills. They will also learn about making predictions, differentiating between fiction and non-fiction and recognizing essential sight words. Students will be introduced to a variety of materials and receive instruction on test taking strategies for standardized reading tests.			

<b>Reading II</b>		<b>Course No. H1102SY</b>	
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	
In this course, students will be introduced to more varieties of text. This course will focus primarily on increasing students' reading fluency. Students will be introduced to novels and more intricate literature and will also receive instruction on test taking strategies that they will need to pass the Virginia Standards of Learning (SOL) reading test.			

<b>Adaptive Physical Education</b>		<b>Course No. H5002SY</b>	
<b>Elective</b>	<b>Co-requisite: enrolled in Life Skills OR Living on Your Own</b>	<b>Year-Long</b>	
This adapted physical education course is designed for students who have Individual Education Plans (IEPs) identifying adapted physical education services in the special education setting. Students may enroll in this class each year of middle school participation, as appropriate. Emphasis is on organized lead-up modified fitness and wellness activities. Activities are designed based upon the student's present level of performance and directed to improve deficit areas and maximize participation.			

# BUSINESS & INFORMATION TECHNOLOGY

Accounting		Course No.H6091SY	
<b>Elective: Grades 10-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
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. <b>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.</b>			

Advanced Accounting		Course No.H6092VY	
<b>Elective: Grades 11-12</b>	<b>Prerequisite: Accounting</b>	<b>Year-Long</b>	<b>1 credit</b>
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. <b>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.</b>			

Computer Information Systems (CIS)		Course No.H6201DY	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
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®, 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. <b>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.</b>			

Advanced Computer Information Systems		Course No.H6202DY	
<b>Elective: Grades 10-12; DE</b>	<b>Prerequisite: CIS</b>	<b>Year-Long</b>	<b>1 credit</b>
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®. Instruction and use of a digital camera and 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. <b>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.</b>			
<i>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.</i>			

Economics & Personal Finance			Course No.H6010RY
<b>Required</b>	<b>Recommended Grade Level: 10 and 11</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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. <b>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.</b></p>			

Medical Systems Administration			Course No.H6160DY
<b>Elective: Grades 11-12; DE</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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. <b>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.</b></p> <p><i>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 &amp; 112). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.</i></p>			

Entrepreneurship			Course No.H6260EY
<b>Elective: Grades 10-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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. <b>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.</b></p>			

Design, Multimedia, & Web Technologies (DMW)			Course No.H6221DY
<b>Elective: Grades 10-12; DE</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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. Completion of this course prepares students for Adobe CC industry certification tests. . <b>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.</b></p> <p><i>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.</i></p>			

Advanced Design, Multimedia, & Web Technologies			Course No.H6222VY
<b>Elective: Grades 11-12</b>	<b>Prerequisite: DMW</b>	<b>Year-Long</b>	<b>1 credit</b>
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. Completion of this course prepares students for Adobe CC industry certification tests and other examinations, national assessments, or licensure examinations approved by the Virginia Board of Education. <b>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.</b>			

Information Technology Fundamentals			Course No. H6200EY
<b>Elective: Grades 9-12</b>	<b>Prerequisites: none</b>	<b>Year-Long</b>	<b>1 credit</b>
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
<b>Elective: Grades 10-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
This course is intended to provide students with experiences in using computer programming techniques and 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
<b>Elective: Grades 11-12; DE</b>	<b>Prerequisite: Computer Programming</b>	<b>Year-Long</b>	<b>1 credit</b>
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.			
<i>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.</i>			

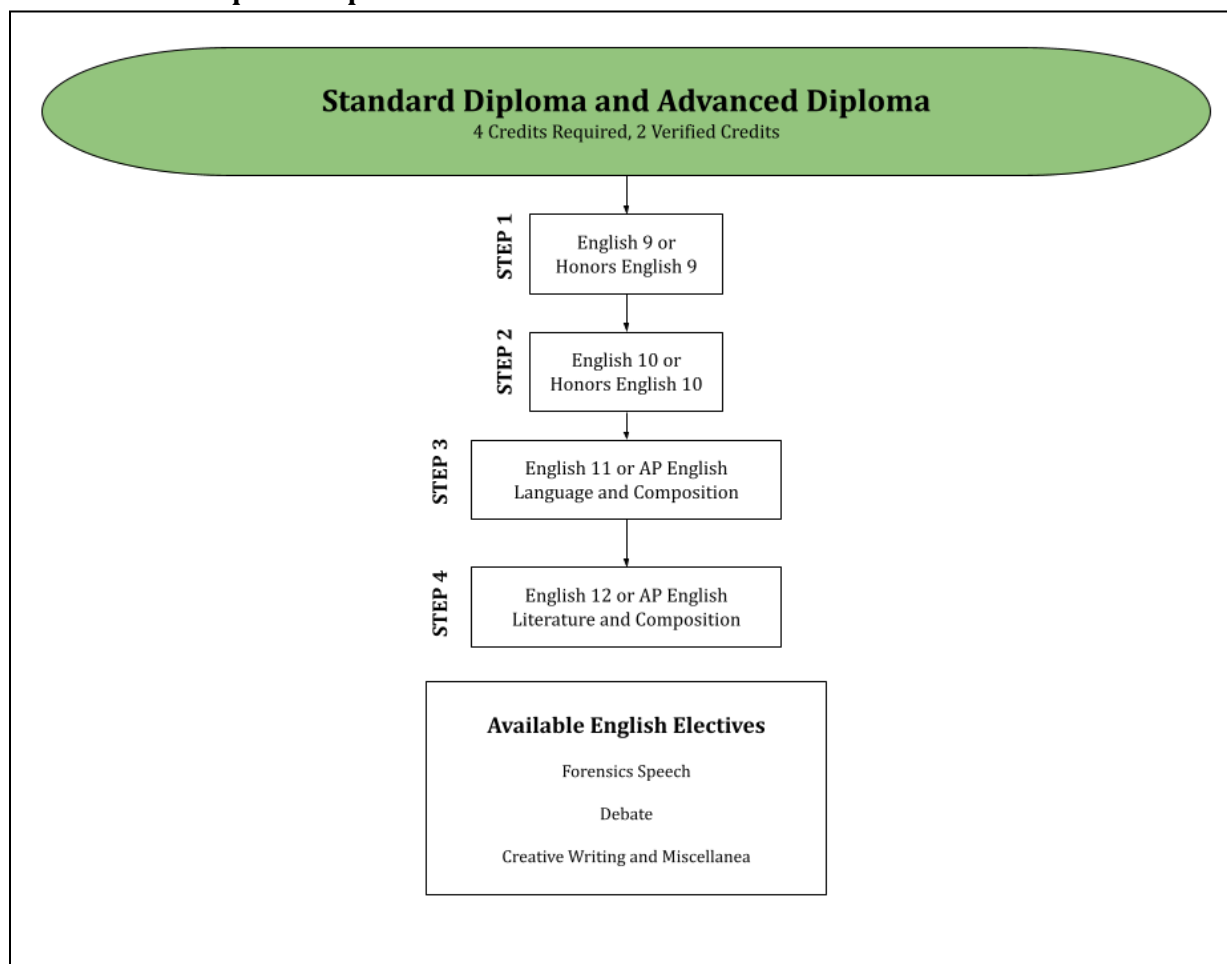
# CAREER CONNECTIONS

Virginia Teachers for Tomorrow I		Course No.H6921EY	
<b>Elective: Grades 11-12; DE</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>In this course, students build a foundation for teaching; learn the history, structure and governance of teaching; apply professional teaching techniques in the VTFT classroom; and reflect on their teaching experiences. This course fosters student interest, understanding, and appreciation of the teaching profession and allows secondary students to explore careers in education. Additional educational leadership opportunities are offered through the student organization, Future Educators Association.</p> <p>Students must complete the following eligibility requirements to be considered for enrollment in the program:</p> <ul style="list-style-type: none"> <li>■ Have and maintain a minimum 2.7 grade point average or its equivalent;</li> <li>■ Submit three satisfactory teacher recommendations; and</li> <li>■ Submit a brief essay and application.</li> </ul> <p><i>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.</i></p>			

Virginia Teachers for Tomorrow II		Course No.H6922EY	
<b>Elective: Grades 11-12; DE</b>	<b>Prerequisite: VA Teachers for Tomorrow I</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p> <p>Students must complete the following eligibility requirements to be considered for enrollment in the program:</p> <ul style="list-style-type: none"> <li>■ Have and maintain a minimum 2.7 grade point average or its equivalent;</li> <li>■ Submit three satisfactory teacher recommendations; and</li> <li>■ Submit a brief essay and application.</li> </ul> <p><i>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.</i></p>			

# ENGLISH

## English Instructional Sequence Options



### 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

Course No.H1011HY

Required: NCAA

Prerequisite: none

Year-Long

1 credit

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.

<b>English 10</b>			<b>Course No.H1022RY</b>
<b>Required: NCAA</b>	<b>Prerequisite: English 9</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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 claim 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.</p>			

<b>Honors English 10</b>			<b>Course No.H1022HY</b>
<b>Required: NCAA</b>	<b>Prerequisite: English 9</b> <b>Recommendation: Honors English 9</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>English 11</b>			<b>Course No.H1033RY</b>
<b>Required: NCAA</b>	<b>Prerequisite: English 10</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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 in the spring of the course year. 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.</p>			

<b>AP English Language and Composition</b>			<b>Course No.H1051BY</b>
<b>Required: DE; NCAA</b>	<b>Prerequisite: successful completion of Honors English 9 AND/OR English 10 OR English teacher recommendation</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p> <p><i>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 &amp; 112). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.</i></p>			

<b>English 12</b>		<b>Course No.H1044RY</b>	
<b>Required: NCAA</b>	<b>Prerequisite: English 11 or AP English Language and Composition</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>AP English Literature and Composition</b>		<b>Course No.H1052BY</b>	
<b>Required: DE; NCAA</b>	<b>Prerequisite: English 11 or AP English Language and Composition and Grade of B or higher in previous English course and English teacher consultation.</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p> <p><i>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</i></p>			

<b>Forensics Speech</b>		<b>Course No.H1081EY</b>	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>Debate</b>		<b>Course No.H1082EY</b>	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

Creative Writing & Miscellanea			Course No.H1090EY
Elective: Grades 9-12; DE (11th and/or 12th only); NCAA	Co-requisite for Dual Enrollment: AP English Language and Composition (ENG. 111 and 112)	Year-Long	1 credit
<p>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 must submit an application with a writing sample and recommendation from a previous English teacher. Students will also create and publish the literary/art magazine Miscellanea.</p> <p><i>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</i></p>			

Yearbook			Course No. H11104EY
Elective: Grades 10-12	Prerequisite: application and instructor approval	Year-Long	1 credit
<p>This course helps produce the annual student publication. In this course, students will gain skills in the following areas: page design, publishing techniques, copywriting, editing, photography, record keeping, time management, teamwork, marketing, and leadership skills. Students are tasked with producing a timeless, creative, and innovative publication which will record our school's community, memories and events.</p> <p><b>*This course may be repeated for additional credits with no more than one per year.</b></p>			

# ENGLISH LEARNERS

The EL 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 sheltered classes for students to work on developing English language skills and fluency as well as content area skills. The program also offers co-taught support classes in several content areas.

## English as a Second Language I Course No.H1003LS

Elective	Co-enrolled with English as a Second Language II	Semester	1 credit
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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. This course will meet every day on the A/B schedule in a semester.

**\*\*Students will receive an elective credit in the area of World Language for this class**

## English as a Second Language II Course No.H1006LS

Elective	Co-enrolled with English as a Second Language I	Semester	1 credit
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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. This course will meet every day on the A/B schedule in a semester.

**\*\*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	1 credit
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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. This course will meet every day on the A/B schedule in a semester.

**\*\*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. This course will meet every day on the A/B schedule in a semester.

\*\*Students will receive an English credit for this class

**Transitional English for ELs (11/12)****Course No.H1008LS****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. This course will meet every day on the A/B schedule in a semester.

\*\*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****Course No. H1001LS****Elective****Prerequisite: none****Year-Long****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

<b>EL Integrated Science</b>		<b>Course No.H3000LS</b>	
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Semester</b>	<b>1 credit</b>
<p>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. This course will meet every day on the A/B schedule in a semester.</p> <p><b>**Students will receive an elective credit for this class.</b></p>			

<b>Biology for ELs (Part 1 and Part 2)</b>		<b>Course No. H3021LS, H3022LS</b>	
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>2 credits</b>
<p>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. This course will meet every day on the A/B schedule.</p> <p>Students will take the EOC Biology SOL at the end of the school year.</p> <p><b>**Students will receive an elective credit (part 1) <i>and</i> a science (part 2) credit for this class</b></p> <p><b>** Students with an IEP or 504 will receive 2 science credits for the successful completion of this class</b></p>			

<b>Algebra 1 for ELs (Part 1 and Part 2)</b>		<b>Course No. H2011LS, H2012LS</b>	
<b>Elective</b>	<b>Prerequisite: 8<sup>th</sup> grade math or EL Algebra Readiness</b>	<b>Year-Long</b>	<b>2 credits</b>
<p>This course is for students who are still learning the English language and require native language support or EL supports 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. This course will meet every day on the A/B schedule.</p> <p>Students will take the EOC Algebra I SOL at the end of the school year.</p> <p><b>**Students will receive an elective credit (part 1) <i>and</i> a math credit (part 2) for this class</b></p> <p><b>** Students with an IEP or 504 will receive 2 math credits for the successful completion of this class</b></p>			

<b>EL Algebra Readiness</b>			<b>Course No.H2002LY</b>
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>2 Credits</b>
<p>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. This course will meet every day on the A/B schedule.</p> <p><b>**Students will receive 2 elective credits for this class</b></p>			

<b>EL Strategies for Success</b>			<b>Course No.H9031LY</b>
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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).</p> <p><b>**Students will receive 1 elective credit for this class</b></p>			

# FINE ARTS

## Art Courses

Art Foundations			Course No.H8070EY	
Elective	Prerequisite: none		Year-Long	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	Year-Long	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	Year-Long	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	Year-Long	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	Year-Long	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.			

<b>AP Studio Art: 2-D Design</b>		<b>Course No.H8101AY</b>	
<b>Elective: Grades 11-12</b>	<b>Recommended: Art Foundations, Drawing and Painting I &amp; II</b> <b>Required: Portfolio Review</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>AP Studio Art: 3-D Design</b>		<b>Course No.H8102AY</b>	
<b>Elective: Grades 11-12</b>	<b>Recommended: Art Foundations, Sculpture I &amp; II</b> <b>Required: Portfolio Review</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>AP Studio Art: Drawing</b>		<b>Course No. H8111AY</b>	
<b>Elective: Grades 11-12</b>	<b>Recommended: Art Foundations, Drawing and Painting I &amp; II</b> <b>Required: Portfolio Review</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

## Music Courses

Symphonic Band			Course No. H8020EY
Elective	Prerequisite: DMMS Band or successful audition	Year-Long	1 credit
In 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.			

Beginning Guitar			Course No. H8031EY
Elective	Prerequisite: none	Year-Long	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	Year-Long	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	Prerequisite: DMMS band, JHHS band/guitar, or successful audition	Year-Long	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			Course No. H8033EY
Elective	Prerequisite: none	Year-Long	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.			

## Vocal Music Courses

<b>Treble Ensemble</b>		<b>Course No. H8040EY</b>	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
This ensemble is composed of Treble (Soprano/Alto) 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.			

<b>Advanced Treble Ensemble</b>		<b>Course No. H8042VY</b>	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: successful audition and one year experience in the choral program at Handley, or advanced skills as determined by the director</b>	<b>Year-Long</b>	<b>1 credit</b>
This ensemble is a select ensemble of advanced treble 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.			

<b>Concert Choir</b>		<b>Course No. H8050EY</b>	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: None</b>	<b>Year-Long</b>	<b>1 credit</b>
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.			

<b>Chamber Choir</b>		<b>Course No. H8060EY</b>	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: successful audition, and one year experience in Treble Ensemble or Concert Choir, or advanced skills as determined by the director</b>	<b>Year-Long</b>	<b>1 credit</b>
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.			

<b>Gaveliers</b>		<b>Course No. H8051EY</b>	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
This ensemble is composed of Tenor/Bass voices 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.			

## The Handley Singers

Course No. H8065EY

**Elective: Grades 9-12**

**Prerequisite: none**

**Year-Long**

**1 credit**

This ensemble is composed of students who are interested in both singing and dancing. The focus will be on preparing a Show Choir program for the annual Coronation of Queen Shenandoah that occurs during Apple Blossom. A high level of commitment and professionalism is expected from this group. Rehearsal may occur after school hours in the spring to prepare. Performance in all concerts presented by this ensemble is required.



## Theatre Arts Courses

Theatre I		Course No. H1070EY	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

Theatre II		Course No. H1071EY	
<b>Elective: Grades 9-12</b>	<b>Recommendation: Theatre I</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

Theatre III		Course No. H1072EY	
<b>Elective: Grades 9-12</b>	<b>Recommendation: Theatre II</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

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

Technical Theatre		Course No. H1076EY	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

# KINESIOLOGY & HEALTH

Kinesiology 9 - Health & PE			Course No.H5010RY	
Required	Prerequisite: none		Year-Long	1 credit
<p>We will cover 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. As our main objective we would like all students to be able to identify the five components of physical fitness and find life-long fitness activities that promote their own health and well-being.</p> <p><b>Health Topics of Study:</b> Nutrition, Fitness, CPR, Drugs &amp; Alcohol, Mental Health and Family Life Education. <i><b>For graduation verification, students are required to pass training in emergency first aid, CPR and the use of AEDs.</b></i></p>				

Kinesiology 10 - Drivers Education, Health & PE			Course No.H5020RY
Required	Prerequisite: none	Year-Long	1 credit
<p>We will cover 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. As our main objective, we would like all students to be able to identify the five components of physical fitness and find life-long fitness activities that promote their own health and well-being.</p> <p><b>Health Topics of Study:</b> Mental Health and Family Life Education.</p> <p><b>Driver's Education:</b> 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.</p>			

Advanced Kinesiology-Team Sports I			Course No. H5031EY	
Elective: Grades 10-12	Prerequisite: successful completion of Kinesiology 9 and prior approval	Year-Long	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. Completion of this course is a prerequisite for Advanced Kinesiology-Team Sports II.				

Advanced Kinesiology-Team Sports II			Course No. H5032EY	
Elective: Grades 11-12*	Prerequisite: successful completion of Advanced Kinesiology-Team Sports I	Year-Long	1 credit	
<p>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.</p> <p><b>*This course may be repeated for additional credits with no more than one per year.</b></p>				

<b>Advanced Kinesiology-Weight Training I</b>			<b>Course No. H5041EY</b>
<b>Elective: Grades 10-12</b>	<b>Prerequisite: successful completion of Kinesiology 9 and prior approval</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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. .</p>			

<b>Advanced Kinesiology-Weight Training II</b>			<b>Course No. H5042EY</b>
<b>Elective: Grades 11-12*</b>	<b>Prerequisite: successful completion of Advanced Kinesiology-Weight Training I</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course is for students who want 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.</p> <p><b>*This course may be repeated for additional credits with no more than one per year.</b></p>			

<b>Sport, Exercise, and Health Science</b>			<b>Course No. H5043EY</b>
<b>Elective: Grades 11-12</b>	<b>Prerequisite: successful completion of Kinesiology 9 and 10</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>In Sports, Exercises, and Health Science, 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.</p>			

# MARKETING

Marketing		Course No.H6213EY	
Elective: Grades 10-12	Prerequisite: none	Year-Long	1 credit
<p>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). Computer/technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. <b>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.</b></p>			

Advanced Marketing		Course No.H6232VY	
Elective: Grades 11-12	Prerequisite: Marketing, or Sports Entertainment Marketing, or Entrepreneurship	Year-Long	1 credit
<p>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. <b>The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved marketing position with continuing supervision throughout the school year.</b></p>			

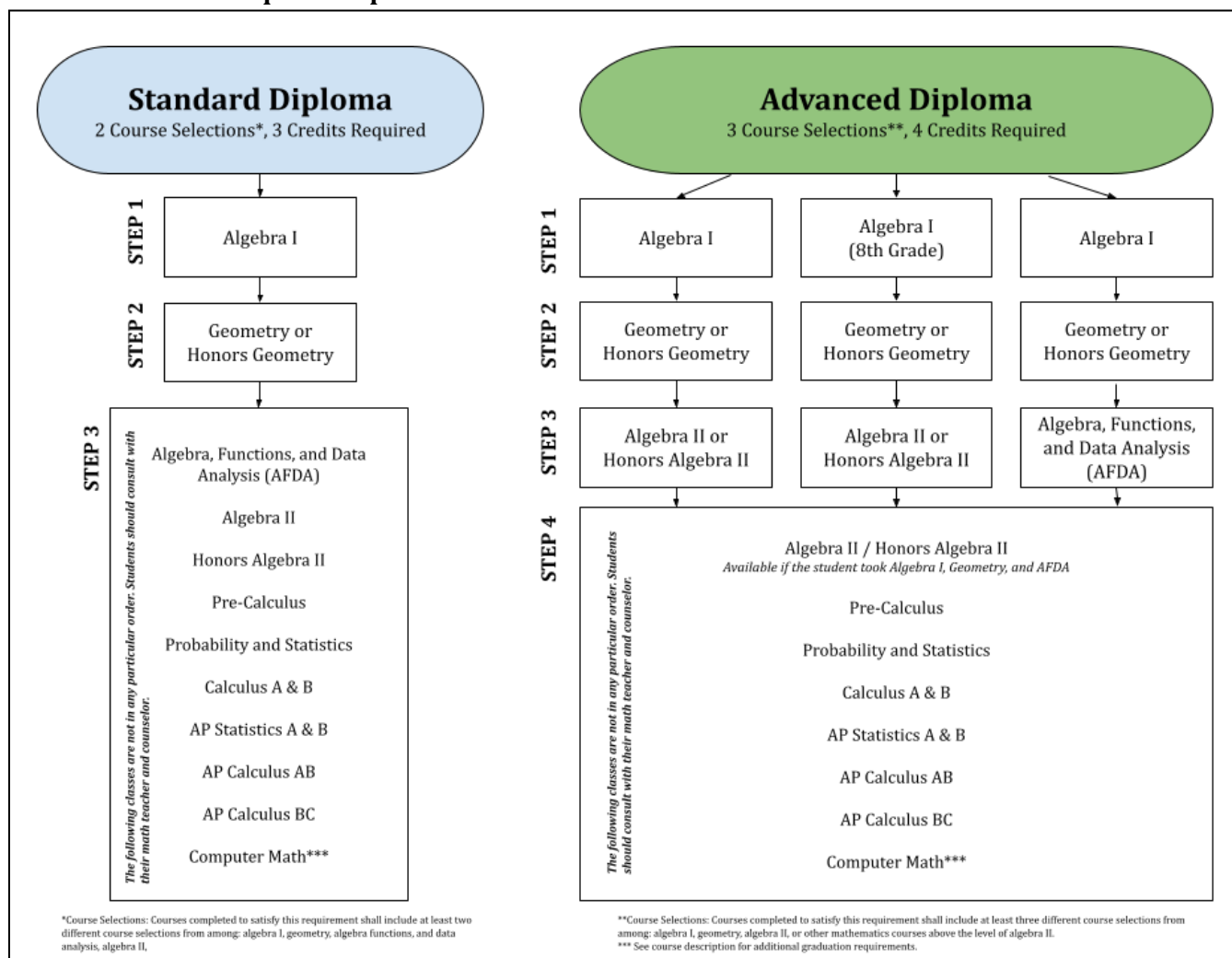
Entrepreneurship		Course No.H6260EY	
Elective: Grades 10-12	Recommended: Principles of Business and Marketing	Year-Long	1 credit
<p>This course introduces students to the exciting world of creating, owning, and launching their own business. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle. <b>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.</b></p>			

Sports Entertainment Marketing		Course No. H6250EY	
Elective: Grades 10-12	Recommended: Principles of Business and Marketing or Advanced Marketing	Year-Long	1 credit
<p>This course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports, entertainment, and recreation industries. Students will investigate the components of branding; sponsorships and endorsements, as well as promotion plans needed for sports, entertainment and recreation events. The course also supports career development skills and explores career options. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. <b>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.</b></p>			

<b>Principles of Business and Marketing</b>		<b>Course No. H6020EY</b>	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

# MATHEMATICS

## Math Instructional Sequence Options



## Algebra I

Course No.H2010RY

Required: NCAA

Prerequisite: none

Year-Long

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.*

<b>Algebra I: Part 1 and Part 2</b>		<b>Course No. H2011RS, H2012RS</b>	
<b>Required: NCAA</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>2 credits</b>
<p>This course is a full-year, two credit, daily Algebra course. 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. <i>This class will meet every day on the A/B schedule.</i></p> <p>(*)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.</p>			

<b>Algebra I: Part 1</b>		<b>Course No. H2011RY</b>	
<b>Required: NCAA</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course supports and promotes student success in mathematics coursework necessary to fulfill graduation requirements. While strengthening prerequisite skills in the areas of operations with whole numbers, fractions, decimals, percentages, integers, and rational numbers, 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.</p> <p>Students may earn one elective credit for the Standard Diploma by successfully completing Algebra I, Part 1. 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.</p>			

<b>Algebra I: Part 2</b>		<b>Course No. H2012RY</b>	
<b>Required: NCAA</b>	<b>Prerequisite: Algebra I: Part 1</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course supports and promotes student success in mathematics coursework necessary to fulfill graduation requirements. The study of linear and quadratic equations, linear inequalities, systems of equations, and functions inherent in Algebra are emphasized in the course. Graphing calculators and other emerging technologies are used to facilitate problem solving, data analysis, and transformational graphing. Students will take the Algebra I SOL test.</p> <p>Students may earn one math credit for the Standard Diploma by successfully completing Algebra I, Part 2. 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.</p>			

<b>Geometry</b>		<b>Course No. H2020RY</b>	
<b>Required: NCAA</b>	<b>Prerequisite: Algebra I</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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. <i>This course is also offered at the middle school.</i></p>			

<b>Honors Geometry</b>		<b>Course No.H2020HY</b>	
<b>Required: NCAA</b>	<b>Prerequisite: Algebra I</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>Algebra, Functions and Data Analysis</b>		<b>Course No.H2010EY</b>	
<b>Elective: NCAA</b>	<b>Prerequisite: Algebra I or Geometry</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>Algebra II</b>		<b>Course No. H2030RY</b>	
<b>Elective: NCAA</b>	<b>Prerequisite: Geometry</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>Honors Algebra II</b>		<b>Course No.H2030HY</b>	
<b>Elective: NCAA</b>	<b>Prerequisite: Geometry</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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 introductory to trigonometry will be presented.</p>			

<b>Pre-Calculus</b>		<b>Course No. H2044DY</b>	
<b>Elective: DE; NCAA</b>	<b>Prerequisite: Algebra II</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p> <p><i>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.</i></p>			

Probability and Statistics			Course No. H2074EY
Elective: NCAA	Prerequisite: Algebra II	Year-Long	1 credit
<p>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.</p>			

Calculus A & B			Course No.H2055DY
Elective: DE; NCAA	Prerequisite: Pre-Calculus	Year-Long	1 credit
<p>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.</p> <p><i>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 &amp; 262). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.</i></p>			

AP Statistics			Course No.H2070BY
Elective: DE; NCAA	Prerequisite: Pre-Calculus or Probability and Statistics	Year-Long	1 credit
<p>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.</p> <p><i>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.</i></p>			

AP Calculus AB			Course No H2051BY
Elective: DE; NCAA	Prerequisite: Pre-Calculus	Year-Long	1 credit
<p>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.</p> <p>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.</p> <p><i>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.</i></p>			

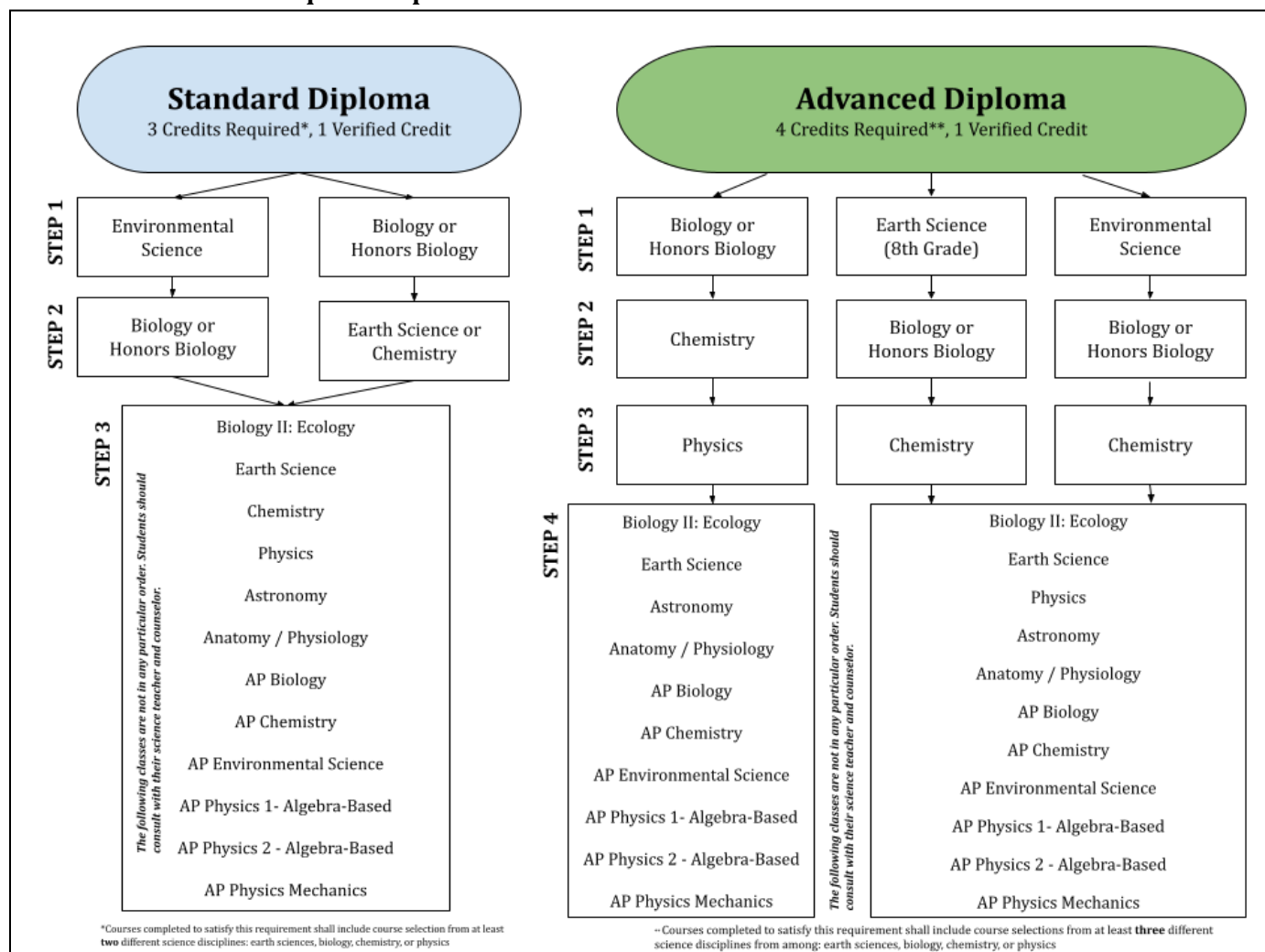
AP Calculus BC			Course No.H2053BY
Elective: DE; NCAA	Prerequisite: AP Calculus-AB	Year-Long	1 credit
<p>This course provides the student a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, and verbally. Considerable mathematical 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.</p> <p><i>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.</i></p>			

Computer Math			Course No. H2090EY
Elective	Prerequisite: Algebra I	Year-Long	1 credit
<p>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.</p> <p><i>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.</i></p>			

Data Science			Course No. H2031EY
Elective	Prerequisite: Algebra I and Geometry	Year-Long	1 credit
<p>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.</p>			

# SCIENCE

## Science Instructional Sequence Options



### Environmental Science

Course No.H3060EY

**Elective: Grades 9-10, NCAA**

**Prerequisite: have not taken/passed Biology**

**Year-Long**

**1 credit**

This course is an introductory course designed to explore the physical world. 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.

### Earth Science

Course No.H3011EY

**Elective: NCAA**

**Prerequisite: none**

**Year-Long**

**1 credit**

This course is designed for students to investigate Earth's development and its relationship in space. The curriculum investigates the disciplines of Geology, Meteorology, Oceanography, and Astronomy. Students will gain a deeper understanding of many natural processes occurring around them. This curriculum is reinforced by hands-on-activities, demonstrations, research and investigation, as well as individual activities. *This course is also offered at the middle school.*

<b>Biology</b>		<b>Course No.H3021EY</b>	
<b>Required: NCAA</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
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. Major topics include: basic morphology and physiology of the cell, photosynthesis and cellular respiration, heredity, evolution, classification of organisms, and basic ecological principles. Laboratory activities serve to give practical applications of some of the basic concepts formed throughout the course.			

<b>Honors Biology</b>		<b>Course No.H3021HY</b>	
<b>Required: NCAA</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
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.			

<b>Biology II: Ecology</b>		<b>Course No.H3022VY</b>	
<b>Elective: NCAA</b>	<b>Recommended: Biology</b>	<b>Year-Long</b>	<b>1 credit</b>
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.			

<b>AP Biology</b>		<b>Course No.H3021BY</b>	
<b>Elective: DE; NCAA</b>	<b>Prerequisite: Biology and Chemistry</b>	<b>Year-Long</b>	<b>2 credits</b>
<p>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.</p> <p><i>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 &amp; 102). Students must satisfy enrollment criteria, complete labs, and pay a reduced college tuition rate to be eligible for college credits. To meet lab requirements associated with this course, students will attend on A &amp; B days for the entire school year.</i></p>			

<b>Chemistry</b>		<b>Course No.H3030EY</b>	
<b>Elective: NCAA</b>	<b>Prerequisite: Algebra 1</b>	<b>Year-Long</b>	<b>1 credit</b>
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. Grades are based upon tests, laboratory reports, homework assignments, and a research paper/project.			

AP Chemistry		Course No.H3031BY	
Elective: DE; NCAA	Prerequisite: Chemistry and enrolled in/completed Pre-calculus	Year-Long	2 credits
<p>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.</p> <p><i>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 CHM 111 &amp; 112). Students must satisfy enrollment criteria, complete labs, and pay a reduced college tuition rate to be eligible for college credits. To meet lab requirements associated with this course, students will attend on A &amp; B days for the entire school year.</i></p>			

Physics		Course No.H3040EY	
Elective: NCAA	Prerequisite: Algebra I, Geometry Recommended Co-requisite: Algebra II	Year-Long	1 credit
<p>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.</p>			

AP Physics 1 - Algebra-Based		Course No. H3043AY	
Elective: DE; NCAA	Prerequisite: Algebra I, Geometry Co-requisite: Algebra II	Year-Long	1 credit
<p>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: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and electric force, DC circuits, and mechanical waves and sound.</p> <p><i>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 201). Students must satisfy enrollment criteria, complete labs, and pay a reduced college tuition rate to be eligible for college credits.</i></p>			

AP Physics 2 - Algebra-Based		Course No. H3044AY	
Elective: DE; NCAA	Prerequisite: AP Physics 1 Recommended Co-requisite: Pre-Calculus	Year-Long	1 credit
<p>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.</p> <p><i>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.</i></p>			

AP Physics C (Mechanics)		Course No.H3041AY	
<b>Elective: Grades 11-12; DE; NCAA</b>	<b>Co-requisite: Calculus or AP Calculus</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p> <p><i>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.</i></p>			

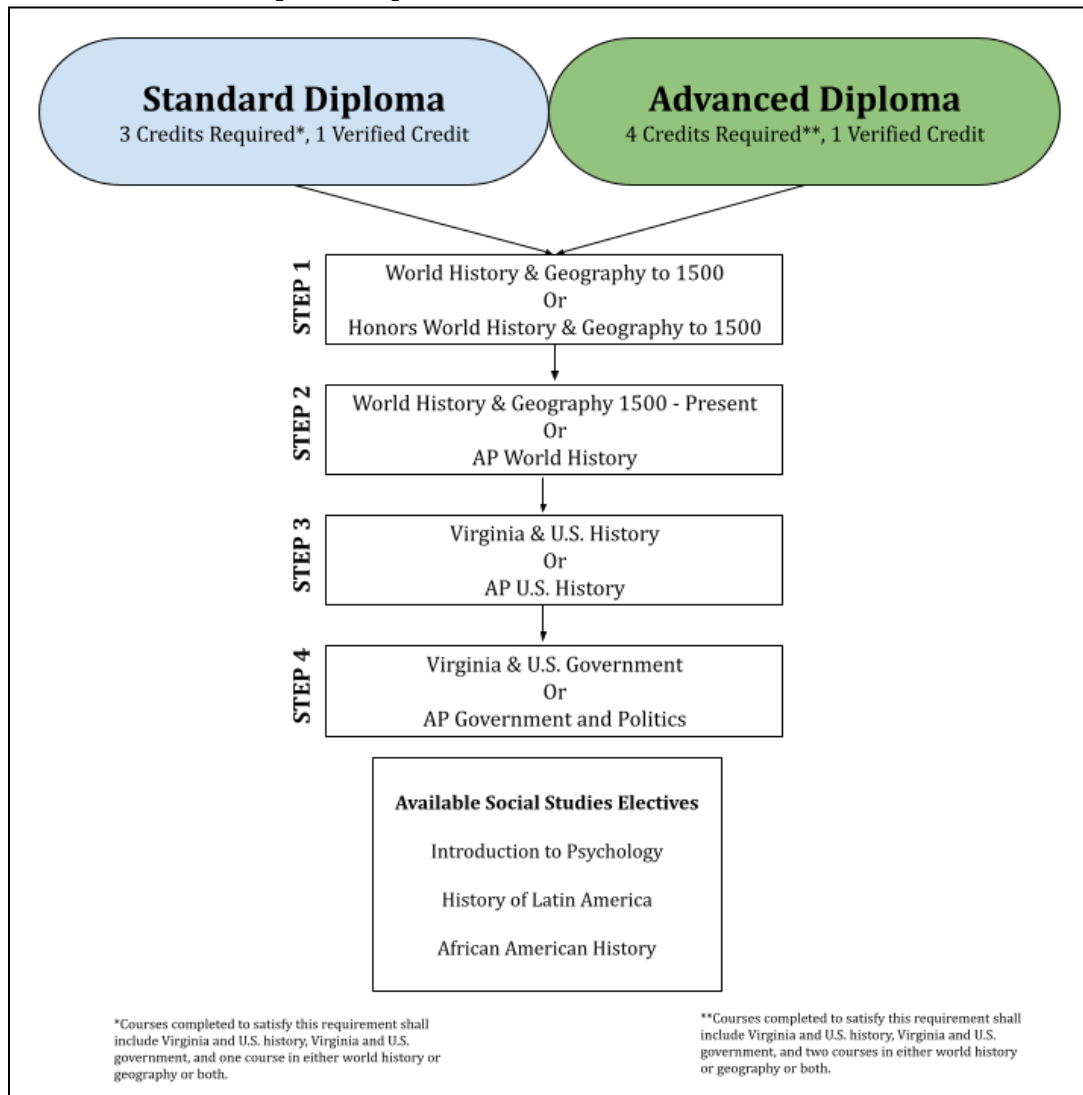
AP Environmental Science		Course No.H3060AY	
<b>Elective: NCAA</b>	<b>Prerequisite: Biology and Chemistry</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course is designed for students who want to gain a greater understanding of the complex relationship between human societies and problems that face our 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.</p>			

Astronomy		Course No.H3070EY	
<b>Elective</b>	<b>Prerequisite: Earth Science</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course provides a quantitative introduction to the science of astronomy. Course themes are chosen from a variety of astronomical observations and models, the main topics of the course are exploration, the solar system, stars, universe, and cosmology. Exploring the sky section includes origins of modern astronomy, gravity, light, and telescopes. The solar system section includes the origin of the solar system, planets, moons, asteroids, meteorites, and comets. Star section includes stellar evolution, death of stars, interstellar medium, neutron stars, and black holes. The universe section includes galaxies, supermassive black holes, quasars, and dark matter. The cosmology section includes the expanse of the universe, Big Bang Theory, dark energy, and the future of the universe. Students will be expected to research, write detailed scientific papers, and present on astronomical topics.</p>			

Anatomy & Physiology		Course No.C3070DY	
<b>Grades 10-12; DE; NCAA</b>	<b>Prerequisite: Biology/Honors Biology Recommended: Chemistry</b>	<b>Year-Long</b>	<b>1 credits</b>
<p>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.</p> <p><i>This course is only offered at Emil &amp; Grace Shihadeh Innovation Center (EGSIC) and must be paired with a CTE course at EGSIC.</i></p> <p><i>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.</i></p>			

# SOCIAL STUDIES

## Social Studies Instructional Sequence Options



### World History & Geography to 1500

Course No.H4011EY

**Required: NCAA**

**Prerequisite: none**

**Year-Long**

**1 credit**

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 the Origins of Man and Civilization, the Classical World, the Post-Classical World, and Regional Interactions in the late Medieval and Early Modern World. Stressed throughout the course are such critical thinking skills as analysis and interpretation.

<b>Honors World History &amp; Geography to 1500</b>			<b>Course No.H4011HY</b>
<b>Required: NCAA</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course is designed to introduce students to the origins of Western and Non-Western Civilizations through 1550 CE. Students will explore more deeply the concepts and techniques employed by historians with special emphasis on historical inquiry. Though an SOL Course, this course will also align closely with the AP World History: Modern curriculum and is meant to offer students an opportunity to explore many of the themes and topics that will be discussed in more depth in AP World History: Modern. Topics covered include the Origins of Man and Civilization, the Classical World, the Post-Classical World, and Regional Interactions in the late Medieval and Early Modern World. 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.</p>			

<b>World History &amp; Geography 1500 - Present</b>			<b>Course No.H4022EY</b>
<b>Elective: NCAA</b>	<b>Prerequisite: World History &amp; Geography to 1500</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course is designed to challenge students about the continuing examination of Western Civilization and the impact of non-Western civilizations upon the West from 1550 to the present. Contemporary emphasis is placed upon current crises, international relations, and the increasing interdependence of nations. Concepts and techniques employed by historians, archaeologists, and other social scientists are explored.</p>			

<b>AP World History: Modern</b>			<b>Course No.H4010BY</b>
<b>Elective: DE; NCAA</b>	<b>Prerequisite: World History &amp; Geography to 1500</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course covers the World History curriculum as it is described by the College Board. It focuses on the years 1500 CE (Common Era) to the present. Then the class will move on to a thematic survey of modern world history from the Renaissance 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.</p> <p><i>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.</i></p>			

<b>Virginia &amp; U.S. History</b>			<b>Course No.H4030RY</b>
<b>Required: NCAA</b>	<b>Prerequisite: World History &amp; Geography to 1500 or World History &amp; Geography 1500-Present</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course is designed to help students develop a strong, solid foundation in their knowledge and understanding 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. The basic theme will be the evolution of the United States into a dominant world power.</p>			

<b>AP U.S. History</b>		<b>Course No.H4030BY</b>	
<b>Required: DE; NCAA</b>	<b>Prerequisite: World History &amp; Geography to 1500 or World History &amp; Geography 1500-Present</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p> <p><i>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 &amp; 122). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.</i></p>			

<b>Virginia &amp; U.S. Government</b>		<b>Course No.H4040RY</b>	
<b>Required: NCAA</b>	<b>Prerequisite: Virginia &amp; U.S. History</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>AP Government &amp; Politics</b>		<b>Course No.H4050BY</b>	
<b>Required: DE; NCAA</b>	<b>Prerequisite: Virginia &amp; U.S. History</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p> <p><i>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 268). Students must satisfy enrollment criteria and pay a reduced college tuition rate to be eligible for college credits.</i></p>			

<b>Introduction to Psychology</b>		<b>Course No.H4060EY</b>	
<b>Elective: Grades 11-12; NCAA</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course will introduce students to the fundamental aspects of the science of psychology through examining theories of human thought, emotion, and personality. Students will compare and evaluate major theories and analyze the impact culture has on the development of psychological theories. Students will demonstrate mastery of objectives through writing, discussion, demonstration, projects, and other methods.</p>			

<b>History of Latin America</b>		<b>Course No.H4070EY</b>	
<b>Elective 10-12 NCAA</b>	<b>Recommended: World History &amp; Geography to 1500 and World History &amp; Geography 1500-Present</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>African American History</b>		<b>Course No. H4080EY</b>	
<b>Elective Grades 10-12 NCAA</b>	<b>Recommended: Completion or current enrollment in Virginia &amp; U.S. History</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course is designed to introduce students to the major themes, issues, and topics in African American history from the origins of African kingdoms in the 1500s through today. In this course students will explore people and events from perspectives typically not addressed in traditional curriculums. The course will center on questions such as “what is freedom?” Throughout the course, students will utilize historical thinking skills such as chronological reasons, comparison and contextualization, constructing historical arguments from evidence, and historical analysis and interpretation.</p>			

# TECHNOLOGY/TRADE AND INDUSTRIAL EDUCATION

Industrial Maintenance I		Course No H6151ES	
Elective: Grade 12; DE	Prerequisite: acceptance into the Trades Academy	Semester	2 credits
<p>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.</p> <p><i>This course may be Dual Enrolled with Laurel Ridge Community College.</i></p>			

Industrial Maintenance II		Course No H6152ES	
Elective: Grade 12; DE	Prerequisite: acceptance into the Trades Academy	Semester	2 credits
<p>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.</p> <p><i>This course may be Dual Enrolled with Laurel Ridge Community College.</i></p>			

Imaging Technology		Course No.H6100EY	
Elective: Grades 10-12	Prerequisite: none	Year-Long	1 credit
<p>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.</p>			

Video & Media Technology		Course No.H6270EY	
Elective: Grades 10-12	Prerequisite: application & instructor approval	Year-Long	1 credit
<p>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.</p>			

# WORK-BASED LEARNING

Advanced Technologies Academy Cooperative Education		Course No. H9210EY	
<b>Elective: Grades 11-12</b>	<b>Co-requisite: enrollment in an Advanced Technologies Academy course</b>	<b>Year-Long</b>	<b>1 credit*</b>
<p>This course is a WBL experience, specifically for the Advanced Technologies Academy at the Emil &amp; 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. <i>This class shall be graded on a pass-fail basis.</i></p> <p><i>*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.</i></p>			

Cooperative Office Education (COE)		Course No.H9120EY	
<b>Elective: Grades 11-12</b>	<b>Co-requisite: enrollment in a business course</b>	<b>Year-Long</b>	<b>1 credit*</b>
<p>This course is a career preparation WBL method that combines Career &amp; 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. <i>This class shall be graded on a pass-fail basis.</i></p> <p><i>*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.</i></p>			

Health Science Academy Cooperative Education		Course No. H9160EY	
<b>Elective: Grades 11-12</b>	<b>Co-requisite: enrollment in a Health Science Academy course</b>	<b>Year-Long</b>	<b>1 credit*</b>
<p>This course is a WBL experience, specifically for the Health Science Academy at the Emil &amp; 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. <i>This class shall be graded on a pass-fail basis.</i></p> <p><i>*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.</i></p>			

Internship			Course No. H9180EY
Elective: Grades 11-12	Prerequisite: application process	Year-Long	1 credit*
<p>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. <i>This class shall be graded on a pass-fail basis.</i></p> <p><i>*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.</i></p>			

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

Marketing Cooperative Education			Course No. H9130EY
Elective: Grades 11-12	Co-requisite: enrollment in a marketing class	Year-Long	1 credit*
<p>This course is a career preparation WBL method that combines Career &amp; 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. <i>This class shall be graded on a pass-fail basis.</i></p> <p><i>*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.</i></p>			

Mentorship			Course No. H9190EY
Elective: Grades 9-12	Prerequisite: application process	Year-Long	0.5 credit*
<p>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. <i>This class shall be graded on a pass-fail basis.</i></p> <p><i>*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.</i></p>			

Nurse Aide Cooperative Education			Course No. C9140EY
Elective: Grades 12	Co-requisite: enrollment in Patient Care Technician	Year-Long	1.5 credits
<p>This course is a WBL experience, specifically for the Nurse Aide program at the Emil &amp; 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. <i>This class shall be graded on a pass-fail basis.</i></p>			

Professional Skills Academy Cooperative Education			Course No. H9200EY
Elective: Grades 11-12	Co-requisite: enrollment in a Professional Skills Academy course	Year-Long	1 credit*
<p>This course is a WBL experience, specifically for the Professional Skills Academy at the Emil &amp; 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. <i>This class shall be graded on a pass-fail basis.</i></p> <p><i>*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.</i></p>			

# WORLD LANGUAGES

German I			Course No.H7031EY
Elective: NCAA	Prerequisite: none	Year-Long	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			Course No.H7032EY
Elective: NCAA	Prerequisite: German I	Year-Long	1 credit
This course builds on skills acquired in German I. Students learn more sophisticated grammar and vocabulary; write essays on topics of interest, such as sports and politics; engage in frequent conversations in German in the classroom as well as prepare and present formal oral presentations; and study German history, literature and culture. German and English are the languages of instruction.			

German III			Course No.H7033EY
Elective: NCAA	Prerequisite: German II	Year-Long	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			Course No.H7034DY
Elective: NCAA	Prerequisite: German III	Year-Long	1 credit
In this course, German students hone skills in writing, reading, listening and speaking through the study of contemporary and classical German literature; current events and culture in German-speaking lands. Students will be expected to do both independent and group work and take advantage of technology-assisted learning opportunities. German is the language of the classroom.			

AP German Language and Culture			Course No.H7035AY
Elective: NCAA	Prerequisite: German IV	Year-Long	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.			

French I			Course No.H7021EY
Elective: NCAA	Prerequisite: none	Year-Long	1 credit
This course is designed with an emphasis in communication in speaking, reading, writing, and listening activities. Speaking and writing is an interactive process whereas reading and listening is a receptive process. Students will learn in a real life process through partner exchange and online writing to discover French culture and language from across the globe. French and English are the languages used in the high school classroom.			

French II			Course No.H7022EY
Elective: NCAA	Prerequisite: French I	Year-Long	1 credit
The course builds upon the skills attained in French I. Students will continue to expand their communication skills with presentational opportunities, writing dialogues, speaking with partners in a group context to learn about France and African Francophone culture, reading novice to intermediate stories, and interactive exchanges.			

French III			Course No.H7023EY
Elective: NCAA	Prerequisite: French II	Year-Long	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	Year-Long	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	Year-Long	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.			

Latin I			Course No.H7041SY
Elective: NCAA	Prerequisite: none	Year-Long	1 credit
The course concentrates on the students' ability to comprehend Latin, and includes a thorough study of nouns and verbs. Students learn basic English grammar, as well as history, mythology, and English vocabulary, while learning the language and culture which has most influenced our own. Students read and compose Latin stories.			

Latin II			Course No.H7042SY
Elective: NCAA	Prerequisite: Latin I	Year-Long	1 credit
The course will continue to build Latin grammar, vocabulary and English derivatives, as well as glimpsing different aspects of Roman life. A year-long study of mythology and history exposes students to the influence of classical myths and ancient Roman culture on art, literature and the English language.			

<b>Latin III</b>		<b>Course No.H7043SY</b>	
<b>Elective: NCAA</b>	<b>Prerequisite: Latin II</b>	<b>Year-Long</b>	<b>1 credit</b>
This course, after an intensive review of Latin grammar, will use their accumulated grammar and vocabulary to read original Latin works which will give an insight into what the Romans thought about themselves. This involves the study of ancient Roman authors, along with an in-depth study of Roman history from the fall of Troy through the fall of the Empire over 1500 years. Students will be exposed to the heroes, villains, and ideas which have influenced our lives, with emphasis on the first century B.C. and the roles of Caesar, Cicero, and Augustus.			

<b>AP Latin</b>		<b>Course No.H7044AY</b>	
<b>Elective: NCAA</b>	<b>Prerequisite: Latin III</b>	<b>Year-Long</b>	<b>1 credit</b>
In this course, Vergil and his works are viewed in the perspective of the Augustan Age and its impact on world history and literature while reading his epic, the Aeneid. Additionally, students will read selections of Julius Caesar's Gallic Wars. AP Latin places a heavy emphasis on literal translation, reading comprehension, contextualization and text analysis.			

<b>Spanish I</b>		<b>Course No. H7011EY</b>	
<b>Elective: NCAA</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
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.			

<b>Spanish II</b>		<b>Course No.H7012EY</b>	
<b>Elective: NCAA</b>	<b>Prerequisite: Spanish I or Spanish for heritage speakers I</b>	<b>Year-Long</b>	<b>1 credit</b>
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.			

<b>Spanish III</b>		<b>Course No.H7013EY</b>	
<b>Elective: NCAA</b>	<b>Prerequisite: Spanish II or Spanish for heritage speakers II</b>	<b>Year-Long</b>	<b>1 credit</b>
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.			

<b>Spanish IV</b>		<b>Course No.H7014EY</b>	
<b>Elective: NCAA</b>	<b>Prerequisite: Spanish III or Spanish for heritage speakers III</b>	<b>Year-Long</b>	<b>1 credit</b>
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.			

<b>AP Spanish Language and Culture</b>			<b>Course No.H7015AY</b>
<b>Elective: NCAA</b>	<b>Recommended: Spanish IV or teacher recommendation</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>AP Spanish Literature and Culture</b>			<b>Course No. H7016AY</b>
<b>Elective: NCAA</b>	<b>Recommended: Spanish IV or teacher recommendation</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>Spanish for Heritage Speakers I</b>			<b>Course No.H7001LY</b>
<b>Elective</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>Spanish for Heritage Speakers II</b>			<b>Course No.H7002LY</b>
<b>Elective</b>	<b>Prerequisite: Spanish I or Spanish for heritage speakers I</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>This course continues to explore language and cultural issues through authentic and fictional resources. Students will benefit from further instruction in reading, writing, basic principles of grammar, spelling, sentence structure, punctuation, accents, and paragraph organization. This class will be taught exclusively in Spanish.</p>			

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

# 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 employment, and in doing so, every regional industry is fully supplied with dedicated, skilled workers who will sustain 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 this strategy, the Innovation Center has become a hub of workforce development for the community, serving both high school students and adults.

The instructional culture at the Innovation Center is interdisciplinary and organized into industry themes where Career & Technical Education (CTE) teachers, core academic 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 foster students with the skills and credentials needed for a career in their respective field.

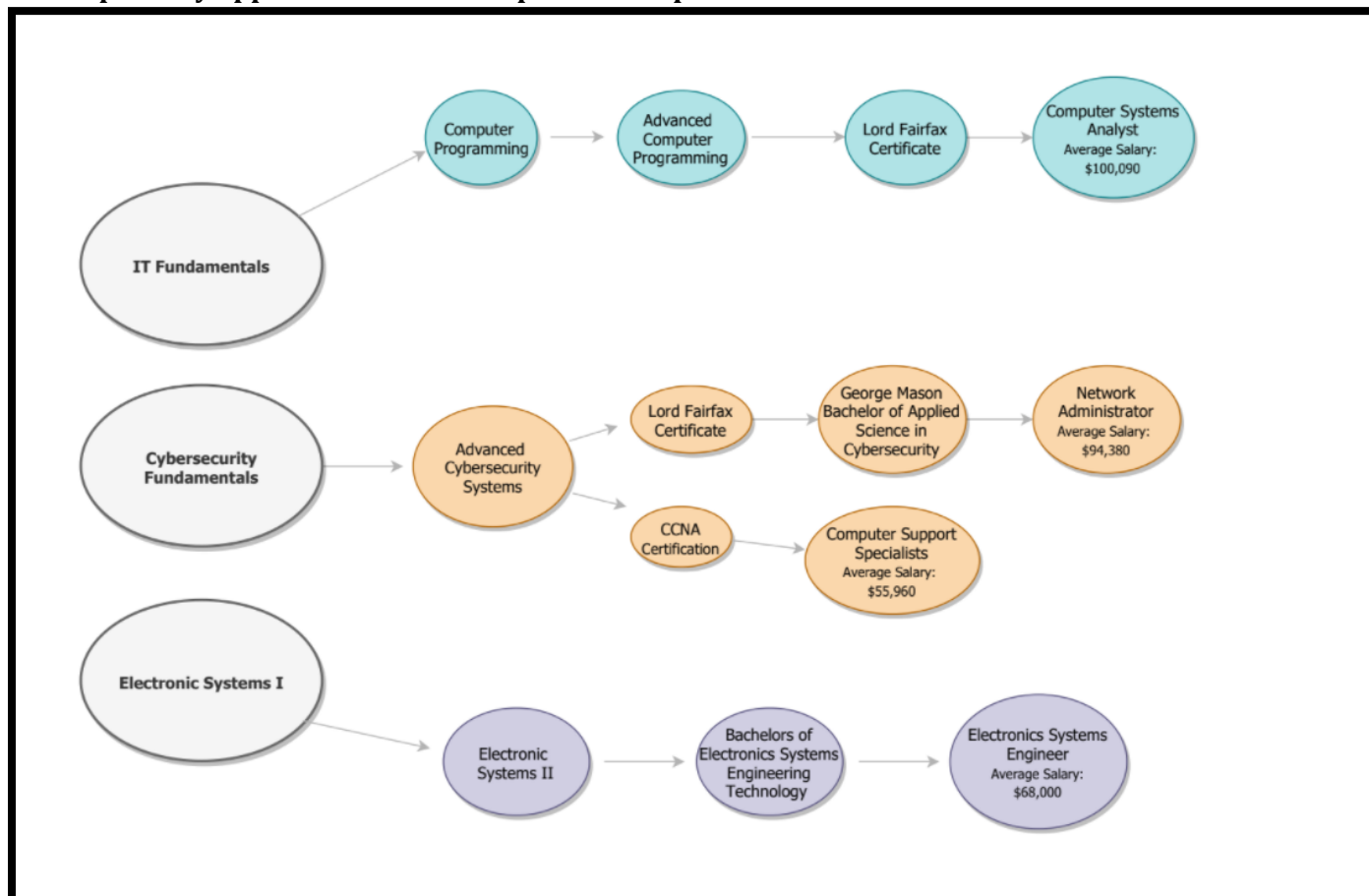
The table below includes CTE courses available at the Innovation Center. Please note that courses may not be available every semester and course offerings will be continually updated.

Advanced Technologies Academy	Professional Skills Academy	Health Science Academy
Computer Programming Cybersecurity Fundamentals Cybersecurity Technology I (DE) Advanced Cybersecurity Technology (DE) Electronic Systems I Electronic Systems II Imaging Technology Video and Media Technology	Materials & Processes Technology Electricity I Electricity II Welding I Welding II Carpentry I Carpentry II Technical Drawing & Design Architecture Drawing & Design Plumbing (Laurel Ridge Community College Workforce) Plumbing II (Laurel Ridge Community College Workforce) HVAC I (Laurel Ridge Community College Workforce) HVAC II (Laurel Ridge Community College Workforce) Electricity I (Laurel Ridge Community College Workforce) Electricity II (Laurel Ridge Community College Workforce)	Intro. to Health and Medical Sciences Emergency Medical Technician I Emergency Medical Technician II Medical Laboratory Technology I Medical Laboratory Technology II (DE) Nurse Aide I Nurse Aide II Patient Care Technician Physical/Occupational Therapy I Physical/Occupational Therapy II Firefighting I Firefighting II

Core 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 and sample career options



## Cybersecurity Fundamentals

Course No.C6060EY

**Elective: Grades 9-12**

**Prerequisite: none**

**Year-Long**

**1 credit**

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**

**Year-Long**

**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.*

## Advanced Cybersecurity Technology II

**Course No. C6061DY**

**Elective: Grades 10-12; DE**

**Prerequisite: Cybersecurity Technology I**

**Year-Long -  
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: Technical Drawing and Design**

**Year-Long**

**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**

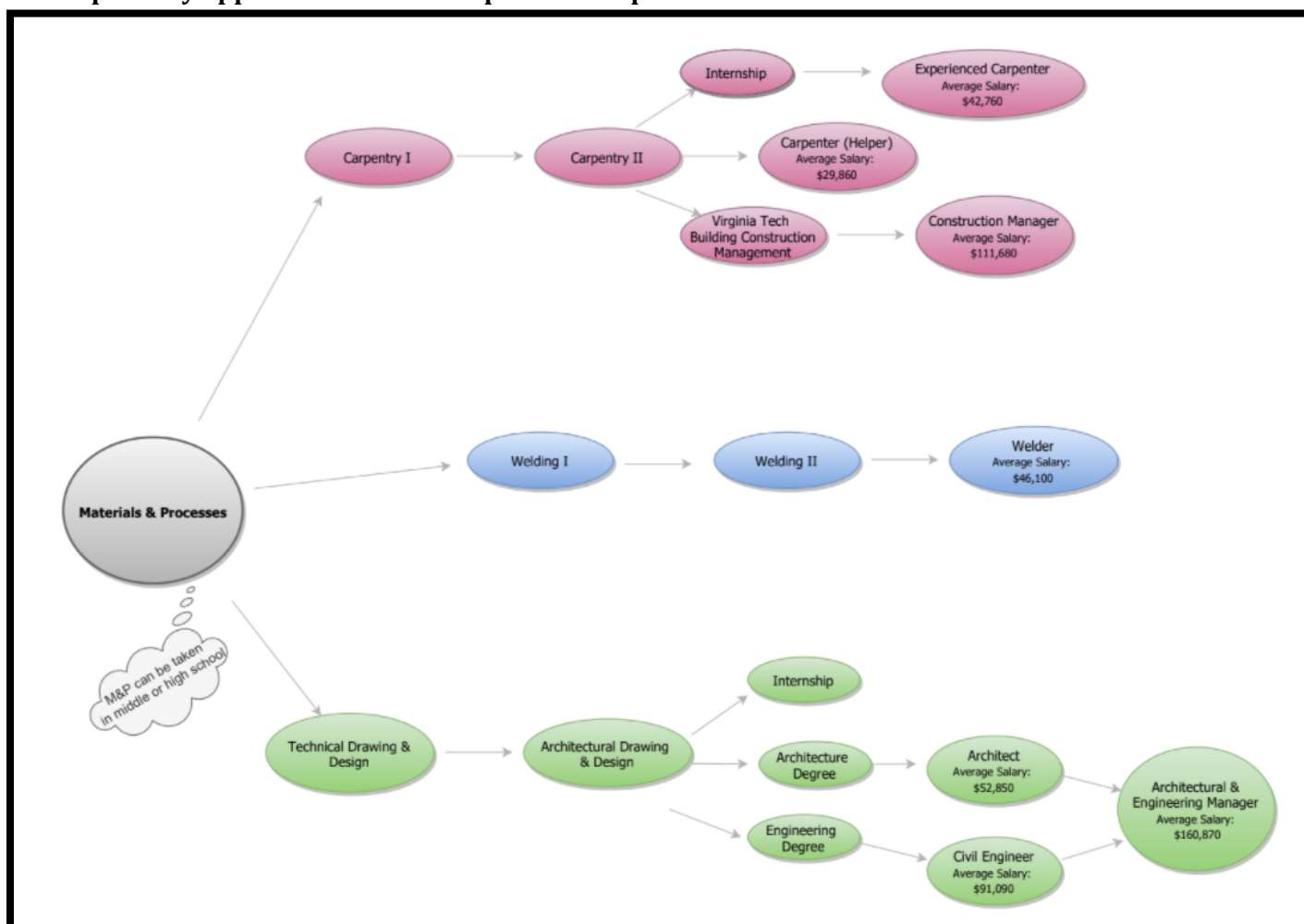
**Year-Long**

**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.

# PROFESSIONAL SKILLS ACADEMY

Career pathway opportunities and sample career options



## Materials and Processes Technology

Course No.C6140EY

**Elective: Grades 9-12**

**Prerequisite: none**

**Year-Long**

**1 credit**

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**

**Year-Long**

**1 credit**

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.

<b>Carpentry II</b>			<b>Course No.C6041EY</b>
<b>Elective: Grades 10-12</b>	<b>Prerequisite: Carpentry I</b>	<b>Year-Long - 2 Blocks</b>	<b>2 credits</b>
<p>This course leads to a successful transition into postsecondary education for careers in carpentry and related 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. Students will become proficient in assembling and installing various types of residential construction components that are current with industry standards, including rigging and job-estimating procedures, forming foundations, framing floors, walls, ceiling, roofs, trusses, roofing materials, stairs, exterior doors and windows, decks, and porches. Successfully passing this course leads to CTE program completion.</p>			

<b>Welding I</b>			<b>Course No.C6070DY</b>
<b>Elective: Grades 9-12</b>	<b>Recommended: Materials and Processes Technology</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>Welding II</b>			<b>Course No. C6081EY</b>
<b>Elective: Grades 10-12</b>	<b>Prerequisite: Welding I</b>	<b>Year Long - 2 Blocks</b>	<b>2 credits</b>
<p>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.</p>			

<b>Electricity I</b>			<b>Course No. C6134EY</b>
<b>Elective: Grades 10-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p> <p>Note: this course may be a Youth Registered Apprenticeship and may count as progress toward a Registered Apprenticeship.</p>			

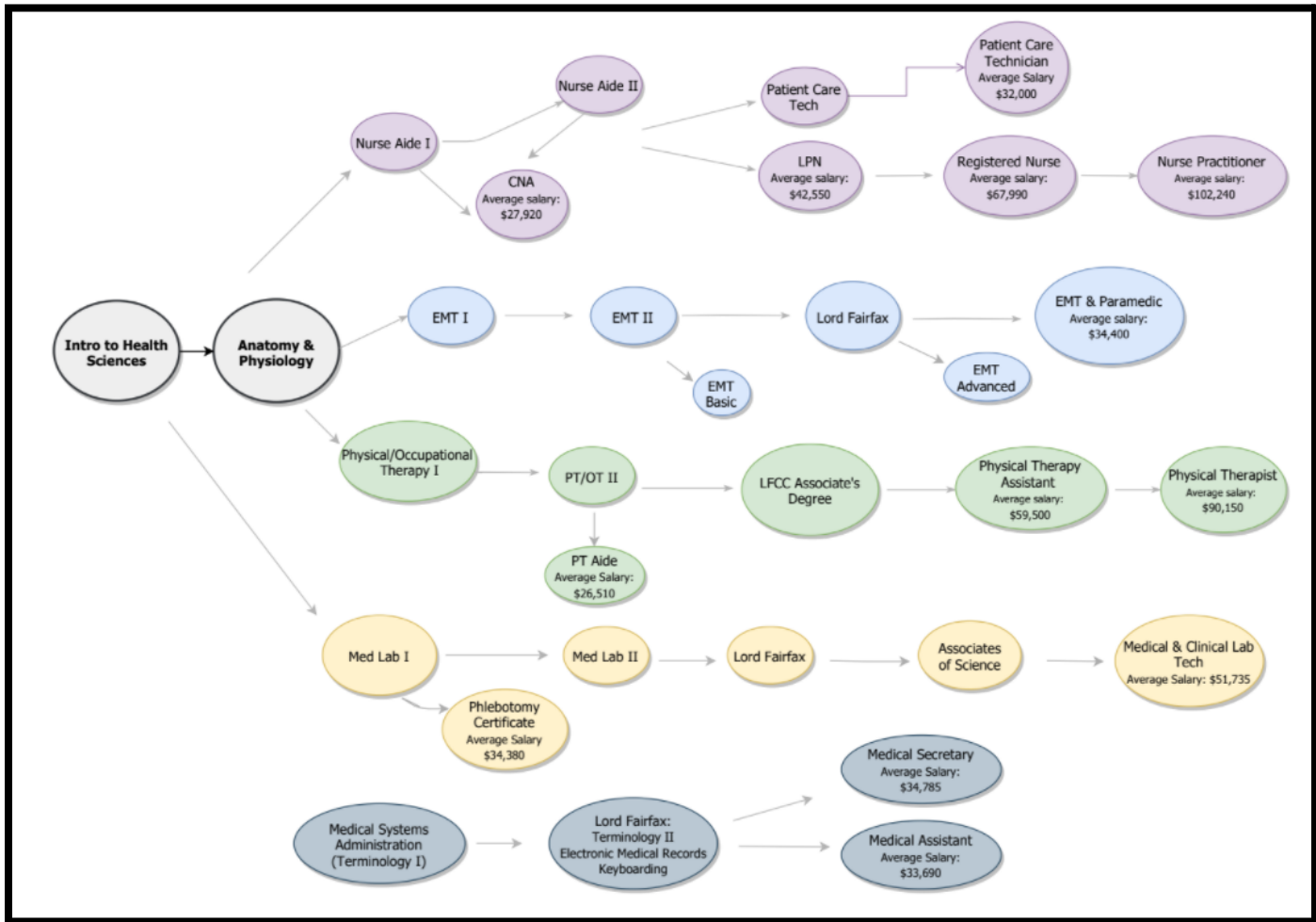
<b>Electricity II</b>		<b>Course No. C6135EY</b>	
<b>Elective: Grades 11-12</b>	<b>Prerequisite: Electricity I</b>	<b>Year-Long 2 Blocks</b>	<b>2 credits</b>
<p>Students will continue to develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial 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.</p>			

<b>Technical Drawing and Design</b>		<b>Course No.C6110EY</b>	
<b>Elective: Grades 9-12</b>	<b>Prerequisite: none</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

<b>Architectural Drawing and Design</b>		<b>Course No. C6120EY</b>	
<b>Elective: Grades 10-12</b>	<b>Prerequisite: Technical Drawing and Design</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p>			

# HEALTH SCIENCE ACADEMY

## Career pathway opportunities and 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.

**Please note: certain locations are requiring the COVID-19 vaccination and students must adhere to these requirements.**

**Introduction To Health & Medical Sciences****Course No.C6170EY****Elective: Grades 9-12****Recommended: Algebra I and Biology****Year-Long****1 credit**

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. CPR instruction is included.

**Emergency Medical Technician I****Course No. C6150ES****Elective: Grades 11-12****Recommended: Intro to Health Sciences**  
**\* See Notation****Semester**  
**(2 blocks)****1 credits**

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.

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**Emergency Medical Technician II****Course No. C6160ES****Elective: Grades 11-12****Prerequisite: Emergency Medical Technician I**  
**\* See Notation****Semester**  
**(2 blocks)****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. Students should take Emergency Medical Technician I first-semester and Emergency Medical Technician II second-semester.

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<b>Firefighting I</b>		<b>Course No. C6133ES</b>	
<b>Elective: Grades 11-12</b>	<b>Prerequisite:</b>	<b>Semester (2 blocks)</b>	<b>1 credit</b>
<p>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.</p> <p><u>Students must be at least 16 years old</u> (Code of Virginia 40-1.79.1) by the first day of the course offering. <u>Enrollment also requires parental consent</u>. Additional requirements, including CPR, HAZMAT operations, and Mayday Awareness, are stipulated for those students seeking NFPA 1001-2013 Firefighter I certification.</p> <p><i>*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 80. Students need to read and comply with the course enrollment requirements on Page 80.</i></p>			

<b>Firefighting II</b>		<b>Course No. C6134ES</b>	
<b>Elective: Grades 11-12</b>	<b>Prerequisite: Firefighting I</b>	<b>Semester (2 blocks)</b>	<b>1 credit</b>
<p>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.</p> <p><u>Students must be at least 16 years old</u> (Code of Virginia 40-1.79.1) by the first day of the course offering. <u>Enrollment also requires parental consent</u>. Additional requirements, including CPR, HAZMAT operations, and Mayday Awareness, are stipulated for those students seeking NFPA 1001-2013 Firefighter I certification.</p> <p><i>*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 80. Students need to read and comply with the course enrollment requirements on Page 80.</i></p>			

<b>Medical Laboratory Technology I</b>		<b>Course No.C6181DY</b>	
<b>Elective: Grades 11-12</b>	<b>Recommended: Intro to Health Sciences * See Notation</b>	<b>Year-Long</b>	<b>1 credit</b>
<p>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.</p> <p><i>*Before enrolling students need to read the responsibility, confidentiality, and accountability statement on Page 80. Students need to read and comply with the course enrollment requirements on Page 80.</i></p>			

**Medical Laboratory Technology II****Course No.C6182DY****Elective: Grades 11-12; DE****Prerequisite: Medical Laboratory Technology I**  
**\* See Notation****Year-Long****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.*

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**Nurse Aide I****Course No.C6191ES****Elective: Grades 11-12****Prerequisite: application & Instructor Approval**  
**Recommended: Intro to Health Sciences**  
**\* See Notation****Semester (2 blocks)****1 credit**

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.

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**Nurse Aide II****Course No. C6192ES****Elective: Grades 11-12****Prerequisite: Nurse Aide I**  
**\* See Notation****Semester (2 blocks)****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.

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**Patient Care Technician****Course No. C6193EY****Elective: Grades 12****Prerequisite: Nurse Aide II & CNA credential**  
**Co-requisite: Nurse Aide Cooperative Education****Year-Long****1 credit**

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.

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## Physical/Occupational Therapy I

**Course No. C6175EY**

**Elective: Grades 11-12**

**Recommended: Intro to Health Sciences and Anatomy and Physiology**  
**\* See Notation**

**Year-Long -  
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.

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## Physical/Occupational Therapy II

**Course No.C6176EY**

**Elective: Grades 11-12**

**Required: Physical/Occupational Therapy I**  
**Recommended: Intro to Health Sciences and Anatomy and Physiology**  
**\* See Notation**

**Year-Long -  
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.

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## **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.

<b>Academic Support</b>		
Study Skills I	Followed by	Study Skills 2
Reading I	Followed by	Reading II
<b>Business and Information Technology</b>		
Accounting	Followed by	Advanced Accounting, Computer Information Systems, Advanced Computer Information Systems, Design, Multimedia, & Web Technologies, Adv. Design, Multimedia, & Web Technologies, Entrepreneurship, Medical Systems Administration, Principles of Business & Marketing
Computer Information Systems	Followed by	Accounting, Advanced Accounting, Advanced Computer Information Systems, Design, Multimedia, & Web Technologies, Adv. Design, Multimedia, & Web Technologies, Entrepreneurship, Information Technology Fundamentals, Medical Systems Administration, Principles of Business & Marketing, Computer Programming, Advanced Computer Programming
Computer Programming	Followed by	Computer Information Systems, Advanced Computer Information Systems, Design, Multimedia, & Web Technologies, Adv. Design, Multimedia, & Web Technologies, Advanced Computer Programming
Design, Multimedia, & Web Technologies	Followed by	Accounting and Advanced Accounting, Computer Information Systems, Advanced Computer Information Systems, Adv. Design, Multimedia, & Web Technologies, Information Technology Fundamentals, Medical Systems Administration, Principles of Business & Marketing, Computer Programming, Advanced Computer Programming
Principles of Business & Marketing	Followed by	Accounting, Advanced Accounting, Computer Information Systems, Advanced Computer Information Systems, Design, Multimedia, & Web Technologies, Advanced Design, Multimedia, & Web Technologies, Entrepreneurship, Marketing, Advanced Marketing, Medical Systems Administration, Sports Entertainment Marketing
<b>Career Connections</b>		
Virginia Teachers for Tomorrow I	Followed by	Virginia Teachers for Tomorrow II
<b>English</b>		
Forensics Speech	Followed by	Debate

English Learners		
English as a Second Language I	Followed by	English as a Second Language II, English as a Second Language III
Fine Arts		
Art Foundations	Followed by	Drawing and Painting I, Drawing and Painting II, Sculpture I, Sculpture II, AP Studio 2-D, AP Studio 3-D, AP Studio Art: Drawing
Treble Ensemble	Followed by	Advanced Treble Ensemble
Concert Choir	Followed by	Chamber Choir
Handley Singers	Followed by	Concert Choir, Advanced Treble, Chamber Choir
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 Training I	Followed by	Advanced Kinesiology Weight Training II
Marketing		
Marketing	Followed by	Entrepreneurship, Advanced Marketing, Principles of Business & Marketing, Sports Entertainment Marketing
Principles of Business & Marketing	Followed by	Accounting, Advanced Accounting, Computer Information Systems, Advanced Computer Information Systems, Design, Multimedia, & Web Technologies, Advanced Design, Multimedia, & Web Technologies, Entrepreneurship, Marketing, Advanced Marketing, Medical Systems Administration, Sports Entertainment Marketing
Social Studies		
Introduction to Psychology	Followed by	AP Psychology (Virtual Virginia)
Technology/Trade and Industrial Education		
Industrial Maintenance I	Followed by	Industrial Maintenance II
Imaging Technology	Followed by	Video and Media Technology
World Languages <small>(only courses not needed for graduation can count as a sequential elective)</small> <small>Sequential electives for the Advanced Studies Diploma using World Languages may only be counted as such, after the graduation requirement for World Language has been met (ex. Levels AP)</small>		
French I	Followed by	French II
German I	Followed by	German II
Latin I	Followed by	Latin 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
<b>Advanced Technologies Academy</b>		
Cybersecurity Fundamentals	Followed by	Cybersecurity Technology I, Advanced Cybersecurity Technology II
<b>Advanced Technologies Academy continued</b>		
Cybersecurity Technology I	Followed by	Advanced Cybersecurity Technology II
Electronic Systems I	Followed by	Electronic Systems II
<b>Professional Skills Academy</b>		
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
<b>Health Sciences Academy</b>		
Emergency Medical Technician (EMT) I	Followed by	Emergency Medical Technician (EMT) II
Introduction to Health and Medical Sciences	Followed by	Medical Systems 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.

Winchester Public Schools

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