

Madison County High School



Course of Studies

Pathways to Success

2019-2020

Dear Parent/Guardian:

This course of studies is made available to you and your child to help guide you through the process of choosing the proper academic path. This handbook includes MCHS policies, procedures, graduation requirements, career clusters and descriptions of courses that are available to our students. It is our hope that you look over this handbook to help make the best decisions for your child's academic success.

It is important that we work together as a team to make the best decisions for each student to guarantee success. The administration and staff at the high school wish to work with parents and students to help with this process. During the 4 years of high school, there will be several decisions to make regarding a student's academic path. The following are important things to consider when making these decisions:

- What courses are required for graduation?
- What courses am I interested in?
- In what areas of study do I find success?
- What type of education/training will I pursue after high school?

I encourage all students to challenge themselves academically. Please consider this along with recommendations from teachers and school counselors. Their experience is an important part of the process and should be helpful with making these decisions. It is in high school where students will receive the greatest level of support from their teachers.

Counselors will be meeting with your child individually and/or in small groups to assist with program planning. They are also available to help students determine interest, needs and special talents as well as to provide information about educational opportunities at various colleges, universities, trade and technical schools. Teachers recommend courses and advise students on appropriate academic pathways in their departments. I strongly encourage students and parents to take advantage of *Naviance* for career exploration, college searches and scholarship opportunities.

Deadlines for registration and completed schedules will be announced on-line and at the school.

Sincerely,

Gary Wintersgill
Principal - MCHS

Quick Finder	Page
4-year Planning Worksheet	68
Advanced Placement	11
Agriculture Education	31-32
Audit Policy	24
Blue Ridge Virtual Governor's School (BRVGS)	12
BRVGS Courses	33-37
Business and Information Technology	38-39
Career Program of Studies at MCHS	22-23
Building Trades	40
Career and College Readiness Testing Assessment	13
Cosmetology & Barbering	41-42
Course Load	17
Courses Taken Off-Campus	12
Diploma Seals	9-10
Driver's Education	53-54
Dual Enrollment	10 & 70
Early College Pathways through GCC	15-16
Engineering	48
English	43-47
Family & Consumer Science	49-50
Foreign/World Language	51-52
Governor's Early Scholars College Program	12
Governor's Early College Scholars Agreement	69
Grade Point Average Calculation	26
Grading System	26
Graduation Requirements Class of 2017 and beyond	4-8
Health & Physical Education	53-54
Health Science	55
Highlights	3
High School Credit Awarded at Middle School	10
High School Industry Credentialing	14
Homebound Instruction	24
Homework	26
How to read a course description	28-29
Junior-Year Options	18
Marketing Education	56
Mathematics	57-59
Music	60
Naviance	21
Promotions	25
Repeating a Course	24
Sample 4-Year Plans	19
Scheduling Procedures/Issues	27-28
Science	61-63
Senior-Year Options	17-18
Social Studies	64-66
Special Education	24
Steps for Dual Enrollment	70
Summer School-SOL Remediation and Credit Recovery	24
VHSL Eligibility	25
Virtual Virginia Advanced Placement School	11
Visual Arts	67
Weighted Course Policy	27
Workplace Readiness Skills for the Commonwealth	20
Work Based Learning (WBL)	29-30

HIGHLIGHTS IN THE 2019-2020 COURSE OF STUDIES

Naviance: MCHS is entering its eighth year using Naviance as a career and college exploration and portfolio application. It is proving to be a very efficient system and provides a wealth of information for students as they plan their career and college future. More information about Naviance can be found on page 22.

Work Based Learning (WBL) Program:

The Career and Technical Education (CTE) department provides opportunities for students to experience on the job training in various careers. Work based learning at MCHS is a cooperative education program. More information about work based learning can be found on pages 30-31.

GENERAL INFORMATION

This handbook contains information that will assist you in planning your high school education and career direction. It includes graduation requirements, sample four-year plans, course descriptions, explanations of special academic programs, career clusters, and other academic policies. We strongly encourage you to study this guide prior to registration and to consult your parents, school counselor and teachers in planning your course of study.

BLOCK SCHEDULING

Madison County High School follows a 4X4 block schedule. The school year is divided into two semesters (fall and spring), each approximately eighteen weeks long. During each semester, students take four classes (courses) which meet daily and are worth one credit each. This is an accelerated curricular program that permits students to earn thirty-two credits during their high school years. There are no study halls.

MOUNTAIN TIME

Mountain Time is a dedicated period built into the regular school day. It is instructional time that is used for enrichment, review, tutoring, make-up work and enhancement of the regular instructional curriculum. On Mondays, students meet with their teacher advisor to review their academic performance, to complete career assessments through Naviance and to update their 4-year plans. Club meetings also occur on alternating Mondays. There is flexibility for students to focus on areas of need as the school year progresses.

MADISON COUNTY POLICY – GRADUATION REQUIREMENTS

The Commonwealth of Virginia, through the Standards of Learning (SOL) and Standards of Accreditation, has set a goal for academic achievement for all students in public schools. Madison County High School aspires to reach these goals by encouraging each student to develop his or her full potential. A variety of elective courses and co-curricular activities are offered to students. Participation in these activities and courses enables students to have a balanced curriculum that assists them in creativity, critical thinking, communication, collaboration, and citizenship for lifelong learning. All students shall complete credits in core academic and elective courses to satisfy graduation requirements.

Twenty-two credits are required for the Standard Diploma and twenty-six credits are required for the Advanced Studies diploma. Students are expected to carry a full schedule of four courses in each semester. Students will be enrolled in only one required core course (English, Social Studies, Math, and Science course per year). However, accommodations may be made for students on a case-by-case basis in their junior and senior years, if they need more than one English or social studies class in order to graduate in four years.

Exceptions may be made for juniors and seniors whose program of study includes an off-site placement. See page 13.

GRADUATION REQUIREMENTS

The Virginia Board of Education has established criteria for graduation from high school. Regular education students can earn a Standard or Advanced Studies diploma. Students receiving services through Special Education have two additional options: a Standard Diploma with credit accommodations or an Applied Studies (formerly called an IEP diploma). Information about these diplomas is available from the student's case manager.

The Virginia State Board of Education establishes the credit requirements for graduation. A standard unit of credit for graduation is based on a minimum of 140 hours of instruction plus successful completion of the requirements of the course. A verified credit is based on a minimum of 140 clock hours of instruction, successful completion of the requirements of the course, and a passing score on the end-of-course Standards of Learning (SOL) test for that course. There are alternate assessments that can be used to earn certain verified credits. This information is available through the counseling office as well as on the Virginia Department of Education website: www.doe.virginia.gov. The MCPS School Board may award locally verified credits in Science, History, Math and English that may be used to fulfill the requirement of verified credits of the student's own selection. An administrative/faculty committee will review the student's testing history and other required criteria before awarding a verified credit. Please contact a building administrator and/or school counselor for more information on locally verified credits.

Students must take all applicable end-of-course SOL tests following course instruction. SOL tests are listed below. All students enrolled in a course that has an SOL test must take the test unless they have met their verified credit requirement for that core area. The SOL tests are listed in the subsequent chart.

High School End-of-Course SOL Tests	
English	Grade 11 Reading Grade 11 Writing (Multiple Choice & Short Paper)
Mathematics	Algebra I Algebra II Geometry
History/Social Science	World History & Geography to 1500 World History & Geography 1500 to Present U.S. & Virginia History World Geography
Science	Earth Science Biology Chemistry

Students Entering 9th Grade in 2015-2016

Advanced Studies Diploma

Standard Diploma

Required Courses	Standard units of credit	Verified units of credit	Standard units of credit	Verified units of credit
English – 9, 10, 11, and 12	4	2 Writing and Reading	4	2 Writing and Reading
Mathematics – Courses shall include at least two different course selections from among Algebra I; Geometry; Algebra, Functions and Data Analysis; Algebra II; or other mathematics courses above the level of Algebra II (Standard Diploma) or at least three different course selections from among Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II (Advanced Studies Diploma).	4	2	3	1#
Laboratory Science – Courses shall include at least two different course selections from among Earth Science, Biology, Chemistry, or Physics (Standard Diploma). The Advanced Studies Diploma requires at least three different course selections from among Earth Science, Biology, Chemistry, or Physics.	4	2	3	1#
History and Social Sciences – Courses shall include U.S. and Virginia History, U.S. and Virginia Government, and one (Standard Diploma) or both (Advanced Diploma) of the following: World History to 1500; World History from 1500; World Geography may be accepted as one of the required courses for the Advanced Studies diploma for transfer students.	4	2	3	1#
Foreign Language Courses to include Spanish for Native/Heritage Speakers courses. Courses shall include three years of one language or two years each of two languages.	3			
Health/Physical Education I, II	2		2	
Economics and Personal Finance	1		1	
Fine Arts or Career and Technical Education	1			
Foreign Language, Fine Arts, or Career and Technical Education – Credits earned shall include one credit in fine or performing arts or career and technical education.			2	
Electives – Courses to satisfy this requirement shall include at least two sequential electives (*Standard Diploma only).	3		4*	
Student Selected Test – A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics, or other areas as prescribed by the Board.		1		1#
TOTAL CREDITS REQUIRED	26	9	22	6
ADDITIONAL REQUIREMENTS	Virtual Course for Credit or Non-Credit		Virtual Course for Credit or Non-Credit Career and Technical Education Credential	

Students Entering 9th Grade in 2016-17 and 2017-2018

Required Courses	Advanced Studies Diploma		Standard Diploma	
	Standard units of credit	Verified units of credit	Standard units of credit	Verified units of credit
English – 9, 10, 11, and 12	4	2 Writing and Reading	4	2 Writing and Reading
Mathematics – Courses shall include at least two different course selections from among Algebra I; Geometry; Algebra, Functions and Data Analysis; Algebra II; or other mathematics courses above the level of Algebra II (Standard Diploma) or at least three different course selections from among Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II (Advanced Studies Diploma).	4	2	3	1#
Laboratory Science – Courses shall include at least two different course selections from among Earth Science, Biology, Chemistry, or Physics (Standard Diploma). The Advanced Studies Diploma requires at least three different course selections from among Earth Science, Biology, Chemistry, or Physics.	4	2	3	1#
History and Social Sciences – Courses shall include U.S. and Virginia History, U.S. and Virginia Government, and one (Standard Diploma) or both (Advanced Diploma) of the following: World History to 1500; World History from 1500; World Geography may be accepted as one of the required courses for the Advanced Studies diploma for transfer students.	4	2	3	1#
World Language Courses – Courses shall include three years of one language or two years each of two languages.	3			
Health/Physical Education I, II	2		2	
Economics and Personal Finance	1		1	
Fine Arts or Career and Technical Education	1			
World Language <u>or</u> Fine Arts, <u>or</u> Career and Technical Education – Credits earned shall include one credit in either world language or fine and performing arts or career and technical education.			2	
Electives – Courses to satisfy this requirement shall include at least two sequential electives (*Standard Diploma only).	3		4*	
Student Selected Test – A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics, or other areas as prescribed by the Board		1		1#
TOTAL CREDITS REQUIRED	26	9	22	6
ADDITIONAL REQUIREMENTS	Virtual Course for Credit or Non-Credit and CPR/First Aid and AED Training		Virtual Course for Credit or Non-Credit and CPR/First Aid and AED Training and Career and Technical Education credential	

Students who are seeking the Standard Diploma and 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 acquire a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (i) the student selected verified credit and (ii) either 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 of Education as an educational test to verify student achievement.

**Students who are seeking the Standard Diploma must take and pass a career and technical education credentialing exam that has been approved by the Board of Education. This may include an industry certification, state licensure examination, National Occupational Competency Assessment, or Virginia Workplace Readiness Skills Assessment OR take one advanced course during their high school career.

Students Entering 9th Grade in 2018-19 and Beyond

Requirements	Advanced Studies Diploma		Standard Diploma	
	Standard units of credit	Verified units of credit	Standard units of credit	Verified units of credit
English – 9, 10, 11, and 12	4	2 Writing and Reading	4	2 Writing and Reading
Mathematics – Courses shall include at least two different course selections from among Algebra I; Geometry; Algebra, Functions and Data Analysis; Algebra II; or other mathematics courses above the level of Algebra II (Standard Diploma) or at least three different course selections from among Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II (Advanced Studies Diploma).	4	1	3	1
Laboratory Science – Courses shall include at least two different course selections from among Earth Science, Biology, Chemistry, or Physics (Standard Diploma). The Advanced Studies Diploma requires at least three different course selections from among Earth Science, Biology, Chemistry, or Physics.	4	1	3	1
History and Social Sciences – Courses shall include U.S. and Virginia History, U.S. and Virginia Government, and one (Standard Diploma) or both (Advanced Diploma) of the following: World History to 1500; World History from 1500; World Geography may be accepted as one of the required courses for the Advanced Studies diploma for transfer students.	4	1	3	1
World Language Courses – Courses shall include three years of one language or two years each of two languages.	3			
Health/Physical Education I, II	2		2	
Economics and Personal Finance	1		1	
Fine Arts or Career and Technical Education	1			
World Language or Fine Arts, or Career and Technical Education – Credits earned shall include one credit in either world language or fine and performing arts or career and technical education.			2	
Electives – Courses to satisfy this requirement shall include at least two sequential electives (*Standard Diploma only).	3		4*	
TOTAL CREDITS REQUIRED	26	5	22	5
ADDITIONAL REQUIREMENTS	Virtual Course for Credit or Non-Credit Career and Technical Education Credential OR One Advanced Course CPR/First Aid and AED Training			

**Students who are seeking the Standard Diploma must take and pass a career and technical education credentialing exam that has been approved by the Board of Education. This may include an industry certification, state licensure examination, National Occupational Competency Assessment, or Virginia Workplace Readiness Skills Assessment.

Other Diplomas & Certificates

Applied Studies Diploma	For students with disabilities who meet the requirements of their IEP.
Certificate of Completion	For students who complete a prescribed program of studies defined by local school board but who are not eligible to receive a standard, advanced studies, or applied studies diploma.
ISAEP (Individual Student Alternative Education Plan)	For students who are between the ages of 16-18, who meet specific criteria and pass the high school equivalency exam.

REQUIREMENTS FOR GRADUATION

The revised regulations reduce the number of SOL tests students must pass to earn a high school diploma — while maintaining high expectations for learning in English, math, science and history/social science — and implement the “Profile of a Virginia Graduate,” a set of skills and attributes identified by employers and higher education as critical for success in the workplace and in college.

These expectations are often referred to as the “5 C’s”: Creativity, Critical thinking, Communication, Collaboration and Citizenship.

The new graduation requirements place increased emphasis on the practical application of learned skills and content knowledge by expanding the use of performance-based assessments for the awarding of verified credits.

In addition, the career-planning component of the new graduation requirements provides the opportunity for students to learn about employment options aligned with their interests in their own communities and elsewhere.

While there is no specific activity that a student must experience (such as Work Based Learning or participation in a career fair) to graduate, Madison County Public Schools will collaborate with local employers to create opportunities for students to learn about the workplace expectations, regardless of their plans after high school.

Madison County High School will provide opportunities for students to understand and demonstrate civic responsibility and community engagement.

Key points for students and parents to remember about how Virginia’s diploma standards are changing include the following:

- The new graduation requirements are effective with students entering the ninth grade in the fall of 2018 (class of 2022).
- Under the new requirements, the number of required standard credits for a Standard Diploma remains the same (22) but the number of required verified credits is reduced from six to five (one each in English reading, English writing, mathematics, science and history/social science).
- Under the new requirements, the number standard credits required for an Advanced Studies Diploma remains the same (26) but the number of required verified credits is reduced from nine to five (one each in English reading, English writing, mathematics, science and history/social science).
- School divisions, on a local-option basis, may offer an authentic performance-based assessment as an alternative to the English writing SOL test for the awarding of verified credit.

VIRGINIA BOARD OF EDUCATION DIPLOMA SEALS

Recognition of Outstanding Academic Performance

Students who demonstrate academic excellence and/or complete additional requirements may be eligible for one or more of the following awards:

The **Governor's Seal** is awarded to students who complete the requirements for an Advanced Studies Diploma with an average grade of "B" (GPA 3.0) or better, and successfully complete at least nine (9) transferable college credits in Advanced Placement courses and/or dual enrollment courses.

The **Board of Education Seal** is awarded to students who complete the requirements for a Standard or an Advanced Studies Diploma with an average grade of "A" (4.0).

The **Board of Education's Career and Technical Education Seal** will be 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" (GPA 3.0) or better in those courses; or

- (i) 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
- (ii) Acquire a professional license in that career and technical education field from the Commonwealth of Virginia. The Board of Education must approve all professional licenses and examinations used to satisfy these requirements.

The **Board of Education's Seal of Advanced Mathematics and Technology** will be awarded to students who earn a Standard or Advanced Studies Diploma and satisfy all of the mathematics requirements for the Advanced Studies Diploma (four (4) units of credit including Algebra II; two verified units of credit with a "B" (GPA 3.0) or better; and accomplish one (1) of the following three options:

- (i) Pass an examination in a career and technical education field that confers certification from a recognized industry, or trade or professional association; or
- (ii) Acquire a professional license in a career and technical education field from the Commonwealth of Virginia or
- (iii) Pass an examination approved by the Board that confers college-level credit in a technology or computer science area. The Board of Education must approve all professional licenses and examinations used to satisfy these requirements.

The **Board of Education Seal for Excellence in Civics Education** will be awarded to students who meet the following criteria:

- (i) Earn a Standard or an Advanced Studies diploma and
- (ii) Complete VA/US History and VA/US Government courses with a grade of "B" or better and
- (iii) Have good attendance and no disciplinary infractions as determined by local school board policy and
- (iv) Complete 50 hours of voluntary participation in community service or extracurricular activities:
 - (a) Volunteering for charitable or religious organizations that provide services to the poor, sick, or less fortunate;
 - (b) Participating in Boy Scouts, Girl Scouts, 4-H or similar youth organizations;
 - (c) Participating in political campaigns, government internships, Boys/Girls State, or Model General Assembly;
 - (d) Participating in school-sponsored extracurricular activities that have a civic focus
- (v) Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement

The **Board of Education's Seal of Biliteracy** 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:

The Board of Education's Seal of Biliteracy will be awarded to students who earn either a Board of Education-approved diploma and

- (i) Pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level;
- (ii) 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.

[For purposes of this article, "foreign language" means a language other than English, and includes American Sign Language.]

The **Board of Education's Seal for Excellence in Science and the Environment** shall be awarded to students who earn either a Standard Diploma or Advanced Studies Diploma and

- (i) 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;
- (ii) complete laboratory or field-science research and present that research in a formal, juried setting; and
- (iii) 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.

HIGH SCHOOL CREDIT AWARDED AT MIDDLE SCHOOL

Grades and credits earned in middle school for high school credit-bearing courses will count toward graduation credits. Credit and the grade will be calculated in the high school GPA unless the parent/guardian requests to have the grade expunged from the child's record. A request form must be submitted to the school counseling office before the end of the student's first semester of his or her 9th grade year. If a parent wishes, a student who took a high school credit class as a middle school student may re-enroll in the course for which the grade and credit were deleted to earn a higher grade. If the student's deleted final grade is a "C" or better with a passing score on the accompanying SOL test (if applicable), the student may proceed to the next level of the course without the grade or credit for the prerequisite course. Credits earned during middle school allow a student to pursue more rigorous courses in all core areas, foreign languages, and CTE and Fine Arts programs at MCHS.

DUAL ENROLLMENT COURSES

Dual Enrollment (DE) is a unique enrichment program in which high school junior and senior students are given the opportunity to take college courses in their own high school through Germanna Community College's program. DE courses hold the same rigor as any other college level course. Students are expected to perform at the same level as their college student counterparts participating in the same course. Credits generally transfer to all Virginia Community Colleges and most Virginia colleges and universities.* Courses are taught by high school instructors who have the qualifications to teach at the college level. Prospective students must:

- 1] Obtain permission from your teachers and counselors
- 2] Pick up Dual Enrollment Intent Form from Counseling Office
- 3] Complete the on-line GCC Application for Admissions at <https://apply.vccs.edu/app/app.htm>
- 4] **Obtain your GCC student ID number and report it to MCHS counselor**
- 5] Take the Virginia Placement Test

For more information on dual enrollment visit:

<https://www.germanna.edu/career-and-transfer/>

*For information on transferring credits to specific universities:

Once a student is enrolled in a dual enrollment class at MCHS:

- Students will earn high school and Germanna Community College credit upon completion of the course with a passing grade of D- or higher. *Students must earn a C or better in a DE course for it to be considered for college transfer credit. A C or better is required to continue to the next level of the course (Example: C or better in DE Comp I in order to move to DE Comp II)*
- Students will pay tuition for the course (The Madison County School Board pays a portion of each student's fee and provides the textbook). Payment in full or the 1st payment of a 3 month billing plan is due at the end of the 1st month of school in which the student is taking the course. Failure to submit payment or develop an approved payment plan after the second week of the course will result in a drop and dual-enrollment credit will not be available. **A student will not be denied the opportunity to participate in this program if able to provide documented financial need. Tuition will not be refunded if a student does not receive a passing grade for each course.**
- The student's tuition responsibility in the **2018-2019 school year for a three credit course was \$219.00**
- Academic dual enrollment courses are weighted on the grading scale (if C- or higher) and are marked with a DE on the transcript.
- Students who earn grades in dual enrollment courses will have a permanent transcript and GPA at GCC. Student must request from GCC to have their transcript sent to any colleges or other institutions.
- Poor grades (GPA) on a college level transcript can affect future financial aid eligibility.

ADVANCED PLACEMENT COURSES

Advanced Placement (AP) Courses offer students an opportunity to do college-level work. AP courses are offered through an agreement with the Education Testing Service. These are courses with a standardized curriculum that generally matches the introductory level in the subject area at the college level. In order for a college to award credit, students must take the AP exam after successfully completing the course. Exams are scored on a scale of 1 - 5. Most colleges accept scores of a 3 or higher for college credit.

Advanced Placement courses* are offered at MCHS in:

- 1] AP Literature & Composition (11th)
- 2] AP Biology (BRVGS Only)

*Additional AP courses are offered through **Virginia's Virtual Advanced Placement School** (distance learning). Students qualifying as **Early College Scholars** do not pay for the course and the AP exam fee is paid by the Virginia Department of Education. All other students must pay for the course and exam. Deadline for registration is August 1st.

ADVANCED PLACEMENT EXAMS

Advanced Placement exams are given in May in accordance with the schedule established by the College Board. Students enrolled in AP courses **must take the AP exam(s) in order to earn weighted credit**. The MCHS school board generally pays one-half of the test fees and additional fee assistance is available through the counseling office. **In addition, any student, who feels qualified, may take an AP exam without taking the course but will pay the full exam fee.** More information is available through the counseling office and the College Board website: <https://apstudent.collegeboard.org>

VIRTUAL VIRGINIA ONLINE LEARNING- VDOE

Virginia Virtual Advanced Placement School provides a variety of on-line college-level courses, enabling Virginia students to earn college credit. Each AP course is weighted provided that the student takes the AP exam. **Registration for any Virtual Virginia course must be made by August 1st, 2019. There is no late registration for second semester.** www.virtualvirginia.org.

Grades: 10-12

1 Credit

PREREQUISITE: A cumulative **GPA of 3.8** and a high school level course in the subject is required before taking the AP course.

Virtual Virginia offers advanced placement courses (AP), world languages, and elective courses for students across the state. The courses utilize video segments, audio clips, whiteboard and online discussions, as well as text lessons. Teachers are available for telephone conversations with students during office hours. Courses can be scheduled flexibly throughout the day as courses do not have to be taken in "real" time.

These courses are designed for students who can work independently with minimum supervision, have good time management skills, and a desire to learn. A successful online student can stay on task and maintain a regular schedule of logging on and keeping up with the readings and course assignments. Additional time may be required beyond the time spent in the classroom. AP courses are college-level and require the ability to work at this level. If a student qualifies for the Early College Scholar Program, then there is no charge for the Virtual Virginia Courses. Some of the available online courses are:

AP Biology	4370	AP Micro Economics	2802
AP Chemistry	4470	AP Physics B	4570
AP European History	2399	AP Psychology	2902
AP Government – Comparative	2450	AP Spanish Language	5570
AP Government – US	2445	AP U.S. History	2319
AP Human Geography	2212	AP World History	2380

***A student enrolled in a Virtual Virginia course who drops the course after 21 calendar days is responsible for the \$75.00 fee charged by Virtual Virginia.**

COURSES TAKEN OFF-CAMPUS

In unique situations, students may have permission to enroll in community college courses through the joint enrollment program or online courses through an approved VDOE online provider. These courses are not considered dual enrollment courses and therefore are not weighted. The following procedures and permissions are required:

1. Meet with high school counselor to discuss intended course(s)
2. Receive administrative approval
3. Meet with Career Coach to understand the registration process (There is no tuition/fee assistance)
4. Student is responsible for turning in a copy of course registration
5. Student is responsible for turning in a transcript of final grades

BLUE RIDGE VIRTUAL GOVERNOR’S SCHOOL (BRVGS)

The Blue Ridge Virtual Governor’s School (BRVGS) is an academic year governor’s school that provides a challenging and differentiated program of studies in core academic subjects, emphasizing mathematics, science, and technology. The program utilizes interactive technology, field trips, student collaboration and team teaching to create a regional community of learners from the counties of Fluvanna, Goochland, Greene, Louisa, Madison, Nelson, and Orange. The aim of the program is to provide students with instruction in those skills necessary for success beyond high school, and to give individual students both responsibility and freedom in their learning endeavors.

The admissions process for BRVGS is handled at William Wetsel Middle School and the MCPS district office. Students and parents of rising 8th graders are notified of the applications process in the fall, and information meetings are held at WWMS. Each year, applications will go out in October and are due back in mid-December. Applicants take standardized tests of ability and achievement, write a timed essay and participate in an interview process.

As part of the application process, students must provide the following:

- Recommendations from current or past teachers of Math and Science
- A recommendation from one other adult who is not related to the student

In addition, applicants to BRVGS take standardized tests of ability and achievement, write a timed essay, and participate in an interview process. Each applicant is scored on the basis of all of these components. Each BRVGS school is limited to 18 acceptances per year for incoming freshmen. Ninth graders may apply to be accepted into the program in 10th grade providing their school has an open slot.

GOVERNOR’S EARLY COLLEGE SCHOLARS PROGRAM

This program encourages juniors and seniors who are interested in accelerating their coursework to earn college credit while still in high school. To qualify, a student must:

- 1] Have a “B” average or better and
- 2] Be on track for an Advanced Studies Diploma and
- 3] Have potential to earn at least fifteen transferrable college credits through Advanced Placement courses and/or Dual Enrollment Courses
- 4] Complete a signed contract

The Early College Scholar agreement form can be obtained from the School Counseling Office or at:

http://www.doe.virginia.gov/instruction/graduation/early_college_scholars/

CAREER AND COLLEGE READINESS TESTING ASSESSMENTS

MCHS provides the following standardized tests to help prepare students for college entrance exams and military careers. These exams/tests are given during the school day at MCHS.

1. PSAT – This test is for college bound juniors. Students are responsible for the cost of the exam (approx. \$16.00). The test is given nationally in mid-October.
2. PSAT 10 – This test is given to all tenth graders and paid for by the School Board. The purpose of the test is to prepare students for the PSAT and SAT and to provide data used for curriculum improvement.
3. ASVAB – The Armed Services Vocational Aptitude Battery is a career oriented test providing practical information to students on their vocational skills and ability. It is also used as a benchmark for students interested in joining the military. The test is free.
4. VPT – The Virginia Placement Test is given at MCHS to students who plan to enroll in dual enrollment courses for the next school year. This test is free.

The Path to Industry Certification: High School Industry Credentialing

Student Industry Credentials

The 2012 General Assembly passed, and the Governor signed into law, HB 1061 and SB 489, to strengthen postsecondary education and workplace readiness opportunities for all students. The legislation says, in part:

“Beginning with first-time ninth grade students in the 2013-2014 school year, requirements for the standard diploma shall include a requirement to earn a career and technical education credential that has been approved by the Board, that could include, but not be limited to, the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness skills assessment.”

How Credentials Work for Student-Selected Verified Credit

The board annually reviews and approves industry, professional or trade association certification examinations and occupational competency assessments that will meet the student-selected verified credit requirements as well as to earn the board’s Career and Technical Education seal and Advanced Mathematics and Technology seal. Students who earn a credential by passing a certification or licensure examination may earn up to two student-selected verified credits to meet graduation requirements.

Criteria for Awarding Student-Selected Verified Credit: Student-selected verified credit will be awarded for certification or licensure examinations that meet all of the following criteria:

- Industry certification or licensure examinations that are approved to satisfy the requirements for the Board of Education’s Career and Technical Education Seal or the Board of Education’s Seal of Advanced Mathematics and Technology will satisfy requirements for student-selected verified credits.
- The teacher and/or the career and technical education program must be certified by the issuing organization relative to the industry certification or license.
- A standard credit may not be verified more than once.

Earning Student-Selected Verified Credit: One student-selected verified credit may be awarded for passing each certification or licensure examination that meets all of the above criteria and the student earns one standard unit of credit only in the career and technical education concentration or specialization.

Two student-selected verified credits may be awarded for passing each certification or licensure examination that meets all of the above criteria; and

- The student meets the career and technical education concentration or specialization course requirements for program completion.
- The student earns at least two standard units of credit in the career and technical education concentration or specialization.
- The student may substitute one of these verified credits for a verified credit in either science or history/social science.

In addition to providing student-selected verified credit(s) and adding value to a student's résumé for obtaining entry-level positions in today's technical job market, credentials provide the following benefits to students:

- added value to a transcript for higher education purposes or obtaining an entry-level position in the technical job market;
- evidence that the student has completed advanced educational preparation by verifying competency in career and technical education skill areas in demand by business and industry;
- increased job opportunities for advancement in a chosen career path; and
- enhanced self-esteem for students through achieving national occupational competency standards recognized by business and industry.

MADISON EARLY COLLEGE PROGRAM THROUGH GERMANNA COMMUNITY COLLEGE (GCC)

The Early College Pathway is an academic advancement plan in alignment with House Bill 1184 in which high school students can earn a General Studies Associate Degree (62 credits) or a General Education Certificate (33 credits) concurrently. The Early College curriculum includes a distribution of general education courses, which are usually required in the first two years of many baccalaureate programs.

Credit awarded for applicable dual enrollment courses, joint enrollment college courses taken on campus, Advanced Placement courses with qualifying exam scores of three or higher, or qualifying International Baccalaureate scores may be applied toward attainment of the aforementioned credentials. Early College students can take full advantage of Germanna's tutoring, library resources, advising and other support services.

The Early College Program varies among school districts, depending on their Dual Enrollment/Advanced Placement/International Baccalaureate offerings. Students interested in the pathway are encouraged to speak with a school counselor at their high school or contact an academic counselor at GCC for additional information. Students must follow the *Steps for Admission for GCC's Early College* and are required to complete an **Early College Orientation** session on campus at GCC prior to enrollment. The curriculum begins with on campus courses in the summer prior to junior year.

PARTICIPATION REQUIREMENTS

The Madison Early College Program offers college level coursework and the work-load is more demanding than similarly titled high school courses. Participating students will take most of their college courses at Madison County High School. Course delivery will be traditional, blended, or possibly online courses at MCHS. Students should set realistic academic goals for themselves, and not assume that previous high school success will immediately translate to college success. All students must maintain a minimum of a C in each class in order to continue in the program. Failure to earn a C or better could result in a student not earning the requisite number of credits.

The program is restricted by GCC to high school juniors and seniors who demonstrate a readiness for college coursework. Students who place into developmental courses are not eligible to participate in the Madison Early College Program. Both partners, Madison County High School and Germanna Community College, will take appropriate steps to assess the academic potential and readiness of each applicant to the Madison Scholars Program. The college will use its established institutional policies, the applicant's disciplinary standing with Madison County High School to determine their readiness for the program.

Before entering the program, students should have successfully completed Algebra II, or higher math, at the high school. Applicants must be in good disciplinary standing at their high school and should have the strong reading and writing skills, necessary for the rigor of college level courses. Before becoming full participants in the program, students must take the Virginia Placement Test (VPT) in *reading*, *writing*, and *math* and are required to achieve a score qualifying them to enroll in Pre-Calculus and college level English composition courses. Applicants may qualify for a waiver of the VPT if they meet the college's waiver criteria. Once the student has completed testing and meets the requisite test scores, the college requires they complete the *Madison Scholars Permission to Enroll Form*. All program participants then, must enroll in Pre-Calculus in their first semester of the program.

In the event that a student, or students, needs to leave the program, Madison County High School should contact the Coordinator of Dual Enrollment at Germanna Community College, as soon as possible. Dependent upon the reasons necessitating a student's departure from the program, the Dual Enrollment Coordinator will supply the Dual Enrollment Liaison at the high school with all requisite forms to withdraw the student from classes. Reasons for exiting the program include but, are not limited to, failure to maintain good academic standing, disciplinary reasons, voluntary withdrawal, or other mitigating circumstances. Efforts to withdraw students from the program necessitate close cooperation between Madison County High School and Germanna Community College.

Prospective Early College students are strongly urged to acquaint themselves with the requirements of the college or university to which transfer is contemplated and to consult with an advisor at the four- year institution for further transfer assistance prior to entering the Early College Pathway. Each four-year college or university will make its own determination regarding the transfer status of Early College students.

The following is the tentative pathway for a qualifying Madison County High School student to complete the Germanna Community College Associate of arts and Science Degree in General Studies concurrent with high school graduation requirements. This table suggests the sequence of courses which are dependent on the availability of instructors and student enrollment. This program can only be offered if there is an adequate number of students enrolled in the program.

Semester I – Junior Year Pathway	Semester II – Junior Year Pathway	
Student Development (1)	Pre-Calculus I & II (6)	
Intro to Computer Applications (3)	US Gov't I & II (6)	
College Comp I & II (6)	Intro to HUM 100 (3) <i>plus Econ & Pers Finance</i>	
US History I & II (6)	<i>HS Science</i>	
<i>HS Elective or Foreign Language</i>		
	Semester II – Senior Year	
Semester I – Senior Year	Math Pathway	Liberal Arts Pathway
English Lit I & II (6)	Adv Composition (3)	Adv Composition (3)
Chem I (4)	Chem II (4)	Chem II (4)
Statistics (3)	Prin of Sociology (3)	Prin of Sociology (3)
Intro to Communication (3)	Physical Education (2)	Physical Education (2)
<i>HS Elective</i>	Calculus I (4)	Intro to Bus (3)
	<i>HS Elective</i>	<i>HS Elective</i>

COURSE LOAD

All students are expected to carry the normal load of classes required to meet the minimum standards necessary for graduation. Exceptions may be made for some students whose program of study includes an off-site placement. Students may leave school early on a daily basis only if they have enrolled in:

1. A work based learning co-op program that awards high school credit through the MCHS Career and Technical Education department; or
2. A program for special needs students that includes job skills and work experience; or
3. A post-secondary course/program not offered at MCHS.

SENIOR YEAR OPTIONS

Option 1] **Full time student** enrolled in eight (8) courses

Option 2] **Early release (work based learning-co-op) student**

Student can leave 3rd or 4th block based upon meeting graduation requirements which includes verified credits (SOLs)

- 1] Must have a job that meets the work based learning/co-op criteria and
- 2] Must enroll in an approved work based learning program at MCHS through the Career and Technical Education department
 - a] Student meets the work based learning requirements
 - b] Student earns one (1) credit for working **both** semesters (verified by turning in necessary work based learning requirements)
 - c] If a student fails WBL the first semester, they will not be enrolled in WBL for the second semester and will be given a full day's schedule

NOTE: If student does not have a job by the first day of school, then the early release privilege is revoked and student will attend school for four (4) blocks.

Option 3] **Joint Enrollment with Germanna Community College or Piedmont Virginia Community College**

This option is for students* who are on track for high school graduation with either a Standard or Advanced Studies diploma by the beginning of their senior year or at the second semester of the senior year.

- 1] The following required high school senior-year courses **may be** completed at the community college.
 - ☐ **English 12** taken at a community college requires English Composition 111 and 112
 - ☐ **Government** taken at a community college requires US Government I 211 and US Government II 212 or American National Politics 135 and State & Local Politics 136
 - ☐ Other courses are considered on an individual basis **OR**
- 2] If you have completed all of your high school requirements, you may enroll in any appropriate college or career credited program as a full time^o student. **The following steps must be completed prior to the beginning of anticipated enrollment at the community college.** The student is responsible for adhering to the college's deadlines.
 - ☐ Credit check with the School Counselor which includes verified credits
 - ☐ Meet the age requirement set by the division office
 - ☐ Complete on-line college application
 - ☐ **TAKE the VIRGINIA PLACEMENT TEST and make score cut** to take college level courses
 - ☐ Approval by School Counselor and Principal
 - ☐ Student must present proof of college registration schedule to the School Counselor **before the college term begins** (MCHS does not assist with tuition)
 - ☐ Student is responsible for providing official verification of his or her community college grades so high school credit can be awarded.

*A student is expected to be a full time student at the community college.

^oFull time status is defined as enrolled in and completing a minimum of three (3) courses per semester (a total of 12+ credit hours).

SAMPLE SCHEDULE FOR SENIORS-Option #2

Block	First Semester	Second Semester
1	Elective/Graduation Requirement	English 12
2	VA/US Government	Elective/Graduation Requirement
3	Leave for work (WBL Program)	Leave for Work (WBL Program)
4		

Option 5] **January Graduation (Please contact a School Counselor or Administrator for more information)**

JUNIOR YEAR OPTIONS

Option 1] Full time student enrolled in eight (8) courses or

Option 2] **Early release (work based learning-co-op) student**

Student can leave 4th block based on being on track for graduation which includes verified credits (SOLs)

- 1] Must have a job that meets the work based learning/co-op criteria and
- 2] Must enroll in an approved work based learning program at MCHS through the Career and Technical Education department
 - a] Student meets work based learning requirements
 - b] Student earns one (1) credit for working **both** semesters (verified by turning in necessary work based learning requirements)
 - c] If a student fails WBL the first semester, they will not be enrolled in WBL for the second semester and will be given a full day's schedule

NOTE: If student does not have a job by the first day of school, then the early release privilege is revoked and student will attend school for four (4) blocks each semester.

Sample Schedule for Juniors-Option #2

Block	First Semester	Second Semester
1	Elective	English 11
2	VA/U.S. History	Science
3	Math	Econ & Personal Finance
4	Leave for Work (WBL)	Leave for Work (WBL)

Sample 4-Year Plans

Standard	Advanced Studies
English 9 Algebra Part 1 Algebra Part 2 Earth Science World History I H/PE I 2 Electives	English 9 Algebra I Earth Science (Biology if Earth Science credit was earned in 8 th grade) World History I Foreign Language I H/PE I 2 Electives
English 10 Geometry Part 1 Geometry Part 2 Biology H/PE II Foreign Lang/Art/Music/CTE 2 Electives	English 10 Geometry Biology or Chemistry World History II Foreign Language II H/PE II 2 Electives
English 11 Alg Functions & Data Analysis Chemistry or Environmental Sci. VA/U.S. History Econ & Personal Finance 3 Electives	English 11 Algebra II AP Bio or Chemistry or Anat & Phys VA/U.S. History Foreign Language III Econ & Personal Finance 2 Electives
English 12 VA/U.S. Government Algebra II Env. Sci /Chem/Bio II (Opt.) 4-6 Electives	English 12 Trigonometry Physics VA/U.S. Government Foreign Language IV 3 Electives
Minimum 22 Credits and Industry Certification	Minimum 26 Credits

Workplace Readiness Skills for the Commonwealth

Needs Identified by Virginia Employers

Personal Qualities and People Skills

1. **POSITIVE WORK ETHIC:** Comes to work every day on time, is willing to take direction, and is motivated to accomplish the task at hand
2. **INTEGRITY:** Abides by workplace policies and laws and demonstrates honesty and reliability
3. **TEAMWORK:** Contributes to the success of the team, assists others, and requests help when needed
4. **SELF-REPRESENTATION:** Dresses appropriately and uses language and manners suitable for the workplace
5. **DIVERSITY AWARENESS:** Works well with all customers and coworkers
6. **CONFLICT RESOLUTION:** Negotiates diplomatic solutions to interpersonal and workplace issues
7. **CREATIVITY AND RESOURCEFULNESS:** Contributes new ideas and works with initiative

Professional Knowledge and Skills

8. **SPEAKING AND LISTENING:** Follows directions and communicates effectively with customers and fellow employees
9. **READING AND WRITING:** Reads and interprets workplace documents and writes clearly
10. **CRITICAL THINKING AND PROBLEM SOLVING:** Analyzes and resolves problems that arise in completing assigned tasks
11. **HEALTH AND SAFETY:** Follows safety guidelines and manages personal health
12. **ORGANIZATIONS, SYSTEMS, AND CLIMATES:** Identifies “big picture” issues and his or her role in fulfilling the mission of the workplace
13. **LIFELONG LEARNING:** Continually acquires new industry-related information and improves professional skills
14. **JOB ACQUISITION AND ADVANCEMENT:** Prepares to apply for a job and to seek promotion
15. **TIME, TASK, AND RESOURCE MANAGEMENT:** Organizes and implements a productive plan of work
16. **MATHEMATICS:** Uses mathematical reasoning to accomplish tasks
17. **CUSTOMER SERVICE:** Identifies and addresses the needs of all customers, providing helpful, courteous, and knowledgeable service

Technology Knowledge and Skills

18. **JOB-SPECIFIC TECHNOLOGIES:** Selects and safely uses technological resources to accomplish work responsibilities in a productive manner
19. **INFORMATION TECHNOLOGY:** Uses computers, file management techniques, and software/programs effectively
20. **INTERNET USE AND SECURITY:** Uses the Internet appropriately for work
21. **TELECOMMUNICATIONS:** Selects and uses appropriate devices, services, and applications





MCHS uses a web-based post-secondary planning tool for students. The Naviance Succeed program guides students through career and college preparation. Students will identify career choices based on four career assessments and see exactly which skills, abilities, and knowledge areas are required to succeed in their chosen field. Students will explore careers and career clusters based on the Holland code to identify careers that match their strengths and areas of interest. High school students will continue developing their Academic Career Plans started in the middle school.

Academic and Career Planning (ACP)

Career Exploration tools and assessments help students learn about themselves and link their personality type and interests with different careers. In the process, students gain a clear understanding of the academic preparation required to pursue careers that are likely to be fulfilling for them. Careers are formally explored through Advisory classes and classroom guidance.

Who Am I?

- What am I interested in?
- What is important to me?
- What do I like to do?

Where am I going?

- What kind of work fits who I am?
- What level of education or training after high school do I need for the work I want to do?

How do I get there?

- What schools/programs offer the skills and knowledge I need?
- How do I apply to college?
- How do I find the resources to help pay for college?

College Planning & Application Process

College searches, applications, recommendations, scholarships and enrichment programs are managed from one location. Naviance provides our students and families with access to comprehensive information about thousands of colleges as well as a College Match service.

The school counseling office manages, prepares, and sends recommendations and transcripts electronically which allows for documents to arrive in a timely manner. Seniors are responsible for using Naviance to request transcripts for college applications.


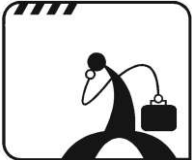

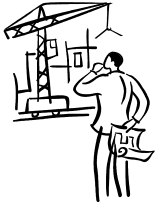

The login page for Naviance can be found at: <http://connection.naviance.com/madisonch>

CAREER PROGRAM OF STUDIES AT MCHS

This section covers the career areas representing workplace fields that are offered at the high school. These areas offer challenging academic preparation and workplace readiness. Students are able to move among areas as interests and goals change. Entering ninth graders are especially encouraged to think about a career path and high school courses that are relevant in preparing for his or her chosen career pathway

Academic & Career Planning (ACP) begins in the seventh grade and continues throughout high school. Components of the ACP are:

- Selecting postsecondary career pathway based on the student's academic and career interests,
- Aligning student's program of study for high school graduation with a post-secondary career pathway, and/or college entrance,
- Review ACP with student and parent

Agriculture & Natural Resources Agriculture, Food Science & Preparation, Natural Resource Management, Environmental Services 	Business & Marketing Management, Business Administration, Finance, Marketing, Sales & Services, Information Technology 	Communications, Arts, & Media Visual Arts, Performing Arts, Information Technology, Publishing & Broadcasting 	Engineering, Trade, & Technical Architecture & Construction, Science –Technology - Engineering – Math, Manufacturing, Design, Planning, Building 	Health & Human Services Education & Training, Health Science, Human Services, Hospitality & Tourism 
Agronomist Animal Breeder Animal Caretaker Animal Scientist Botanist Butcher/Meat Cutter Conservation Scientist County Ag Agent Crop Farmer Dairy Farmer Environmental Engineer Extension Service Farm Manager Forester Horticulturist Landscape Livestock Farmer Marine Biologist Nursery Worker Pest Controller Poultry Farmer Rancher Sanitation Inspector Soil Conservationist Tree Surgeon	Accountant Bank Teller Bookkeeper Buyer Computer Programmer Data Processing Economist Manager Financial Manager Insurance Claims Examiner Legal Assistant Loan Officer Medical Records Network Technician Office Manager Paralegal Purchasing Agent Real Estate Agent Sales Associate Shipping & Receiving Clerk Trade Analyst Travel & Tourism Web Master	Actor/Actress Advertising Executive Architect Artist Commercial Artist Costume Designer Curator Decorator Designer Editor Fashion Designer Film Developer Graphic Artist Illustrator Musician Newscaster Producer Public Relations Specialist Publisher Reporter Radio/TV Announcer Researcher Teacher Technical Writer Writer	Air Traffic Controller Aerospace Engineer Automotive Repair Biomedical Engineer Builder Carpenter Chemical Engineer Computer Repairer Computer Engineer Diagnostic Technician Drafter Electrical Engineer Farm Equipment Geologist HVAC Mechanics Locksmith Manager Machinist Mathematician Mechanic Mechanical Engineer Millwright Safety Inspector Small Engine Mechanic Surveyor	Barber Biomedical Technician Chef Child-care Provider Correctional Officer Cosmetologist Dietician Emergency Medical Flight Attendant Food Service Hygienist Technician Health Service Worker Home Health Aide Medical Assistant Medical Records Tech Nurse Physician Physical Therapist Psychologist Radiologic Technician Social Worker Speech Therapist Teacher Veterinarian

Agriculture & Natural Resources	Business & Marketing	Communications, Arts, & Media	Engineering, Trade, & Technical	Health & Human Services
<input type="checkbox"/> Ag Plants <input type="checkbox"/> Ag Livestock <input type="checkbox"/> Small Engine Repair <input type="checkbox"/> Agriculture-Prod <input type="checkbox"/> Horticulture <input type="checkbox"/> WBL	<input type="checkbox"/> Principles of Bus & Marketing <input type="checkbox"/> Marketing-Business WBL <input type="checkbox"/> Econ & Personal Finance <input type="checkbox"/> Computer Info Systems <input type="checkbox"/> Advanced CIS <input type="checkbox"/> Adv. Desktop Multimedia <input type="checkbox"/> Business Law <input type="checkbox"/> DE Business 100 <input type="checkbox"/> WBL	<input type="checkbox"/> Creative Writing I & II <input type="checkbox"/> Yearbook <input type="checkbox"/> Newspaper <input type="checkbox"/> Drama I & II <input type="checkbox"/> Spanish I – VI <input type="checkbox"/> French I – VI <input type="checkbox"/> Adv. Desktop Multimedia <input type="checkbox"/> Band <input type="checkbox"/> Choir <input type="checkbox"/> Art I – IV <input type="checkbox"/> Computer Info Systems <input type="checkbox"/> Adv. Computer Info <input type="checkbox"/> WBL	<input type="checkbox"/> Building Trades I <input type="checkbox"/> Building Trades IIA <input type="checkbox"/> Building Trades IIB <input type="checkbox"/> Technical Drawing & Design <input type="checkbox"/> 3D Modeling <input type="checkbox"/> Architecture & Civil Eng. <input type="checkbox"/> Engineering Drawing & Design <input type="checkbox"/> Advanced Drawing & Design <input type="checkbox"/> WBL	<input type="checkbox"/> Life Planning <input type="checkbox"/> Nutrition & Wellness <input type="checkbox"/> Teachers for Tomorrow <input type="checkbox"/> Service Learning <input type="checkbox"/> Intro to Health & Medical Science <input type="checkbox"/> Nursing I & II <input type="checkbox"/> Cosmetology <input type="checkbox"/> Barbering <input type="checkbox"/> WBL

Suggested additional courses that complement the career cluster

<input type="checkbox"/> Algebra II and higher <input type="checkbox"/> Chemistry <input type="checkbox"/> Biology II <input type="checkbox"/> Environmental Science <input type="checkbox"/> Econ & Personal Finance <input type="checkbox"/> Principles of Bus & Marketing <input type="checkbox"/> Business Law <input type="checkbox"/> Nutrition & Wellness <input type="checkbox"/> World Language	<input type="checkbox"/> Algebra II and higher <input type="checkbox"/> Chemistry <input type="checkbox"/> Physics <input type="checkbox"/> World Language <input type="checkbox"/> Psychology	<input type="checkbox"/> Algebra II and higher <input type="checkbox"/> Chemistry <input type="checkbox"/> Biology II <input type="checkbox"/> Environmental Science <input type="checkbox"/> Econ & Personal Finance <input type="checkbox"/> Psychology	<input type="checkbox"/> Algebra II and higher <input type="checkbox"/> Physics <input type="checkbox"/> Chemistry <input type="checkbox"/> Environmental Science <input type="checkbox"/> Econ & Personal Finance <input type="checkbox"/> Principles of Bus & Marketing <input type="checkbox"/> Computer Info Systems <input type="checkbox"/> World Language	<input type="checkbox"/> Algebra II and higher <input type="checkbox"/> Chemistry, <input type="checkbox"/> Biology II <input type="checkbox"/> Econ & Personal Finance <input type="checkbox"/> World Language <input type="checkbox"/> Advanced Physical Ed <input type="checkbox"/> Speech <input type="checkbox"/> Principles of Business
--	--	--	---	--

SUMMER SCHOOL-SOL REMEDIATION AND CREDIT RECOVERY

Summer school courses for the 2019-2020 school year are offered for **credit recovery** only and based on funding, student numbers, and availability of faculty. Possible course offerings for students needing to recover a credit are English 9, 10, 11, Algebra I and Geometry. SOL summer school **remediation offerings will be based on teacher availability**.

Health/Physical Education will be offered to rising ninth graders and other students during summer school for a fee. Driver's Education is also available as an online course. There is a fee charged.

SOL Remediation in Algebra I, Geometry, Biology, World History I, US History, English Reading, and English Writing is offered in the summer. Students are expected to take at least 20 hours of remediation (two weeks) before retesting. There is no fee for SOL remediation. **SOL remediation offerings will be based on teacher availability**.

REPEATING A COURSE

Students wishing to repeat a course for a better grade must do so before the next course in the sequence is taken. (Example: Spanish II must be repeated before Spanish III is taken.) When a course is repeated, only the better of the two grades will be used in calculating the GPA, although both attempts will be on the transcript.

SPECIAL EDUCATION

The services and placement of student with disabilities are determined by the student's Individualized Education Plan (IEP) and the IEP team. Services are specialized and designed to meet individualized needs through accommodations, modifications, curriculum adaptations, and delivery of instruction to meet the student's IEP. Placement is based on the least restrictive environment that can be a self-contained setting, a general education classroom or a combination.

HOMEBOUND INSTRUCTION

A student who suffers from a medical condition that prevents him or her from attending school may request homebound instruction from the Madison County School Board. Homebound instruction may be requested if the absence from school will be for two weeks or more. A physician must sign the required form stating that homebound instruction is necessary and appropriate, and specify the length of homebound time. Adjustments may be made to the student's schedule due to limitations of the course content being taught outside of the classroom.

AUDIT POLICY

Students seeking an audit for a class must meet with their Counselor to discuss the request and the audit process.

- 1] Student must request the audit by the end of the first interim (4.5 weeks) grading period
- 2] Student must make the request for audit through the teacher; the teacher will forward information to the Counselor and Administrator
- 3] Counselor, administrator, teacher and student will meet to discuss the audit request
- 4] Audit is not granted until the end of the course; the student remains in the course and must complete assignments to the best of ability, maintain good attendance, and maintain good behavior

Audit status is granted at the end of the course as long as the student meets guidelines and other expectations as outlined by the teacher, counselor, and administrator.

PROMOTIONS

Student promotions are made in January and June after final grades are received. The following criteria will be used to determine eligibility for promotion:

-9th grade to 10th grades: Six credits including one (1) for English 9 and 1 verified (passing a science, history, or math class and the corresponding SOL test)

-10th grade to 11th grade: Thirteen credits including one (1) for English 10 and 3 verified credits (passing 1 science, 1 history, and 1 math class and the corresponding SOL tests)

-11th grade to 12th grade: Credits and required courses sufficient to be a candidate for graduation-16 credits at minimum with 3 English credits and 4 verified credits (including at least passing 1 science, 1 English, 1 history, and 1 math class and the corresponding SOL tests)

VIRGINIA HIGH SCHOOL LEAGUE ELIGIBILITY (VHSL)

In order to be eligible to participate in the VHSL inter-scholastic activities, a student must meet **all** of the following criteria:

- A] Student must have taken, passed, and received credit for at least three courses from the previous semester and
- B] Student must be enrolled in at least three courses* for credit during the current semester and if participating in athletics
- C] Student must submit a completed Athletic Participation/Parent Consent/Physical Examination Form+. This form must be submitted each school year and permits the student to participate for the entire school year.

Students are responsible for maintaining their academic eligibility.

*Previously passed courses that are being repeated for a better grade do NOT count toward eligibility.

+NOTE: Students will not be allowed to practice or play if the Athletic Director does not have this form on file.

ATHLETIC OFFERINGS

Madison County High School is a Level A member of the Virginia High School League (VHSL) and a member of the Bull Run District. Madison participates interscholastically with high schools in the district and with schools of other districts and levels. Currently, the following sports are available for eligible students:

Fall

Football
Cross Country
Cheerleading
Golf (Varsity Team only)
Volleyball

Winter

Girls Basketball
Boys Basketball
Wrestling
Swimming & Diving

Spring

Softball
Baseball
Girls and Boys Track
Girls and Boys Soccer



ADDITIONAL VHSL ACTIVITIES

Creative Writing
Drama
Film Festival
Forensics
Literary Magazine (*Scream*)
Newspaper (*The Mountaineer*)
Yearbook (*MAHI*)



HOMEWORK

Homework is designed to reinforce in-class learning and can be assigned regularly in any course. Homework serves several purposes:

- 1] Practice of a skill for mastery
- 2] Extend what has been learned by connecting a concept to real life
- 3] Preparation for an upcoming lesson or unit
- 4] Create a project/report over an extended period of time

Students have a responsibility to give the assignment their best effort. Individual teachers define homework content, grades, deadlines, and other requirements.

GRADE POINT AVERAGE (GPA) CALCULATION

The final grade for each course is a letter grade. This letter grade is assigned a point value that is used in computing a student's grade point average. The total number of points earned divided by the total number of courses taken determines the GPA. The grades of WP (withdraw-pass) and WF (withdraw-fail) are not used in calculating the GPA.

Additionally, courses that receive a P (pass) for a grade are not figured into the GPA. For any course that a student repeats, the better of the two grades will be used in calculating the GPA. Students receiving an incomplete grade for the nine weeks grading period and/or semester grade have one week to contact the teacher to arrange for make-up work.

Marking System

A+ = 100 - 99	B+ = 89 - 87	C+ = 79 - 77	D+ = 69 - 68	F = 64 - 0
A = 98 - 93	B = 86 - 83	C = 76 - 73	D = 67 - 66	
A - = 92 - 90	B - = 82 - 80	C - = 72 - 70	D - = 65	

Letter grades are converted to the following numerical values:

GPA Computation

A+ = 4.3 (5.3)*	B+ = 3.3 (4.3)	C+ = 2.3 (3.3)	D+ = 1.3	F = 0
A = 4.0 (5.0)	B = 3.0 (4.0)	C = 2.0 (3.0)	D = 1.0	I = Incomplete**
A - = 3.7 (4.7)	B - = 2.7 (3.7)	C - = 1.7 (2.7)	D - = 0.7	

*For **weighted classes**, letter grades of C – or higher are assigned either an additional point or half-point depending on the level of class. Honors, Dual Enrollment, Advanced Placement and upper level mathematics, sciences, and world languages are weighted courses. **Students taking AP Courses must take the AP exam to earn the weighted credit.** Students in DE courses must pass with at least a C to receive weighted credit. Courses receiving a full-point of weighting are designated with a superscript W following the course number. Courses receiving a half-point weighting are designated with a superscript HW.

****Incompletes** are awarded due to extended illness or other legitimate factors that prevent the student from completing their work before grades are due. Incompletes must be remedied by the interim period of the next marking period.

Class rank is determined using the student's GPA and comparing it to the GPA's of all other students in that grade level.

Progress Reports are issued at the midpoint day of each nine (9) weeks to inform parents and students of their current academic status in each class. Parents are asked to review the report and contact the teacher with any concerns.

Report Cards are distributed to the student approximately five (5) school days after the end of the nine (9) weeks.

Parents may monitor their student's grades using **PowerSchool Parent Portal**.

Visit <https://madisoncounty.powerschool.com/public/home.html> to login.

Login information can be obtained from the Counseling Office or Main Office.

WEIGHTED COURSE POLICY





1. If a community college course replaces a graduation required course that is weighted, then the community college course will also be weighted in the student's MCHS GPA.
2. Any community college course or off campus online course that is not listed in the MCHS Course of Studies as a weighted course will not be weighted.

SCHEDULING PROCEDURES

Scheduling Procedures & Deadlines

- Students receive a Course of Studies, transcript and menu worksheet at class meetings
- Student reviews Course of Studies 2019-2020 with parent
- Complete menu worksheet
- **Students will have teachers recommend the next appropriate level in core classes and electives**
- Turn in grade/class menu form
- Course requests are entered in PowerSchool with Counselor/Administrative assistance
- Students receive a course request verification which they sign and return to 1st block teacher

Understandings:

-  Courses are planned based on student requests. Student schedule change requests are not always able to be accommodated and are based first on need for graduation.
-  Course offerings in this publication are subject to enrollment and staffing decisions. Any course can be cancelled at any time by administrative decision.
-  **Students/parents requests for specific teachers cannot be considered unless student previously failed same course with same teacher.**
-  A student may repeat a course previously passed with a grade of D+ or lower in order to strengthen academic skills. In the student's permanent record, the highest earned grade of the two will be averaged into the GPA. The lower grade will remain on the transcript. Only one credit toward graduation can be earned for each course.

SCHEDULE ISSUES

Due to the 4x4 schedule, it is imperative that students are in attendance from the first day of school. Changes after the 1st day of school will require administrative approval and meet one of the following criteria:

- 1] A required core course does not appear on the schedule.
- 2] A senior needs to adjust his or her schedule to meet graduation requirements.
- 3] A student failed a course and the course needs to be rescheduled.
- 4] A course has already been completed (passed)
- 5] Extenuating circumstances*
- 6] Requests must be made in writing by day 3 of the semester

*The following **are not** necessary reasons for a schedule change (this list is not exhaustive): requests to change teachers, specific period, lunch period, "change of mind", lack of motivation, failure to obtain tutorial support, or failing the course.

If a student must change his or her schedule due to extenuating circumstances, the student will consult with a counselor about the change then complete and return the Schedule Review Request Form with a parent/guardian signature. When a course is substituted in place of the dropped course, the student is responsible for making up all missed work.

NOTE: Administration reserves the right to make schedule changes that are in the best interest of the master schedule as in leveling classes.

Students in a SOL course may not be reclassified (i.e. from Algebra I to Algebra 1, Part 1) after the first week of the second marking period (Q2 or Q4).

After the first marking period of the semester, any student who drops a course, unless there are extenuating circumstances, will receive

a grade of WF (withdraw-fail). No credit will be awarded. The course and WF will appear on the transcript and be considered an attempted credit.

If a request for a schedule change is due to a concern with a specific classroom, the following procedure should be followed before a change will be considered:

- 1] Parent/Student requests a conference with the teacher to discuss concerns and to seek a resolution
- 2] If the above is not successful the parent/student requests a conference with the teacher and department chairperson to seek resolution
- 3] If the above does not resolve the issues/concerns, the parent/student may submit in writing details of the concerns and the remedy sought. Such a letter should be submitted to the administrator overseeing that specific department.

HOW TO READ A COURSE DESCRIPTION

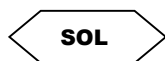
Course Number & Title: The course number is the state assigned number. This is followed by the title of the course. A superscript **W** or **HW** designates that the course is weighted.

Grade Level: The grade level indicates the most appropriate grade level for taking the course.

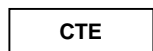
Credits: This shows the number of credits earned for the course. A credit is based on a minimum of 140 clock hours of instruction and successful completion of the requirements of the course.

Course Prerequisite: Prerequisites have been established to increase the student's probability of success in a course. Some courses require a prerequisite, co-requisite, or pre-approval, which may include but is not limited to:

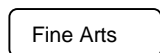
- successful completion of a previous sequential course
- specified grade point average (GPA)
- teacher recommendation, auditions or other specific requirements.



This course has an end-of-course Standard of Learning Test.



Designates a program that meets the Career & Technology Education requirement



Designates a program that meets the Fine Arts requirement

Instructional Grouping: All students should choose challenging classes that maximize their learning opportunities. Rigorous high school courses prepare students well for further education and successful careers. Considerations for placement include student grades, teacher recommendations, standardized assessments, and post-secondary and career goals.

Academic-These courses are designed for students to receive instruction to meet state approved curriculum standards.

Honors (H)-These courses are designed to meet state standards and include an emphasis on the use of research analysis and advanced writing skills. Students should expect rigorous course work that exceeds standard course requirements.

Advanced Placement (AP)-These courses are college preparatory classes. Students have the opportunity to receive college credit based on their AP exam score.

Dual Enrollment (DE)-These courses are college level courses in which students receive high school and college credit.

Core Courses: English, Mathematics, Science and Social Studies

Electives: Core departments offer some electives. The majority of electives are found in non-core departments. **All courses are not offered every year. Courses are offered based on sufficient number of student requests to justify offering the course.**

Flow Charts: Each core discipline has a suggested sequence of courses illustrated in flow charts. These charts present a basic pattern of progression from middle school courses through graduation.

Multiple Credit Courses: Students may take specified courses more than once for multiple credits over a period of years. For example: Band may be taken up to eight times for credit. Students are reminded that courses required for graduation take precedent over elective courses taken for multiple credits. The school division is required to ensure that student achievement expectations are raised as a student progresses through subsequent enrollments in the course.

WORK BASED LEARNING WITH CAREER AND TECHNICAL EDUCATION

MCHS offers various career and technical education (CTE) programs. CTE programs include agriculture education, business and marketing, health sciences, engineering, and family and consumer sciences. Students have the opportunity to pursue work based learning (WBL) experiences through cooperative education and student apprenticeships.

Work-based learning (WBL) is a school-coordinated, sequence of on-the-job experiences that are related to students' career goals and/ or interests. These job experiences are based on instructional preparation and are performed in partnership with local businesses, industries, or other organizations in the community.

Work-Based Learning Program offered at MCHS

Cooperative education is a career-preparation WBL method that combines CTE 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. Virginia students qualify for credit toward graduation for cooperative education experiences, and they normally work between 11 and 15 hours per week to achieve a minimum of 396 hours.

Criteria for Student Selection

1. The student must have passed the industry certification associated with the appropriate CTE sequence.
2. The student must have successfully completed a CTE sequence or be completing the sequence during the current school year.
3. The student must have a minimum overall GPA of 2.00.
4. The Junior year student applicant must have passed 3 SOL's and the Senior year applicant must have passed 5 SOL's.
5. The student must have the consent of a parent or guardian before participating in a WBL experience.
6. The student should have a satisfactory attendance record; it is recommended that the student not have been absent more than 7 days in the previous semester.
7. The student should have no honor code violations or suspension offense for the previous semester.
8. The student must have their own transportation to and from the job placement.
9. The student must submit a completed application to the counseling office which will then be reviewed by the CTE department for meeting the above criteria and the proof of employment.

Possible Pathways to WBL at MCHS

Listed below are the possible pathways that students can pursue through work based learning.

Marketing:

1. Principles of Business and Marketing (6115)
2. Marketing (8120)

Agriculture: (Recommended passing of Private Applicator Certification)

1. Intro to Plants (8007)
2. Horticultural Science (8034)

Business: (Recommended passing of MOS Certification)

1. Computer Information Systems (6612)
 2. Adv Computer Information Systems (6613) or Adv Design, Multimedia and Web Technologies (6631)
- OR
1. Principles of Business and Marketing (6115)
 2. Dual Enrollment Business 100 (6135DE)

Engineering:

1. Engineering Drawing and Design (8436)
 2. Architectural Drawing and Design (8437)
- OR
1. Engineering Drawing and Design (8436)
 2. Advanced Drawing and Design (8438)

Family and Consumer Science: (Recommended Passing of ParaPro Assessment for Teachers for Tomorrow)

1. Life Planning (8227)
 2. Nutrition and Wellness (8229)
- OR
1. Life Planning (8227)
 2. Teachers for Tomorrow (9062)

Health Sciences: (Recommended passing of State CNA Assessment)

1. Nursing Assistant 1 (8360)
2. Nursing Assistant 2 (8362)

Upon completion of one of the above course sequences, **Juniors** may enroll in **one** block of WBL education per semester. Student must have an approved job* and must report wages and hours for the required state report. There will be at a minimum quarterly visit to the work site and supervisor evaluation.

Upon completion of one of the above course sequences, **Seniors** may enroll in **one or two** blocks of WBL education per semester. Student must have an approved job* and must report wages and hours for the required state report. There will be at a minimum quarterly visit to the work site and supervisor evaluation.

*Job placements must be approved in advance by the content area teacher, the CTE department chair and a representative from the MCHS administrative team.

Students participating in WBL experiences accept the following responsibilities:

1. The student must demonstrate regular attendance at school *and* at the workplace.
2. If the student is absent from school, the student may not report for a workplace experience in the afternoon without the coordinator's permission.
3. The student must notify the training sponsor and school if he or she must be absent from a scheduled work experience.
4. The student must report hours and wages to their teacher each pay period.
5. The student is encouraged to become a member of the related career and technical student organization at the local, state, and national levels.
6. If a student fails WBL the first semester, he/she will be ineligible to continue in the WBL program for second semester and will be placed in a class at MCHS.

8007 INTRODUCTION TO PLANT SYSTEMS [Ag Plants]

Grades: 9-10

1 Credit

PREREQUISITE: None

Recommended Background: None

This course is designed to develop competencies in each of the major areas of the Plant Systems career pathway including applied botany, plant propagation, and plant care and selection. Students are also introduced to various divisions of the plant systems industry. Students learn agricultural mechanics applicable to plant systems. As with all agriculture courses, students will be exposed to the principles of leadership and opportunities within student organizations, along with Supervised Agricultural Experience opportunities

8008 INTRODUCTION TO ANIMAL SYSTEMS [Ag Livestock]

Grades: 10-12

1 Credit

PREREQUISITE: Agricultural Mechanics and Plant Science I

Recommended Background: None

Students develop competencies in each of the major areas of the Animal Systems career pathway including animal nutrition, reproduction, breeding, care, and management. Students learn agricultural mechanics applicable to animal systems. As with all agriculture courses, students will be exposed to principles of leadership and opportunities within student organizations along with Supervised Agricultural Experience opportunities.

8010 AGRICULTURAL PRODUCTION TECHNOLOGY

Grades 10-11

1 Credit

PREREQUISITE: 8008

Recommended Background: None

This course emphasizes areas of plant science, animal science, soil science, agriculture business management, and agricultural mechanization. Beef cattle farm establishment will be the livestock enterprise highlighted. Supervised occupational experience programs and leadership training are important parts of the course. Emphasis is placed on individualized instruction and supervised occupational experience programs.

8034 HORTICULTURE SCIENCES AND PRACTICES [Horticulture Science]

Grades: 10-12

1 Credit

PREREQUISITE: 8007

Recommended Background: None

Students develop the necessary knowledge, skills, habits, and attitudes for entry-level employment and advancement in areas such as floriculture, landscape design, greenhouse operation, nursery plant production, and turf management. They receive instruction in using soil and other plant-growing media and in identifying, propagating, and growing horticultural plants in the green house and land laboratory. Instruction is provided in safety practices and leadership development. *Small Engine Repair and Horticulture yearly offerings are based on the student requests for Introduction to Animal Systems and the total number of sections in the Agriculture program.*

8082 SMALL ENGINE REPAIR [Sm Engines]**Grades: 10-12****1 Credit****PREREQUISITE:** (8007, 8008, 8010, 8034)**Recommended Background:** Grade of C- or higher in previous Agriculture course and teacher recommendation

This course offers an intensive study of the operation, maintenance, and repair of small gasoline and diesel engines. Instructional topics include principles of operation of gasoline and diesel engines, tune-up and maintenance procedures, and disassembly, overhaul, and reassembly. Instruction may also include the operation of two cycle and four-cycle engines commonly found on lawn mowers, garden tractors, snow blowers, rotary tillers, chainsaws, and other equipment. The course emphasizes leadership activities and opportunities to participate in FFA functions. Completion of this course may prepare students for Outdoor Power Equipment Certification exams. If this exam is taken and passed, the student may be granted a student selected verified credit. *Small Engine Repair and Horticulture* yearly offerings are based on the student requests for Introduction to Animal Systems and the total number of sections in the Agriculture program.

Examples of Sequential Elective Options for Standard Diploma:	
Year 1	Year 2
Ag Plants	Horticulture
Ag Livestock	Ag Production Technology

Industry Credential in Agricultural Education

Private Applicator Certification

BLUE RIDGE VIRTUAL GOVERNOR'S SCHOOL (BRVGS)



2215BR and 2216BR Technology Through The Ages

Grade: 9

2 Credits

While the past, by definition, consists of data that nothing in the future can change, knowledge of the past is progressive and constantly being transformed and perfected. Students will study the history of our world through the eyes of historians, with a focus on the development, ethics and implications of technology. Students learn real-world skills of collaboration, time management, ethics, problem-solving, communication, research, writing and public presentation through project-based learning.

This course meets and exceeds the requirements set forth in the Virginia Standards of Learning for World History I and World History II. Students take SOLs in World History I and II to receive verified credits towards graduation.

4370BR BRVGS Advanced Placement Biology

Grade: 10

2 Credits

The Biotechnology Industry Organization (BIO) defines biotechnology to be 'the application of biological knowledge and techniques to develop products and services.' Today, our constantly-evolving understanding of DNA, cell function and our ability to manipulate their genetic content is being used in medicine, agriculture, criminal justice, the pharmaceutical industry and many other areas. This course offers the student an opportunity to experience the basics of microbiology, human genetics, biotechnology, and exploration of bioethical issues. Students continue to learn and practice college-readiness skills in multiple experiments and project.

This course meets and exceeds the requirements set forth for Advanced Placement Biology. Students in the course are required to take the AP Biology exam. Those who score a 3 or better on the AP Biology exam may receive up to 6 college credits (as determined by the college of attendance).

11th Grade: All BRVGS students must take at least ONE of the following online courses:

3184BR BRVGS Computer Science Spring 2020

Grade: 11

1 Credit

This is the “default” required course for BRVGS juniors and is offered:

- In the Fall semester for Fluvanna, Louisa and Nelson
- In the Spring semester for Orange and Madison
- Yearlong for Goochland and William Monroe

The course, taught directly by a BRVGS instructor through an online learning management system, is primarily focused on the central ideas of computing and computer science, instilling the ideas and practices of computational thinking and inviting students to understand how computing changes the world.

This rigorous course promotes the ability to navigate in an online course, deep learning of computational content, computational thinking skills, and creativity in the context of programming. Students may or may not be in a classroom with fellow BRVGS junior classmates, depending on local scheduling and supervision.

The course culminates in a team-based “design-and-build” project, in which teams of students identify a problem, solve that problem with a program of their own design, and market that program to the public.

This course may also be taken as a BRVGS elective.

3185P Advanced Placement Computer Science Principles - Yearlong 19-20

Grades: 11-12

1 Credit

This is a yearlong course, primarily focused on the “central ideas of computing and computer science”, taught by a non-BRVGS teacher from CodeHS, with a BRVGS staff member serving as the course “Coach”. It is very similar to BRVGS CSP, but is focused on the AP exam for Computer Science Principles, and contains a number of different (and more rigorous) lessons than the non-AP course. Students will participate in team-based projects as part of their BRVGS requirements for the course.

Students in the course are required to take the AP course exam. Those who score a 3 or better on the AP exam may receive up to 6 college credits (as determined by the college of attendance). Please see <https://codehs.com/info/curriculum/apcsp> for information from Code HS about the course.

This course may also be taken as a BRVGS elective.

3185BR BRVGS Advanced Placement Computer Science A - Yearlong 19-20

Grades: 11-12

1 Credit

This is a yearlong course, primarily focused on Java Programming. The course is taught by a non-BRVGS teacher from CodeHS, with a BRVGS staff member serving as the course “Coach”. It teaches the Java programming language. Students will participate in team-based projects as part of their BRVGS requirements for the course.

Students in the course are required to take the AP course exam. Those who score a 3 or better on the AP exam may receive up to 6 college credits (as determined by the college of attendance)

This course may also be taken as a BRVGS elective.

9628BR University of Virginia Explorations in Engineering (ENGR 1520) - Fall 2019

Grades: 11-12

1 Credit

Great engineering is sometimes referred to as ‘art that works’. This is because engineering, like art, requires innovation and creativity. But engineering creations, unlike art, must solve real problems and help our society meet new challenges.

This introductory college engineering course introduces students to the world of engineering, including the role of engineers in modern society, an overview of the various fields of engineering, and modern methods used by engineers to solve problems and meet new challenges. A key component of the course is a hands-on design-build project in which students work together in small teams to design and develop a solution to a case study problem. This activity will culminate in the demonstration of a prototype of the design solution. Students will explore the sources of inspiration, the methods engineers use to solve problems and the impact of engineering solutions.

This course may also be taken as a BRVGS elective.

8394BR University of Virginia Explorations in Health Care (PSHM 1010) - Fall 2019

Grades: 11-12

1 Credit

This course provides an introduction to health care and health care management literature; the structure and delivery systems of US healthcare; current challenges facing the system; and the scope of career opportunities in the health care field. Explores the educational requirements and job responsibilities of a wide range of health care providers. Additional topics include health care economics, insurance, health care research, health care policy and reform, and the Affordable Care Act. Through the use of online discussions, literature search assignments, and relevant projects, the course promotes the application of critical thinking and library research skills. This course may also be taken as a BRVGS elective.

1010BR University of Virginia Digital Technology & Communications (PSTS 1010) – Spring 2020

Grades: 11-12

1 Credit

Today's students will spend their adult lives in a multi-tasking, multifaceted, technology-driven, diverse and vibrant world. This course will give students an online experience so that they are able to do so. This course will emphasis on analyzing, accessing, managing, integrating, evaluating, and creating information in a variety of forms and media so that students will understand the role of media in society.

Communication skills will also be emphasized, so that students will understand, manage, and create effective oral, written, and multimedia communication in a variety of forms and contexts.

This course may also be taken as a BRVGS elective.

3192BR BRVGS Advanced Placement Statistics - Spring 2020

Grades: 11-12

1 Credit

This course presents an overview of statistics, including descriptive statistics, elementary probability, probability distribution, estimation, hypothesis testing, and correlation and regression. Students will learn and practice the skills of Statistics through online instruction and real-world, project-based problem solving.

Prerequisite: Students must have successfully completed Algebra II with a grade of "B-" or higher.

This course may also be taken as a BRVGS elective.

Please see the College Board full description of the course at: <https://apcentral.collegeboard.org/pdf/ap-statistics-course-description.pdf?course=ap-statistics>

0128BR BRVGS Senior Project

Grade: 12

1 Credit

The overall purpose of the senior internship is for students to make an in-depth exploration of their individual interests and talents, and to find a meaningful way to explore connections between "real world" experience, research and service. The internship and service will take as many diverse forms as we have students. Students combine rigorous research with a **minimum of 10 hours** of interaction with an expert in their field of interest. Students construct, research and write about a "burning question" related to their internship topic. In addition, students serve a **minimum of 10 hours** of community service, in which they apply the knowledge gained through their internship and research to service of school or community. **Overall, students must serve a combined 30 hours for both internship and community service.**

Throughout their internship work, students will reflect on leadership and their potential to make a difference in our world. The course culminates in public presentations showcasing the results of students' experiences, learning and service. **Students in schools with 4X4 block schedules will take the course in Fall 2019, but will be required to present their results in Spring 2020.** Student grades will not be finalized until Spring 2020.

Elective Courses (may be taken in 11th or 12th grade years)

Courses listed above as choices for 11th grade requirements may also be taken as electives, providing that BRVGS requirements are already met.

6612CYBR University of Virginia Explorations in Cyber Security (IT 1010) - Spring 2020

Grades: 11-12

1 Credit

This course is intended to attract, educate, and inspire a new generation of students in the evolving field of cyber security. It introduces students to the world of cyber security and the vast opportunity in cyber security careers. At the end of the course, students will have an understanding of the various types of cyber security professions and educational opportunities to help them when choosing a career path. They will also develop critical thinking, problem solving, and analytical skills that will benefit them in a variety of career paths.

1165JM James Madison University “Science in the Popular Novel” (ISCI 101) - Spring 2020

Grades: 11-12

1 Credit

This course explores and analyzes the relationship between science and pop culture through the lens of fiction. Science contained in the readings, novels and short stories, will be investigated, keeping in mind the unique history, people, objects, social constructs and experience shaping them.

The primary objectives of this course are four-fold:

1. to teach science by analyzing popular novels that treat scientific topics;
2. to develop an appreciation of the historical genre relating to the historical nature of science in the novels;
3. to enhance writing skills within the popular media(s) of expression; and
4. to enhance scientific searching skills for data analysis and scientific writing skills.

The culmination is the construction of an original short story.

9826VASTS Virginia Aerospace Science and Technology Scholars (VASTS) - Spring 2020

Grades 11-12

1 Credit

(Up to 4 college credits)

Note: Use of this class to meet BRVGS requirements is pending approval by the BRVGS Board

The Virginia Aerospace Science and Technology Scholars (VASTS) program is an interactive online science, technology, engineering and mathematics learning experience, highlighted by a seven-day residential summer academy at NASA Langley Research Center in Hampton, Va. Students learn about a broad range of science, technology, engineering and mathematics (STEM) skills. Based on course performance, scholars may be selected to participate in an all-expense paid seven-day residential Summer Academy at NASA Langley Research Center.

Scholars can receive two college credits for successful completion of online coursework and two additional credits for the Summer Academy. The course is offered for free online from December through May and consists of seven lessons and a final project that allows scholars to build their knowledge of NASA, space exploration and key STEM skills.

Scholars selected for the Summer Academy will spend seven days with STEM mentors and master educators at NASA Langley Research Center in Hampton. Scholars will work in project teams to design a human mission to Mars and will be immersed in hands-on experiential STEM activities.

Note: In order for this course to count as a junior requirement, you are required to attend the VASTS Summer Academy, OR (if you are unable to attend the VASTS Summer Academy) you are required to attend a BRVGS Summer Academy.

This course may also be taken as a BRVGS elective.

4610VESSS Virginia Earth System Science Scholars (VESSS) - Spring 2020

Grades 11-12

1 Credit

(Up to 5 college credits)

Note: Use of this class to meet BRVGS requirements is pending approval by the BRVGS Board

The Virginia Earth System Science Scholars (VESSS) program is an interactive online science, technology, engineering and mathematics learning experience for Virginia high school juniors and seniors, highlighted by a seven-day residential summer academy at NASA Langley Research Center in Hampton, Virginia. This transferable, four-credit, Topics GOL 195 dual enrollment course, offered through Thomas Nelson Community College (TNCC), engages the student in real world investigations of the Earth and its highly dynamic systems through the use of the latest research and data from NASA's Earth Science missions. Students develop an understanding of the Earth's responses to both natural and man-made changes to climate, weather, and natural hazards. Students will explore NASA's major Earth Science missions addressing how the global Earth System is changing, how the Earth system will change in the future, the causes of these changes, and the societal benefits provided through study of the Earth's system science.

Students selected to participate in the seven-day Summer Academy are immersed in the design of a hypothetical mission to study one of the Earth's major spheres and how the spheres are interconnected. Students will address a real-world scenario based on NASA missions which are currently being studied or that will be studied in the Earth System Sciences. Students can earn an additional transferable independent research credit, in GOL 195.

Note: In order for this course to count as a junior requirement, you are required to attend the VESSS Summer Academy, OR (if you are unable to attend the VESSS Summer Academy) you are required to attend a BRVGS Summer Academy.

This course may also be taken as a BRVGS elective.

6612 COMPUTER INFORMATION SYSTEMS [CIS]**Grades: 9-12****1 Credit****PREREQUISITE:** None**Recommended Background-**None

Students apply problem-solving skills to real-life situations through word processing, spreadsheets, databases, multimedia presentations, and integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, telecommunications, and emerging technologies. Students will prepare for Microsoft Office Specialist (MOS) exam for PowerPoint to receive industry certification.

6115 PRINCIPLES OF BUSINESS [POB]**Grades: 9-10****1 Credit****PREREQUISITE:** None**Recommended Background-**None

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, taxations, and investments are investigated to provide a strong background as students prepare to make sound decisions as 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.

6120 ECONOMICS AND PERSONAL FINANCE [EPF]**Grades: 11-12****1 Credit****PREQUISITE:** None**Recommended Background-**None

The topics of economics and personal finance teach that resources are limited; thus, people must make choices that may include substitutions or alternatives. Students practice using a set of tools for analyzing choices of all types, including those related to personal finance. Students learn the benefits of compound interest over time and that poor money management can lead to difficulty in obtaining credit. Students practice weighing costs and benefits of options when making choices about such things as careers, insurance, housing, investments, savings, automobiles and health care. Students develop thinking skills that include analyzing real-world situations, economic reasoning, decision making, and problem solving.

6613 ADVANCED COMPUTER INFORMATION SYSTEMS [Adv CIS]**Grades: 10-12****1 Credit****PREREQUISITE:** **Computer Information Systems with****Recommended Background:** C or higher and teacher recommendation

Students apply problem-solving skills to real-life situations through advanced integrated software applications, including printed, electronic, and Web publications. Students build upon basic knowledge in Microsoft Office programs –Word, Excel, PowerPoint and Access learning advanced techniques and preparing for MOS testing. Oral presentations are essential in this class and professionalism in projects is essential. Students work individually and in groups to explore advanced computer maintenance activities, programming, networking, emerging technology, and employability skills. Students work in MOS Practice Software preparing for **MOS Certification***.

6631 ADVANCED DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES**Grades: 10-12****1 Credit****PREREQUISITE: CIS plus teacher recommendation****Recommended Background: C or better**

Students develop advanced skills in creating interactive media with the use of PowerPoint presentations, movie creation software, digital imaging software, web sites, and publications for print and electronic distribution. Students work with sophisticated hardware and software applying skills learned to real-world projects. Student oral presentations and group participation are essential in this class. Professionalism in all advanced projects is expected of each student and with using expensive cameras and equipment in classroom projects.

6131 BUSINESS LAW**Grades: 11-12****1 Credit****PREREQUISITE: None****Recommended Background-None**

Students examine the foundations of the American legal system and learn the rights and responsibilities of citizens. Students gain practical knowledge and life skills by exploring economic and social concepts related to laws governing business and individuals. Focus areas include contracts, consumer protection, criminal law, tort law, international law, family/domestic law, employment law, and careers in the legal profession.

6135DE^w DUAL ENROLLMENT BUSINESS 100 - INTRODUCTION TO BUSINESS**Grades: 11-12****1 Credit****PREREQUISITE: Satisfactory score on Virginia Placement Test in English and Algebra I SOL****Recommended Background-None**

This course presents a broad introduction to the functioning of business enterprise within the U.S. economic framework, introducing economic systems, essential elements of business organization, production, human resource management, marketing, finance, and risk management while developing a business vocabulary. This course carries one (1) high school credit and three (3) semester hours of college credit. Payment will be required. (Business 100: Introduction to Business is offered in cooperation with Germanna Community College.)

Industry Credential(s) in Business and Information Technology

MOS Certification (Microsoft PowerPoint, Word, and Excel)
W!SE Financial Literacy Certification

Examples of Sequential Options for Standard Diploma	
Year 1	Year 2
CIS	Adv CIS
CIS	POB
CIS	Bus Law
POB	DE Business

8515 BUILDING TRADES I

Grades: 9-11

1 Credit

PREREQUISITE: None

Recommended Background-None

Building Trades I introduces students to four core areas of residential construction: masonry, carpentry, electricity, and plumbing. Students emphasize safety by preparing them to earn the OSHA 10 certification and potentially the Core Craft Skills certification.

8516A BUILDING TRADES II-A

Grades: 10-12

1 Credit

PREREQUISITE: 8515 and successful completion of Building Trades I and teacher recommendation based on Building Trades I skill level.

Recommended Background-Teacher recommendation based on Building Trades I skill level.

Building Trades II teaches students advanced skills in masonry, carpentry, electricity, and plumbing. The class prepares students to synthesize these valuable skills to build or repair complete residential structures, using a variety of materials and tools.

Building Trades II-A prepares students with a Core Craft licensure opportunity that will help them begin an apprenticeship training through Germanna College. To achieve a license each student has to pass a 9 module test with a score of 80% or higher. The module topics include: Basic Safety, Intro. to construction Math, Intro. to Hand Tools, Intro. to Power Tools, Intro. to Construction Drawings, Intro. to Basic Rigging, Basic Communication Skills, Basic Employability Skills, and Intro. to Material Handling. Passing the class with-in Madison County High School standards does NOT guarantee a license. Students must obtain an 80% or higher to receive Core Craft Licensure.

8516B BUILDING TRADES II-B

Grades: 10-12

1 Credit

PREREQUISITE: 8516A

Recommended Background-Successful completion of Building Trades I & II-A and teacher recommendation based on Building Trades I skill level. Building Trades II teaches students advanced skills in masonry, carpentry, electricity, and plumbing. The class prepares students to synthesize these valuable skills to build or repair complete residential structures, using a variety of materials and tools.

Course Hours

BT I (Year 1)	140 Hours
BT II A (Year 2)	140 Hours
BT II B (Year 2 or 3)	140 Hours

Industry Credential in Building Trades

Core Craft Skills (NCCER) Certification

8527A COSMETOLOGY I**Grades: 11-12****4 Credits****PREREQUISITE:** None**Recommended Background-GPA 2.0**

Cosmetology is the study of hair, skin, and nails and their related care. Students study and prepare in a clinical lab setting, using mannequins and live models for manipulative skill practice. The program emphasizes safety and sanitation, communication, and management skills. Related areas of study include anatomy, ethics, and presentation of professional image. The state competencies include: haircuts, hair color, permanent waves, relaxers, scalp treatments, hairstyling, manicures, pedicures, and facials. This is a two-year program requiring year-long double blocks for both years. Students are prepared for the state licensing exam from the Virginia Board of Cosmetology. In this introductory course, students study hair, skin, and nails and their related care. Students are grounded in theory as they prepare to practice procedures in a clinical lab setting or classroom, using manikins for manipulative skill practice. The first-year course emphasizes personal safety, professionalism, and sanitation and disinfection of equipment and facilities. Students develop skills in shampooing and conditioning hair, as well as styling and cutting hair. They are introduced to chemical texture services and develop skills in manicure and pedicure procedures.

8528B COSMETOLOGY II**Grade: 12****2 Credits****PREREQUISITE:** Cosmetology I 8527A**Recommended Background-None**

Cosmetology II is a continuation of Cosmetology I. Students must have completed all state competencies, have B- average and a total of 980 hours at the end of the two-year course. Once the requirements are fully met, each student is eligible to sit for the state Cosmetology licensure exam issued by the Virginia Board of Cosmetology. In this continuing course, students build on their theoretical foundation of general sciences and practices in cosmetology to increase proficiency in hair cutting and styling on live models, with attention to professionalism, client consultation, safety, and infection control. Students are trained in safe chemical processes related to permanent waves, relaxers, lightening, and coloring hair. In addition, students learn to care for skin, hands, and feet, developing experience in providing facials, manicures, pedicures, and nail enhancements. Students will be introduced to a business management unit with a focus on managing the salon.

8529 COSMETOLOGY III**Grade 12****2 Credits****PREREQUISITE:** Cosmetology II 8528A**Recommended Background-GPA 2.0**

In this advanced course, students build on their theoretical foundation of general sciences and practices in cosmetology to increase proficiency in hair cutting and styling on live models, with attention to professionalism, client consultation, safety, and infection control. Students are trained in safe chemical processes related to chemical texture services and advanced hair coloring techniques. They also develop artistic skills with wigs and hair additions. In addition, students learn to care for skin, hands, and feet, developing experience in providing facials, manicures, pedicures, and nail enhancements. An advanced business management unit focuses on managing the salon. Competency completion prepares the student for the Virginia State Licensing Exam. Students can combine classroom instruction and supervised on-the-job training in an approved position or internship with continuing supervision throughout the school year.

8740 BARBERING I**Grades: 11-12****4 Credits****PREREQUISITE:** GPA 2.0**Recommended Background-**None

Barbering is the study of hair, skin and their related care. Students study and prepare in a clinical lab setting, using mannequins and live models for manipulative skill practice. The program emphasizes safety and sanitation, communication, and management skills. Related areas of study include anatomy, ethics, and presentation of a professional image. The state competencies include haircuts, shaving, hair color, permanent waves, relaxers, scalp treatments, manicures, and hairstyling. This is a two-year program requiring year-long double blocks for both years. Students are prepared for the state licensing exam from the Virginia Board of Barbering.

8741 BARBERING II**Grade: 12****2 Credits****PREREQUISITE:** GPA 2.0**Recommended Background-**None

Barbering II is a continuation of Barbering I. Students must have completed all state competencies, have B- average and a total of 980 hours at the end of the two-year course. Once the requirements are fully met, each student is eligible to sit for the state Barbering licensure exam issued by the Virginia Board of Barbering.

8742 BARBERING III**Grade: 12****2 Credits****PREREQUISITE:** GPA 2.0**Recommended Background-**None

In this advanced course, students build on their theoretical foundation of general sciences and practices in barbering to increase proficiency in hair cutting and styling on live models, with attention to professionalism, client consultation, safety, and infection control. Students are trained in safe chemical processes related to chemical texture services and advanced hair coloring techniques. They also develop artistic skills with wigs and hair additions. In addition, students learn to care for skin, hands, and feet, developing experience in providing facials, manicures, pedicures, and nail enhancements. An advanced business management unit focuses on managing the salon. Competency completion prepares the student for the Virginia State Licensing Exam. Students can combine classroom instruction and supervised on-the-job training in an approved position or internship with continuing supervision throughout the school year.

Sequential Options for Standard Diploma	
Year 1	Year 2
Cosmetology I	Cosmetology II/III
Barbering I	Barbering II/III

Industry Credential in Cosmetology and Barbering

Virginia Board of Barbers and Cosmetology License

ENGLISH

1130 ENGLISH 9 ACADEMIC

Grade: 9

1 Credit

PREREQUISITE: None

Recommended Background: None

Students will study grammar in relation to writing activities. Some composition assignments will relate to literature studied or short research projects. Most composition assignments, however, will be personal essays or creative writings (dialogues, poems, narratives, etc.) and expository essays in a five-paragraph format. Students will also complete a research paper. Literature will include reading and analyzing short stories, poetry (including the epic poem), novels, non-fiction and drama. Some emphasis will be placed on vocabulary development as well as survival skills: reading newspapers, completing forms, letter writing, reasoning skills, following directions, process of elimination, and reading maps, charts, labels, graphs, and weather reports. All SOL and grade level requirements will be met in this course. Daily homework should be expected.

1130^{HW} ENGLISH 9 HONORS

Grade: 9

1 Credit

PREREQUISITE: SOL scaled score of 450 in 8th grade, minimum passing grade of 85%/B in past curriculum area, teacher recommendation and parent input

Recommended Background: None

This one semester weighted course is differentiated with an emphasis on the use of research, analysis, and advanced writing skills where students will study grammar in relation to writing activities. Some composition assignments will relate to literature studied or short research projects. Most composition assignments, however, will be personal essays or creative writings (dialogues, poems, narratives, etc.) and expository essays in a five-paragraph format. Students will also complete a research paper. Literature will include reading and analyzing short stories, poetry (including the epic poem), novels, non-fiction and drama. Some emphasis will be placed on vocabulary development as well as survival skills: reading newspapers, completing forms, letter writing, reasoning skills, following directions, process of elimination, and reading maps, charts, labels, graphs, and weather reports. All SOL and grade level requirements will be met in this course. In addition, students should be prepared to accept rigorous course requirements. The assignments and activities in honors courses exceed standard course requirements and are meant to prepare students for future honors courses, Advanced Placement and Dual Enrollment courses. There will also be a summer reading requirement for the course. This course carries a .5 weighted credit.

1140 ENGLISH 10 ACADEMIC

Grade: 10

1 Credit

PREREQUISITE: Pass English 9

Recommended Background: None

Students will review grammar as needed in relation to problems in composition. Composition assignments will relate to various types of literature and will reflect the four types of writing. Students will study world literature thematically. In addition to selected short stories and poems, students will study drama and multiple novels or fiction. The class includes a major research paper.

1140^{HW} ENGLISH 10-HONORS (Pre-AP)

Grade: 10

1 Credit

PREREQUISITE: Minimum of B in English 9 and English 9 Teacher Recommendation

Recommended Background: None

This one-semester weighted course is a survey of multicultural world literature. The course will focus on poetry, the short story, drama, and the novel. Course readings will include several novels covered at a fast pace. Composition, an important component of this course, will focus on themes and interpretations of the literature studied. Writing will vary in purpose and audience. This class includes a major literary research paper. In addition, students should be prepared to accept rigorous course requirements. Honors courses exceed standard course requirements and are meant to prepare students for Advanced Placement and Dual Enrollment courses. There will also be a summer reading requirement for the course. The course carries a .5 weighted credit.

1150 ENGLISH 11 ACADEMIC**SOL****Grade: 11****1 Credit****PREREQUISITE: Successful completion of English 10**

Recommended Background: None

Students will concentrate on grammar skills as needed to improve composition, focusing on various styles of essay writing, including, but not limited to, the personal essay, the persuasive essay, and technical writing. The study of American literature will be chronological and thematic with an emphasis on non-fiction. Students will focus on skills needed to pass both the End-of-Course SOL Tests in Writing and Reading with an emphasis on strategies for vocabulary development, persuasive writing, and reading comprehension.

1195^W ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION**SOL****Grades: 11****1 Credit****PREREQUISITE: Successful completion of English 10H with a B and Teacher Recommendation**

Recommended Background: None

Students will concentrate on grammar skills as needed to improve composition, focusing on various styles of essay writing, including, but not limited to, the personal essay, the persuasive essay, and research. This weighted course is largely a survey of English and world literature, with emphasis on literary tonal analysis of drama, poetry, the novel, and selected nonfiction. Composition will focus on analysis of selected literary works in preparation for both the EOC Writing and Reading SOL tests and the AP exam. Daily homework and out of class readings should be expected. Students must take the national AP Exam in order to earn weighted credit. *There will be required summer reading assignments.*

1160 ENGLISH 12 ACADEMIC**Grade: 12****1 Credit****PREREQUISITE: Successful completion of English 11**

Recommended Background: None

English 12 is a chronological study of British literature. Course readings will include poetry, drama, short stories, and novels. Emphasis will be on improving language through usage in speaking and writing. Grammar will be reviewed as needed. Composition will be related primarily to the literature studied. Students will be required to complete a major research paper or project. Daily homework and out of class reading should be expected.

1160D^W DUAL ENROLLMENT: COLLEGE COMPOSITION 111-112**Grade: 12****1 Credit****PREREQUISITE: Satisfactory score on Virginia Placement Test**

Composition 111 introduces students to critical thinking and the fundamentals of academic writing. Through the writing process, students refine topics; develop and support ideas; edit for effective style and usage; and determine appropriate approaches for a variety of contexts, audiences, and purposes. Writing activities will include exposition and argumentation with at least one researched essay. Students must complete this course with a C- or better to continue to Composition 112.

Composition 112 continues to develop college writing with increased emphasis on critical essays and argumentation, and research, supported by investigating, evaluating, and incorporating research material. Requires students to locate, evaluate, integrate, and document sources and effectively edit for style and usage.

These weighted courses carry one (1) high school credit for English 12 and six (6) semester hours of college credit. Payment (tuition) will be required. Daily homework should be expected. (English 111 & 112: College Composition is offered in cooperation with Germanna Community College.)

ENGLISH ELECTIVES

1171 CREATIVE WRITING I

Grades: 10-12

1 Credit

PREREQUISITE: None

Recommended Background: Student must have a C+ or better in previous year's English class and recommendation of the English teacher. Writing samples may be submitted to the Creative Writing instructor for alternate approval. Creative Writing is an elective course for tenth through twelfth grade students who enjoy writing and want to develop their skills. Students will write in many genres, using a variety of techniques and for a range of purposes and audiences. Students will produce polished writing in fiction, non-fiction, and poetry. Students will study contemporary authors and the composing processes of professional writers. Students will create a portfolio of their writing and submit multiple works for publication. Students will contribute to the content and production of *Scream*, the MCHS literary magazine. This course may be combined with Creative Writing II and Desktop Publishing for Newspaper.

1177 CREATIVE WRITING II

Grades: 11-12

1 Credit

PREREQUISITE: Creative Writing I and approval of the Creative Writing instructor

Recommended Background-None

This class will allow for students who have taken Creative Writing I to pursue a large writing project of their choosing. Students will spend approximately two-thirds of their time developing this project and the other third spent working with students enrolled in Creative Writing I. Students will contribute to the content and production of *Scream*, the MCHS literary magazine. This course may be combined with Creative Writing I and Desktop Publishing for Newspaper.

1410 THEATRE ARTS

Grades: 9-11

1 Credit

PREREQUISITE: None

Recommended Background-None

This is a **participation** course that explores the fundamentals of acting and stagecraft through acting, improvisation, pantomiming, voice, and diction exercises/performances plus stage design, blocking and production projects. The student will also study the history of both world and American theatre. Public speaking is emphasized through improvisation and monologues. Students will have the opportunity to participate in the Theatre Competition should they meet the VHSL eligibility requirements. See page 26 for VHSL eligibility requirements.

1411/1412 THEATRE ARTS II

Grades: 10-12

1 Credit

PREREQUISITE: Drama teacher recommendation

Recommended Background-None

Drama II will continue to build skills in theatre arts. Students will explore directing techniques, technical theatre, stage design, set design, make-up design and play production. In preparation for district and regional competition theatre, specifically district theatre, each member will be required to participate in some element of theatre as a co-curricular activity.

1220 NEWSPAPER – DESKTOP PUBLISHING

Grades: 10-12

1 Credit

PREREQUISITE: Successful completion of computer applications and a **B-** average in English

Recommended Background-None

This course deals with desktop publishing and journalism skills as they relate to publishing a school newspaper and literary magazine. This course will include active participation in the basic skills of journalistic writing, interviewing, desktop layout design, editing, reporting, and photography. The class is based on successful completion of deadlines set by the instructor. **Only students who are dedicated to producing a quality school newspaper, as well as learning advanced desktop design techniques and web design should enroll in this class.** Students will learn the following programs: Adobe InDesign, Photoshop, and web design applications. This course may be combined with Creative Writing I and II.

1200 YEARBOOK – DESKTOP PUBLISHING

Grades: 10-12

1 Credit

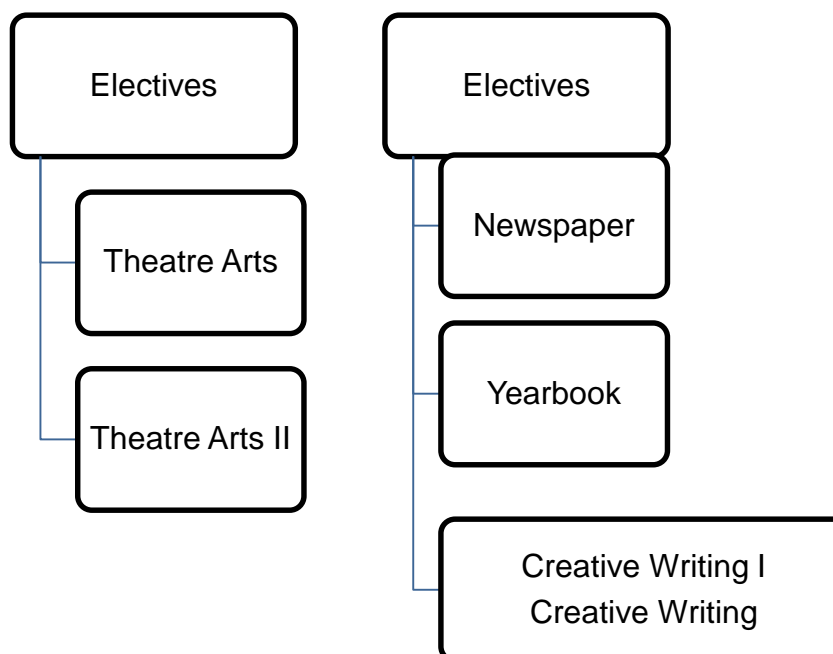
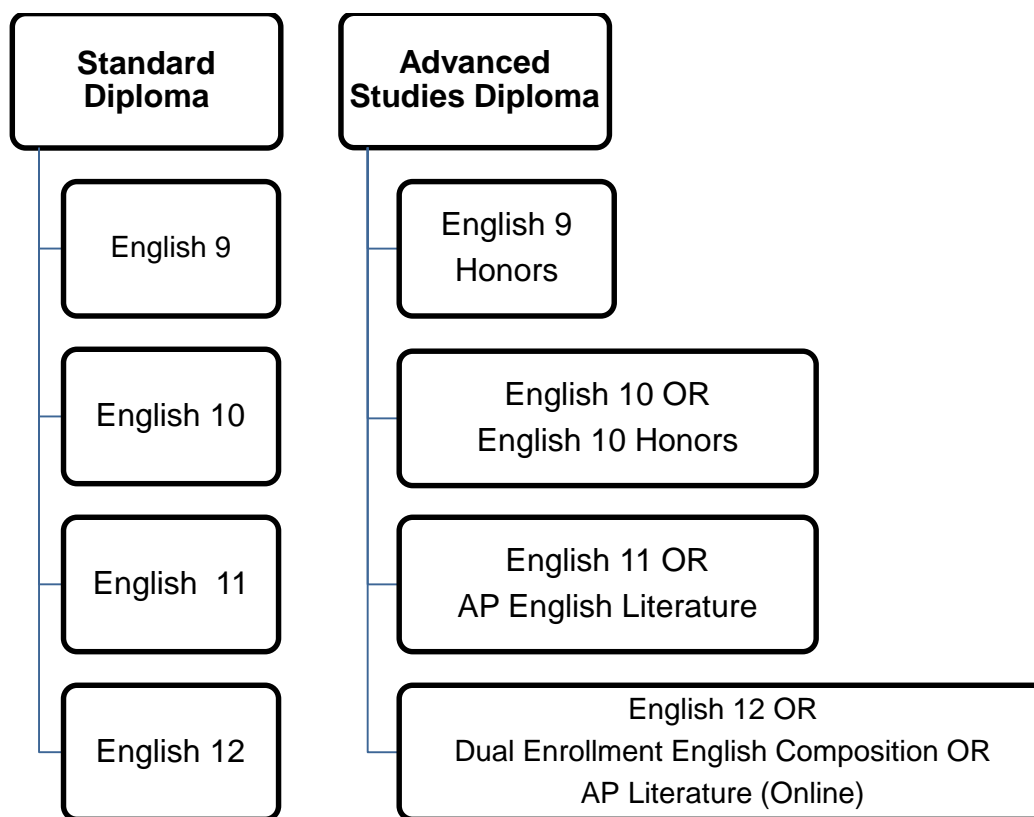
PREREQUISITE: **B-** average in English, recommendations from current English teacher **and** a former computer teacher, **or** successful completion of Desktop Publishing for Newspaper

All interested students must have a signed parental permission letter available from instructor plus a completed application.

Recommended Background-None

This course deals with desktop publishing and journalism skills as they relate to publishing a school yearbook. This course will include active participation in the basic skills of journalistic writing, interviewing, desktop layout design, editing, reporting, photography, and business management. The class is based on successful completion of deadlines set by both the instructor as well as the publishing company. **Only students who are dedicated and self-motivated should enroll in this class.** Students will learn to use the following software: Adobe InDesign and Photoshop. Selling ads in the community for the yearbook is expected of all yearbook staff members.

English Sequence of Courses – Grades 9-12



The High School Pre-Engineering Program is a two-year sequence of courses which, when combined with traditional mathematics and science courses in high school, introduces students to the scope, rigor and discipline of engineering prior to entering college. However, those not intending to pursue further formal education will benefit greatly from the knowledge and logical thought processes that result from taking some or all of the courses provided in the curriculum.

8435 TECHNICAL DRAWING & DESIGN [TDD]

Grades: 9-11

1 Credit

PREREQUISITE: Algebra I

Recommended Background-None

In this foundation course, students learn the basic language of technical design while they design, sketch, and make technical drawings illustrations, models, or prototypes of real design problems. Students develop spatial ability as they apply mathematical concepts to visual representations.

8436 ENGINEERING DRAWING AND DESIGN [EDD]

Grades: 10-12

1 Credit

PREREQUISITE: Technical Drawing and Design, Geometry, and Instructor Recommendation

Recommended Background- Instructor Recommendation

Students explore the engineering design process and use a graphic language for product design, technical illustration, assembly, patent, and structural drawings. They increase their understanding of drawing and the design process and techniques learned in the prerequisite course. Students use computers, calculators, and descriptive geometry and adhere to established standards to solve design problems.

8437 ARCHITECTURAL DRAWING & DESIGN [ADD] *Offered 2020 - 2021*

Grades: 9-12

1 Credit

PREREQUISITE: Engineering Drawing & Design, Geometry, and Instructor Recommendation

Recommended Background: None

This course provides an overview of the fields of Civil Engineering and Architecture while emphasizing the interrelationship and dependence of both fields on each other. Students use state-of-the-art software to solve real world problems and communicate solutions to hands-on projects and activities. This course covers topics such as: the roles of Civil Engineers, Architects, Project Planning, Site Planning, Building Design, and Project Documentation and Presentation. There is an opportunity to earn industry certification in an AutoDesk software suite at the end of the course.

8438 ADVANCED DRAWING AND DESIGN (3D MODELING) *Offered 2019-2020*

Grades: 10-12

1 Credit

PREREQUISITE: Engineering Drawing & Design, Geometry, and Instructor Recommendation

Recommended Background: None

Students use a graphic language for product design and technical illustration. They increase their understanding of drawing techniques learned in the prerequisite courses. They research design-related fields while identifying the roles of advanced drawing and design in manufacturing and construction industry processes. They apply the design process, analyze design solutions, reverse engineer products, create 3D models using CADD, construct physical models, and create multimedia presentations of finished designs. A work portfolio based on a chosen graphic project is required. There is an opportunity to earn industry certification in an AutoDesk software suite at the end of the course.

Engineering Sequential Options for Standard Diploma	
Year 1	Year 2
TDD	EDD
EDD	ADD

FAMILY AND CONSUMER SCIENCE

8227 LIFE PLANNING

Grades: 9-10

1 Credit

PREREQUISITE: None

Recommended Background-None

Students enrolled in Life Planning focus on developing a life-management plan; caring for self and others to ensure wellness; building and maintaining constructive relationships; building and maintaining strong, functional families; developing strategies for lifelong career planning; coordinating personal and career responsibilities; and establishing a plan for using resources. Critical thinking and practical problem solving opportunities within the area of personal, family, and career planning are emphasized, as well as civic responsibilities and community service. Teacher highlights basic skills of math, science, and communication when appropriate in the content.

8229 NUTRITION AND WELLNESS

Grades: 10-12

1 Credit

PREREQUISITE: None

Recommended Background-None

Students enrolled in Nutrition and Wellness focus on making choices that promote wellness and good health; analyzing relationships between psychological and social needs and food choices; choosing foods that promote wellness; obtaining and storing food for self and family; preparing and serving nutritious meals and snacks; selecting and using equipment for food preparation; and identifying strategies to promote optimal nutrition and wellness of society. Critical thinking and practical problem solving opportunities within the area of nutrition and wellness are emphasized. Teacher highlights the basic skills of math, science, and communication when appropriate in the content. Students will have an opportunity to participate in a simulated workplace by operating a restaurant and becoming a part of a serving staff.

9062HW TEACHERS FOR TOMORROW (offered during even years only, pending sufficient enrollment)

Grades: 11-12 (Offered for the 2020-2021 school year)

1 Credit

PREREQUISITE: 2.7 GPA, Application and Teacher Recommendation required

Recommended Background-None

The Teachers for Tomorrow course introduces juniors and seniors to a career in teaching and public education. The primary elements of the curriculum components are the learner, the school, and the teacher and teaching. The components are intentionally broad in scope and provide a great deal of flexibility based on the career interest of the students. In addition to the fundamental curriculum components, all students are required to observe and participate in an internship. The internship may be done from pre-school through 12th grade. Students who complete Teachers for Tomorrow are eligible to test for Para Pro certification. Eligibility for this course includes a 2.7 G.P.A. that is derived from predominantly college preparatory classes. Student must also submit an application with an essay plus three written teacher recommendations to enter the program. This is a weighted class.

Industry Certification for Teachers for Tomorrow

Industry Credential for Family and Consumer Science Program

ParaPro Assessment

Examples of Sequential Electives

Year 1	Year 2
Life Planning	Nutrition and Wellness
Nutrition and Wellness	Teachers for Tomorrow

CTE

9070S SERVICE LEARNING (STUDENT ASSISTANT)

Grades: 11-12

1 Credit (Juniors may earn 1 credit during their Junior year. Seniors may earn 2 credits during their Senior year)

PREREQUISITE: Teacher approval, current year attendance will be evaluated

Recommended Background-None

Service Learning will encourage students to practice community volunteerism during the school day. The objective is to instill a spirit of community involvement that will extend beyond high school into adult life. The Service Learning course is a program open to juniors and seniors interested in serving as tutors and student assistants at the elementary school level or at selected community agencies.

Students enrolled in this class should be interested in a career in the field of childcare or early childhood education. Students will be placed at Madison Primary School or Waverly Yowell Elementary School where they will engage in the day to day activities and operation of a classroom.

FOREIGN / WORLD LANGUAGES

5110 FRENCH I

Grades: 9-12

1 Credit

PREREQUISITE: None

Recommended Background: C average or better in English

This course is designed to establish basic communication skills in the French language and serves as an introduction to French and Francophone culture. Many vocabulary, culture, and grammar activities will prepare students to express themselves in the French language. Technology is an important tool in accessing authentic information in French.

5120 FRENCH II

Grades: 9-12

1 Credit

PREREQUISITE: French I and Teacher Recommendation

Recommended Background: C or better in French I

This course is designed to continue developing communication in French to increase comfort and spontaneity with the language. The focus is increasing vocabulary and grammatical skills in order to speak, listen, read, and write in French. French regional culture is emphasized as well.

5130 FRENCH III

Grades: 9-12

1 Credit

PREREQUISITE: French II and Teacher Recommendation

Recommended Background: C or better in French II

This course is designed to continue developing all forms of communication in French. Students learn more advanced grammar and culture topics, focusing on the ability to communicate in a day-to-day setting. Film studies are included as an expansion on culture and history.

5140^{HW}/5150^{HW}/5560^{HW} FRENCH IV/V/VI

Grades: 11-12

1 Credit

PREREQUISITE: French III and teacher recommendation

Recommended Background: B or better in French III

These courses are designed to encourage and enhance personal communication styles, critical thinking skills, and authentic interaction in French. Advanced grammar, vocabulary, and interpersonal communication skills will be covered, as well as an increased focus on French and francophone culture and history. The class will be conducted mainly in French and students will be expected to speak in French. Only students with high aptitude and interest in French should pursue this course. This is a half-weighted class and is required for membership in the national French honor society, *La Société Honoraire de Français*.

5510 SPANISH I

Grades: 9-12

1 Credit

PREREQUISITE: None

Recommended Background: C average or better in English

This course is designed to focus on basic Spanish communication and understanding of the cultures of Spanish-speaking countries. Students learn to communicate in real-life contexts about topics that are meaningful to them. Rather than isolating grammar in a separate strand, it is integrated into instruction according to the vocabulary and structures needed in the various situations in which students are required to function.

5520 SPANISH II**Grades: 9-12****1 Credit****PREREQUISITE:** Spanish I and Teacher Recommendation**Recommended Background:** C average or better in Spanish I

This course continues to develop student proficiencies in Spanish as well as developing spontaneity. Students begin to show a greater level of accuracy when using basic language structures and are exposed to more complex features of the Spanish language. Students focus on communicating about their immediate world and daily life activities. Emphasis continues to be placed on the use of Spanish in the classroom as well as on the use of authentic materials to learn about the culture.

5530 SPANISH III**Grades: 10-12****1 Credit****PREREQUISITE:** Spanish II and Teacher Recommendation**Recommended Background:** C average or better in Spanish II

This course continues to develop student communicative competence by interacting with other speakers of Spanish, understanding oral and written messages in Spanish, and making oral and written presentations in Spanish. Students communicate using more complex structures in Spanish. Spanish is used extensively in the class as students develop the ability to discuss topics related to historical and contemporary events and issues.

5540^{HW}/5550^{HW}/5560^{HW} SPANISH IV/V/VI**Grades: 11-12****1 Credit****PREREQUISITE:** Spanish III and Teacher Recommendation**Recommended Background:** B average or better in Spanish III

These courses are designed to encourage and enhance personal communication styles, critical thinking skills, and authentic interaction in Spanish. Students improve their communication skills by exchanging and supporting opinions on a variety of relevant contemporary and historical events or issues. The class will be conducted mainly in Spanish and students will be expected to speak in Spanish. Students with high aptitude in Spanish should pursue this course. This is a half-weighted class and is required for membership in the national Spanish honor society, *La Sociedad Honoraria Hispánica*.

ENGLISH AS A SECOND LANGUAGE [ESL]**5710 ESL I****Grades: 9-12****1 Credit PER SEMESTER****PREREQUISITE:** Pre-approval**Recommended Background:** None

This course is designed to provide instruction to speakers of other languages who are classified as less than independent in English. The main goal of the program is the acquisition of English communication skills.

5720 ESL II**Grades: 10-12****1 Credit PER SEMESTER****PREREQUISITE:** Pre-approval**Recommended Background:** None

This course is designed to provide instruction to speakers of other languages who are classified as less than independent in English. The main goal of the program is the acquisition of intermediate English communication skills.

HEALTH AND PHYSICAL EDUCATION

All Madison County High School students are required to complete two semesters of physical education, health and drivers education. Rising ninth grade students are encouraged to complete the H/PE I requirement during their ninth grade year. Rising tenth grade students should complete H/PE II during their tenth grade year.

7300 HEALTH AND PHYSICAL EDUCATION I

Grade: 9

1 Credit

PREREQUISITE: None

Recommended Background: None

This course will help students develop an understanding of health concepts, behaviors, and promote ways to enhance one's health. Subject's taught are: disease prevention, consumer health, environmental health, First Aid, personal and family survival, drugs, alcohol, tobacco, and Family Life.

The physical education program offers students opportunities to participate in badminton, ping pong, volleyball, basketball, football, soccer, softball, as well as a course-long emphasis on cardiovascular and muscular fitness. The Virginia Wellness tests are administered during this course.

7405 HEALTH, PHYSICAL EDUCATION & DRIVER EDUCATION II

Grades: 10-12

1 Credit

PREREQUISITE: Health and Physical Education I

Recommended Background: None

This course will provide students 36 + hours of classroom training in Driver's Education as required for students to obtain their Driver's License. The Physical Education offerings include weight training, football, soccer, recreational games, basketball, volleyball, floor\street hockey and a semester long emphasis on physical fitness. The Virginia Wellness tests are administered during this course. Health concepts that will be introduced are injury prevention and rehabilitation, medication and substance abuse, and stages of healthy development.

7638 ADVANCED PHYSICAL EDUCATION: LIFETIME ACTIVITIES

Grades: 11-12

1 Credit

PREREQUISITE: Physical Education 10

Recommended Background: None

This course is developed specific skills for individual and dual fitness and game activities. Activities will include, but are not limited to, archery, badminton, bowling, doubles volleyball, golf, hiking, ping pong, tennis, and other social games. Emphasis will be placed on the development of skills and knowledge development to play at the recreational level.

7640 ADVANCED PHYSICAL EDUCATION: STRENGTH AND CONDITIONING

Grades: 11-12

1 Credit

PREREQUISITE: Physical Education 10

Recommended Background: None

This course consists of weight training and other fitness activities. Lifting technique is taught. Testing occurs at the beginning of each cycle. This provides for regular evaluation and a means for determining percentages of the maximum weight used during the next cycle of lifts.

SUMMER SCHOOL: HEALTH AND PHYSICAL EDUCATION – SUMMER SCHOOL

Grades: 9-12

1 Credit

Fee Charged

Basic Course Requirements: Regular participation in physical activity, heart rate monitor downloads, personal fitness log, recognize individual's level of health and wellness, identify and implement strategies that improve wellness, and successful completion of all assigned coursework (140 total hrs.) The ultimate goal is to help students plan for a lifetime of fitness, wellness, and physical activity.

Physical Education (70 documented hrs.)

- 40 hours at fitness center, team practice or play
- 20 hours of approved personal fitness activities
- 10 hours direct instruction and fitness assessments

Maximum 2 hours a day and 12 hours per week

Health Education (70 hours) online course

SUMMER SCHOOL: HEALTH, PHYSICAL EDUCATION & DRIVER EDUCATION (On-Line Course)

Grades: 9-12

1 Credit

Fee Charged

Please contact the counseling office for more information.

*Student must be 15 years and 6 months old to be eligible for a learner's permit.

Student must have a learner's permit for 9 months and be 16.3 years old to be eligible for a driver's license.

When the student successfully completes the classroom phase and has secured a learner's permit, then he or she may take behind-the-wheel driver instruction. Student must sign up with the teacher for driving time. There is a fee for behind-the wheel driver instruction.

8302 INTRODUCTION TO HEALTH AND MEDICAL SCIENCES I**Grades: 10-12****1 Credit****PREREQUISITE:** Biology

Recommended Background-C+ or higher in Biology

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, CPR, First Aid, vital signs, and communication skills essential for providing quality patient care. Unique and fun learning experiences will include simulated medical scenarios.

8355 NURSING ASSISTANT I [To be taken concurrently with Nursing Assistant II]**Grades: 11-12****1 Credit****PREREQUISITE:** Introduction to Health and Medical Sciences recommended

Nurse Aide I, offered as an occupational preparation course beginning at the 11th-grade level, 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. Students 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 competences for a certified nursing assistant are met.

8356 NURSING ASSISTANT II**Grades: 11-12****1 Credit****PREREQUISITE:** Nursing Assistant I concurrently

Nurse Aide II 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 successful 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.

*Students who plan to take Nursing I and II for CNA Certification must not be guilty of a barrier crime. More details on barrier crimes can be found at: http://www.vdh.state.va.us/OLC/Laws/documents/barrier_crimes_guide.pdf

Industry Credential for Health and Medical Science Program

Virginia Board of Nursing License (Nurse Aide)

8120 MARKETING

Grades: 10-12

1 Credit

PREREQUISITE: None

Recommended Background: None

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. Marketing students will participate in the Simulated Workplace Program as student-employees of nextGEN Business Consulting, providing marketing and promotional plans to local companies and organizations.

8130 ADVANCED MARKETING

Grades: 11-12

1 Credit

PREREQUISITE: Marketing

Recommended Background: None

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.

Advanced Marketing students will participate in the Simulated Workplace Program as student-managers of nextGEN Business Consulting, providing marketing and promotional plans to local companies and organizations.

Examples of Sequential Options for Standard Diploma	
Year 1	Year 2
Principles of Business and Marketing	Marketing
Marketing	Advanced Marketing

MATHEMATICS

All rising 9th graders taking Algebra I will be placed in a year-long course. Enrollment in year-long algebra provides the opportunity to lay a solid foundation in secondary math and prepare students for success in later courses. In the spring of the 9th grade year, student placement for next year's math course will be based on final grades, SOL scores, and teacher recommendations. There is sufficient time in the high school schedule for students who take year-long algebra as freshman to enter dual enrollment math classes in their senior year.

As in many disciplines, math builds on itself which is why demonstrating understanding is vital at each level for success at the next level. Based on data and observation, students who earn below C (73%) experience difficulty in mastering content at the next level; therefore teacher recommendation is an integral component for math placement. We believe that any student who engages in the lessons, practices and, when necessary, attends after school math tutoring will be successful.

Our dual enrollment offerings reflect the recommendations of the Virginia Community College System. The goal for MCHS and the VCCS is to offer a curriculum that provides a smooth transition and preparedness to post-secondary education. As a small high school, we are also looking for Dual Enrollment courses that are the most transferable to the majority of Virginia colleges and to their programs/majors.

3130 ALGEBRA I (Year-long)

Grades: 7-12

1 Math Credit and 1 Elective credit)

PREREQUISITE: 8th grade math

Recommended Background: None

This is the fundamental course for any study of advanced mathematics. The topics include the real number system, sets, polynomials, equations, functions, problem-solving, graphing, exponents, radicals, and statistics. This course will involve extensive use of the graphing calculator.



3143 GEOMETRY (Semester)

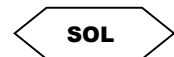
Grades: 7-12

1 Credit

PREREQUISITE: Algebra I

Recommended background; Pass Algebra I SOL, Algebra I B- or above and/or teacher recommendation

Topics include congruency, parallelism, perpendicularity, similarity as applied to polygons, and 2-D and 3-D figures. Students will also study right triangle trigonometry, transformations, circles, and constructions. Writing proofs will be an integral part of the course. The semester course will be faster paced than the year-long course.



3143-44 GEOMETRY (Year-long)

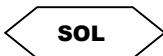
Grades: 9-12

1 MATH Credit and 1 ELECTIVE Credit

PREREQUISITE: Algebra I

Recommended background; Pass Algebra I SOL, Algebra I C or above and/or teacher recommendation

Topics will include congruency, parallelism, perpendicularity, similarity as applied to polygons, and 2-D and 3-D figures. Students will also study right triangles, trigonometry, transformations, circles, constructions, deductive reasoning and conditional statements. A study of proofs will be included.



3134 ALGEBRA FUNCTIONS AND DATA ANALYSIS [AFDA]**Grades: 10-12****1 Credit****PREREQUISITE:** Algebra I**Recommended Background:** None

Algebra, Functions and Data Analysis is a course for students who find math challenging and who need to sharpen their algebra skills before taking Algebra II. Algebra, Functions and Data Analysis will focus on real-world problems through the use of mathematical modeling and data analysis. Students will study about functions, probability, experimental design, and data analysis and explore many advanced algebra topics. Data will be generated by practical applications in the areas of science, business, and finance

3135 ALGEBRA II**Grades: 9-12****1 Credit****PREREQUISITE:** Geometry**Recommended background:** Pass Alg I SOL, Algebra I C or above and/or teacher recommendation

In this course, a thorough treatment of advanced algebraic concepts will be covered through the study of functions, “families of functions,” equations, inequalities, systems of equations and inequalities, polynomials, rational and radical equations, complex numbers, and sequences and series, and statistics. Emphasis will be placed on practical applications, modeling, and statistical analysis throughout the course of study. Oral and written communication concerning the language of algebra, logic of procedures, and interpretation of results will also permeate the course. This course will take a theoretical approach.

3160-1 ADVANCED MATHEMATICS**Grades: 11-12****1 Credit****PREREQUISITE:** Algebra II**Recommended Background:** None

In this rigorous course, students will review and extend knowledge of a variety of subjects in mathematics. They will have a chance to experience how mathematics applies in real-life situations and develop skills to prepare you for the SAT, ASVAB, VPT, and the world beyond this high school’s doors. Topics presented will cover the fields of algebra, geometry, trigonometry, consumer, and discrete mathematics. Placement in Advanced Math may be advised after Algebra II for students needing to build the advanced Algebra skills necessary for success in Trigonometry.

3150^{HW} TRIGONOMETRY**Grades: 9-12****1 Credit****PREREQUISITE:** Algebra II**Recommended background:** Pass Algebra II SOL, Algebra II B- or above, and/or teacher recommendation

This is an advanced functions course that follows Algebra II. This course is a prerequisite for Math Analysis, Pre-Calculus. The course begins with a detailed study of trigonometry and the use and application of trig functions. Other topics include polynomials, rational functions and the transcendental functions, particularly exponential and logarithmic functions. A pretest of pre-requisite skills will be given.

3162^{HW} MATHEMATICAL ANALYSIS**Grades: 10-12****1 Credit****PREREQUISITE:** Trigonometry**Recommended background:** Pass Trigonometry with a C+ or above, and/or teacher recommendation

This course will extend the study of trigonometry. Topics to be explored will include sequences and series, conics, polar graphing, vectors, matrices, parametric equations, complex numbers, and an introduction to limits. Emphasis will be on problem solving.

3162DE^W DUAL-ENROLLMENT PRE-CALCULUS [MTH 161-162]

Grades: 11-12

6 Credit

PREREQUISITE: Passing score on the Virginia Placement Test

Presents college algebra, analytic geometry, trigonometry, and algebraic exponential, and logarithmic functions. This weighted course carries one (1) weighted high school credit and six (6) semester hours of college credit. Payment will be required.

3233DE^W DUAL-ENROLLMENT COLLEGE STATISTICS [MTH 245]

Grades: 11–12

1 Credit

PREREQUISITE: DE Pre-Calculus with a C or better

This course presents an overview of statistics, including descriptive statistics, elementary probability, probability distribution, estimation, hypothesis testing, and correlation and regression. Lecture 3 hours per week. Note MTH 245 is recommended for students who will regularly apply statistics within their major/career (biology, business, environmental science, liberal arts, and social sciences). This weighted courses carried one (1) weighted high school credit and 3 semester hours of college credit. Payment will be required.

3231DE^W DUAL-ENROLLMENT CALCULUS WITH ANALYTIC GEOMETRY I [MTH 263]

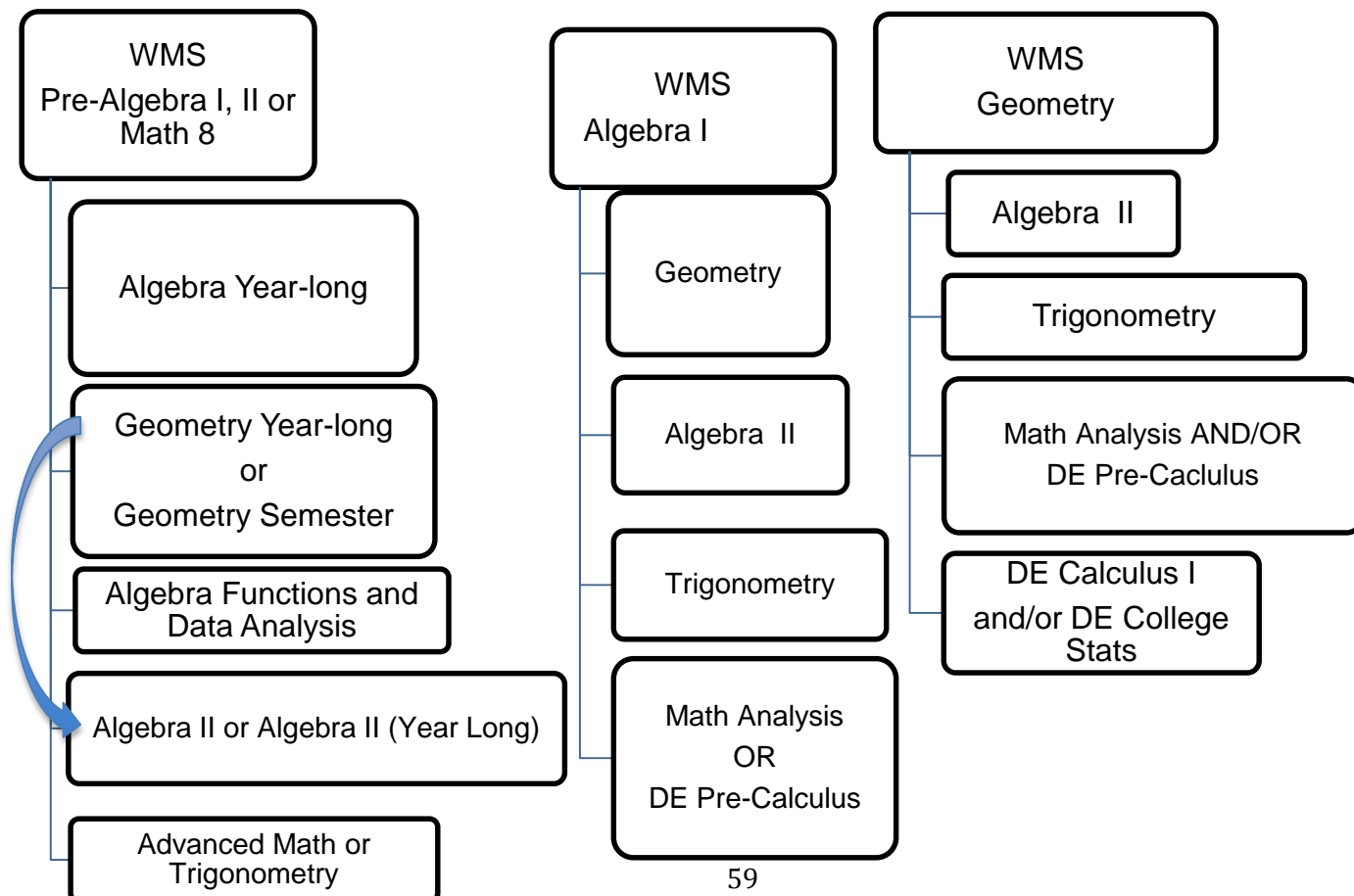
Grades: 12

1 Credit

PREREQUISITE: C+ or better in DE Pre-Calculus.

Presents analytic geometry and the calculus of algebraic and transcendental functions including the study of limits, derivatives, differentials, and introduction to integration along with their applications. Designed for chemistry, engineering, mathematics, physics, and technology. This weighted course carries one (1) weighted high school credit and four (4) semester hours of college credit. Payment will be required.

Mathematics Sequence of Courses – Grades 8 - 12



9234F MARCHING BAND* [Semester 1]
9234S WIND ENSEMBLE [Semester 2]

Grades: 9-12

1 Credit PER SEMESTER

PREREQUISITE: Prior band class or instrumental experience

Recommended Background: Demonstrate independent proficiency at the VBODA Level II (Semester I)

Demonstrate independent performance at the VBODA Level III (Semester 2)

This year-long program is the advanced instrumental music ensemble for accomplished band students who are ready to participate in both Fall/Spring marching and stage performances. **Attendance at all performances, rehearsals, and football games is mandatory.** Students are urged to enroll for two semesters but may take only one semester if there are schedule conflicts. The course may be repeated for credit.

*Students enrolled in the Wind Ensemble and Concert Bands will be combined during marching season to create the HS Marching Band. Attendance at all performances, rehearsals, and football games is mandatory

9233 CONCERT BAND [Second Semester Only]

Grades: 9-12

1 Credit

PREREQUISITE: Prior band class or instrumental experience

Recommended Background: Demonstrate independent proficiency at the VBODA Level II

This semester course is designed for those students who have not yet reached the skill level for Wind Ensemble spring semester.

Students will further develop their musical skills. **Attendance at all performances and rehearsals is mandatory.** The course may be repeated for credit. **All 9th grade band students taking band 2nd semester will be registered for concert band and have the option to audition into symphonic band.**

*Students enrolled in the Wind Ensemble and Concert Bands will be combined during marching season to create the HS Marching Band. Attendance at all performances, rehearsals, and football games is mandatory.

9289F CHORUS [Semester 1]
9289S CHORUS [Semester 2]

Grades: 9-12

1 Credit PER SEMESTER

PREREQUISITE: None

Recommended Background: An interest in singing, performing, and learning more about music

This course is for students interested in developing vocal techniques for good vocal production. Students will sing music written in three or more parts. **Attendance at all performances and rehearsals, both during school and out of school time, is mandatory.** Many different musical styles will be studied and performed. Students are urged to stay for two semesters. Students may repeat this class for credit, with teacher approval.

9222 JAZZ IMPROVISATION

Grades: 10-12

1 Credit

PREQUISITITE: 1 year of high school marching band and/or high school concert band OR 2 semesters of high school choir class, OR by audition for piano, guitar, and bass

Recommended Background: An interest in learning about music.

This course is offered to students who wish to learn about jazz improvisation on their instrument or a secondary instrument. Students enrolled in this class must supply their own instrument with the exception of the piano.

SCIENCE

4210 EARTH SCIENCE ACADEMIC

SOL

Grades: 9-12

1 Credit

PREREQUISITE: None

Recommended Background: None

Earth Science includes astronomy (the universe, galaxies, stars, the solar system, and the moon), geology, (mapping, rocks and minerals, soils, volcanoes, earthquakes, and other earth processes), meteorology (atmospheric studies, climate, weather, and the water cycle), and oceanography (sea floor topography, sea water, ocean currents, and the wetlands). Current environmental issues are investigated. Demonstrations and laboratory exercises are used to enhance the learning of the topics being considered. Opportunities for field trips and study of additional topics are available. *

4310 BIOLOGY I ACADEMIC

SOL

Grades: 9-12

1 Credit

PREREQUISITE: None

Recommended Background: None

Biology is the study of living things. Topics studied include basic ecology, chemistry, the cell, homeostasis, photosynthesis, DNA and RNA, mitosis and meiosis, sexual and asexual reproduction, heredity, taxonomy, microorganisms, infectious diseases, the human body, the effects of foreign substances on the human body, and evolution. The course will go beyond the SOL requirements and challenge students to extend beyond the curriculum. A number of laboratory experiments are performed and will require students to work independently on occasion. */♦

4330 BIOLOGY II: ANATOMY & PHYSIOLOGY

Grades: 11-12

1 Credit

PREREQUISITE: Biology I

Recommended Background: B- or higher in Biology

The course will include microbiology, with emphasis on techniques for growing and handling common bacteria; advanced genetics; human anatomy and physiology; human diseases; and a more in-depth view of the ecology of our community, state, nation and world, and how each affects a given individual. Guest speakers will be used to give students insight into jobs related to the subject matter considered, and how relevant these topics are to everyday life. */♦

4400 - 4401 CHEMISTRY I [Year-Long]

SOL

Grades: 10-12

2 Credits: (1 Science, 1 Elective)

PREREQUISITE: Earth Science and/or Biology

Recommended Background: C- in Algebra I (Geometry and Algebra II is encouraged)

Chemistry I Pt 1 and Chemistry I Pt 2 is a year-long sequence to be started in the Fall. This course studies the composition, properties, and changes associated with matter and their applications. Topics include: atomic structure, chemical bonding, the mole, formulas and equations, the gas laws, solutions, acids and bases, and chemical reactions. Algebra-based calculations are integrated into the study of most of these topics. Both open-ended laboratory experiments and standard verification-type laboratory experiments are performed by small groups of students. *

4410 CHEMISTRY I**SOL****Grades: 10-12****1 Credit****PREREQUISITE:** Earth Science and/or Biology**Recommended Background:** Be currently enrolled in Algebra II or have passed Algebra II.

(Tenth graders shall have an A- or higher average in Biology I Academic)

Chemistry I is a course for students in which the following topics are investigated in some depth: atomic structure, chemical bonding, the mole, formulas and equations, the gas laws, solutions, acids and bases, chemical reactions, and stoichiometry. Algebra-based calculations are integrated into the study of most of these topics. Both open ended laboratory experiments and standard verification-type laboratory experiments are performed by small groups of students. *

4420^{HW} CHEMISTRY II (Pending Sufficient Enrollment)**Grades: 11-12****1 Credit****PREREQUISITE:** Chemistry or Chemistry Year-Long**Recommended Background:** B- or higher in Chemistry or Chemistry Year-long

In Chemistry II students review and expand upon numerous concepts from Chemistry I. The class also explores topics beyond Chemistry I, such as oxidation-reductions, reactions, electrochemistry, and organic chemistry. In-depth research papers will be assigned and the labs and their reports are longer and more involved than those in Chemistry I. *

4220 ENVIRONMENTAL SCIENCE ACADEMIC**Grades: 9-12****1 Credit****PREREQUISITE:** Earth Science**Recommended Background:** Verified Earth Science credit

This course is designed to cover the basic concepts of ecology, geology, and earth systems including historical and current issues in environmental sciences, ecology, and earth sciences. Ecology is the study of organisms and their interaction with their environments. Topics include populations, ecosystems, dynamics of communities, and emerging sciences behind the developmental sustainable products and resources. Geology is the study of the earth and how systems of tectonics, weathering, and deposition interact. *

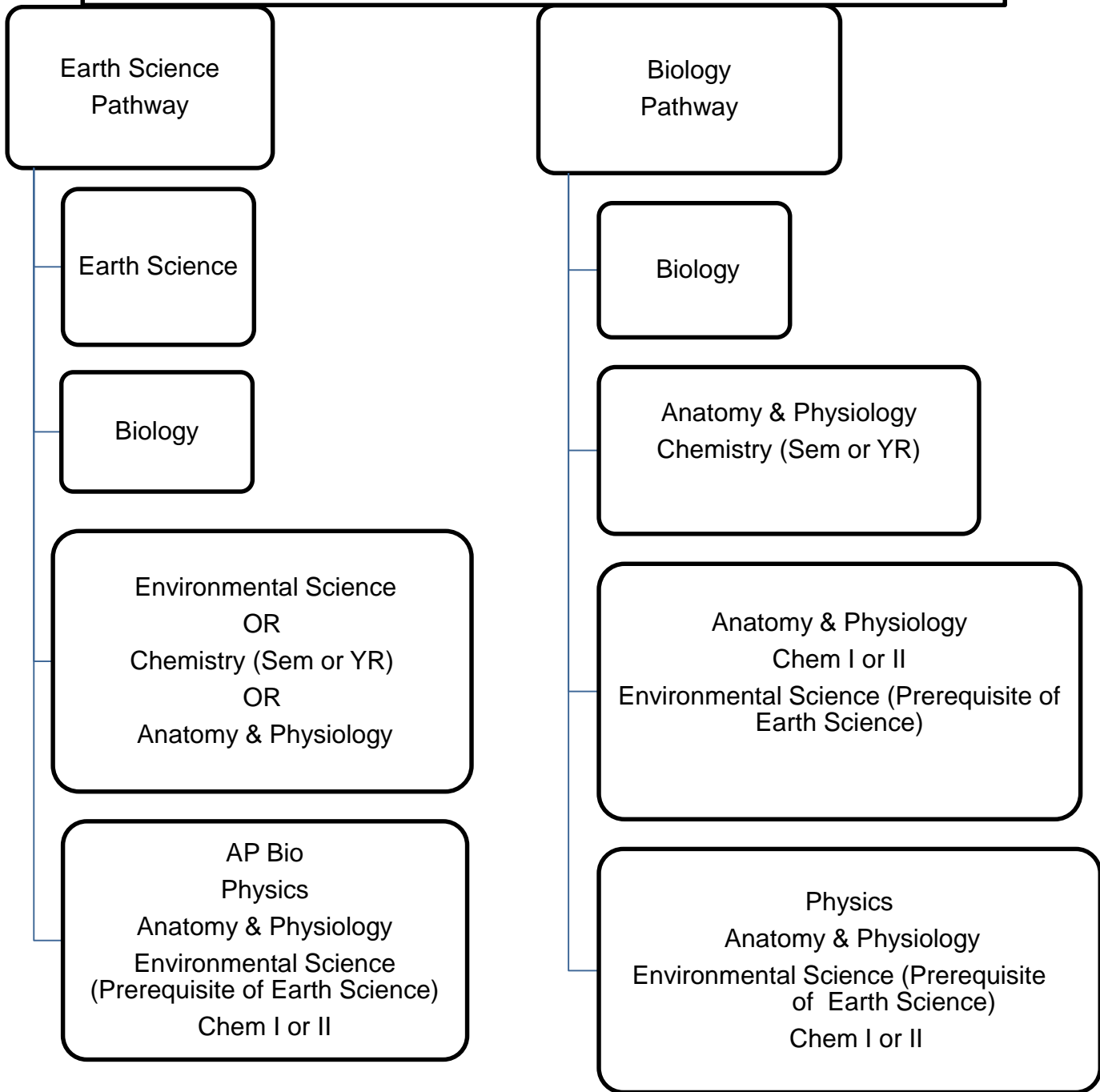
4510^{HW} PHYSICS**Grade: 12****1 Credit****PREREQUISITE:** Chemistry I**Recommended Background:** Math Analysis and 75% or higher in Chemistry I

This course teaches fundamental principles of physics, covering mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics. This is a weighted course. *

♦ **Alternatives to animal dissection techniques within each relevant curriculum will be provided.**

***Students in science classes are monetarily responsible for broken or lost equipment and materials.**

Science Sequence of Courses – Grades 9-12



SOCIAL STUDIES

2215 WORLD GEOGRAPHY/WORLD HISTORY I ACADEMIC

Grades: 9

1 Credit

PREREQUISITE: None

Recommended Background: None

This course focuses on the world's people, places, and environments with historical emphasis on ancient times until about 1500 A.D.

SOL

2215^{HW} WORLD GEOGRAPHY/WORLD HISTORY I HONORS

Grades: 9

1 Credit

PREREQUISITE: SOL scaled score of 450 in 8th grade, minimum passing grade of 85%/B in past curriculum area, teacher recommendation and parent input

This honors course focuses on the world's people, places, and environments with historical emphasis on ancient times until about 1500 A.D.(C.E.) The fast-paced course places an emphasis on reading primary and secondary sources and writing as well as a greater depth of content and understanding. This is a rigorous history course designed for highly motivated students and will provide the students with the knowledge and skills to be successful in future honors and dual enrollment social studies classes. Students should expect frequent homework. There will be a required summer assignment due on the first day of school. The course carries a .5 weighted credit.

SOL

2216 WORLD GEOGRAPHY/WORLD HISTORY II ACADEMIC

Grades: 10-12

1 Credit

PREREQUISITE: World Geography/World History I

Recommended Background: Pass World History I SOL Test

This course covers geography and history from 1500 A.D. to the present with emphasis on Western Europe. The in-depth coverage of the content and course activities are designed for the college bound student or advanced studies diploma.

SOL

2360 VIRGINIA/US HISTORY ACADEMIC

Grade: 11

1 Credit

PREREQUISITE: None

Recommended Background: None

This course covers the development of American ideals and institutions through the study of major events, eras, and personalities of Virginia and United States history from the Age of Discovery to the present.

SOL

2996D^W DUAL ENROLLMENT: VIRGINIA/US HISTORY

Grades: 11-12

1 Credit

PREREQUISITE: Satisfactory score on Virginia Placement Test

This college course surveys United States history from its beginning to the present. This honors course meets the Virginia/United States history graduation requirement. This weighted course carries one (1) weighted high school credit and six (6) semester hours of college credit. Payment will be required. (History 121/122: US History is offered in cooperation with Germanna Community College.) Students must pass History 121 in order to move on to History 122.

SOL

2440 VIRGINIA/US GOVERNMENT ACADEMIC

Grade: 12

1 Credit

PREREQUISITE: None

Recommended Background: None

In this course the principles of American democracy are examined. Some of the major topics studied are the three branches of government, the US Constitution and other significant documents, civil rights and liberties, state and local governments, American public policy and comparative government.

2440DE^W DUAL ENROLLMENT: VIRGINIA/US GOVERNMENT

Grade: 12

1 Credit

PREREQUISITE: Satisfactory score on Virginia College Placement test

This college course teaches structure, operation, and process of national, state, and local governments. It includes in-depth study of the three branches of the government and of public policy. This weighted course carries one (1) weighted high school credit and six (6) semester hours of college credit. Payment will be required. (PLS 211/212: American Government is offered in cooperation with Germanna Community College.)

2900 PSYCHOLOGY

Grades 11-12

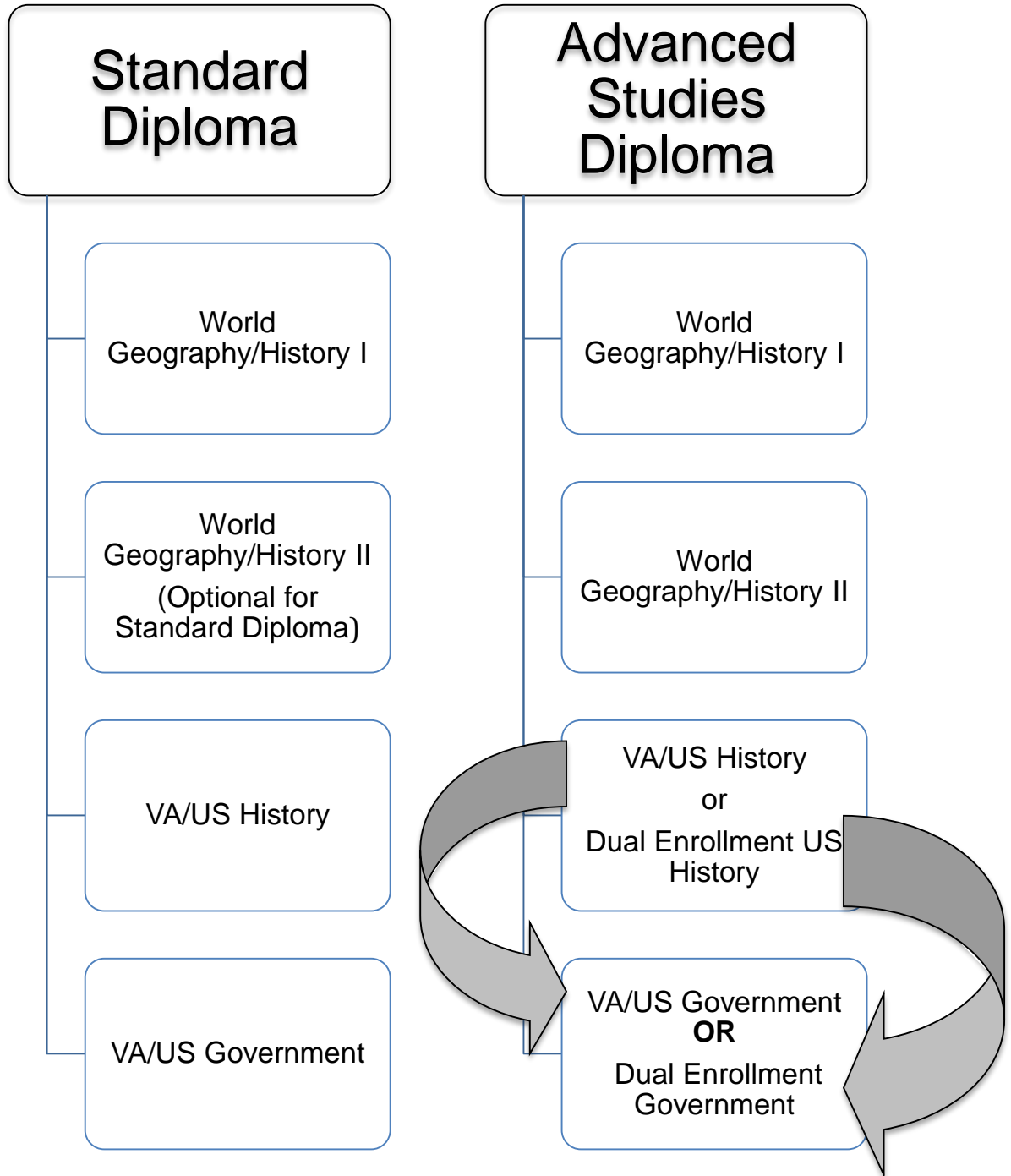
1 Credit

PREREQUISITE: None

Recommended Background: Social Studies Teacher recommendation

The course is designed for students interested in the psychological perspective. Basic theories, research techniques, and detailed psychological methods are examined. Students will engage in a variety of activities and experiments to gain an understanding of psychology concepts.

History Sequence of Courses – Grades 9-12



9120 ART I (FOUNDATIONS)**Grades: 9-12****1 Credit****PREREQUISITE:** None**Recommended Background:** None

This introductory course provides a broad-based exposure to visual art with an emphasis on the elements and principles of design. Students focus on idea development and visual literacy while they explore a wide range of art media through creative journal assignments. Students develop skills in drawing, painting, printmaking, and 3-D media, etc. Art history, aesthetics, and criticism are also studied through writing processes. Students will begin to develop a personal style and compile a portfolio.

9130 ART II (INTERMEDIATE)**Grades: 10-12****1 Credit****PREREQUISITE:** Art I**Recommended background:** C or better or teacher recommendation

This course provides students with the opportunity to build on skills developed in Art I, provides for more self – expression, and creative problem solving with open-ended projects. Art history, aesthetics, and criticism are studied through writing processes. More media choices and techniques are introduced. The importance of craftsmanship is stressed. Students will begin to develop a personal style and compile a portfolio.

9140 ART III (ADVANCED)**Grades: 10-12****1 Credit****PREREQUISITE:** Art II**Recommended Background:** B- or better or teacher recommendation

This course builds on skills learned in Art I-II with more opportunities for student-lead projects. Students **must** have a high interest in art and be self-motivated. Art career opportunities are studied as students develop the work habits of the art professional. Students continue to build their artistic style as well as a cohesive art portfolio.

9147 ART IV (PORTFOLIO PREPARATION)**1 Credit****PREREQUISITE:** Art III

This course builds on skills from Art III and is designed for the serious art student with an emphasis on preparing students for a college art setting. Students must be self-motivated for this guided independent study which requires research, artistic challenges, fine tuning of art skills, completed commissions and independent work. At the end of the course, students will have a strong, elaborate portfolio that demonstrates their knowledge and skills in art. This course may be repeated for credit with the teacher's permission.

4-Year Planner/Worksheet

Name _____ Class of _____

Diploma Type: ___Adv Studies ___Standard

Prior to 9 th Grade Year			9 th Grade Year			10 th Grade Year		
	Class Credit	SOL Credit		Class Credit	SOL Credit		Class Credit	SOL Credit
Spanish I			English			English		
Algebra			Math:			Math:		
Geometry			Science			Science:		
Algebra II			Wld Hist/Geog I			Wld Hist/Geog II		
Earth Science			Health/PE I			Health/PE II		
			Foreign Language			Foreign Language		
			Electives:			Electives		
11 th Grade Year			12 th Grade Year			5 th Year		
	Class Credit	SOL Credit		Class Credit	SOL Credit		Class Credit	SOL Credit
English			English					
U.S. History			Government					
Math:			Math:					
Science:			Science:					
Foreign Language			Foreign Language					
Economics & Personal Finance			Electives:					
Electives								

GOVERNOR'S *EARLY COLLEGE SCHOLARS* AGREEMENT

The responsibilities of each party are outlined herein and the corresponding signature assures acceptance of responsibility of each party.

The student agrees to:

Earn an Advanced Studies Diploma or an Advanced Technical Diploma with a Governor's Seal. To receive a Governor's seal, students must:

- Complete the requirements for the Advanced Studies Diploma or the Advanced Technical Diploma;
- Earn a "B" average or higher; 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

Earn at least 15 transferable college credits while enrolled in high school. College credits toward completion of this Agreement will be considered earned by:

- Completing dual enrollment/dual credit courses and earning a "C" or better in the courses
- Completing advanced placement courses i.e., AP, IB or Cambridge and
 - Scoring a "3" or higher on the AP examinations or
 - Scoring a "4" or higher on any form of the IB examinations or
 - Scoring a "D" or better on the Cambridge examinations
- Earning college credits by passing College Level Examination Program (CLEP) examinations
- Completing college-level courses and documenting credit awarded

Apply and be accepted to a college or university

Student Name (Printed)

Student Signature

Date

The parent/guardian agrees to:

Support and monitor student's academic work and progress in school, particularly as it relates to fulfillment of the requirements for the Governor's *Early College Scholars* Agreement.

I understand that the actual number of transferable college credits awarded depends on the criteria of the admitting college or university.

Parent/Guardian Signature

Date

The high school agrees to:

Provide the student opportunities to access college-level courses and/or advanced placement courses needed to fulfill this agreement.

Provide the counseling services needed to fulfill the requirements of the Governor's *Early College Scholars* Agreement, including assisting students in developing a program of study.

Provide the Virginia Department of Education with data regarding participation and completion of the Governor's *Early College Scholars* program.

High School Principal Signature

Date

School Counselor

Date

Virginia Department of Education

September 2011



STEPS FOR DUAL ENROLLMENT

2019-2020

Enrolling in Dual Enrollment (DE) coursework offered at your high school is a five-step process. All prospective DE students must receive qualifying placement test scores in order to enroll in a DE course. If you have questions about the process, your first point of contact is your high school guidance counselor.

Please note, high school students taking college courses on a Germanna campus follow a slightly different registration process. For more information on that process, please visit the High School/Home School Admissions page on the Germanna website: <http://www.germanna.edu/admissions/high-school-admissions-checklist/>

Step One:

Discuss your school's Dual Enrollment offerings with your high school guidance counselor as you are considering your junior or senior year courses. Obtain permission from your high school to enroll in Dual Enrollment courses.

Step Two:

Complete the application for admissions by your high school's deadline. **Students who are under 18 must have their parent or guardian sign the Parent Certification Form in order to enroll in courses.**

Students who have been enrolled in Dual Enrollment courses through Germanna in the last year (Fall 2018 - Spring 2019) may need to update their GCC application for admission but do not need a new application. Students who have dual enrolled in another VCCS college, or plan to dual enroll in two colleges, will need to complete a separate application for each college.

Apply online at Germanna's homepage:

<http://www.germanna.edu/admissions/apply-online/>

If you have application questions or need assistance completing your application, please contact Kelly Crowder, Program Assistant for the Office Dual Enrollment:

(540)423-9131

kcrowder@germanna.edu or the
Coordinator of Dual Enrollment,
Tim Konhaus: (540)-423- 9126,
TKonhaus@germanna.edu

Step Three:

Sign up to take the college placement test administered at your high school, or submit qualifying SAT, PSAT, or ACT scores. **You are required to have your 7-digit Germanna Student ID Number to take a placement test.** Students are strongly advised to practice prior to taking the placement test. Practice test directions and tests themselves, are accessible online at:

Practice Test Directions: <http://www.germanna.edu/documents/virginia-practice-test-directions.pdf> and

Practice Test: <https://college.measuredsuccess.com/mscollege/do/log>

Step Four:

Register for classes at your high school by the deadline. You must complete and submit a GCC Registration Form each semester, available in your high school guidance office or on the Dual Enrollment website. **Meeting all deadlines is the student's responsibility.**

Step Five:

Submit tuition payment to your high school by the deadline. Your high school will collect DE tuition at the beginning of each semester. Check with your high school for Dual Enrollment tuition rate and due date. **Students who do not submit tuition by the deadline may be dropped from their Dual Enrollment class.**

For more information on Germanna's Dual Enrollment Program, please visit the Germanna Community College website:
<http://www.germanna.edu/dual-enrollment/>

Madison County High School Web Page
Web Site address-<https://www2.madisonschools.k12.va.us/Page/9>
Access to Naviance



Student Resources

- Student Resources
- DMV Testing
- Additional Resources
- Desmos Calculators



Buy a Yearbook

<https://yearbookforever.com/#school/9961>

Class of 2019

<https://sites.google.com/madisonschools.k12.va.us/classof2019>

Google Apps

<https://accounts.google.com>

Library

<http://madisonlearningcommons.weebly.com/>

Naviance

<https://connection.naviance.com/family-connection/auth/login/?hsid=madisonch>



Welcome to Naviance Student

Email

Password

Are you new here?

[I need to register](#)

Madison County High School
68 Mountaineer Lane

Access to PowerSchool Parent Portal
<https://www2.madisonschools.k12.va.us/domain/105>

HOME OUR DISTRICT OUR SCHOOLS DEPARTMENTS PARENTS STUDENTS STAFF EMPLOYMENT CALENDAR

MIC
Public Schools
teaching • learning • caring

Welcome to Madison County Public Schools

Sign In TRANSLATE SELECT A SCHOOL

Search... PARENT PORTAL EVENT CALENDAR MENUS NEWS STAFF DIRECTORY



Parent Links

Parent Links

- Parent Portal
<https://madisoncountypowerschool.com/public/home.html>
- PowerSchool Assessment & Analytics
https://aa.powerschool.com/Account/Login?redirectUrl=https://aa.powerschool.com/&code=VA_MADISON
- School Report Card
http://www.doe.virginia.gov/statistics_reports/school_report_card/index.shtml
- VDOE Parent/Student Page
<http://www.doe.virginia.gov/families/index.shtml>



PowerSchool

Student and Parent Sign In

Sign In

Create Account

Username

Password

Forgot Username or Password?

Sign In

Madison County High School

68 Mountaineer Lane

Madison, VA 22727

Phone: 540-948-3785

Principal: Gary Wintersgill

Assistant Principal: Dr. Jason Allison

Instructional Coach: Jayne PennHollar

Athletic Director: Phil Warren

Counselors: Torie Knighton

Taylor Austin

Registrar: Karen Teal

Counseling Office Phone: 540-948-3785



Madison County Public Schools

60 School Board Court

Madison, VA 22727

Phone: 540-948-3780

Madison County School Board

Dr. Barry Penn Hollar, Chair

Karen Allen, Vice Chair

Dr. Robert Chappell

Nita Collier

Arthur Greene Jr.

Superintendent

Anna Ruth Graham

Assistant Superintendent

Cathy Jones

Director of Administration

Tina Weaver

Director of Technology

Sam Utz

Supervisor of Facilities Management

Earl Keys

Supervisor of Student Services

Jeanette Alexander

Supervisor of Food Services

Patty Seale

Supervisor of Transportation

Donald Farnham

To contact the specific person via email, please enter the first letter of their first name, then last name
@madisonschools.k12.va.us.