# Directory of Middle & High Schools

## Middle Schools

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
<th>Principal, Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BATTLEFIELD</td>
<td>11120 Leavells Road, Fredericksburg, VA 22407</td>
<td>540.786.4400</td>
<td>Dr. Sheila Smith, Principal</td>
</tr>
<tr>
<td>CHANCELLOR</td>
<td>6320 Harrison Road, Fredericksburg, VA 22407</td>
<td>540.786.8099</td>
<td>Ms. Deborah Frazer, Principal</td>
</tr>
<tr>
<td>FREEDOM</td>
<td>7315 Smith Station Road, Fredericksburg, VA 22407</td>
<td>540.548.1030</td>
<td>Dr. Eric Wright, Principal</td>
</tr>
<tr>
<td>NI RIVER</td>
<td>11632 Catharpin Road, Spotsylvania, VA 22553</td>
<td>540.785.3990</td>
<td>Mr. Brian Bartoszek, Principal</td>
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<tr>
<td>POST OAK</td>
<td>6959 Courthouse Road, Spotsylvania, VA 22551</td>
<td>540.582.7517</td>
<td>Mr. Scott Belako, Principal</td>
</tr>
<tr>
<td>SPOTSYLVANIA</td>
<td>8801 Courthouse Road, Spotsylvania, VA 22553</td>
<td>540.582.6341</td>
<td>Mr. Lane Byrd, Principal</td>
</tr>
<tr>
<td>THORNBURG</td>
<td>6929 N. Roxbury Mill Road, Spotsylvania, VA 22551</td>
<td>540.582.7600</td>
<td>Dr. Chandra Rhue, Principal</td>
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## High Schools

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<tr>
<td>CHANCELLOR</td>
<td>6300 Harrison Road, Fredericksburg, VA 22407</td>
<td>540.786.2606</td>
<td>Mrs. Jacqueline Bass-Fortune, Principal</td>
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<tr>
<td>COURTLAND</td>
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<td>540.898.4445</td>
<td>Mr. Cliff Conway, Principal</td>
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<td>MASSAPONAX</td>
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<td>540.710.0419</td>
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<td>RIVERBEND</td>
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<td>540.582.3882</td>
<td>Mr. Kelly Guempel, Principal</td>
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The full contents of this course selection guide are available online at [www.spotsylvania.k12.va.us](http://www.spotsylvania.k12.va.us)
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Introduction

Our Core Values
- Quality
- Equity
- Innovation
- Inclusivity
- Collaboration
- Citizenship
- Stewardship

Developing Your Educational Plan
Greetings! We created this guide to help students and families plan meaningfully for middle and high school. The career pathways pages that follow describe coursework that can lead to various careers in our community. These will be useful to you as you choose courses and plan your future. The pathways suggest courses that align with specific career interests. Please read, learn, ask questions, and plan wisely.

As our vision statement indicates, we want students to come to school excited about learning. These pathways should be considered suggestions for consideration, not a prescribed sequence that must be followed. If you are passionate about music and technology, take both types of courses! Pursue clubs and activities that interest you. Explore what intrigues you as you develop the skills you need for your future.

Course Availability
Courses are available to students who have met the stated prerequisites. Occasionally, a particular course will not be available due to an insufficient number of students desiring the course or a scheduling conflict. If a student selects one or more of these courses, an alternate class must be chosen. While every effort is made to resolve conflicts, in certain situations, students may need to consider alternative choices. The school will attempt to contact students and parents when this becomes necessary.

Statement of Non-Discrimination
Spotsylvania County Public Schools does not discriminate on the basis of race, color, ethnicity, age, religion, national origin, sexual orientation, gender identity, sex, marital status, or disability. All students have equal access to the courses and programs contained within this guide.
For each career pathway, a summary of that cluster is provided along with information about projected job growth, certifications/credentials, student organizations, postsecondary options at Germanna Community College, and a sampling of what is offered at 4 year state colleges/universities.

In the future careers charts, the regional projection growth is the Local Workforce Investment Area XIII which consists of the following counties/cities: Spotsylvania, Stafford, Fredericksburg, King William, King George, Essex, Richmond, Westmoreland, Northumberland, King and Queen, Caroline, Accomack, and Middlesex. These projections are from 2016 to 2026.

Each career pathway offers a variety of different certifications or credentials. A credential/certification as defined by the Virginia Department of Education:

- **State-issued professional license** - required for entry into a specific occupation as determined by a Virginia state licensing agency (Licensed Practical Nurse (LPN), Cosmetology);
- **Full industry certification** - from a recognized industry, trade, or professional association validating essential skills of a particular occupation (A+ CompTIA, Microsoft Certified Professional (MCP);
- **Pathway industry certification** - which may consist of entry-level exams as a component of a suite of exams in an industry certification program leading toward full certification (Automotive Service Excellence, (ASE), Microsoft Office Specialist (MOS); or
- **Occupational competency assessment** - a national standardized assessment of skills/knowledge in a specific career and/or technical area, (NOCTI).
Summary of Pathway
Do you have a love of science, environment, and/or animals? Learners who pursue Animal Science will be prepared for careers that involve improving the quality and safety of food, cultivating and preserving our natural resources, and caring for animals. Learners need a solid background in math, science, communications, and technical skills.

The Plant Science pathway encourages students to study the production of plants while developing an understanding of one of the largest employment sectors. Learners will receive hands-on instruction in floral design and in greenhouse managements. The major focus of the pathway is to expose students to the world of agriculture, plant science, and career options.

This area is projected to grow by 19% by 2026. Classes that help students advance in this area are Geometry, Biology, and Anatomy and Physiology. Students will also have the opportunity to apply for the Veterinary Science program at the Career and Tech Center.

Certifications Earned
Animal Systems Assessment; Canine Care and Training Program-Level 1 Certification Examination; Customer Service Specialist (CSS) Examination; Pet Sitters Certification Examination; Small Animal Science and Technology Assessment; Workplace Readiness Skills for the Commonwealth Examination; Commercial Pesticide Applicator Certification Examination; Floriculture Assessment; Floriculture: Greenhouse Assessment; Greenhouse Operators Certification Examination; Horticulture-Landscaping Assessment; Plant Science Certification Examination

Post Secondary Options at Germanna Community College
• Associates of Arts and Sciences in Science
• Applied Horticulture/Horticulture Operations
• Associates of Applied Science in Mining Technology, Natural Resources, and Conservation

Sample Post Secondary Options at a 4-year University
• Agricultural Science Major
• Pre-Veterinary Science Medicine Major
• Wildlife Conservation
• Marine Biology
• Landscape Design
• Floral Design
• Forestry and Wildlife
• Environmental Science
# Agriculture, Food & Natural Resources Pathways

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<th>Grade</th>
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<th>9th Grade</th>
<th>10th Grade</th>
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<td>Small Animal Care</td>
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<td>Agriculture Cooperative Education</td>
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</table>
Architecture and Construction

Summary of Pathway
Do you want to design, build, or manage the structures where we live, work, and play? Learners who pursue this career pathway will help prepare the next generation of construction trades workforce and architects. This area is projected to grow by 12%, but this is an area of growing need. Students with this training will be in high demand for entry level positions. There will be opportunity for internships and registered apprenticeships positions. Courses that help prepare students for this pathway are Technology Education classes offered at the high schools. Students will also have the opportunity to apply for HVAC-R, Masonry, Carpentry, Electricity, and Drafting at the Spotsylvania Career and Tech Center.

Certifications Earned
- EPA 608 - Refrigerant Handling Certification
- OSHA 10 - Occupational Safety & Health Administration 10 Hour Card
- International Code Council Building Trades Certification

Post Secondary Options
Spotsylvania Career & Technical Center
- Registered Apprenticeship Programs of Electricity, Plumbing, and HVAC-R

Germanna Community College
- Registered Apprenticeship Programs in a variety of trades include: Carpentry, CNC Milling Operator, Electrical, HVAC, Industrial Maintenance, Plumbing, and Open Pit Miner

4-year University Sample
- Bachelor of Fine Arts - Architectural Design
- Bachelor of Science - Architecture
- Bachelor of Urban and Environmental Planning

**Construction Trades do not require a 4 year Bachelor's Degree.**

FUTURE CAREER GROWTH PROJECTIONS
(Projections based on Regional Statistics)

- Construction Managers - 7%
- Cost Estimators - 9%
- Brick & Block Masons - 13%
- Carpenters - 6%
- Electricians - 11%
- Electrical Power-Line Installers and Repairers - 10%
- Architectural and Engineering Managers - 10%
- Heating, Air Conditioning, and Refrigeration Mechanics and Installers - 19%
- Construction and Building Inspectors - 12%

Student Organizations
- SkillsUSA
- TSA
- National Association of Home Builders - Student Chapter
# Architecture and Construction Pathways

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<tr>
<th>8th Grade</th>
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<td>Tech Systems</td>
<td>Manufacturing Tech</td>
<td>Construction Tech</td>
<td>Carpentry, Masonry, Electricity, or HVAC I</td>
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<td>Drafting I</td>
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</table>
Arts, Audio/Video Tech, and Communications

Summary of Pathway
Are you creative? The Arts Pathway helps students showcase the creative expression of their ideas through a wide variety of imaginative mediums, designs, and performances. The Kennedy Center Arts Edge research shows that the arts play a critical role in quality education by: fostering creativity and innovative thinking; helping students communicate a variety of messages; improving student achievement in other disciplines; advancing problem-solving and cognitive skills; enhancing cultural understanding; and increasing attendance and graduation rates. Learners who pursue the music, theatre, and visual arts pathway will be involved in effectively communicating in both oral and written form. In addition, the creative aspects of this cluster are rapidly merging with technological skills, making it even more challenging. Preparation for careers in this cluster through high school, allows students to gain experience in the performing and visual arts as well as in the academic foundations. This area is projected to grow by 10% by 2026. Students will have the opportunity to take visual and performing arts classes within their own high schools. Students can also take Video Production courses at the Spotsylvania Career and Tech Center.

Post Secondary Options at Germanna Community College
- Associate of Arts and Science - General Studies
- Associate of Arts and Science - Liberal Studies
- Certificate in Fine Arts
- Certificate in Graphic Communications

Sample Post Secondary Options at a 4-year University
- Bachelor of Arts - Art History, Studio Art, Dance, Digital Video and Cinema, Converged Media, Communication Studies
- Bachelor of Fine Arts - Interior Design, Art, Dance and Choreography, Fashion, Graphic Design, Theatre
- Bachelor of Music - Composition, Music Industry, Performance

FUTURE CAREER GROWTH PROJECTIONS
(Projections based on Regional Statistics)
- Graphic Designer - 12%
- Actors - 10%
- Music Directors - 8%
- Composers - 8%
- Art Directors - 13%
- Fine Artists (Painters, Sculptors, Illustrator) - 4%
- Film & Video Editors - 16%
- Photographers - 14%
- Audio & Video Technicians - 13%
- Musicians & Singers - 11%
- Set Designers - 9%
- Art Directors - 13%

Student Organizations
- Art Club
- Drama Club
- Marching Band
- Spring Musical
- Extracurricular productions and events
- VHSL Competitions: Fall One Act Play, Forensics, and Film Festival
# Arts, Audio/Video Tech, and Communications Pathways

<table>
<thead>
<tr>
<th>Grade</th>
<th>English</th>
<th>Math</th>
<th>Science</th>
<th>Social Studies</th>
<th>Health &amp; PE</th>
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<td>Basic Strings/ Concert Performance Orchestra/ Symphonic Performance Orchestra</td>
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</table>

- **Music Theory**: AP Music Theory/ IB Music
- **Sculpture**: Sculpture I (MHS & RHS)
- **Dance**: Dance I (CoHS)
- **Intro. To Music Technology**: Intro. To Music Technology (SHS)
- **Video Production Pathways**: Video Production
- **Advanced Video Production**
Business Management and Administration/Finance

Summary of Pathway
Do you want to be a CEO or CFO? Do you want to run an organization? This pathway is a diverse field that incorporates many types of management positions. From major corporations to independent businesses, every operation needs skilled administrators in order to succeed. Students will learn how to be motivated and organized in order to thrive in business where environments are often high-powered. Learning how to deal with stress will help students keep their cool—and keep their business in the black. This area is expected to grow by 8% in Business Management and Administration and by 10% in Finance. Courses that help to prepare students for this pathway include all business courses and marketing courses.

Certifications Earned
Workplace Readiness Skills

Post Secondary Options at Germanna Community College
- Associates of Art and Science - Business Administration
- Associate of Applied Science - Business Management
- Career Studies Certificate - Accounting, Business Core, Entrepreneurship, Supervision

Sample Post Secondary Options at a 4-year University
- Bachelor of Science in Commerce - Accounting, Business, Economics, Finance
- Bachelor of Business Administration - Finance, Financial Economics, Political Economy
- Certificate in Venture Creation

FUTURE CAREERS
GROWTH PROJECTIONS
(Projections based on Regional Statistics)

General and Operations Managers - 12%  
Sales Managers - 12%  
Administrative Services Managers - 13%  
Management Analysts - 19%  
Training and Development Specialists - 22%  
Social and Community Service Managers - 25%  
Computer and Information Systems Managers - 16%  
Receptionists & Information Clerks - 19%  
Fundraisers - 29%

Student Organizations
- FBLA
- DECA
## Business Management and Administration/Finance Pathways

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<td>Introduction to Marketing</td>
<td>Fashion Marketing/ Sports Marketing</td>
<td>Marketing</td>
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<td>DMWT I</td>
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Education and Training, Human Services

Summary of Pathway
Do you want to make a difference? Learners who pursue the Education and Training/Human Services pathway will be involved in classes to prepare the next generation to make a difference. This family of classes and practical experiences prepares students for the art of teaching, planning, and administration in schools, colleges, technical institutes, and businesses. This pathway can also prepare students for cosmetology, counseling, and self/personal care. The jobs in the area of Education and Training are expected to grow by 9% and Human Services by 16%. Courses in Family and Consumer Science and Psychology will help to prepare students for this pathway. Students also have the opportunity to apply to Early Childhood Education (Spotsylvania Career and Tech Center), Teachers for Tomorrow (Chancellor High School), and Cosmetology (Spotsylvania Career and Tech Center).

Certifications Earned
Cosmetology State Board of Licensing Certification; American Association of Family and Consumer Science Early Childhood; Education Student Certification

Post Secondary Options at Germanna Community College
- Associates of Arts and Sciences - Education
- Specialization K-8 General Studies - Psychology Specialization
- Associates of Applied Sciences - Early Childhood Development
- Certificate - Early Childhood Development, General Education Certificate
- Career Studies Certificate - Early Childhood Development

Sample Post Secondary Options at a 4-year University
In Virginia, students do not major in education. Instead, future teachers major in a content area (such as Biology, Modern Foreign Languages, or Theatre) and work toward teacher licensure through a 4-year undergraduate or 5-year master’s program.

FUTURE CAREER GROWTH PROJECTIONS
(Projections based on Regional Statistics)
Teachers (all levels) - 13%
Administrators - 13%
School Counselors - 18%
Coaches - 19%
Teaching Assistants - 12%
Librarians - 16%
Interpreters - 27%
Translators - 28%

Student Organizations
- FCCLA
- Ed Rising
## Education and Training, Human Services Pathways

<table>
<thead>
<tr>
<th>Grade</th>
<th>English</th>
<th>Math</th>
<th>Science</th>
<th>Social Studies</th>
<th>Health &amp; PE</th>
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<td>Health/PE 8</td>
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- **English**: English 8, English 9, English 10, English 11, English 12, Hon English 8, Hon English 9, Hon English 10, Hon English 11, Hon English 12, AP English 11, AP English 12, DE English 11, DE English 12
- **Science**: Physical Science, Environmental Science, Biology, Earth Science, Hon Physical Science, AP Environmental Science, Hon Biology, Chemistry, AP Biology with Chemistry, AP Chemistry, Any Science
- **Health & PE**: Health/PE 8, Health/PE 9, Health/PE 10
- **World Language**: World Language I through AP
- **Per. Fin./Econ**: Economics & Personal Finance
Government & Public Administration/Law, Public Safety, Corrections, and Security

Summary of Pathway
Do you have a passion to provide a public service? Almost every career can be found within this field. Learners will be prepared to protect our country, represent our interests abroad, or pass and enforce laws. Learners may also be prepared to protect people from harm, crime, or national disasters. Both of these areas are projected for growth within the state and nationally. Government and Public Administration is projected to grow by 17%, and Law, Public Safety, Corrections, and Security are projected to grow by 8%. Courses that help to prepare students for this pathway include JROTC, Criminal Justice, and Social Science classes.

Certifications Earned
ASVAB

Post Secondary Options at Germanna Community College
- Associates of Arts and Sciences - Administration of Justice
- Associates of Applied Science - Administration of Justice; Fire Science
- Fire Science Certificate
- Career Studies Certificate - Administration of Justice; Legal Assistant; Paraprofessional Counseling

Sample Post Secondary Options at a 4-year University
- Bachelor of Arts - International Relations, Political Science, Homeland Security, and Emergency Preparedness
- Bachelor of Science - Public Policy and Administration, Criminal Justice, Environmental Studies, and Forensic Science

FUTURE CAREERS
GROWTH PROJECTIONS
(Projections based on Regional Statistics)

Administrative Services Managers - 13%
Compliance Officers - 13%
Eligibility Interviewers for Government Programs - 11%
Court, Municipal, and License Clerks - 19%
Probation Officers and Correctional Treatment Specialists - 6%
Emergency Medical Technicians & Paramedics - 13%
Police, Fire, and Ambulance Dispatchers - 13%
First-Line Supervisors of Police and Detectives - 10%
Police and Sheriff’s Patrol Officers - 11%
Security Guards - 7%
Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers - 14%
Protective Service Workers - 11%

Student Organizations
- FBLA
- SkillsUSA
<table>
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<tr>
<th>Subject</th>
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Health Sciences

Summary of Pathway
Do you want to make a difference by helping people or animals? The health science field provides many challenging educational and training opportunities within the high-skilled world of Health Science. Learners need a solid background in math, science, communications, and technical skills. This area is projected to grow 18% by 2026. Classes that can help students in this field are science, math, psychology, and technology classes. There is also an opportunity for a Medical Pathways course, Medical Assistant, Dental Assistant, and Veterinary Science programs at the Spotsylvania Career and Tech Center.

Certifications Earned
Dental Assisting National Board Radiation Certification
NHA: Certified Medical Administrative Assistant
NHA: Certified Clinical Medical Assistant

Post Secondary Options at Germanna Community College
- Associate of Arts & Sciences - General Studies and Pre-BSN Specialization
- Associate of Applied Sciences - Nursing, Licensed Practical Nursing for Advanced Standing, and Physical Therapist Assistant
- Certificates - Dental Assisting and/or Practical Nursing
- Career Studies Certificates - Allied Health Preparation, Healthcare Technician, Personal Training, Pharmacy Technician, Restorative Dental Function, Indirect Restorative Techniques, Expanded Functions Dental Assisting, and Surgical Scrub Nurse

Sample Post Secondary Options at a 4-year University
- Associate of Arts & Sciences - General Studies, Pre-BSN Specialization
- Associate of Applied Sciences - Nursing, Licensed Practical Nursing for Advanced Standing, Physical Therapist Assistant
- Certificates: Dental Assisting, Practical Nursing
- Career Studies Certificates - Allied Health Preparation, Healthcare Technician, Personal Training, Pharmacy Technician, Restorative Dental Function, Indirect Restorative Techniques, Expanded Functions Dental Assisting, and Surgical Scrub Nurse

FUTURE CAREER GROWTH PROJECTIONS
(Projections based on Regional Statistics)
Physician Assistants - 50%
Cardiovascular Techs - 20%
Radiologic Techs - 13%
EMTs - 18%
Medical Health Service Managers - 31%
Occupational Therapists - 40%
Physical Therapists - 38%
Family & General Practitioners - 24%
Registered Nurses - 19%
Veterinarians - 27%

Student Organizations
- HOSA
- Science National Honor Societies (school specific)
- FFA
- Science National Honor Societies (school specific)
# Health Sciences Pathways

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**Possible Additional Courses**

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Hospitality & Tourism/Marketing Pathways

Summary of Pathway
Do you like people? The hospitality and tourism/marketing industry is a fast-paced, active setting that includes restaurants, retail environments, hotels, and others. Spotsylvania has hundreds of businesses that employ people in these industries. It's one of the top career fields in our area and is expected to grow by 10% by 2026. The average entry-level salary in hospitality management is $40,109, and there are typically many opportunities for advancement in the field. Classes that prepare students for a career in this field include marketing, family and consumer sciences, and business management, along with a Culinary program at the Career and Tech Center.

Certifications Earned
National Restaurant Association Pro-Start Certification
ServeSafe Manager’s Certifications
Customer Service Certification
Workplace Readiness

Post Secondary Options at Germanna Community College
• Associates of Arts and Sciences or Applied Sciences in Business Management
• Career Studies Certificate - Accounting, Business Core, Entrepreneurship, and Supervision

Sample Post Secondary Options at a 4-year University
• Bachelor of Business Administration - Marketing, Business Administration
• Bachelor of Science - Hospitality Management, Tourism and Events Management, and Sports and Recreation Management

FUTURE CAREER GROWTH PROJECTIONS
(Projections based on Regional Statistics)

Sales Manager - 12%
Public Relations Specialist - 14%
Realtors - 5%
Event Planners - 16%
Advertising Sales Agents - 15%
Market Research Analysts and Marketing Specialists - 32%
Cooks (Restaurant) - 16%
Bakers - 16%
Food Preparation Workers - 11%
Food Service Managers - 13%

Student Organizations
• SkillsUSA
• FCCLA
• Community Leaders of America
• DECA
• FBLA
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Information Technology & STEM

Summary of Pathway
Do you like to work behind the scenes? Information Technology (IT) careers involve the design, development, support, and management of hardware, software, multimedia, and systems integration services. The IT industry is a dynamic and entrepreneurial working environment that has a revolutionary impact on the economy and society. This area is projected to grow by 13% by 2026. Classes offered that help students advance in this field are Cybersecurity, Computer Information Systems, and Computer Science.

Do you like to problem solve? Learners who pursue engineering will be involved in planning, managing, and providing scientific research and professional and technical services including laboratory and testing services and research and development services. Engineers will improve and update product designs to optimize their manufacturing processes. Additional engineers and technologists will be needed to improve or build new roads, bridges, water and pollution control systems, and other public facilities. Employment of engineers is projected to grow 4% from 2014 to 2024. Courses that help students advance in the field are Engineering Explorations and Studies and Technical Drawing and Design along with the opportunity to apply to the Drafting program at the Career and Tech Center.

Certifications Earned
COMP TIA 901 and 902 A+ Certification; Microsoft Office Specialist Word; Microsoft Office Specialist PowerPoint; Microsoft Office Specialist Excel; AutoCAD; Workplace Readiness; Inventor

Post Secondary Options at Germanna Community College
- Associate of Science Engineering - Electrical Concentration, and Mechanical Concentration
- Career Studies Certificates - Advanced Networking (not needed if taken Computer Networking), Cybersecurity, E-Commerce, Industrial Maintenance Technology, Microcomputer Applications for Business and Networking, and Engineering Technology

Sample Post Secondary Options at a 4-year University
- Bachelor of Business Administration - Computer Information Systems
- Bachelor of Science - Information Systems, Aerospace Engineering Major, Civil and Environmental Engineering Major, Computer Engineering Major, Engineering Science and Mechanics, Computer Science, and Biomedical Engineering
- Bachelor of Arts - Computer Science
- Bachelor of Science in Commerce - Business Analytics Major, and Information Technology

FUTURE CAREERS GROWTH PROJECTIONS
(Projections based on Regional Statistics)
- Computer and Information Systems Manager - 16%
- Computer and Information Research Scientists - 11%
- Database Administrators - 21%
- Computer User Support Specialists - 15%
- Information Security Analysts - 47%
- Computer Network Architects - 18%
- Architectural and Engineering Managers - 10%
- Software Developers - 37%
- Computer User Support Specialists - 15%
- Network and and Computer Systems Administrators - 13%
- Civil Engineers - 10%
- Aerospace Engineers - 13%
- Mechanical Engineers - 12%

Student Organizations
- SkillsUSA
- FBLA
- TSA
# Information Technology STEM Pathways

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Summary of Pathway
Are you ready to help prepare our nation's aging infrastructures such as bridges, buildings, and highways? Or are you ready to manage and move everything from people to products through a range of transportation? Students will learn a range of skills to help prepare them in Manufacturing for production planning, production design, maintenance, and engineering. Students will learn logistics in all modes of transportation from the road to the sky. Both of the fields will continue to be in demand as older workers retire although statistics only show a 2% growth increase. Students have the opportunity to apply to take Metal Trades, Auto Service, and Auto Collision at the Spotsylvania Career and Technical Center.

Certifications Earned
Automotive Service Excellence Student Examinations

Post Secondary Options at Germanna Community College
- Associate of Applied Science Technical Studies: Industrial Maintenance
- Career Studies Certificate - Automotive Diagnostician; Automotive Technician
- Industrial Maintenance Technology

Sample Post Secondary Options at a 4-year University
- Bachelor of Science - Manufacturing Engineering

**Automotive and Manufacturing Industries do not require a Bachelor's degree.

FUTURE CAREER GROWTH PROJECTIONS
(Projections based on Regional Statistics)

- Automotive Body and Related Repairers - 12%
- Automotive Service Technicians & Mechanics - 13%
- Bus & Truck Mechanics and Diesel Engine Specialists - 11%
- Mobile Heavy Equipment Mechanics, (except Engines) - 9%
- Motorboat Mechanics and Service Technicians - 9%
- Automotive and Watercraft Service Attendants - 21%
- Cleaners of Vehicles and Equipment - 14%
- Maintenance and Repair Workers, General - 11%
- Helpers - Installation, Maintenance & Repair Workers - 17%

Student Organizations
- SkillsUSA
- TSA
## Manufacturing, Transportation, Distribution, & Logistics Pathways

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<td>Economics &amp; Personal Finance</td>
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### Possible Additional Courses
- Tech Systems
- Metal Trades I
- Metal Trades II
- Auto Service I
- Auto Service II
- IT Fundamentals
- Manufacturing Tech
- Construction Tech
- Auto Collision I
- Auto Collision II
GCC Early College Pathway

Summary of Pathway
Do you know you want to go to college for a bachelor's degree, master's degree, or doctoral degree? Are you looking to save money and possibly years of time preparing for your future? The Germanna Early College Pathway may be the right opportunity for you to make it happen.

Starting in 10th grade, students can begin a series of courses that can result in earning a high school diploma and an associate's degree from Germanna. Most of these courses are available at each high school. Dual Enrollment (DE) and Advanced Placement (AP) courses provide college credit while also meeting high school graduation requirements. DE courses require students to earn a ‘C’ or better and are guaranteed to count towards associate degree requirements at Germanna. AP courses have an end of course exam and students must earn a 3 or better (the best possible score is 5) on the AP exam to count towards the associate degree requirements at Germanna. Other colleges and universities may also award college credit for completing these courses, but each school determines what exam scores are required for college credit. This pathway has been developed in partnership with Germanna to ensure that all credits earned count towards both the high school diploma and the Germanna Associate's degree.

Some courses must be taken on campus at Germanna. Germanna requires all students to take a student development course, an introductory computer course, and a communications course. These classes equip students with the study habits and basic computer skills necessary for success in college. Germanna also requires a college-level health or physical education course to be taken on-campus during the summer between junior and senior year.

Earning an associate's degree at the same time as a high school diploma is a rigorous academic pathway. Make an appointment with your school counselor, and follow up with a Germanna advisor to discuss your specific plan.
# Early College Pathway - Associates of Arts & Sciences

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<td>AP European History</td>
<td>AP Psychology</td>
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<td>Required GCC Courses</td>
<td>SDV 100 - Student Development*</td>
<td>CST 100/110/126 - Communications*</td>
<td>College-level Health/PE*</td>
<td>ITE 115 - Intro to Computer Apps &amp; Concepts*</td>
<td>Social Science Elective</td>
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<td>*Recommended summer course</td>
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School Counseling Program and Services

The middle school years may be difficult for students and their families. As adolescents, they are seeking out their own identity, adjusting to more responsibilities, and are balancing increasing academic loads. Although typical ten to fifteen year olds will act as if they want complete independence, they really do seek and respect parent/guardian opinions. It is highly recommended that middle school parents attend school events, meet the school counselor, talk with teachers, and learn more about the middle school program.

Each building employs professional school counselors who can help students and parents navigate concerns around these “middle years.” Middle school counselors are instrumental in the academic success of students. They provide academic, career, and personal counseling designed to meet the unique developmental stage of middle level learners. Parents will find that building counselors utilize a variety of programs to engage all students including: classroom lessons, small group sessions, individual counseling, and parent workshops.

Family Life

The Family Life Program is designed to help students understand and adjust to the pressures of growing up. The program promotes a positive self-concept, develops communication and decision-making skills, helps students understand and cope with emotional growth and development, and promotes positive family and social skills to say “no” to relationships or substances that can be physically and emotionally harmful. Information addresses physical growth and development, reproduction, sexually transmitted diseases, child abuse, molestation, and the value of postponing sexual activity until marriage. The health and physical education teacher provides instruction on family life education during health class. Each school notifies parents prior to the beginning of family life instruction regarding the availability of the Family Life curriculum for review at each school and the option to exempt a student from specified activities. An opt-out form is available from the school principal.

Battlefield Middle School ..........786-4400
Chancellor Middle School ..........786-8099
Freedom Middle School ............548-1030
Ni River Middle School ............785-3990
Post Oak Middle School ............582-7517
Spotsylvania Middle School ......582-6341
Thornburg Middle School ........582-7600

The focus of the middle school curriculum is to enable students to develop basic skills necessary for learning and the ability to apply those skills to new tasks. All courses are taught in accordance with locally developed curriculum guides and state-developed Standards of Learning objectives.

The Parent/Student Handbook provides information about the many opportunities for student participation in extracurricular activities. Opportunities for active participation in areas of interest are valuable for students at any grade level but are particularly important for middle school students.

Information about each school is available on the website at www.spotsylvania.k12.va.us.
Standards of Learning objectives (SOL) developed by the Virginia Department of Education are the basis for the core academic curriculum in grades 6-8. Locally developed objectives in curriculum guides reflect, amplify, or exceed the objectives developed by the state. Required classes include: English, Mathematics, Science, History & Social Science, and Health & Physical Education.

Elective classes are determined by the school and may include: Band, Orchestra, Chorus, World Language Exploratory, or an Exploratory rotation. Exploratory rotation experiences are determined by the school and typically include Exploratory Art, Family and Consumer Science, Introduction to Technology, and Music Appreciation. Students who struggle with reading or math fundamentals may also receive additional support as an elective based on the needs of the student.

### Core Classes

#### English 6
Course #1109
This course will emphasize the application and refinement of reading comprehension strategies focusing on developing and analyzing effective communication skills in presentations and small group discussions. In addition, students will study and develop vocabulary, understand the basic elements of media literacy, build research skills, and utilize technology as appropriate. Students will read, independently and in groups, a variety of fiction, narrative nonfiction, nonfiction, and poetry. Additionally, students will plan, draft, revise, and edit narratives, descriptive, expository, and persuasive writing with concentration on composing, written expression, and usage/mechanics.

#### United States History 6
Course #2354
This course is the continuation of United States history from the fifth grade. Students will study United States history from the end of the Civil War to present day. Focus will be placed upon the following: geographic influences; westward expansion; immigration; development of American cities; Progressive Movement; involvement in world affairs from the Spanish-American War to the Cold War; and the economic, social, and political transformation of the United States and the world between the end of World War II and the present.

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### Math 6
Course #3110
The Math 6 curriculum includes the prescribed Virginia Standards of Learning (SOL) as a minimum. The sixth grade curriculum places emphasis on the study of rational numbers to include integers, decimals, fractions and percents. Students will use ratios to compare data sets; identify and represent integers and their absolute value, use all four operations with rational numbers and integers; explore proportional relationships; focus on problem solving with area, perimeter, volume, and surface area; determine probability and use statistics; and investigate and solve practical problems involving equations and inequalities.

#### Pre-Algebra
Course #3122
Prerequisite: Division Placement Criteria
In the Pre-Algebra course, students review and extend concepts and skills from previous math courses and study new content to better prepare them for algebra and geometry. The Pre-Algebra curriculum places an emphasis on the study of linear relationships. Students will gain proficiency in computation with rational numbers and integers, use of proportions to solve a variety of problems, solving algebraic equations and inequalities, and representing functional relationships in a variety of ways. Other topics include problem solving with two and three dimensional figures, probability, and statistics.

#### Science 6
Course #4105
Sixth grade science builds on the scientific concepts, skills, and processes acquired in kindergarten through fifth grade. Students will experience the richness and excitement of scientific discovery and the natural world as they study the role of the sun's energy on the Earth's systems, air and atmosphere, human interactions as they affect watershed systems, and basic chemistry concepts. The concept of change is explored through the study of transformations of energy and matter. A more detailed understanding of the
solar system and space exploration takes students on a collaborative quest for knowledge and understanding. Emphasis is placed on development and use of an experimental design in scientific inquiry, use of the language of science to communicate understanding, and investigation of phenomena using technology.

**Health & Physical Education 6**  
Course #7110  
Students in middle school Physical Education will develop fundamental skills and build them into more skilled movements as they progress through eighth grade. In all grades, students will focus on cooperative and competitive games, dance, and lifetime activities as appropriate for their development. Through these activities, students will gain knowledge in rules, decision making, conflict resolution, appropriate etiquette, and respect for others. Students will focus on personal wellness and goal setting as it relates to their cardiorespiratory endurance, muscular strength endurance, flexibility, and body composition. In Health, students will cover a variety of topics relating to body systems, nutrition, first aid, safety, alcohol, tobacco, drugs, family life, and disease.

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**Elective Classes**

**Family & Consumer Sciences I**  
Course #8261  
Family and Consumer Sciences Exploratory I prepares students for the demands of 21st century living. This course provides a foundation for managing individual, family, career, and community roles and responsibilities. Students focus on areas of individual growth, goal setting, strengthening families, and awareness of personal safety and wellness. They also explore saving and spending practices, clothing care, food preparation, positive and caring relationships with others, and careers. Instruction emphasizes science, technology, engineering, and mathematics (STEM) concepts, when appropriate.

**Introduction to Technology I**  
Course #8481  
Students will study the basic elements of all technology, including processes, energy, information, and people. They will relate the impact of technology on society, environment, and culture to future consequences and decisions. Students utilize the design process through hands-on projects such as 3D printing, flight models, egg drop, and more.

**Computer Solutions 6**  
Course #6607 or 6609  
This course is designed for middle school students to develop and enhance touch skills for entering alphabetic, numeric, and symbol information on a keyboard. Students compose and produce personal, educational, and professional documents.

**Music Appreciation**  
Course #6903  
Students will gain knowledge of music through the exploration of concepts and skills. Students will analyze musical compositions, identify sound sources, demonstrate music reading skills, develop an understanding of the history of music, and identify career opportunities related to music. Through a variety of activities, the student will experience growth in musicianship and expanded aesthetic awareness.

**Exploratory Art**  
Course #6905  
Students will develop their art skills, learn new studio habits, develop critical thinking skills, expand their creativity, and experiment with making art across a variety of 2-D and 3-D art mediums. Note: 6th grade Exploratory Art is not a prerequisite for future art classes.

**World Language Exploratory1**  
Course #5700  
Sixth grade World Language Exploratory is a language enrichment class that provides students with an overview of the culture and people who speak French, German, Latin, and Spanish. Topics for each language include: holidays, music, art, geography, literature, culinary exploration, activities, interests, and social conversation. World Language Exploratory will help students make an informed decision about the language they wish to pursue in seventh grade.

**ESOL- English for Speakers of Other Languages**  
Course #7820E  
The ESOL program will provide the English Learner (EL) student with the language skills necessary for academic success and to participate fully in the total school program. The course will emphasize the application of the WIDA English Language Development Standards to content knowledge and skills.

**Band I**  
Course #9230  
Band I develops students’ basic instrumental skills. These skills will provide a solid foundation upon which students will build as they advance to the intermediate level. Through classroom performance, students will learn the mechanics of proper sound production, attain knowledge of rhythm and rhythm patterns, and begin developing the social skills necessary to function successfully in a group situation. Students supply their own instruments.

**Orchestra I**  
Course #9235  
This full-year course will focus on how to play a string instrument (violin, viola, cello, and string bass). Students learn how to read and write music, experience music history, musical style, ensemble performance, bowing technique, instrument care, tone production, and conducting patterns. Daily at-home practice is necessary for student success. Students must furnish own violin, viola, cello, or bass, with
larger instruments provided for in-school use. Students who select this class are required to play all music in concerts.

**Chorus I**

Chorus I is offered to students who wish to develop their knowledge, understanding, and appreciation of vocal music. It offers students the opportunity to improve their vocal technique and skills in musicianship, to develop an understanding and appreciation for vocal music, and to participate in concerts. The selection of music for study and performance may be based upon a variety of styles and/or periods of music history and provides a variety of vocal experiences.
7th Grade Course Descriptions

Students in 7th grade engage core instruction in English, Math, Civics & Economics, Life Science, and Health & Physical Education. Elective opportunities available to 7th graders include: Art, Inventions and Innovations, Family and Consumer Sciences, Computer Solutions, Hands on Music, and Chorus. Students who began music instruction in 6th grade can continue in Band or Orchestra. Although participation in 6th grade orchestra is expected as a prerequisite for the 7th grade courses, some students who take lessons or practice on their own are able to participate. Please see your music teacher for details if this interests you.

Students in 7th grade may also take a high school world language course. These rigorous courses (French I, German I, Latin I, and Spanish I) are described in the high school section of this guide. World language courses offer students the opportunity to earn high school credit prior to 9th grade. World language courses are a requirement for the advanced diploma and can also lead to the Seal of Academic Excellence and the Virginia Seal of Biliteracy.

Core Classes

English 7  Course #1120
This course is designed to expand the study of literature, writing, research, oral communication, and media literacy. Students will continue to learn and expand the use of reading comprehension strategies as well as research skills. They will also enhance their literacy skills by developing more advanced vocabulary and reading a variety of fiction, nonfiction, and poetry. Students will continue to develop oral communication skills independently and in small groups, as well as advance their knowledge of persuasive techniques used in the media. Students will plan, draft, revise, and edit expository, narrative, and persuasive pieces with attention to composition, written expression, and usage/mechanics.

Civics & Economics 7  Course #2357
Civics is the study of the structure and functions of the United States government at the national, state, and local levels. Focus will be placed upon the founding documents, principles and structure of American constitutional government, rights and responsibilities of American citizenship, political processes, three branches of government, and the linkage of institutions influencing government. Students will also explore an introduction to economic principles and the American economic system.

Math 7  Course #3111
The Math 7 curriculum includes the prescribed Virginia Standards of Learning (SOL) as a minimum. The seventh grade curriculum places emphasis on algebraic foundations and proportional reasoning. Students will use order of operations to evaluate numeric and algebraic expressions, apply properties of real numbers, solve linear equations and inequalities, work with consumer application programs, work with rational numbers in a variety of ways, solve problems involving two and three dimensional figures, probability, and statistics, perform statistical analysis, and analyze situations involving probability.

Pre-Algebra  Course #3122
In the Pre-Algebra course, students review and extend concepts and skills from previous math courses and study new content to better prepare them for algebra and geometry. The Pre-Algebra curriculum places an emphasis on the study of linear relationships. Students will gain proficiency in computation with rational numbers and integers, use of proportions to solve a variety of problems, solving algebraic equations and inequalities, and representing functional relationships in a variety of ways. Other topics include problem solving with two and three dimensional figures, probability, and statistics.

Algebra  Course #3130
Credit: 1 Unit of High School Credit
Algebra I is a study of the real number system and its properties. Students will study the solution of linear and quadratic equations, linear inequalities, systems of equations, polynomials, graphing, and data analysis. Tables and graphs will be used to interpret algebraic expressions, equations, and inequalities and to analyze functions. Appropriate technology (graphing calculators and spreadsheets) will be used as tools to assist in problem solving.

Life Science  Course #4115
The living world is emphasized by studying change, life cycles, patterns, and relationships. Students gain an understanding of these principles through the following: the study of cellular organization, the classification of organisms, the relationship among organisms, populations, communities and ecosystems, and change due to the
transmission of genetic information from generation to generation. Students will continue to build scientific reasoning; logic, and an understanding of the nature of science by planning and conducting investigations, manipulating variables, and identifying sources of experimental error.

**Health & Physical Education**  
**Course #7120**  
Students in middle school Physical Education will learn fundamental skills and develop them into more skilled movements as they progress through eighth grade. In all grades, students will focus on cooperative and competitive games, dance, and lifetime activities as appropriate for their development. Through these activities, students will gain knowledge in rules, decision making, conflict resolution, appropriate etiquette, and respect for others. Students will focus on personal wellness and goal setting as it relates to their cardiorespiratory endurance, muscular strength and endurance, flexibility, and body composition. In Health, students will cover a variety of topics relating to body systems, nutrition, first aid, safety, alcohol, tobacco, drugs, family life, and disease.

**Elective Classes**

**Computer Solutions**  
**Course #6609A**  
Students are introduced to the world of business using the computer as a problem-solving tool. Emphasis is placed on using basic touch keyboarding skills to complete a variety of projects incorporating word processing, database, presentation, and spreadsheet software. Basic internet safety and computer maintenance issues are important components of this course.

**Family & Consumer Sciences II**  
**Course #8263**  
Family and Consumer Sciences Exploratory II emphasizes personal responsibility for the demands of multiple life roles through hands-on, project-based instruction. Students focus on individual development; maintain their personal environments; apply nutrition and wellness practices; manage consumer and family resources; create textile; fashion and apparel products; and explore careers related to Family and Consumer Sciences such as child care. Instruction in this course emphasizes science, technology, engineering and mathematics (STEM) concepts, where appropriate.

**Inventions & Innovations**  
**Course #8464**  
Students will gain insights into the underlying fundamentals of technology through project-based learning. Students will also explore contemporary technological problems and invent new products or innovations as solutions. Students will utilize the design process through hands-on projects such as racers, rockets, structures, 3D design, and more.

**Middle School Art I**  
**Course #9105**  
During this course, students will develop their art skills, learn new studio habits, grow as artists, develop critical thinking skills, expand their creativity, and experiment with making art across a variety of mediums. This course reflects the students’ concerns for realistic representation and their interest in contemporary issues.

**Middle School Art II**  
**Course #9106**  
**Prerequisite: Middle School Art I**  
During this course, students will develop their art skills, learn new studio habits, grow as artists, develop critical thinking skills, expand their creativity, and experiment with making art across a variety of mediums. Students may opt to develop a portfolio for acceptance into Art III.

**Hands-On Music 7**  
**Course #9211**  
This is a semester class in which students will gain knowledge of music through the exploration of concepts and practicing skills. Students will analyze musical compositions, identify sound sources, demonstrate music reading skills, develop an understanding of the history of music, and identify career opportunities related to music. Through a variety of activities, students will experience growth in musicianship and expanded aesthetic awareness.

**Reading Improvement 7**  
**Course #1187**  
Reading Improvement is designed to strengthen reading fluency and comprehension. Students are assigned based on need as demonstrated by classroom performance as well as diagnostic and achievement testing. Reading Improvement is taken in place of an elective subject.

**Algebra Readiness 7**  
**Course #3127**  
Students must pass Algebra I and the Algebra I SOL End-Of-Course test to earn a Standard Diploma from a high school in Virginia. The Algebra Readiness Program is designed to provide mathematics intervention to students who are at risk of failing the Algebra I SOL End-of-Course test, as demonstrated by individual performance on diagnostic tests approved by the Department of Education. Teachers will individualize math instruction for students and provide the assistance needed to be successful in Algebra I. Only students who are performing below average in their current mathematics course and/or did not pass the Standards of Learning Mathematics assessment will be required to take a state-approved diagnostic test. Those students who are not successful on the diagnostic test will be required to enroll in the Algebra Readiness Program for a minimum of one quarter in place of an exploratory or elective class.
ESOL- English for Speakers of Other Languages
Course #7820E
The ESOL program will provide the English Learner (EL) student with the language skills necessary for academic success and to participate fully in the total school program. The course will emphasize the application of the WIDA English Language Development Standards to content knowledge and skills.

Band II
Course #9231
Prerequisite: Band I
This course focuses on the refinement and extension of skills introduced at the beginning band level to provide a solid foundation upon which to build and continue to the next level. Students will refine the mechanics of proper sound production, acquire knowledge of more difficult rhythms and rhythm patterns, and further develop the social skills necessary to function successfully in a group situation. Students supply their own instruments.

Orchestra II
Course #9236
Prerequisite: Orchestra I or director recommendation
This full-year course is a continuation of Orchestra I. Students will continue the mastery of string technique and ensemble performance. Students will perform more advanced repertoire. Daily at-home practice is necessary for student success. There will be additional performance opportunities such as All-County Orchestra and Regional Orchestra auditions. Students furnish their own violin, viola, cello, or bass, with larger instruments provided for in-school use. Students who select this class are required to play all music and participate in concerts.

Chorus II
Course #9270
Chorus II is offered to students who wish to expand their knowledge, understanding, and appreciation of vocal music. It offers students the opportunity to improve their vocal technique and skills in musicianship, to develop an understanding and appreciation for vocal music, and to participate in concerts. The selection of music for study and performance may be based upon a variety of styles and/or periods of music history and provides a variety of vocal experiences.
8th Grade Course Descriptions

Note Regarding Course Selection
Algebra I, Geometry, Information Technology Fundamentals, and World Language are offered to middle school students for high school units of credit. Course descriptions may be reviewed in the high school section of this guide. Each course fulfills high school requirements and counts as a unit of credit toward high school graduation. A verified unit of credit for Algebra I and Geometry can be earned toward high school graduation by passing the course and passing the Standards of Learning End-of-Course test. Grades earned count in the computation of the high school grade point average and class rank. Students are encouraged to take challenging course work while in middle school. Based on State Board of Education policy, a student who completes a high school course while in middle school may have the credit and grade removed from the student’s permanent record. This procedure is recommended if the student has not shown strong academic performance and needs to take the course again to gain mastery of the content.

Students enrolled in high school credit courses (Algebra, Geometry, Information Technology Fundamentals, World Language) will receive information about the policy and procedures. All requests to remove the high school credit and grade must be in writing and completed by the deadline indicated on the letter.

Core Classes

English 8  
Course #1120
Students will continue to learn and expand the use of reading comprehension strategies. Oral communication skills, including interviewing techniques, will be applied in this course. In addition, students will analyze, develop, and produce creative and informational media messages. Students will apply knowledge of vocabulary and figurative language in texts, and will continue the study of literary elements, including theme, main idea, cause-effect relationships, and inferencing in a variety of literary and informational selections. English 8 students will take the Virginia Standards of Learning tests in both Reading and Writing.

Honors English 8  
Course #1120AD
Students will delve more deeply into literature to search for complex themes and relationships and to support their assertions with textual references. Instruction will include reading comprehension with an emphasis on paired passages, writing in expository, persuasive, narrative, and informational modes, language conventions, vocabulary development in meaningful contexts, and research skills. Honors English 8 students will take the Virginia Standards of Learning tests in Reading and Writing.

Health & Physical Education 8  
Course #7200
Students will focus on cooperative and competitive games, dance, and lifetime activities as appropriate for their development. Through these activities, students will gain knowledge in rules, decision making, conflict resolution, appropriate etiquette, and respect for others. Students will focus on personal wellness and goal setting as it relates to their cardiorespiratory endurance, muscular strength and endurance, flexibility, and body composition. In Health, students will cover a variety of topics relating to body systems, nutrition, first aid, safety, alcohol, tobacco, drugs, family life, and disease.

World History I  
Course #2215
This course will cover the historical development of people, places, and patterns of life from ancient times until 1500 A.D. (C.E.). Areas of study will include the following: the early development of humankind from the Paleolithic Era to the revolution of agriculture, ancient river civilizations, early Greece, ancient Rome, conflict between the Muslim world and Christendom, Byzantine Empire, Russia, Europe, Asia, Africa, and the Americas.

Honors World History I  
Course #2215AD
In the honors course, students will follow a systematic approach to the development of their writing skills while completing all the content of the World History I 8th grade course. Students should expect homework (reading, writing, studying) every night. Students will take reading quizzes during the course of the year, and students will complete short written responses to advanced level questions.

Math 8  
Course #3112
Students will gain proficiency in computation with rational numbers, identifying relationships of rational numbers, the use of proportions to solve a variety of problems, solving multi-step algebraic equations and inequalities, and representing functional relationships in a variety of ways. Other topics the course will include plane geometry (including Pythagorean Theorem and transformations),
solid geometry (including problem-solving with surface area and volume), probability, and statistics. Students enrolled in this class takes the Math 8 SOL.

**Physical Science 8**  
Course #4125  
Physical Science emphasizes the nature and structure of matter and the characteristics of energy. Areas of study include the periodic table; physical and chemical changes; nuclear reactions; temperature and heat; sound; light; electricity and magnetism; and work, force, and motion. Research and experimentation and the manipulation of variables to validate conclusions will also be part of the class. Students will share their work through written and oral presentations. Students take the Standards of Learning test for Grade 8 Science.

**Honors Physical Science 8**  
Course #4125AD  
The course will incorporate technology, community resources, laboratory experimentation, and problem-based learning activities designed to foster critical thinking. This course will encourage student-directed, inquiry-based research and each student will conduct an approved research project. The course is recommended for highly motivated students with exceptional work and study habits and a high interest in science. Students will take the Standards of Learning test for Grade 8 Science.

**Elective Offerings**

**Family & Consumer Sciences III**  
Course #8244  
Family and Consumer Sciences Exploratory III is an advanced-level course that will prepare middle school students for their roles in families, careers, and communities through project-based instruction. Students will experience in-depth studies of nutrition and wellness, food preparation, relationships, personal environments, textiles, fashion and apparel, consumer resources, child development and care, and leadership service in action. Instruction in this course will emphasize science, technology, engineering, and mathematics (STEM) concepts.

**Digital Technologies 8**  
Course #6160  
Digital Input Technologies introduces new and emerging input devices (e.g., speech and handwriting recognition software, tablets, cloud computing software applications, headsets/microphones, scanners, digital cameras, digital video cameras, mobile devices, keyboards, mice) to prepare students for using tools that are becoming standard in the workplace and everyday life. Emphasis is also placed on using basic touch keyboarding skills.

**Technological Systems**  
Course #8463  
Students will explore, design, analyze, and evaluate technological systems by simulating systems and assessing their impacts. Students will also explore occupational areas and technology-oriented careers. Students will utilize the design process through hands-on projects such as dream house design, CO2 cars, maglev racers, water rockets, and others.

**Middle School Art I**  
Course #9105  
During this course, students will develop their art skills, learn new studio habits, grow as artists, develop critical thinking skills, expand their creativity, and experiment with making art across a variety of mediums.

**Middle School Art II**  
Course #9106  
Prerequisite: Middle School Art I  
During this course, students will develop their art skills, learn new studio habits, grow as artists, develop critical thinking skills, expand their creativity, and experiment with making art across a variety of mediums. Students may opt to develop a portfolio for acceptance into Art III.

**Middle School Art III**  
Course #9107  
Prerequisite: Middle School Art I and Middle School Art II, or Portfolio Review and Teacher Recommendation  
Art III is offered to students who wish to expand their knowledge, understanding, and skill as a growing artist. Students will be asked to complete 2D and 3D projects that follow detailed steps. Techniques will be used to familiarize students with higher level art classes. Grading in this course will focus on aesthetic quality, project completion, and time management. Note: Students will be expected to keep a sketchbook.

**Hands-On Music 8**  
Course #9213  
Students will gain knowledge of music through the exploration of concepts and practicing skills. Students will analyze musical compositions, identify sound sources, demonstrate music reading skills, develop an understanding of the history of music, and identify career opportunities related to music.

**Reading Improvement 8**  
Course #1188  
Reading Improvement will strengthen reading fluency and comprehension. Students will be assigned based on need as demonstrated by classroom performance and diagnostic and achievement testing. Reading Improvement 8 will take the place of an elective subject.
Theatre Arts  
Course #1395
Students will learn miming and facial expression as ways to use the body in acting. They will also learn vocal skills such as expressive reading and projection. Additionally, students will learn the vocabulary of theatre and the stage. The class will emphasize the utilization of imagination, quick thinking skills, teamwork, empathy, and introspection as a way to develop acting skills.

Algebra Readiness 8  
Course #3128
This course will provide mathematics intervention services to students who are at risk of failing the Algebra I SOL End-of-Course test, as demonstrated by individual performance on diagnostic tests approved by the Department of Education. Teachers will individualize mathematics instruction and provide the assistance students need to be successful in Algebra I. Only students who are performing below average in their current mathematics course and/or did not pass the Standards of Learning Mathematics assessment will be required to take a state-approved diagnostic test.

ESOL- English for Speakers of Other Languages  
Course #7820E
The ESOL program will provide the English Learner (EL) student with the language skills necessary for academic success and to participate fully in the total school program. The course will emphasize the application of the WIDA English Language Development Standards to content knowledge and skills.

Band III  
Course #9240
Prerequisite: Band II
Through classroom and public performance, the students will continue to refine the mechanics of proper sound production, acquire knowledge of more difficult rhythms and rhythm patterns, and further develop the social skills necessary to function successfully in a group situation. Students must supply their own instruments.

Orchestra III  
Course #9246
Prerequisite: Orchestra II or director recommendation
Students will continue the mastery of string technique and ensemble performance through advanced technical etudes, scales, arpeggios, and age-appropriate repertoire. Daily at-home practice will be necessary for student success. There will be additional performance opportunities such as All-County Orchestra and Regional Orchestra. Students furnish their own violin, viola, cello, or bass, with larger instruments provided for in-school use. Students who select this class will be required to play all music and participate in concerts.

Chorus III  
Course #9271
Chorus III will focus on the refinement of skills including the intensified study of diction, sound production, posture, phrasing, theory, sight singing, and rhythm. Chorus III will offer students the opportunity to improve their vocal technique and skills in musicianship, develop an understanding and appreciation for vocal music, and participate in concerts. The selection of music for study and performance may be based upon a variety of styles and/or periods of music history which will provide a variety of vocal
## High School Information

### Requirements for a Standard Diploma

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**NOTE 1**
- For students entering the ninth grade for the first time between 2013-2014 and 2017-2018: Courses completed to satisfy this requirement shall include at least two different course selections from Algebra I; Geometry; Algebra, Functions and Data Analysis; Algebra II, or other mathematics courses above the level of Algebra II. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.
- For students entering the ninth grade for the first time as of the 2018-2019 school year: Courses completed to satisfy this requirement shall include at least two different course selections from Algebra I, Geometry, Algebra Functions, and Data Analysis, Algebra II, or other mathematics courses approved by the board to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.

**NOTE 2**
- For students entering the ninth grade for the first time as of the 2013-2014 school year: Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines: earth sciences, biology, chemistry or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit.
NOTE 3
• Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and one course in either World History or Geography or both.

NOTE 4
• Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

NOTE 5
• For students entering the ninth grade for the first time as of the 2011-2012 school year: 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 in 8 VAC 20-131-110.

NOTE 6
• Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, trade, or professional association or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential or license for (1) the student selected verified credit and (2) either a 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 additional test to verify student achievement.

NOTE 7
• For students entering the ninth grade for the first time as of the 2013-2014 school year: Pursuant to Section 22.1-253.13:4, Code of Virginia, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education. Per the Standards of Quality, a computer science course credit earned by students may be considered a career and technical course credit.

NOTE 8
• For students entering 9th grade as of the 2016-2017 school year: Students shall be trained in emergency first aid, CPR, and the use of AED, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation.

ADDITIONAL REQUIREMENTS FOR GRADUATION
• For students entering the ninth grade for the first time as of the 2018-2019 school year: In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, honors, or International Baccalaureate course, or (ii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the standard diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia Workplace Readiness assessment.
# Requirements for an Advanced Studies Diploma

Advanced Studies Diploma Course Requirements (8 VAC 20-131-50.C)

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**NOTE 1**
- For students entering the ninth grade for the first time as of the 2013-2014 school year: Courses completed to satisfy this requirement shall include at least three different course selections from Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.

**NOTE 2**
- For students entering the ninth grade for the first time as of the 2013-2014 school year: Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from earth sciences, biology, chemistry, or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit.

**NOTE 3**
- For students entering the ninth grade for the first time as of the 2011-2012 school year: Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and two courses in either World History or Geography or both.
NOTE 4
• Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

NOTE 5
• For students entering the ninth grade between 2011-2012 and 2017-2018: A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education, economics, or other areas as prescribed by the Board in 8 VAC 20-131-110.

NOTE 6
• For students entering 9th grade as of the 2016-2017 school year: Students shall be trained in emergency first aid, CPR, and the use of AED, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation.

NOTE 7
• For students entering the ninth grade for the first time as of the 2013-2014 school year: Per the Standards of Quality, a computer science course credit earned by students may considered a career and technical credit.

ELECTIVES
• For students entering the ninth grade for the first time as of the 2018-2019 school year: Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

ADDITIONAL REQUIREMENTS FOR GRADUATION
• For students entering the ninth grade for the first time as of the 2018-2019 school year: In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, honors, or International Baccalaureate course or (ii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the advanced studies diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia Workplace Readiness assessment.
Academic Recognition

Recognition is provided in several ways for high school students who excel in their academic pursuits. To be on the Honor Roll, a student must have a final nine weeks grade of at least 80 in all subjects. To earn an Academic Letter, the student must earn at least 5 credits and a 3.50 or better grade-point average (without rounding) with no final grade lower than a “C” for the school year.

Seniors who have a final grade point average of 3.50 or higher are recognized as honor graduates at Commencement. Seniors with a final grade point average of 4.0 or higher are recognized as graduating with special distinction at Commencement. The senior(s) who has the second highest final grade point average is recognized as the Salutatorian. The senior(s) with the highest final grade point average is recognized as the Valedictorian.

Graduation Seals

GOVERNOR’S SEAL
The Governor’s Seal shall be awarded to students who complete the requirements for an Advanced Studies Diploma with an average grade of “B” or better and successfully complete college-level coursework that shall earn the student at least nine transferable college credits in Advanced Placement (AP), International Baccalaureate (IB), Cambridge, or dual enrollment courses.

STATE BOARD OF EDUCATION SEAL FOR ADVANCED STUDIES OR STANDARD DIPLOMA
The Board of Education Seal shall be awarded to students who complete the requirements for a Standard Diploma or an Advanced Studies Diploma with an average grade of “A”.

BOARD OF EDUCATION’S SEAL FOR CAREER AND TECHNICAL EDUCATION
The Board of Education’s Seal for Career and Technical Education shall be awarded to students who earn a Standard Diploma or an Advanced Studies Diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain a “B” or better average in those courses or (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 shall approve all professional licenses and examinations used to satisfy these requirements.

BOARD OF EDUCATION’S SEAL OF ADVANCED MATHEMATICS AND TECHNOLOGY
The Board of Education’s Seal of Advanced Mathematics and Technology shall be awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and (i) satisfy all of the mathematics requirements for the Advanced Studies Diploma with a “B” average or better and (ii) pass an examination in a career and technical education field that confers certification from a recognized industry, or trade or professional association; acquire a professional license in a career and technical education field from the Commonwealth of Virginia; or pass an examination approved by the board that confers college-level credit in a technology or computer science area. The board shall approve all professional licenses and examinations used to satisfy these requirements. (Available for students entering high school prior to the 2018-2019 school year.)

BOARD OF EDUCATION’S SEAL OF BILITERACY
The Board of Education’s Seal of Biliteracy shall be awarded to students who demonstrate proficiency in English and at least one other language and meet additional criteria established by the board.
BOARD OF EDUCATION STEM SEAL
The Board of Education’s Seal of Science, Technology, Engineering, and Mathematics (STEM) shall be awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and (i) satisfy all Math and Science requirements for the Advanced Studies diploma with a “B” average or better in all course work, and (ii) successfully complete a 50 hour or more work-based learning opportunity in a STEM area, and (iii) satisfy all requirements for a Career and Technical Education concentration (a concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the CTE Administrative Planning Guide), and (iv) pass one of the following: a Board of Education CTE STEM-H credential examination or an examination approved by the Board that confers a college-level credit in a STEM field.

BOARD OF EDUCATION’S SEAL FOR EXCELLENCE IN CIVICS EDUCATION
The Board of Education’s Seal for Excellence in Civics Education shall be awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and (i) complete Virginia and United States History and Virginia and United States Government courses with a grade of “B” or higher; (ii) have good attendance and no disciplinary infractions as determined by local school board policies; and (iii) complete 50 hours of voluntary participation in community service or extracurricular activities. Activities that satisfy the requirements of clause (iii) of this subdivision include (a) volunteering for a charitable or religious organization that provides services to the poor, sick, or less fortunate; (b) participating in Boy Scouts, Girl Scouts, or similar youth organizations; (c) participating in JROTC; (d) participating in political campaigns or government internships, or Boys State, Girls State, or Model General Assembly; or (e) participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation shall be deemed to have met this community service requirement.

BOARD OF EDUCATION’S SEAL FOR EXCELLENCE IN SCIENCE AND THE ENVIRONMENT
For students entering the ninth grade in 2018-2019: 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.

SPOTSYLVANIA COUNTY PUBLIC SCHOOLS’ SEAL OF ACADEMIC EXCELLENCE
The Spotsylvania Seal of Academic Excellence is awarded to students that meet the criteria for the advanced diploma, and:
1. Take four years of a world language (four years of one or two years each of two different languages). These courses may be begin in middle school.
2. One Fine Arts elective and one Practical Arts elective is required.
3. All English, mathematics, science, social studies and world language courses must be taken at the “advanced” or higher level where multiple levels are available (this requirement does not include AP and college level courses).
4. A total of at least three (3) AP, IB, or other college level courses from the available offerings must be successfully completed. Contact your school counselor for a more specific definition of criteria.

SPOTSYLVANIA COUNTY PUBLIC SCHOOLS’ COMMUNITY SERVICE SEAL
Students may earn the Spotsylvania County Public School’s Community Service Seal on their diplomas by performing 144 hours of community service during their high school career. For specific information on what constitutes community service, pick up an information packet from the counseling office.
Course Selection Information

School Counseling Program and Services
Students are alphabetically (based on the student’s last name) assigned to a school counselor for the duration of their high school years. Parents are encouraged to participate in the development of the student’s program of studies that maps the route to the chosen diploma option and graduation. In addition to the annual academic planning and course selection sessions, counselors provide programs to all students through classroom guidance and small group and/or individual sessions on topics such as study skills, test taking strategies, decision making, and time management strategies. Counselors assist students and parents to address other issues that create challenges to academic success. Each high school counseling program offers workshops for students and parents designed to enhance orientation to academic success, awareness of the college admission process, scholarship and financial aid opportunities, and transitions after high school. Check the school newsletter, school website, and special announcements on the school division’s website and educational broadcasting channel to learn more about the programs at each high school. School counselors may be contacted at each of the schools.

Library Services
The library is an integral part of the school program. Libraries circulate over 875,000 items annually. The library catalog, online databases, online encyclopedias, and ebooks are also available 24/7 through Destiny Library Manager. Spotsylvania County Public School students login to Destiny through the division website by selecting their school and using their network login and password. In addition, librarians work with classroom teachers in all curriculum areas to support instruction and teach 21st century research skills.

Academic Rigor
Students are encouraged to select rigorous courses that will provide an intellectual challenge and also will better prepare them for future courses and educational and/or career pursuits beyond high school. In considering students’ applications for admission, colleges and universities look closely at the number and the kind of advanced courses students have taken. The academic rigor can be a significant factor in a student being accepted by the college of his/her choice.

The Commonwealth Governor’s School
The Commonwealth Governor’s School (CGS) provides gifted and highly-motivated high school students with a challenging, differentiated, and interdisciplinary program in science, mathematics, social sciences, and English. This half-day program utilizes realtime interactive audio/visual technology, field experiences, and team teaching to create a regional community of learners from Stafford, King George, Spotsylvania, and Caroline counties. The CGS curriculum is problem-based, student-oriented, and designed to focus on community issues of environment, development, and service. High speed Internet access, desktop video conferencing, and e-mail enables students to reach worldwide resources for special interest projects and in-depth research. Students participate in electives and activities at their home-based high school. Visit the CGS website at www.cgs.k12.va.us or see the gifted coordinator for application information.

Chancellor High School          786-2606  
Courtland High School           898-4445  
Massaponax High School          710-0419  
Riverbend High School           548-4051  
Spotsylvania High School        582-3882  
Spotsylvania Career &Technical Center  898-2655
English
Honors English 9 (1131G)
Honors English 10 (1141G)
Advanced Placement English Language and Composition (1196G)
Advanced Placement English Literature and Composition (1195G)

Social Studies
Advanced Placement European History (2399G)
Advanced Placement U.S. Government (2445G)
Advanced Placement U.S. History (2319G)
Advanced Placement Human Geography (2211G)

Mathematics
Honors Algebra II (3135G)
Honors Geometry with Trigonometry (3143G)
Honors Math Analysis with Discrete Topics (3162G)
Advanced Placement Calculus BC (3178G)
Advanced Placement Statistics (3192G)

Science
Advanced Placement Environmental Science (4270G)
Advanced Placement Biology (4370G)
DE Chemistry (4420G)
Advanced Placement Physics B (4570G)

Early College Scholars
The Early College Scholars Program allows eligible high school seniors to complete their high school diploma and concurrently earn at least 15 hours of transferable credits toward a college degree, resulting in a more productive senior year and reducing the amount of college tuition for families. Eligibility:
Students should have a “B” (3.0 GPA or higher) average, be pursuing an Advanced Studies diploma, be completing or have completed college level course work (Dual Enrollment, Advanced Placement, or International Baccalaureate courses) that will earn at least fifteen transferable college credits. Students can contract to become an Early College Scholar beginning in grade 9. See your counselor for a contract and more information.

Advanced Placement Program
The Advanced Placement (AP) Program provides students with the opportunity to pursue college-level studies while still in high school and to receive advanced placement credit when entering college. Academically oriented students are strongly encouraged to participate in the Advanced Placement Program offered in each high school.

Advanced Placement (AP) courses follow the suggested College Board course descriptions and serve to prepare students for the AP examinations in May. In addition to preparing students for the AP exam, AP courses allow students to experience the pace and intensity of college-level courses while still in high school. Some AP courses may provide opportunities for students to work in teams on interdisciplinary themes or projects. Such activities are designed to provide students the opportunity to solve real-world problems across AP subject areas. The AP courses are challenging and stimulating, require more work and more time than other high school courses, but are ranked by former AP students as the most valuable experience of the high school education.

The Advanced Placement examinations, provided and graded by the College Board, are administered each year during the 1st and 2nd weeks of May. Usually three hours in length, each exam consists of a multiple choice section and a free-response section that requires essay writing or problem solving. Every examination receives an overall grade from a team of carefully selected college professors and high school AP teachers on a five-point scale:

5 (extremely well-qualified)
4 (well-qualified)
3 (qualified)
2 (possibly qualified)
1 (no recommendation)

An AP Grade Report is available online in July to each student, the high school, and if the student requests it, to the college. All enrolled AP students are encouraged to take AP course examinations. Financial assistance for the cost of the AP exams may be available for students in need on a school-by-school basis.
Advanced Placement Capstone

AP Capstone is an additional diploma that is offered through the College Board. In order to earn this diploma, students take AP Seminar in the 10th or 11th grade, followed by AP Research. Students who earn scores of 3 or higher in AP Seminar, AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma. This signifies outstanding academic achievement and attainment or college-level academic and research skills. Alternatively, students who earn scores of 3 or higher on exam in AP Seminar and AP Research will receive the AP Seminar and Research Certificate signifying their attainment of college-level academic and research skills.

Virtual Learning Options

The E-Credit Recovery option is for a select group of students who need course credit to earn a Standard or Advanced Studies diploma. To be eligible for enrollment in an E-Credit Recovery course, a student must meet certain requirements.

Prerequisites:
- Previous completion of the course yet earned a failing grade
- has the ability to succeed in an online course
- obtains teacher recommendation
- obtains administrator or designee approval

College Credit for Advanced Placement Classes

Although each college determines which AP examination grades it will accept for credit and/or advanced placement, the majority of colleges accept grades of 3 or better and award the student credit in the subject matter tested. In some cases, no credit is given, but the student begins the program of study at an advanced level.

Many colleges will grant sophomore standing to a student who presents acceptable scores on three or more AP examinations. Students wanting to know what AP scores are considered acceptable by the colleges in which they are interested should contact the Director of Admissions of the college or consult with their school counselor. The Advanced Placement Program in SCPS consists of the following courses:

- AP English 11
- AP English 12
- AP German
- AP Spanish
- AP Statistics
- AP Biology
- AP Government
- AP Chemistry
- AP Physics
- AP Psychology
- AP Seminar
- AP Research
- AP Environmental Science

CLEP: College Level Examination Program

Developed by the College Board, the people behind AP and SAT, the College-Level Examination Program (CLEP) has been the most widely trusted credit-by-examination program for over 40 years, accepted by 2,900 colleges and universities and administered in over 1,800 test centers.

International Baccalaureate Diploma Programme (IB DP)

The IB DP is a rigorous, academically challenging and balanced two-year program of education designed to prepare students aged 16 to 19 for success at university and in life beyond. The IB DP provides opportunities to develop both interdisciplinary knowledge and understanding that meet rigorous standards. IB DP encourages inquiry, caring, openmindedness, intercultural understanding, and the attitudes necessary to respect and evaluate a range of viewpoints.

College Credit through Dual Enrollment Courses

Dual Enrollment 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. Students earn college credits while completing their high school requirements. Students
must maintain both attendance and grade requirements set by Germanna in order to receive credit. Credits transfer to Virginia Community Colleges and most colleges and universities. Courses are taught by high school instructors who have the qualifications to teach at the college level. Interested students should discuss dual enrollment options with their high school counselors.

Prospective students will be required to complete a Germanna Community College Application for Admissions, provide qualifying SAT scores, or take a placement test administered at the high school. Qualifying students register through the high school in spring and pay the tuition to the high school at the beginning of the school year. For more information on dual enrollment, visit website: http://www.germanna.edu.

**Early College Pathway through Germanna Community College**
The Early College Pathway is an academic advancement plan 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 or IB 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 Pathway varies among school divisions, 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.

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.

**Course Load**
Students are to be full-time enrolled and scheduled in classes that total at least five units of credit. Any exceptions must be approved by the Superintendent or his/her designee. High school principals will require that any senior whose parent or guardian requests early release must have already passed all the SOL End-of-Course tests required for the chosen diploma option before the principal will recommend early release. Students enrolled in Cooperative Education classes such as marketing or business will be given early release to meet requirements associated with the course. (School Board Policy IHD)

**Grades & Promotion**
Grade level classification is based on the total number of units of credit accumulated as follows:
- Freshman ......................... 0-4 units
- Sophomore ................. 5 units
- Junior ..................... 10 units
- Senior.......................... 15 units and/or eligible for graduation

**High School Subjects Taken in Middle School**
If a middle school student successfully completes a high school credit course, the credit earned is counted for the specified subject required for graduation, and for meeting the total number of units required for graduation. The grades earned are included when calculating the student’s grade point average.

**Schedule Adjustments**
Students and parents are encouraged to make all course request changes as soon as the need for the change is apparent. Since the master schedule for each high school is created in late spring based on student requests and staff availability, changes after the end of the school year may be more difficult to obtain. Counselors review student requests and make schedule adjustments prior to the opening of school when one
or more of the following circumstances occur:

- failure of a course which is a clerical error
- change in the student’s educational plan
- balancing of class sizes
- requested course has low enrollment and will not be offered.

**Dropping Courses**

There will be no record made on the permanent record form of courses dropped during the first fourteen (14) weeks of a full year course and during the first seven (7) weeks for a semester course. After this period, withdrawal from a course will be considered as a WP or WF and a failure (F) will be figured into the grade point average. Exceptions to this procedure may be made by the principal in the case of student hardship.

**Auditing a Course**

A student may decide to audit a course to gain increased subject mastery or to improve the course grade. A course can be taken as an audit only if the student has completed the course, received a passing grade, and earned a credit. The student will not receive a credit for the audited course; however, the highest grade earned will be calculated into the student’s cumulative GPA. Serious consideration must be given to the decision to audit a course. Auditing a course is usually beneficial if the student earned a low grade, passed the course but did not pass the SOL, or if the student took the course and received credit in a different school system where the curriculum did not align with Spotsylvania County Public Schools. The impact of an audited course on the cumulative GPA and the student’s educational plan must be evaluated. The parent must submit a written request to the school counselor for the course audit. After review of the educational plan, the counselor will advance the request to the school principal for final decision.

**Transfer Credits - Earning Credit for Courses Taken from:**

- **Approved Online & Correspondence Programs**
  - A high school student and parent may apply in writing to the high school principal requesting permission to enroll in an online or correspondence course for credit when it is appropriate for the completion of the student’s educational plan. Parents are responsible for any fees and expenses charged by the course provider. Parents are directed to contact the school counselor in advance of making the written request to determine approval status of the online or correspondence program. Spotsylvania County Public Schools students may NOT take an online course for credit which requires an End-of-Course test unless the student has already passed the test and needs the course credit to complete the verified credit. A transcript from the virtual or correspondence school must be supplied to the high school counseling office on or before June 1 of the year in which the student desires the credit to be included on his or her official transcript. The grade earned will be recorded for GPA purposes according to county weighting requirements.

- **From Accredited Schools and Homeschooling**
  - Upon receipt of an official transcript from the student’s previous school, the counselor will review the courses taken and accept credits earned from accredited secondary schools in other school divisions. Courses accepted to meet Virginia graduation requirements must be those recognized as such by the Virginia Department of Education. Course credit may be accepted as elective credit instead of a required course when the course does not align with Spotsylvania County courses. Course credits and grades are converted to reflect a fair comparison to the Spotsylvania County Public Schools grading scale. Only credits earned in AP courses, IB courses, and Dual Enrollment will carry a weighted quality credit value. Students who wish to enroll in post-secondary programs before graduation from high school may be awarded course credit leading to high school graduation if it is part of the student’s educational plan. However, prior approval must be granted by the principal, and the course must be given by the college for degree credit.

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The Spotsylvania County Schools grading scale for high school students is:

- **A** = 90-100
- **B** = 80-89
- **C** = 70-79
- **D** = 60-69
- **F** = Below 60

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50
From Non-Accredited Schools & Non-Accredited Homeschooling - Spotsylvania County Public Schools reserves the right to determine credit and appropriate grade level placement of students transferring from non-accredited private schools or non-accredited home instruction programs. This determination will be based on available transcripts of past academic work, standardized test scores, and tests administered by Spotsylvania personnel. The student will be required to take a Course Mastery Examination for the subject. Examinations will only be given in courses which the student can verify that he/she has taken in private school or through home instruction. For sequential courses such as English and math, if the student cannot successfully pass those examinations, he/she will be required to take the examinations of courses taken previously.

National Collegiate Athletic Association
Eligibility Requirements
The NCAA has established a central clearinghouse to certify athletic eligibility to Division I and II institutions. Students who intend to participate, with or without a scholarship, as a freshman in college, must register with, and be certified as eligible by, the NCAA Initial-Eligibility Center. Initial-eligibility certification pertains only to NCAA requirements for participation in Division I or II athletics and has no bearing on student admission to a particular Division I or II institution. It is best to register after the junior year grades have appeared on the transcript in mid-June. Registration materials may be obtained from the high school counselor.

Information about NCAA eligibility can be obtained by the student-athlete and parents in several ways:
- Website at www.eligibilitycenter.org
- Hotline at 800.638.3731 for copy of “Guide for the College-Bound Student Athlete.”
- NCAA Eligibility Center at 877.262.1492. Office hours are 8:00 a.m. to 5:00 p.m. Central Time, Monday through Friday.

Grade Point Average & Class Rank
The GPA (Grade Point Average) is obtained by:
1. All high school courses and courses attempted prior to the ninth grade which are considered to be high school courses (Algebra I, Spanish I, etc.) are included in the GPA.
2. Each letter grade is assigned a number of quality credit points:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Grade</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.50</td>
<td>A</td>
<td>98-100</td>
</tr>
<tr>
<td>4.25</td>
<td>A</td>
<td>95-97</td>
</tr>
<tr>
<td>4.00</td>
<td>A</td>
<td>90-94</td>
</tr>
<tr>
<td>3.75</td>
<td>B</td>
<td>88-89</td>
</tr>
<tr>
<td>3.50</td>
<td>B</td>
<td>86-87</td>
</tr>
<tr>
<td>3.25</td>
<td>B</td>
<td>84-85</td>
</tr>
<tr>
<td>3.00</td>
<td>B</td>
<td>80-83</td>
</tr>
<tr>
<td>2.75</td>
<td>C</td>
<td>78-79</td>
</tr>
<tr>
<td>2.50</td>
<td>C</td>
<td>76-77</td>
</tr>
<tr>
<td>2.25</td>
<td>C</td>
<td>74-75</td>
</tr>
<tr>
<td>2.00</td>
<td>C</td>
<td>72-73</td>
</tr>
<tr>
<td>1.75</td>
<td>D</td>
<td>68-69</td>
</tr>
<tr>
<td>1.50</td>
<td>D</td>
<td>66-67</td>
</tr>
<tr>
<td>1.25</td>
<td>D</td>
<td>64-65</td>
</tr>
<tr>
<td>1.00</td>
<td>D</td>
<td>60-63</td>
</tr>
<tr>
<td>0</td>
<td>F</td>
<td>59 or less</td>
</tr>
</tbody>
</table>

*Weighted Courses transferred from other school divisions that do not correspond with this list will not receive weighted credit in Spotsylvania County Public Schools.

The subjects listed below are designated as weighted courses:
- All Advanced Placement classes
- IB courses (11th & 12th grade)
- Dual Enrollment classes

3. The points obtained for the final grade in each course are added and then divided by the total
number of credits attempted to arrive at the cumulative GPA.

4. Audited Courses (courses repeated in which credit has been previously earned) do not grant credit, but the quality points are included in the GPA calculation.

5. When a course is failed and subsequently repeated, both grades are counted towards the GPA.

6. GPA is calculated for each student at the end of each school year. For seniors, an additional GPA calculation is made at the end of the first semester.

7. Rank in class: After calculation of the GPA for all students, students are ranked within their class according to that figure.

Services for Gifted Students
In the ninth through the twelfth grades, gifted students in each high school are offered services through an academic year governor’s school, advanced classes, Advanced Placement classes, Dual Enrollment, college/university classes, interdisciplinary classes, independent study, appropriate seminars/internships, and counseling services. A member of the staff at each high school coordinates services for gifted students.

Special Education Services
Special education services are offered for students with special needs who have been evaluated and identified as having a disability and determined to be in need of special education. Coursework and accommodations are designed to meet the emotional, academic, and/or physical needs of students with disabilities. All coursework is then adapted according to the unique needs of each child and in accordance with his/her Individualized Education Program (IEP).

Summer School
A summer school program is offered each year in Spotsylvania County Public Schools. Students who have failed a course during the regular year may repeat that course in summer school if the course is offered. Unlike the regular school year, a tuition fee is charged for all students in summer school. To qualify for attendance in a repeat course, a student may have missed no more than 15 days in the course during the regular school year or needs to have earned at least a 50% in the course. Individual cases not meeting this criteria will be reviewed by the building principal. Specific information about courses and location of the summer school program is announced and available in the school counseling offices and on the website in the spring of each year.

High School Course Offerings
ENGLISH
English Grade 9
Honors English Grade 9
English Grade 10
Honors English Grade 10
English Grade 11
Honors English Grade 11
Dual Enrollment College Composition
Dual Enrollment British Literature
Advanced Placement English Language & Composition 11
English Grade 12
Honors English Grade 12
Advanced Placement English Literature & Composition 12
IB English Language and Literature
IB Theory of Knowledge
Journalism I
Journalism II
Journalism III
Journalism IV
Yearbook Production
Photojournalism
Creative Writing I
Creative Writing II
Humanities
Reading Across the Content
Advanced Placement Seminar
Advanced Placement Research

FINE ARTS
Art I
Art II
Art III
Art IV
Art Seminar
Advanced Placement Studio Art
IB Visual Arts
Sculpture I
Sculpture II
Dance I
Dance II
Theatre Arts I
Theatre Arts II
Theatre Arts III
Theatre Arts IV
Technical Theatre I
Technical Theatre II
Technical Theatre III
Theater Seminar
IB Theatre Arts
Band Class
Percussion Class
Concert Performance Band I/II
Symphonic Performance Band I/II
Performance Jazz Band I/II
Beginning Strings
Concert Performance String Orchestra I/II
Symphonic Performance String Orchestra I/II
Women's Chorus/Men's Chorus I/II
Concert Chorus I/II
Contemporary Ensemble
Select Women's Chorus/Men's Chorus I/II
Vocal Ensemble I/II
Music Theory
Introduction to Music Technology
Advanced Placement Music Theory
IB Music

WORLD LANGUAGES
French I
French II
French III
French IV
French V
Advanced Placement French
IB French
German I
German II
German III
German IV
German V
Advanced Placement German
IB German
Latin I
Latin II
Latin III
Latin IV
Latin V
Advanced Placement Latin
IB Classical Languages
Spanish I
Spanish II
Spanish for Native & Heritage Speakers I & II
Spanish III
Spanish IV
Spanish V
Advanced Placement Spanish
IB Spanish

ESOL
English for Speakers of Other Languages I
English for Speakers of Other Languages II
English for Speakers of Other Languages III
English for Speakers of Other Languages IV

HEALTH AND PHYSICAL EDUCATION
Health and Physical Education Grade 9
Physical Education and Driver's Ed Grade 10
Strength and Conditioning
Recreation and Wellness

MATHEMATICS
Algebra I
Algebra I, Part 1
Algebra I, Part 2
Geometry
Geometry, Part 1
Geometry, Part 2
Algebra Functions and Data Analysis
Algebra II
Honors Algebra II
Applied Mathematics: Modeling and Functions
Mathematical Analysis
Dual Enrollment Pre-Calculus I & II
Dual Enrollment Calculus
Computer Mathematics (Visual BASIC)
Computer Mathematics (C++)
Statistics and Probability
Advanced Placement Statistics
Advanced Placement Calculus AB
Advanced Placement Calculus BC
Advanced Placement Computer Science Principles
Advanced Placement Computer Science (JAVA)
IB Mathematics
IB Math Studies

SCIENCE
Environmental Science
Earth Science
Honors Earth Science
Earth Science II
Advanced Placement Environmental Science
Biology
Honors Biology
Advanced Placement Biology
IB Biology
Biology II - Seminar
Chemistry I
Chemistry II
Advanced Placement Chemistry
IB Chemistry
Physics
Advanced Placement Physics I
DE Physics
Advanced Placement Physics II
Human Anatomy and Physiology
Marine Science
Oceanography

HISTORY & SOCIAL SCIENCES
World Geography
Advanced Placement Human Geography
World History 1500 AD (C.E.) to Present
Advanced Placement World History
Virginia and United States History
Advanced Placement United States History
Virginia and United States Government
Advanced Placement United States Government
Dual Enrollment Western Civilization
Advanced Placement European History
IB History
Psychology
Advanced Placement Psychology
Sociology
African American History
Latin American History
Debate
Criminal Justice
21st Century Global Issues

CAREER & TECHNICAL EDUCATION
AGRICULTURAL EDUCATION
Intro to Animal Science
Small Animal Care
Agri-Business
Advanced Agri-Business
Agricultural Cooperative Education
Plant Production
Greenhouse Production & Management

BUSINESS AND INFORMATION TECHNOLOGY
Information Technology Fundamentals (8th grade ONLY)
MOS I
MOS II
Design, Multimedia and Web Technologies I

Design, Multimedia and Web Technologies II
Economics & Personal Finance
Business Management
IB Business Management
Cybersecurity Fundamentals
Cybersecurity Networking Defense Operations
IB Information Technology in a Global Society

EDUCATION & TRAINING
Dual Enrollment Teachers for Tomorrow I
Dual Enrollment Teachers for Tomorrow II

FAMILY AND CONSUMER SCIENCES
Individual Development
Nutrition and Wellness
Child Development and Parenting
Introduction to Hospitality, Tourism, and Recreation

MARKETING EDUCATION
Introduction to Marketing
Fashion Marketing
Sports, Entertainment, and Recreation Marketing
Marketing
Advanced Marketing
Marketing Management

TECHNOLOGY EDUCATION
Manufacturing Technology
Construction Technology
Technical Drawing and Design
IB Design and Technology
Engineering Drawing and Design
Engineering Exploration
Engineering Studies

TRADE & INDUSTRY PROGRAM COURSES
CONSTRUCTION/MECHANICAL TRADES
Construction & Mechanical Trades Career Pathways
Carpentry I
Carpentry II
Electricity I (Residential Wiring)
Electricity II (Residential Wiring)
Heating, Ventilation, Air Conditioning & Refrigeration (HVAC/R) I
Heating, Ventilation, Air Conditioning & Refrigeration (HVAC/R) II
Bricklaying/Masonry I
Bricklaying/Masonry II
<table>
<thead>
<tr>
<th>INFORMATION TECHNOLOGIES COURSES</th>
<th>ADDITIONAL OPPORTUNITIES</th>
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<tbody>
<tr>
<td>Cybersecurity Systems Technology I</td>
<td>Independent Study</td>
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<tr>
<td>Cybersecurity Systems Technology II</td>
<td>Mentor Apprenticeship Program</td>
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<tr>
<td>MASS COMMUNICATION COURSES</td>
<td>JROTC I</td>
</tr>
<tr>
<td>Video Production Pathways</td>
<td>JROTC II</td>
</tr>
<tr>
<td>Introduction to Video Production</td>
<td>JROTC III</td>
</tr>
<tr>
<td>Advanced Video Production</td>
<td>JROTC IV</td>
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<tr>
<td>TRANSPORTATION COURSES</td>
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<tr>
<td>Auto Collision Repair I</td>
<td></td>
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<tr>
<td>Auto Collision Repair II</td>
<td></td>
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<tr>
<td>Automotive Service Technology I</td>
<td></td>
</tr>
<tr>
<td>Automotive Service Technology II</td>
<td></td>
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<tr>
<td>PERSONAL SERVICES COURSES</td>
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<tr>
<td>Cosmetology I</td>
<td></td>
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<tr>
<td>Cosmetology II</td>
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<tr>
<td>DRAFTING, DESIGN &amp; CAD</td>
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</tr>
<tr>
<td>Drafting, Design, and CAD I</td>
<td></td>
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<tr>
<td>Drafting, Design, and CAD II Mechanical</td>
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<tr>
<td>Drafting, Design, and CAD II Architectural</td>
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<tr>
<td>METAL TRADES</td>
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<tr>
<td>Metal Trades I (9th Grade)</td>
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<tr>
<td>Metal Trades II (10th Grade)</td>
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<tr>
<td>FAMILY &amp; CONSUMER SCIENCES</td>
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<tr>
<td>Culinary Arts I</td>
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<tr>
<td>Culinary Arts II</td>
<td></td>
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<tr>
<td>Early Childhood Education I</td>
<td></td>
</tr>
<tr>
<td>Early Childhood Education II</td>
<td></td>
</tr>
<tr>
<td>HEALTH, MEDICAL &amp; PROTECTIVE SERVICES</td>
<td></td>
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<tr>
<td>Veterinary Science I</td>
<td></td>
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<tr>
<td>Veterinary Science II</td>
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<tr>
<td>Introduction to Health and Medical Pathways</td>
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<tr>
<td>Dental Assistant I</td>
<td></td>
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<tr>
<td>Dental Assistant II</td>
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<tr>
<td>Medical Assistant I</td>
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<tr>
<td>Medical Assistant II</td>
<td></td>
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<tr>
<td>DE Nurse Aide I</td>
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</tbody>
</table>
English 9, 10, 11, and 12 courses are sequential, required classes that are aligned to the current VA Standards of Learning and are designed to develop student literacy skills necessary for continuing educational, professional, and personal progress beyond high school. The courses emphasize the integration of reading literary, nonfiction, and informational texts, writing for diverse audiences and purposes, and fostering research, communication, and collaboration skills. Honors English 9, 10, 11, and 12, Advanced Placement English, and the English courses in the International Baccalaureate and Dual Enrollment programs are rigorous, challenging programs of study designed to strengthen students' critical and analytical language skills. High school students also have the opportunity to extend their study and pursue interests through various English electives.

**English Grade 9**
Course #: 1130B  
**Recommended: Grade 9**  
Credit: 1 Unit  
A variety of literature will be discussed and analyzed to include works of various classic and contemporary authors. Knowledge of literary terms and genres will be applied in the student’s own writing and in the analysis of literature. Writing will encompass narrative, expository, and persuasive forms for a variety of purposes and audiences. Students will expand their knowledge of vocabulary, grammar, oral presentations, research skills, technology use, and media literacy.

**Honors English Grade 9**
Course #: 1130A  
**Recommended: Grade 9**  
Credit: 1 Unit  
**Prerequisites: Passing score on Grade 8 Reading & Writing SOL**  
This course is designed for students who demonstrate the capacity and motivation to complete accelerated work beyond the expected level for the grade. Writing will focus on drafting and revising descriptive, narrative, expository, persuasive, and analytical essays. Literature study will explore themes of various classic and contemporary authors. Students will learn to analyze fiction beyond the literal level, to search for abstract meaning, and to apply the ideas studied to their own lives. The course will further expose students to multiple modes of communication.

**English Grade 10**
Course #: 1140B  
**Recommended: Grade 10**  
Credit: 1 Unit  
**Prerequisites: English Grade 9**  
Students will read and analyze literary texts from a variety of eras and cultures. Attention will be given to the analysis of nonfiction texts. The development of expository, persuasive, narrative, and descriptive writings will be included, although emphasis will be placed on analytic writing. Students will continue to expand the development of vocabulary, research and presentation skills, and grammar knowledge. They will also examine, analyze, and produce media messages.

**Honors English 10**
Course #:1140A  
**Recommended: Grade 10**  
Credit: 1 Unit  
**Prerequisites: English Grade 9**  
Through the study of literature and use of critical thinking skills, students will recognize the universality of literary themes and heighten their appreciation of well-written works. Students are exposed to a wider variety of writing than in English 10, with an emphasis on persuasive and analytic writing. They will also expand their knowledge of vocabulary, grammar, research skills, technology use, and media literacy.

**English Grade 11**
Course #: 1150B  
**Recommended: Grade 11**  
Credit: 1 Unit  
**Prerequisites: English Grade 10**  
Students will study and analyze the relationships among American literary themes, characterizations, culture, and history. They will read a variety of fiction and nonfiction texts with an emphasis on citing textual evidence while comprehending, drawing conclusions, and making inferences. Concentrating on argumentation, students will develop clear and accurate personal, and professional writing skills. Students will locate appropriate sources of information, evaluate them for bias, and synthesize them into their own writing or presentations.

**Honors English Grade 11**
Course #: 1150A  
**Recommended: Grade 11**  
Credit: 1 Unit  
**Prerequisites: English Grade 10**  
Emphasis will be placed on the development of critical thinking skills, the use and evaluation of research materials, and the study of literature as an art and component of a culture. The Honors English 11 student will write in various forms and modes, speak expressively and artfully before a group, and continue to develop an extensive and versatile
vocabulary. Literature read will represent major American authors, genres, movements, or stylistic devices.

**Dual Enrollment Composition (ENG 111-112)**
Course #1177  
Recommended: Grade 11  
Credit: 1 Unit (also transferable college credit hours (6) with a grade of 70 or better each semester)  
Prerequisites: English Grade 10 + Germanna entrance requirements  
Note: Fee required  
This course is a Germanna Community College (GCC) course taught in high school. GCC entrance and tuition requirements must be met. Through the writing process, students will refine topics; develop and support ideas; investigate, evaluate, and incorporate appropriate resources; edit for effective style and usage; and determine appropriate approaches for a variety of contexts, audiences, and purposes. In accordance with GCC requirements, 80% of the student's grade will come from writing assignments. Credits typically transfer to all Virginia Community Colleges and most colleges. Summer assignments may be required.

**Dual Enrollment British Literature (ENG 243-244)**
Course #: 1180  
Recommended: Grade 12  
Credit: 1 Unit (also transferable college credit hours (6) with a grade of 70 or better each semester)  
Prerequisites: Completion of ENG 111-112 + Germanna entrance requirements  
Note: Fee required  
Dual enrollment British Literature is a Germanna Community College (GCC) course taught in high school. GCC entrance and tuition requirements must be met. Students will study the major English works from the Anglo-Saxons to present, emphasizing ideas and characteristics of the British literary tradition. Students will critically read and write in their study of British literature. Credits typically transfer to all Virginia Community Colleges and most colleges. Summer assignments may be required.

**Advanced Placement English Language and Composition 11**
Course #1196  
Recommended: Grade 11  
Credit: 1 Unit  
Prerequisites: English Grade 10  
In this course, students will write about a variety of subjects, with emphasis on expository, analytical, narrative, and argumentative forms. Additionally, through careful reading and critical analysis, students will examine the rhetorical strategies and stylistic choices made by writers. Students will learn to read sources carefully, synthesize material from texts in their own compositions, and cite sources. Students participating in Advanced Placement classes are expected to take the College Board Exam, in addition to fulfilling all the requirements of the course.

**English Grade 12**
Course #1160B  
Recommended: Grade 12  
Credit: 1 Unit  
Prerequisites: English Grade 11  
Students will analyze British literature and literature of other cultures by recognizing major literary forms and their elements. Additionally, students will analyze and synthesize nonfiction texts to solve problems. Students will demonstrate advanced knowledge of grammatical conventions through writing, editing, and speaking. Students will plan and deliver oral presentations as well as choose appropriate tone and language for the audience. They will extend their knowledge of vocabulary, research skills, technology use, and media literacy. Persuasive/argumentative, analytic, and real-world writing will be included in this course. Students will also produce a well-documented major research product by following ethical and legal guidelines.

**Honors English Grade 12**
Course #1160A  
Recommended: Grade 12  
Credit: 1 Unit  
Prerequisites: English Grade 11  
Significant time will be devoted to the creation, development, and analysis of literary research writing. Literature selections include classics of British and world literature. Class discussion will emphasize the development of abstract reasoning which is required for analysis and interpretation of text. Opportunity will be provided for the organization and presentation of group and individual assignments. Students will also produce a well-documented major research product by following ethical and legal guidelines.

**Advanced Placement English Literature and Composition 12**
Course #1195  
Recommended: Grade 12  
Credit: 1 Unit  
Prerequisites: English Grade 11  
This course will involve the study, analysis, and practice of both literature and composition. The study of literature will focus on challenging works of recognized literary merit from multiple genres and periods. In-depth expository, analytical, and argumentative essays will be required. Students will be expected to take the AP College Board Exam in addition to fulfilling all the requirements of the course. Summer assignments may be required.

**IB English Language and Literature (HL)**
Course #IB1150 & IB1160  
Recommended: Grades 11-12  
Credit: 1 Unit Per Course  
Prerequisites: Honors English 9 & 10; Enrolled in IB program  
This course is a requirement for the IB Diploma Programme. In 11th grade, students focus on language
in mass media and analysis of poetry, memoirs, and plays. In the 12th grade, students focus on language in cultural context, as well as a critical and comparative study of the novel as a literacy genre. Required IB assessments include oral activities, written tasks, an oral commentary, and end-of-course exams that call upon the student to analyze and compare previously unseen texts as well as literacy works that have been read during the course. The course provides the possibility of college credit.

**IB Theory of Knowledge**  
**Course #IB1197 & IB1198**  
**Recommended: Grades 11-12**  
**Credit: 1 Unit Per Course**  
**Prerequisites: Enrolled in IB program**  
**Examination: Theory of Knowledge Exam**

This course will include embedded methodology and guided practice regarding the other two elements of the IB Core: Extended Essay (EE) and Creativity, Activity, and Service (CAS). Students will explore fundamental questions of epistemology by reflecting upon and questioning the basis of knowledge and experience, examining cultural and ideological bias, and by formulating rational arguments and value judgments of their own. Academic disciplines examined will include language, history, logic, science, mathematics, ethics and aesthetics. The course will include an externally assessed paper and internally assessed oral presentation.

**Journalism I**  
**Course #1200**  
**Recommended: Grades 9-12**  
**Credit: 1 Unit**

In this course, styles and types of writing will be studied in detail with emphasis upon clarity, conciseness, and accuracy in communication. Through frequent writing assignments during the school year, students will develop proficiency in gathering information, journalistic writing, and editing. The study of the mechanics and technicalities of assembling and producing publications will also be taught. Students will understand the difference between ethics, laws, and policy in order to be successful writers and journalists. Students will hone interview skills to gather in-depth research for accurately written products.

**Journalism II**  
**Course #1210**  
**Recommended: Grades 10-12**  
**Credit: 1 Unit**  
**Prerequisites: Journalism I**

In this course, students will participate in an in-depth study of layout and design. Emphasis will be placed on the development of clear and concise written communication through analysis of information, selection of facts and opinions, and techniques of editing and revision. Students enrolled in Journalism II must be prepared to participate in after-school publication activities for their high school newspaper/magazine.

**Journalism III**  
**Course #1211**  
**Recommended: Grades 11-12**  
**Credit: 1 Unit**  
**Prerequisites: Journalism II**

In this course, students will plan publications, edit work, and format layouts. Students will work collaboratively to create and oversee the production of the school newspaper/magazine. Students will continue to improve their journalistic style in concentrating on written communication for various publications. Students enrolled in Journalism III must be prepared to participate in after-school publication activities.

**Journalism IV**  
**Course #1212**  
**Recommended: Grades 11-12**  
**Credit: 1 Unit**  
**Prerequisites: Journalism III**

In this course, students will plan publications, edit work, and format layouts. Students will work collaboratively to create and oversee the production of the school newspaper/magazine. Students will continue to improve their journalistic style in concentrating on written communication for various publications. Students enrolled in Journalism IV must be prepared to participate in after-school publication activities.

**Yearbook Production**  
**Course #1220, 1221, 1222, 1223**  
**Recommended: Grade 10-12**  
**Credit: 1 Unit**  
**Prerequisites: Staff Approval**

In this course, students will learn the publication process while assisting in the production of the high school yearbook. Computer-assisted layout and writing will be integral parts of the program. Students will be responsible for the development of the yearbook from planning to distribution of the completed publication. Students must be prepared to participate in after-school publication activities.

**Photojournalism**  
**Course #1215**  
**Recommended: Grades 10-12**  
**Credit: 1 Unit**

Students will learn basic camera handling as well as shooting and developing procedures to take correctly exposed and composed photographs. Digital photography, computer print processes, and programs will be utilized as well. Students should be prepared to provide some supplies, including film, and pay fees for darkroom materials. Students must have access to a 35 mm SLR camera or digital camera that is fully adjustable (school cameras may be available). Students should contact the school's photojournalism teacher for specific requirements prior to purchasing a camera.
Creative Writing I  
Course #1171  Recommended: Grades 10-12  
Credit: 1 Unit  
This course is designed for students who enjoy writing imaginatively and have demonstrated competence as writers. Imaginative writing will be explored to help develop an original voice and style. Students will learn and practice strategies to create, revise, polish, and adjust their writing to their needs and the requirements of various audiences. This is not a literature course; however, mentor texts are used as instructional models to improve writing skills.

Creative Writing II  
Course #1172  Recommended: Grades 11-12  
Credit: 1 Unit  
Prerequisites: Creative Writing I  
This course will provide students an opportunity to extend their interests and capabilities as imaginative writers. Using the concepts and techniques learned in Creative Writing I, students will continue to develop and practice advanced strategies for composing and revising, to experiment with sophisticated genres and literary techniques, and to develop their own unique voice and style of writing.

Humanities  
Course #1515  Recommended: Grades 11-12  
Credit: 1 Unit  
This course will provide an overview of coursework in the humanities including art history, philosophy, archetypes, music, and cinema. Students will think about, discuss, respond, and connect to the ideas of authors, historians, artists, filmmakers, and philosophers from various eras and cultures. Students will develop effective strategies for collaboration and communication in writing, creative projects, and presentations.

Reading across the Content  
Course #9840  Recommended: Grades 9-12  
Credit: 1 Unit (one unit of credit is earned for each year taken)  
Prerequisites: Teacher/Staff Recommendation  
This course is designed to specifically improve decoding, reading comprehension, vocabulary, and writing skills. Students will receive explicit instruction on strategic reading of fiction and nonfiction texts. Strategies that will receive attention include: predicting, monitoring understanding, inquiry and reasoning, inferencing, visualizing, connecting, summarizing, and reflecting.

Advanced Placement Seminar  
Course #1516  Recommended: Grades 10-12  
Credit: 1 Unit  
Students will practice reading and analyzing articles, research studies, and foundational, literacy, and philosophical texts; listening to and viewing speeches, broadcasts and personal accounts; and experiencing artistic works and performances. Students will learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. (This program is currently available at MHS and RHS).

Advanced Placement Research  
Course #1518  Recommended: Grades 10-12  
Credit: 1 Unit  
Prerequisites: Advanced Placement Seminar  
Students will design, plan, and conduct a year-long research based investigation to address a research question. In the AP Research course, students will further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. The course will culminate in a substantive academic paper (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense. (This program is currently available at MHS and RHS).

Fine Arts  
Visual Arts courses provide students with the opportunity to participate in sequential and non-sequential offerings and are designed to meet a variety of student interests. Generalized experiences, as well as highly advanced and specialized opportunities, are available. A credit earned in any of these courses fulfills the Career and Technical/Fine Arts credit requirement.

Art I  
Course #9120  Recommended: Grades 9-12  
Credit: 1 Unit  
Note: Lab Fee Required  
Art I is an exploratory course. Students will be exposed to multiple art mediums in order to cultivate the appreciation and creation of art. Emphasis will be placed on learning to draw, on understanding art as a visual language, and on recognizing the relationship of art to other fields. Students will be expected to provide some of their own supplies (such as drawing pencils, erasers, sharpener, art pads, and colored pencils) for completing assignments.
Art II
Course #: 9130  Recommended: Grades 10-12
Credit: 1 Unit  Note: Lab Fee Required
Prerequisites: Art I
In this course emphasis will be placed on students developing a personal style and skill in his/her art. Students will explore more in-depth topics, including but not limited to, conveying complex themes in art, studying figure drawing, demonstrating a broader color palette, utilizing a wide variety of painting techniques, and reflecting upon their evolution as an artist by participating in critique sessions. Continued exposure to various artists and their contributions to the history of art will be examined. Students will be expected to provide some of their own supplies (such as drawing pencils, erasers, sharpeners, sketchbooks, and colored pencils) for completing assignments.

Art III
Course #: 9140  Recommended: Grades 11-12
Credit: 1 Unit  Note: Lab Fee Required
Prerequisites: Art II, Portfolio Audition, Teacher Recommendation
This course will emphasize the development of a personal style and a body of work to be used as a portfolio and/or to showcase at an annual art show. Students will be expected to be a part of a creative community, engaging in frequent critique and class discussions. Students must be self-directed in the completion and mastery of art media and the production of quality work. Students will be expected to provide some of their own supplies (such as drawing pencils, erasers, sharpeners, sketchbooks, and colored pencils) for completing assignments.

Art IV
Course #: 9145  Recommended: Grade 12
Credit: 1 Unit  Note: Lab Fee Required
Prerequisites: Art III, Portfolio Audition, Teacher Recommendation
Art IV is an in-depth study of art techniques specifically designed for the student. The course will emphasize students developing their own style and experimentation with different materials and methods. Students will be expected to provide some of their own supplies (such as drawing pencils, erasers, sharpeners, sketchbooks, and colored pencils) for completing homework assignments.

Art Seminar
Course #: 9196  Recommended: Grades 11-12
Credit: 1 Unit  Note: Lab Fee Required
Prerequisites: Enrollment in Art II or IV and Teacher Recommendation
Art Seminar will allow a motivated art student to pursue in-depth art experiences under the supervision of the teacher. Serious art students will further complete their portfolio and prepare for post-high school art studies. Students will be expected to provide some of their own supplies (such as drawing pencils, erasers, sharpeners, sketchbooks, and colored pencils) for completing assignments.

Advanced Placement Studio Art
Course #: 9149 2-D Design, 9150 Drawing Portfolio
Recommended: Grade 12
Credit: 1 Unit per course (possible college credit with appropriate score on AP exam)
Prerequisites: Art III, teacher recommendation, and portfolio evaluation
Note: Lab fee and portfolio evaluation fee required
Examination: Advanced Placement Test
Advanced Placement Studio Art is a rigorous college-level course which requires the production of an extensive portfolio. Students who enroll in Advanced Placement Studio Art should do so with the understanding that they plan to participate in Advanced Placement evaluation. Students will be expected to provide some of their own supplies (such as drawing pencils, erasers, sharpeners, sketchbooks, and colored pencils) for completing assignments.

IB Visual Arts (HL)
Course #: IB9194 & IB9195
Recommended: Grades 11-12
Credit: 1 Unit per course
Prerequisites: Art I & II, admittance to IB program
Examination: IB Visual Arts Exam
This course will provide opportunities to develop the aesthetic, imaginative, and creative faculties as well as to train visual, perceptual, and critical awareness of arts of various cultures. Students will compare and analyze artwork and artists, create a portfolio which demonstrates intensive concentration in studio work and/or research in preparation for their exhibition, external assessment. A selection from the exhibition which demonstrates technical skill and personal voice through visual communication along with a written curatorial rationale will be submitted. This culminating IB assessment provides the possibility of college credit.

Sculpture I
Course #: 9121  Recommended: Grades 10-12
Credit: 1 Unit
Prerequisites: Art I or teacher recommendation
Note: This course offered at MHS & RHS only
Students will discover the connections between sculpture and other art disciplines as they relate specifically to three-dimensional art. Students will gain knowledge in additive, subtractive, and assemblage techniques as sources of construction. Basic techniques of construction are introduced. Students will utilize a wide variety of materials
in the works created. Students will explore the works of professional sculptors. Students will develop a sculpture portfolio.

**Sculpture II**
Course #: 9122  
Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: Sculpture 1 or teacher recommendation
Note: This course offered at MHS & RHS only
Techniques of construction will build on Sculpture #1. The course will address historical and aesthetic aspects of sculpture with emphasis on the development of a personal visual vocabulary and the cultivation of individual creative expression. Students will create artistic solutions that clearly express the understanding of principles of design and visual thinking while demonstrating an understanding of tools, materials, techniques, and processes.

**Dance**

**Dance I**
Course #: 1450  
Recommended: Grades 9-12
Credit: 1 Unit
Note: This course offered at CHS only
Students will develop fundamental skills in dance through movement, technique, choreography, and creative expression. Selected dance forms surveyed in this course include ballet, jazz, modern, cultural and social dances. Students will cultivate dance vocabulary, study dance history, and develop improvisational and performance skills.

**Dance II**
Course #: 1451  
Recommended: Grades 10-12
Credit: 1 Unit
Prerequisite: Dance I or teacher recommendation
Note: This course offered at CHS only
Students will focus on body awareness as it relates to dance technique. The course will explore movement manipulation as it relates to beginning choreography. In addition to dance technique, students will gain an understanding of nutrition and wellness. The course will also build upon cultural and world dances that were introduced in Dance I.

**Theatre Arts**

**Theatre Arts I: Introduction to Theatre**
Course #: 1410  
Recommended: Grades 9-12
Credit: 1 Unit
This course will provide students with a survey of theatre arts, allowing them opportunities to experience and appreciate dramatic literature and participate in the creative processes of performance and production. The course will emphasize skill development and provides theatrical opportunities that enable students to determine personal areas of interest.

**Theatre Arts II: Dramatic Literature & Theatre History**
Course #: 1420  
Recommended: Grades 10-12
Credit: 1 Unit
Prerequisites: Teacher recommendation and/or audition
Students will be scheduled upon receipt of the Theatre Arts Teacher's recommendation on the Audition Request Form. Through various modes of expression and performance, students will investigate dramatic literature, theatrical styles, and historical periods. Students will study and respond to a variety of theatre experiences that will refine their communicative, collaborative, analytical, interpretive, and problem-solving skills. Students will expand their artistic abilities and appreciation of the theatrical arts.

**Theatre Arts III: Intermediate Acting & Playwriting**
Course #: 1423  
Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: Teacher recommendation and/or audition
Students will be scheduled upon receipt of the Theatre Arts Teacher's recommendation on the Audition Request Form. Through various modes of expression and performance, students will investigate acting styles and the process of playwriting, which includes character development, research, dramatic structure, conflict and resolution, and will develop artistic criteria that will be applied to performance and directing. Students will study and respond to a variety of theatre experiences that will refine their collaborative, analytical, interpretive, and problem-solving skills. Students will deepen their artistic abilities and appreciation of the theatrical arts. Some plays and showcases may require after-school rehearsals.

**Theatre Arts IV: Advanced Acting & Directing**
Course #: 1426  
Recommended: Grade 12
Credit: 1 Unit
Prerequisites: Teacher recommendation and/or audition
Students will be scheduled upon receipt of the Theatre Arts Teacher's recommendation on the Audition Request Form.
Form. Through research, performance, and evaluation, students will develop artistic criteria that will be applied to performance and directing. Students will study and respond to a variety of theatre experiences showcasing their collaborative, analytical, interpretive, and problem-solving skills. Some plays and showcases may require after-school rehearsals.

**Technical Theatre I, II, and III**  
Course #: 1435, 1436, 1437  
Recommended: Grades 10-12  
Credit: 1 Unit  
Prerequisites: Theatre Arts I and/or teacher approval  
Technical Theatre will help students apply and expand their knowledge of theatre design, production, and management. Students will develop problem-solving, communication, organizational, and management skills. Drawing on fine arts and other disciplines, they will work individually and collaboratively to explore the interrelated components of design, production, and management. Students will practice safe operating procedures, including the care, maintenance, and storage of tools, materials, and equipment.  
Notes: Health and Safety Contract required. Lab fee MAY be required (discuss this with your school’s theatre director).

**Theatre Seminar**  
Course #:1440  
Recommended: Grades 10-12  
Credit: 1 Unit  
Prerequisites: Audition/Portfolio, Interview, Theatre I, II, III or the equivalent  
Note: This pilot course offered at ChHS & MHS only  
Theatre Seminar focuses on the process of producing theatre works, including generating and refining ideas, practicing skills and techniques, revision, reflection, and collaboration. This course emphasizes opportunities for choice making that enhances students’ abilities to think critically and creatively as artists. Theatre Seminar offers practical concentrated study in professional and collegiate audition and portfolio preparation. This course will culminate in the creation of an online portfolio, a professional promptbook, and a capstone project based on the students’ area of interest.

**IB Theatre Arts (SL)**  
Course #: IB1432 & IB1433  
Recommended: Grades 11-12  
Credit: 1 Unit per course  
Prerequisites: Theatre I & II, admittance to IB program  
Examination: IB Theatre Arts Exam  
Students will learn the major developments and techniques in the theatrical history of other cultures. Becoming a better performer in front of an audience and the ability to interpret and illuminate play scripts and other theatrical texts analytically and imaginatively will also be an important part of this course. Research and the acquisition of sufficient technical skill will be included. Oral presentations, performing in a theatre production, and written work (including a portfolio) will be internally and externally assessed. This course will culminate with an IB external assessment that provides the possibility of college credit.  
Music courses are designed to provide students with the opportunity to participate in sequential offerings designed to meet a variety of student interests and needs. Generalized experiences, as well as highly advanced and specialized opportunities, are available. A credit earned in any of these courses fulfills the Career and Technical/Fine Arts credit requirement.

**Band**  
Band classes are designed for students that play non-string instruments (woodwinds, brass, percussion). Grades will be determined on the basis of written and playing assessments, class participation, and concert performance. Students must furnish their own instruments (Some school-owned instruments are available for student use. Please check with directors for availability). Students are responsible for purchasing or renting appropriate concert attire.

**Band Class**  
Course #: 9232  
Recommended: Grades 9-12  
Credit: 1 Unit  
This class will offer individualized and small group instruction on any instrument, except percussion, at the student’s ability level. No concerts or events will be required of students enrolled in this class. The student must provide his/her own traditional concert band instrument and method books.

**Percussion Class**  
Course #: 9297  
Recommended: Grades 9-12  
Credit: 1 Unit  
Prerequisites: Middle school band or director’s recommendation  
This class will offer individualized and small group instruction on all traditional percussion instruments. The student must provide his/her own snare drum, bell kit, and mallets for performing on timpani and mallet instruments and method books. Public performances will be at the discretion of the director.

**Concert Performance Band I/II**  
Course #: 9233, 9234  
Recommended: Grades 9-12  
Credit: 1 Unit (one unit of credit is earned for each year taken)  
Prerequisites: Middle school band or director’s recommendation  
This course develops individual musicians and builds
students as members of a musical group. Emphasis is placed on the development of intermediate level technical and ensemble skills necessary for performance. All students who elect to take this class will be required to play all music and participate in all concerts.

**Symphonic Performance Band I/II**  
Course #: 9241, 9242  
Recommended: Grades 9-12  
Credit: 1 Unit (1 unit of credit is earned for each year taken)  
Prerequisites: Successful Audition  
Emphasis is placed on the sequential development of advanced technical skills and on the study of related literature. Concerts of traditional and contemporary band works are prepared and performed. Small ensemble and solo work, as well as music theory and history, are components of this course. All students who elect to take this class will be required to play all music and participate in all concerts.

**Performance Jazz Band I/II**  
Course #: 9298, 9228  
Recommended: Grades 9-12  
Credit: 1 Unit (one unit of credit is earned for each year taken)  
Prerequisites: Successful Audition  
The emphasis in this advanced-level course is on performance techniques unique to jazz music and the history of jazz through the study of traditional and contemporary works. Some emphasis is given to music theory as it relates to improvisation. Students are involved in solo work and small ensembles. This course is based on the traditional size of a jazz band, or “Big Band”, and is limited in size to the instrumentation needs of the group.

**Beginning Strings**  
Course #: 9245  
Recommended: 9-12  
Credit: 1 Unit  
In this course, emphasis is placed on mastering the skills necessary for the performance of Grade I - II string orchestra literature. Concerts of traditional and contemporary string orchestra works are prepared and performed. Small ensemble and solo work, as well as music theory and history, are components of this course. Thirty minutes of daily practice is expected.

**Concert Performance String Orchestra I/II**  
Course #: 9237, 9243  
Recommended: Grades 9-12  
Credit: 1 Unit (one unit of credit is earned each year taken)  
Prerequisites: At least one year’s worth of experience or director’s recommendation  
In this course, emphasis is placed on mastering the skills necessary for the performance of Grade II - IV string orchestra literature. Students participate in District Orchestra Assessment and All-County Orchestra auditions. Concerts of traditional and contemporary string orchestra works are prepared and performed. Small ensemble and solo work as well as music theory and history are components of this course. Thirty minutes of daily practice is expected.

**Symphonic Performance String Orchestra I/II**  
Course #: 9238, 9239  
Recommended: Grades 9-12  
Credit: 1 Unit (one unit of credit is earned for each year taken)  
Prerequisites: Successful Audition at the discretion of the director  
This is an advanced-level course functioning at the artist level in accordance with the Virginia Standards of Learning. Emphasis is on traditional and contemporary works for string orchestra at the Grade IV - VI level. Students continue participation in District Orchestra Assessment and All-County auditions. The group is limited in size based on the instrumental needs of the group. This course is for students who are serious about the study of instrumental music. Private lessons, while not required, are strongly encouraged for members of this ensemble. Students are expected to practice an average of 30 minutes per day.

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Music courses are designed to provide students with the opportunity to participate in sequential offerings designed to meet a variety of student interests and needs. Generalized experiences, as well as highly advanced and specialized opportunities, are available. A credit earned in any of these courses fulfills the Career and Technical/Fine Arts credit requirement.

Orchestra classes are designed for students that play the violin, viola, cello, or bass. Grades will be awarded on the basis of class and concert performance. Students must furnish their own violin, viola, cello or bass, with larger instruments (cello and bass) provided for in-school use. Students are responsible for purchasing or renting appropriate concert attire.
Chorus

Select Women’s Chorus/ Men’s Chorus I/II
Course #: Women’s 9296/9265, Men’s 9299/9267
Recommended: Grades 9-12
Credit: 1 Unit (one unit of credit is earned for each year taken)
Prerequisites: Audition required
Emphasis will be placed on vocal techniques, ear training, and note learning. Choral balance, diction, and phrasing will be considered in all work. Movement in music will be integrated into the curriculum at this level.

Vocal Ensemble I/II
Course #: 9289, 9290
Recommended: Grades 9-12
Credit: 1 Unit (one unit of credit is earned each year taken)
Prerequisites: Audition required
Emphasis will be placed on vocal techniques, ear training, and note learning. Choral balance, diction and phrasing will be considered in all work. Students will be introduced to various styles of chorus music written for the smaller, more-select choral ensemble.

Music Theory
Course #: 9222
Recommended: Grades 9-12
Credit: 0.5 Unit
Music Theory will expose students to the fundamentals of music theory and appreciation. This will include a study of intervals, scales, keys, triads, and chords and their working relation to one another. A survey of music history will be incorporated so that a better understanding and increased reference knowledge may be applied to newly-developed skills.

Introduction to Music Technology
Course #: 9220
Recommended: Grades 10-12
Credit: 1 Unit
Prerequisite: Students must have completed at least 1 semester of a fine arts credit or teacher recommendation/audition
Note: This pilot course offered at SHS only
This course will prepare students to make music on a diverse array of platforms. This will course emphasize original music production, aural skills, and digital media. Daily lessons will include student creativity and cross-curricular music making. Large-scale creative projects will serve as benchmarks for class units and assessment.
**Advanced Placement Music Theory**  
Course #: 9226  
Recommended: Grades 11-12  
Credit: 1 Unit (possible college credit with appropriate score on AP exam)  
Prerequisites: Music Theory/Appreciation or Teacher recommendation  
Examination: Advanced Placement exam  

Students will develop the ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. Students will study fundamental aural, analytical, and compositional skills using both listening and written exercises. The course will progress to the harmonization of a melody by selecting appropriate chords, composing a musical bass line to provide two-voice counterpoint, and the realization of figured-bass notation. Students will be expected to provide their own workbook. Students who enroll in Advanced Placement Music Theory do so with the understanding that they intend to take the Advanced Placement exam.

**IB Music (SL)**  
Course #: IB9294  
Recommended: Grades 11-12  
Credit: 1 Unit  
Prerequisites: AP Music Theory and Admittance to IB program  
Examination: IB Music exam  

Students must be concurrently enrolled in a performance class. This two-year course will include the study of all music, including western and world music, and covers the material needed in an entry-level college music theory, appreciation, and history course. Students will write musical compositions with the Sibelius or Finale Software Program to clarify musical concepts taught. (Part of the requirement for the course is a solo or group performance recording in a variety of ensembles.) This course will prepare students for the IB Music Exam, which will include listening, written, and performance components.

**American Sign Language**  
Course #: 5990V  
Recommended: Grades 9-12  
Credit: 1 unit  
Note: Course offered online through Virtual Virginia  
This course will introduce vocabulary and grammatical structures in order to start communicating right away. It will also explore deaf culture: social beliefs, traditions, history, values, and communities influenced by deafness. The second semester will introduce students to more of this language and its grammatical structures.

**French I**  
Course #: 5110  
Recommended: Grades 7-12  
Credit: 1 Unit  
The emphasis will be on interpretive, interpersonal, and presentational communication, as well as beginning to develop intercultural communication skills by investigating products and practices and interacting appropriately in language and behavior. Students will progress toward the novice-mid to novice-high proficiency level. Students will begin the development of all communicative skills in French.

**French II**  
Course #: 5120  
Recommended: Grades 8-12  
Credit: 1 Unit  
Prerequisites: French I or Placement test  
Examination: French I or Placement test  
The emphasis will be on interpretive, interpersonal, and presentational communication, as well as developing intercultural competency by investigating products and practices and interacting appropriately in language and behavior. Students will progress toward the novice-low proficiency level and will continue to develop communicative skills in French.

**French III**  
Course #: 5130  
Recommended: Grades 9-12  
Credit: 1 Unit  
Prerequisites: French II or Placement Test  
The emphasis will be on interpretive, interpersonal, and presentational communication, as well as developing intercultural competency by investigating products and practices and interacting appropriately in language and behavior. Students will progress toward the intermediate-low/intermediate-mid proficiency level and will continue the development of all communicative skills in French.

**French IV**  
Course #: 5140  
Recommended: Grades 10-12  
Credit: 1 Unit  
Prerequisites: French III or Placement test  
The emphasis will be on interpretive, interpersonal, and presentational communication, as well as developing intercultural competence by investigating products and
practices and interacting appropriately in language and behavior. This course will be designed for students planning on pursuing a language in college, in the workplace, or as a prerequisite for the level 5, AP, or IB course. Students will progress toward the intermediate-mid/intermediate-high proficiency level and will continue the development of all communicative skills in French.

French V
Course #: 5150
Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: French IV or Placement Test
The emphasis will be on interpretive, interpersonal, and presentational communication, as well as developing intercultural competence by investigating products and practices and interacting appropriately in language and behavior. This course will be designed for students planning on pursuing a language in college, in the workplace, or as a pre-AP course for students planning to take AP French the next year. Students will progress toward the intermediate-high/advanced-low proficiency level and will continue the development of all communicative skills in French.

Advanced Placement French
Course #: 5170
Recommended: Grade 12
Credit: 1 Unit (possible college credit with appropriate score on the AP Exam)
Prerequisites: French III/ Equivalency Examination: Advanced Placement exam
The course will seek to develop all skills emphasizing language for communication using authentic materials in preparation for the advanced placement language exam. Students participating in Advanced Placement French will be expected, in addition to the requirements of the course, to take the exam provided by the College Board. By the end of this course, students will perform at the intermediate-high to advanced-low proficiency levels.

IB French (SL)
Course #: IB5142 & IB5152
Recommended: Grades 11-12
Credit: 1 Unit Per Course
Prerequisites: French I, II, III, admittance to the IB program Examination: IB French exam
Students will be able to speak the language with sufficient accuracy and fluency to participate in formal and informal conversations with ease. Students will work toward appreciating, discussing, and commenting, both orally and in writing, on various literacy forms. This course will include an in-depth study of literacy works and contemporary articles. Written essays will be on literacy and issue-oriented themes. Through oral presentations, individual and group projects, and writing assignments, self-expression will be encouraged. Internally assessed oral exams will be a required part of the course. This course will provide the possibility of college credit.

German I
Course #: 5210
Recommended: Grades 7-12
Credit: 1 Unit
Students will begin the development of all communicative skills in German. The emphasis will be on interpretive, interpersonal, and presentational communication, as well as beginning to develop intercultural communication skills by investigating products and practices and interacting appropriately in language and behavior. Students will progress toward the novice-mid to novice-high proficiency level.

German II
Course #: 5220
Recommended: Grades 8-12
Credit: 1 Unit
Prerequisites: German I or Placement test
Students will progress toward the novice-high proficiency level and will continue to develop communicative skills in German. The emphasis will be on interpretive, interpersonal, and presentational communication, as well as developing intercultural competency by investigating products and practices and interacting appropriately in language and behavior.

German III
Course #: 5230
Recommended: Grades 9-12
Credit: 1 Unit
Prerequisites: German II or Placement test
Students will progress toward the intermediate-low/intermediate-mid proficiency level and will continue the development of all communicative skills in German. The emphasis will be on interpretive, interpersonal, and presentational communication, as well as developing intercultural competency by investigating products and practices and interacting appropriately in language and behavior.

German IV
Course #: 5240
Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: German III or Placement test
Students will progress toward the intermediate-mid/intermediate-high proficiency level and will continue the development of all communicative skills in German. The emphasis will be on interpretive, interpersonal, and presentational communication, as well as developing intercultural competency by investigating products and practices and interacting appropriately in language and behavior. This course will be designed for students planning on pursuing a language in college, in the workplace, or as a prerequisite for the level 5, AP, or IB course.
German V
Course #: 5250                        Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: German IV or Placement Test
Students will progress toward the intermediate-high/advanced-low proficiency level and will continue the development of all communicative skills in German. The emphasis will be on interpretive, interpersonal, and presentational communication, as well as developing intercultural competence by investigating products and practices and interacting appropriately in language and behavior. This course will be designed for students planning on pursuing a language in college, in the workplace, or as a pre-AP course for students planning to take AP German the next year.

Advanced Placement German
Course #: 5270                                 Recommended: Grade 12
Credit: 1 Unit (possible college credit with appropriate score on AP exam)
Prerequisites: German III/Equivalency
Examination: Advanced Placement exam
This course will be designed to develop proficiency in German for highly motivated language students. The course will seek to develop all skills emphasizing language for communication using authentic materials in preparation for the advanced placement language exam. Students participating in Advanced Placement German will be expected, in addition to the requirements of the course, to take the exam provided by the College Board.

IB German (SL)
Course #: IB5242 & IB 5252                        Recommended: Grades 11-12
Credit: 1 Unit per course
Prerequisites: German I, II, III, admittance to IB program
Examination: IB German exam
Students will be able to speak the language with sufficient accuracy and fluency to participate in formal and informal conversations with ease. Students will work toward appreciating, discussing, and commenting, both orally and in writing, on various literacy forms. This course will include an in-depth study of literacy works and contemporary articles. Written essays will be on literacy and issue-oriented themes. Through oral presentations, individual and group projects, and writing assignments, self-expression will be encouraged. This course will culminate in an IB exam and will provide the possibility of college credit.

Latin I
Course #: 5310                        Recommended: Grades 7-12
Credit: 1 Unit
Students will begin the development of communication skills in Latin with an emphasis on interpretive reading skills by reading level-appropriate texts. Students will begin to develop an intercultural competence by using Latin to investigate cultural products and practices of the Romans.

Latin II
Course #: 5320                                 Recommended: Grades 8-12
Credit: 1 Unit                           Prerequisites: Latin I
Students will continue to develop their communication skills with an emphasis on interpretive reading by reading more complex level appropriate texts. Students will continue to develop an intercultural competence by using Latin to investigate cultural products and practices of the Romans.

Latin III
Course #: 5330                        Recommended: Grades 9-12
Credit: 1 Unit                  Prerequisites: Latin II
Students will continue to develop their communication skills, with emphasis on interpretive reading, by reading and interpreting level-appropriate selected passages from mostly authentic authors. Students will continue to develop an intercultural competence by using Latin to investigate cultural products and practices of the Romans. This course will be designed for students planning on pursuing a language in college, in the workplace, or as a prerequisite for the level 5, AP, or IB course.

Latin IV
Course #: 5340                                 Recommended: Grades 11-12
Credit: 1 Unit                           Prerequisites: Latin III
Students will continue to develop their communication skills, with emphasis on interpretive reading, by reading and interpreting level-appropriate selected passages from exclusively authentic authors. Students will continue to develop an intercultural competence by using Latin to investigate cultural products and practices of the Romans. This course will be designed for students planning on pursuing a language in college, in the workplace, or as a prerequisite for the AP or IB course.

Latin V
Course #: 5350                                 Recommended: Grades 11-12
Credit: 1 Unit                           Prerequisites: Latin IV
Students will continue to develop their communication skills, with emphasis on interpretive reading, by reading and interpreting level-appropriate selected passages from exclusively authentic authors in Latin. Students will continue to develop intercultural competence by using Latin to investigate cultural products and practices of the Romans. This course will be designed for students planning on pursuing a language in college, in the workplace, or as a pre-AP course for students planning to take AP Latin the next year.
Advanced Placement Latin
Course #: 5370 Virgil  Recommended: Grade 12
Credit: 1 Unit (possible college credit with appropriate score on the AP exam)
Prerequisites: Latin III/Latin IV/Equivalency
Examination: Advanced Placement exam
The Advanced Placement Latin course will examine selections from Julius Caesar’s De Bello Gallico and Virgil’s Aeneid, and will emphasize progress in the reading, understanding, analysis, and interpretation of Latin prose and poetry. In addition to fostering an understanding of the literary techniques of Latin writers and of poetic meter, stylistic analysis will be integral of the advanced work in this course. The Advanced Placement Latin course will also include study of the cultural, social, and political context of the literature. Students will be expected to take the exam provided by the College Board.

IB Classical Languages (HL/SL)
Course #: IB5330 & IB5340  Recommended: Grades 11-12
Credit: 1 Unit per course
Prerequisites: Latin I, II, III, admittance to the IB program
Examination: IB Classical Languages exam
In this two-year course, students will translate, analyze, and interpret selected passages from prescribed authors and topics in Latin. Written assessments will include externally assessed translations of particular passages demonstrating an understanding of the author’s intent and style, as well as student selected topics that reflect an awareness of context and connections within and with other literature and cultures. This course will culminate in IB examinations and provides the possibility of college credit.

Spanish I
Course #: 5510  Recommended: Grades 7-12
Credit: 1 Unit
Students will begin the development of communicative skills in Spanish. The emphasis will be on interpretive, interpersonal, and presentational communication, as well as beginning to develop intercultural communication skills by investigating products and practices and interacting appropriately in language and behavior. Students will progress toward the novice-mid to novice-high proficiency level.

Spanish II
Course #: 5520  Recommended: Grades 8-12
Credit: 1 Unit
Prerequisites: Spanish I or Placement Test
Students will progress toward the novice-high proficiency level and will continue to develop communicative skills in Spanish. The emphasis will be on interpretive, interpersonal, and presentational communication, as well as developing intercultural competency by investigating products and interacting appropriately in language and behavior.

Spanish for Native and Heritage Speakers I & II
Course #: 5511 & 5521  Recommended: Grades 9-12
Credit: 1 Unit
These courses are designed for native or heritage Spanish speakers. Emphasis will be placed on improving the accuracy of students’ written communication. Students will read, interpret, and analyze original, authentic texts, such as short stories, novels, and poetry. Students improve their oral communication skills through class presentations and other interpersonal activities. Knowledge of perspectives and practices in Hispanic culture are expanded.

Spanish III
Course #: 5530  Recommended: Grades 9-12
Credit: 1 Unit
Prerequisites: Spanish II or Placement Test
Students will progress toward the intermediate-low/intermediate-mid proficiency level and will continue the development of all communicative skills in Spanish. The emphasis will be on interpretive, interpersonal, and presentational communication, as well as developing intercultural competency by investigating products and practices and interacting appropriately in language and behavior. Spanish III for heritage speakers may be offered.

Spanish IV
Course #: 5540  Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: Spanish III or Placement test
Students will progress toward the intermediate-mid/intermediate-high proficiency level and will continue the development of all communicative skills in Spanish. The emphasis is on interpretive, interpersonal, and presentational communication, as well as developing intercultural competency by investigating products and practices and interacting appropriately in language and behavior. This course is designed for students planning on pursuing a language in college, in the workplace, or as a prerequisite for the level 5, AP, or IB course.

Spanish V
Course #: 5550  Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: Spanish IV or Placement Test
Students will progress toward the intermediate-high/advanced-low proficiency level and will continue the development of all communicative skills in Spanish. The emphasis will be on interpretive, interpersonal, and presentational communication, as well as developing intercultural competency by investigating products and
practices and interacting appropriately in language and behavior. This course will be designed for students planning on pursuing a language in college, in the workplace, or as a pre-AP course for students planning to take AP Spanish the next year.

**Advanced Placement Spanish**
Course #: 5570  Recommended: Grade 12  Credit: 1 Unit (possible college credit with appropriate score on AP exam)
Prerequisites: Spanish III/Equivalency  
Examination: Advanced Placement exam
This course will be designed to develop proficiency in Spanish for highly-motivated language students. The course will seek to develop all skills emphasizing language for communication using authentic materials in preparation for the advanced placement language exam. Students participating in Advanced Placement Spanish will be expected, in addition to the requirements of the course, to take the exam provided by the College Board.

**IB Spanish (SL)**
Course #: IB5542 & IB 5552  Recommended: Grades 11-12  Credit: 1 Unit per course
Prerequisites: Spanish I, II, III, admittance to IB program  
Examination: IB Spanish exam
Students will be able to speak the language with sufficient accuracy and fluency participate in formal and informal conversations with ease. Students will work toward appreciating, discussing, and commenting both orally and in writing, on various literacy forms. This course will include an in-depth study of literacy works and contemporary articles. Written essays will be on literacy and issue-oriented themes. Through oral presentations, individual and group projects, and writing assignments, self-expression will be encouraged. This course will provide the possibility of college credit.

**English for Speakers of Other Languages (ESOL) I**
Course #: 5710  Recommended: Grades 9-12  Credit: 1 Unit
Prerequisites: WIDA ACCESS score or W-APT screening  
This course will be designed for students with very little to no prior knowledge of English. Listening, speaking, reading, and writing skills will be developed. Academic vocabulary, grammar, and language structures will be studied through the integration of concepts from social studies, math, and science. ESOL I will be recommended for ELs at proficiency Levels I.

**English for Speakers of Other Languages (ESOL) II**
Course #: 5720  Recommended: Grades 9-12  Credit: 1 Unit
Prerequisites: WIDA ACCESS score or W-APT screening  
This course will be designed for students with emerging English skills. Students will use reading, writing, listening and speaking in English to focus on literacy and the knowledge and skills needed for their academic courses. Students will expand academic vocabulary and their ability to read and respond in English. ESOL II will be recommended for ELs at proficiency Levels I and/or II.

**English for Speakers of Other Languages (ESOL) III**
Course #: 573  Recommended: Grades 9-12  Credit: 1 Unit
Prerequisites: WIDA ACCESS score or W-APT screening  
Students will continue to develop listening, speaking, reading, and writing with alignment to the knowledge and skills necessary for their academic courses. Students will develop the ability to analyze and interpret increasingly complex texts and learn to utilize complex language structures. Students will read a variety of texts and compose written responses for a range purposes. This course will be for ELs at Level II and/or III.

**English for Speakers of Other Languages (ESOL) IV**
Course #: 5731  Recommended: Grades 9-12  Credit: 1 Unit
Prerequisites: WIDA ACCESS score or W-APT screening  
This course will provide for the expansion and refinement of all English language skills. Reading, writing, listening, and speaking will be emphasized through the skills and knowledge necessary for content courses. Students will expand their ability to analyze and interpret complex texts and refine the use of complex language structures. Students will read a variety of texts and compose written responses for a range purposes. This course will be for ELs at Levels IV and/or V.

English for Speakers of Other Languages is designed for students whose home language is one other than English and who have limited English proficiency. The ESOL program will provide the English Learner (EL) student with the language skills necessary for academic success and to participate fully in the total school program. The courses will emphasize application of the WIDA English Language Development Standards to content knowledge and skills. A student may earn credit in World Language for ESOL courses.
Two units of health and physical education are required for graduation. The two units are usually taken in grades 9 and 10 with at least 40% of instructional time devoted to health in 9th grade and Driver Education in 10th grade.

**Health & Physical Education Grade 9**

Course #: 7300  
Recommended: Grade 9  
Credit: 1 Unit

Students in ninth grade Physical Education will complete the transition from modified versions of movement to more fundamental movements as they relate to lifetime fitness. Students will also focus on personal wellness through goal setting and fitness plans. Fitness plans and goals will be based upon the five elements of fitness: cardio-respiratory endurance, muscular strength, muscular endurance, flexibility, and body composition. In Health, students will learn about a variety of topics relating to wellness, fitness, health organizations, nutrition, CPR, disease, alcohol, tobacco, drugs, and family life.

**Physical Education & Driver’s Education Grade 10**

Course #: 7405  
Recommended: Grade 10  
Credit: 1 Unit

Prerequisites: Health & Physical Education Grade 9

Students in tenth grade Physical Education will become proficient in all fundamental movements as they relate to lifetime fitness. Students will be assessed on process based skills, while demonstrating strategy and content knowledge. Through these activities and fitness goals, students become prepared to lead a physically active lifestyle. Fitness plans and goals will be based upon the five elements of fitness: cardio-respiratory endurance, muscular strength, muscular endurance, flexibility, and body composition. In Driver’s Education, students will learn about mental health, family life and material related to the operation of a motor vehicle.

**Strength and Conditioning**

Course #: 7640  
Recommended: Grades 9-12  
Credit: 1 Unit

This elective course will provide motivated students seeking daily participation in weight training and cardiovascular fitness the opportunity to design and implement individual fitness routines specific to his or her needs. Participants will gain a working knowledge of muscle groups and the exercises that compliment them, along with an understanding of how the human body benefits from cardiovascular activity.

**Recreation & Wellness**

Course #: 7650  
Recommended: Grades 11-12  
Credit: 1 Unit

In this class, students will participate in a variety of lifetime activities preparing them to lead a physically active lifestyle. Students will be assessed based upon their activity level, process-based skill, and content knowledge. Recommendation from a Physical Education teacher will be highly encouraged.

**Mathematics**

The mathematics curricular choices provide sequential and non-sequential offerings designed to meet a variety of student needs and requirements. Course choices must be made in accordance with individual student needs and abilities as well as course prerequisites. Many of the non-sequential choices provide enrichment for the student enrolled in sequential mathematics offerings. Such courses expand student knowledge in practical matters as well as in mathematical topics.

**Algebra I**

Course #: 3130  
Recommended: Grades 7-12  
Credit: 1 Unit

Prerequisites: Math 8

Students will study the solution of linear and quadratic equations, linear inequalities, systems of equations, polynomials, graphing, and data analysis. Tables and graphs will be used to interpret algebraic expressions, equations, and inequalities and to analyze functions. Appropriate technology will be used as a tool to assist in problem solving.

**Algebra I, Part 1**

Course #: 3131DB  
Recommended: Grades 9-10  
Credit: 1 Unit

Prerequisites: Successful completion of Algebra I, Part 1

Examination: SOL

This course is the first part of a two-part Algebra I course that is taught every day for one semester. It will begin with a review of mathematical vocabulary, equations, and inequalities. Students will explore rational numbers by solving and graphing linear equations. Statistics will be integrated throughout this course to include the use of a graphing calculator.

**Algebra I, Part 2**

Course #: 3132DB  
Recommended: Grades 9-10  
Credit: 1 Unit

Prerequisites: Successful completion of Algebra I, Part 1

Examination: SOL

This course is taught every day for one semester. It completes the Algebra two-year series by reviewing Part 1 concepts and then exploring polynomials and factoring
methods. Students will solve and investigate quadratic
equations and continue with statistics. Students will use
appropriate technology throughout this course to include a
graphing calculator.

**Geometry**

Course #: 3143  
Recommended: Grades 8-12  
Credit: 1 Unit  
Prerequisites: Algebra I  
Examination: SOL  

Geometry is offered to students who have successfully
completed the standards for Algebra I. In this course,
students will study angle relationships, parallel lines,
polygons, symmetry, circles, and constructions. Formulas
for surface area and volume will be used to solve practical
problems. Proofs will be approached intuitively and then
formally as the student is prepared to analyze, synthesize,
and reach conclusions.

**Geometry, Part 1**

Course #: 3144  
Recommended: Grades 10-12  
Credit: 1 Unit  
Prerequisites: Algebra I  
Examination: SOL  

This course is the first part of a two-part Geometry course.
It begins with a review of basic geometry and builds on
working with the coordinate plane. Students will investigate
undefined terms, definitions, postulates, theorems, and
deductive reasoning. The Pythagorean Theorem will
be explored along with various dimensional figures.
Constructions will be emphasized. Appropriate technology
will be utilized.

**Geometry, Part 2**

Course #: 3145  
Recommended: Grades 10-12  
Credit: 1 Unit  
Prerequisites: Geometry, Part 1  
Examination: SOL  

This course completes the geometry two-year series by
reviewing Part 1 concepts and using algebra skills to
identify similarity and proportionality. Additional concepts
involving right triangles and trigonometry will use the
Pythagorean Theorem. Students will analyze plane figures
and investigate surface area and volume. Coordinate and
transformational geometry will also be studied. Appropriate
technology will be utilized.

**Algebra II**

Course #: 3135  
Recommended: Grades 10-12  
Credit: 1 Unit  
Prerequisites: Algebra I and Geometry  
Examination: SOL  

Algebra II is an advanced study of the following topics
within the framework of the real number system: exponents
and radicals, polynomial and rational functions, linear
and quadratic functions and relations, exponential and
logarithmic functions, and systems. Complex numbers will
also be introduced.

**Honors Algebra II**

Course #: 3136  
Recommended: Grades 9-12  
Credit: 1 Unit  
Prerequisites: Successful completion of Algebra I and Geometry  
Examination: SOL  

Honors Algebra II is a more theoretical approach to the
study of the following topics within the framework of the
real number system: exponents and radicals, polynomial
and rational functions, linear and quadratic functions
and relations, exponential and logarithmic functions,
systems, matrices, sequences and series. Complex numbers
and analytic geometry will also be introduced. Graphing
utilities will be used.

**Applied Mathematics: Modeling & Functions**

Course #: 3160  
Recommended: Grades 11-12  
Credit: 1 Unit  
Prerequisites: Algebra II  

This course is designed to help eleventh and twelfth grade
students prepare for college or the workplace by enhancing
skills in number and quantity, functions and algebra,
geometry, statistics and probability and simultaneously
reinforcing readiness skills and dispositions in adaptability
and flexibility, creativity and innovation, leadership, team
work, collaboration and work ethic. Students will research,
collect, and analyze data; develop and support ideas
and conjectures; investigate, evaluate, and incorporate
appropriate resources; and determine appropriate problem-
solving approaches and decision-making algorithms in a
variety of real-world contents and applied settings.
Mathematical Analysis
Course #: 3162  Recommended: Grades 10-12
Credit: 1 Unit
Prerequisites: “B” or better in Algebra II, Applied Mathematics, or recommendation
The content of Mathematical Analysis serves as appropriate preparation for a calculus course and is an in-depth study of functions and their characteristics. The study will include, but will not be limited to, polynomial, rational, radical, exponential, and piece-wise-defined functions. A thorough treatment of trigonometry will be provided through the study of trigonometric definitions, applications, graphing, and solving trigonometric equations. Emphasis will be placed on using connections between right triangle ratios, trigonometric functions, and circular functions. Graphing utilities will be used.

Dual Enrollment Pre-Calculus I&II
Course #: 3161 (MTH 163-164)  Recommended: Grade 12
Credit: 1 Unit
Prerequisites: Algebra II; staff recommendation, and Germanna entrance requirement
Pre-Calculus (MTH 163-164) is a Germanna Community College course that is taught at the high school and will present the concepts and methods necessary for the study of calculus, including algebra, analytic geometry, and the study of algebraic, exponential, logarithmic, and trigonometric Dual Enrollment Pre-Calculus is comparable to Math Analysis. Credits transfer to all Virginia Community Colleges and most colleges and universities. Tuition is required for this class and the fee is based on Germanna Community College's fee.

Dual Enrollment Calculus
Course #: 3230 (MTH 173)  Recommended: Grade 12
Credit: 1 Unit (5 semester hours of college credit)
Prerequisites: MTH-163-164, staff recommendation. Germanna entrance requirement.
This weighted course carries one (1) weighted high school credit and five (5) semester hours of college credit. The course allows seniors to earn high school credit and college credit simultaneously and is taught at the high school. Dual Enrollment Calculus is comparable to AP Calculus. Credits transfer to all Virginia Community Colleges and most colleges and universities. Tuition is required for this class and the fee is based on Germanna Community College's.

Computer Mathematics (Visual Basic)
Course #: 3184
Recommended: Grade 12 (seniors needing credit to graduate)
Credit: 1 Unit
Prerequisites: Algebra I
Taking advantage of BASIC's user-friendly development environment, this course will present structured programming principles - such as problem solving, top-down modular program design and programming style - in a format that is ideal for students with no prior programming concepts in general, and to familiarize the students with the elements of BASIC. Students will learn to write readable, reliable and well-documented programs.

Computer Mathematics (C++)
Course #: 3199  Recommended: Grades 9-12
Credit: 1 Unit  Prerequisites: Geometry
The major focus of this course is to provide experience in using the computer to solve problems set up using mathematical models. Programmers is a major emphasis of the entire course ranging from simple programs to the more complex programs written in the C++ language. Students will be encouraged to take Computer Math in addition to Algebra II, Advanced Algebra II, Mathematical Analysis, or Calculus.

Statistics & Probability
Course #: 3190  Recommended: Grades 11-12
Credit: 1 Unit  Prerequisites: Algebra II
This course will include analyzing data graphically and numerically, designing studies and experiments, introduction to probability, and statistical inference. This course will also focus on mathematical writing and analysis skills. A TI-84 calculator and computer will be used as tools for learning in this course.

Advanced Placement Statistics
Course #: 3192  Recommended: Grades 10-12
Credit: 1 Unit (possible college credit with appropriate score on the AP exam)
Prerequisites: Algebra II
Examination: Advanced Placement exam
The course will include observing patterns and departures from patterns in exploring data, planning what or how to measure in a study, anticipating patterns in advance, an introduction to probability and simulation, and statistical inference. There will be several special problem investigations that culminate in a written report. The Texas Instruments TI-83+ graphing calculator and a computer will be used as tools for learning in this course. Students participating in Advanced Placement Statistics will be expected, in addition to the requirements of the course, to take the exam as provided by the College Board.

Advanced Placement Calculus AB
Course #: 3177  Recommended: Grades 11-12
Credit: 1 Unit (possible college credit with appropriate score on the AP exam)
Prerequisites: Mathematical Analysis
Examination: Advanced Placement exam
Advanced Placement Calculus will be intended for students
who have a thorough knowledge of college preparatory mathematics, including – algebra, axiomatic geometry, trigonometry, and analytic geometry (rectangular and polar coordinates, equations and graphs, lines and conics). This course will cover both theory and applications of integral and differential calculus. The course will follow an outline proposed by the College Board and is presented at a college level. Graphing calculators will be used extensively. Students participating in Advanced Placement Calculus will be expected, in addition to requirements of the course, to take the exam as provided by the College Board.

Advanced Placement Calculus BC
Course #: 3178  
Recommended: Grade 12
Credit: 1 Unit (possible college credit with appropriate score on the AP exam)
Prerequisites: Successful completion of AP Calculus AB
Topics include functional analysis, limits, continuity, the derivative and applications, and solving problems that deal with the rate of change. In addition, students in calculus BC will apply calculus techniques to polar curves, parametric equations, vector function sequences and series, and slope fields. The content of this course is equivalent to two semesters of college calculus. Students participating in Advanced Placement Calculus BC will be expected, in addition to the requirements of the course, to take the exam as provided by the College Board.

Advanced Placement Computer Science Principles
Course #: 3202  
Recommended: Grades 9-12
Credit: 1 Unit (possible college credit with appropriate score on the AP exam)
Prerequisites: Algebra I
Examination: Advanced Placement Test
Advanced Placement Computer Science Principles will introduce students to programming and also give them an understanding of the fundamental concepts of computing, its breadth of application, and its potential for transforming the world we live in. It will be rigorous, engaging, and accessible.

Advanced Placement Computer Science (JAVA)
Course #: 3185  
Recommended: Grades 11-12
Credit: 1 Unit (possible college credit with appropriate score on the AP exam)
Prerequisites: Computer Mathematics (C++)
Examination: Advanced Placement exam
Advanced Placement Computer Science will involve students in programming methodology, algorithms, and data types and structure. The course will include applications of computing and the development of computing techniques. Java will be the programming language used in this course. The course will follow an outline proposed by the College Board and will be presented at a college level. Students participating in Advanced Placement Computer Science will be expected, in addition to requirements of the course, to take the exam as provided by the College Board.

IB Mathematics (SL)
Course #: IB3162 & IB3198
Recommended: Grades 11-12
Credit: 1 Unit per course
Prerequisites: Math Analysis or teacher recommendation and admittance to the IB Program
Examination: IB Math SL exam
Students enrolled in this course will be prepared to take the AP Calculus AB exam in addition to the IB Math SL exam. An important aim of this course will be to enable students to appreciate the multiplicity of cultural and historical perspectives of mathematics. Students will complete two portfolio projects as part of the internal and external assessment for this course and completion of this two year course will fulfill the requirement for group 5 (mathematics) for the IB Diploma. The course will culminate with an IB external assessment that provides the possibility of college credit.

IB Math Studies (SL)
Course #: IB3195 & IB3196  
Recommended: Grades 11-12
Credit: 1 Unit Per Course
Prerequisites: Successful completion of Honors Algebra II and Admittance to the IB program
Examination: IB Math Studies exam
This course enables students to appreciate the multiplicity of cultural and historical perspectives of mathematics. Topics will include: numbers and algebra; sets, logic, and probability; functions; geometry and trigonometry; statistics; introductory differential calculus; and financial mathematics. A substantial mathematical investigation in the form of a project will be required as part of an internal and external assessment in this course, and completion of this two-year course will fulfill the requirement for group 5 (mathematics) for the IB Diploma. The course will culminate with an IB external assessment that provides the possibility of college credit.
Students enrolled in science courses will develop a deeper understanding and competence of techniques by utilizing scientific and engineering practices in the disciplines of biology, chemistry, physics, and geo-systems.

**Environmental Science**  
Course #: 4340  
Recommended: Grade 9  
Credit: 1 Unit  
Students will learn the concepts of communities and ecosystems. Learning opportunities will include the study of interrelationships of living and non-living components in the environment through lecture, lab studies, and various student activities. Particular focus will be on human kind's influence on these systems and environmental stewardship.

**Earth Science**  
Course #: 4210B  
Recommended: Grades 11-12  
Credit: 1 Unit  
Examination: SOL  
Students will learn a broad overview of four areas in Earth Science: geology, astronomy, meteorology, and oceanography. Through the use of lectures, labs, class activities, and audio-visual materials, the students will develop a practical knowledge and appreciation of the forces which shape the earth and affect our lives.

**Honors Earth Science**  
Course #: 4210A  
Recommended: Grades 11-12  
Credit: 1 Unit  
Examination: SOL  
Students will explore the four areas of geology, meteorology, astronomy and oceanography. This course will teach the latest concepts developed in explaining the complex natural forces controlling the earth in terms of our weather, the oceans, crustal processes, and space exploration. Emphasis will be on the students’ inductive reasoning powers to lead them to a more thorough understanding of the earth sciences. Labs, lab reports, use of graphs, or projects will also challenge the students and enrich their pursuit of knowledge of our dynamic earth.

**Biology**  
Course #: 4310B  
Recommended: Grade 10  
Credit: 1 Unit  
Examination: SOL  
Students will develop an understanding and appreciation of the biological processes that relate to all organisms. Students will learn the basics of cells, genetics, ecology, evolution, and the anatomy/physiology of organisms. Laboratory investigations will be conducted which reinforce principles taught in the classroom.

**Honors Biology**  
Course #: 4310A  
Recommended: Grade 10  
Credit: 1 Unit  
Examination: SOL  
Students will learn the scientific background and experience the rigor necessary to prepare them for advanced high school courses and college. Major topics covered in the course will include: cells, genetics, ecology, evolution and the anatomy & physiology of organisms. Laboratory investigations will be conducted which reinforce principles taught in the classroom.

**Advanced Placement Environmental Science**  
Course #: 4270  
Recommended: Grades 9-12  
Credit: 1 Unit (college credit, pending AP exam score)  
Recommended Prerequisites: Successful completion of Algebra I, and pass advanced on the 8th grade Physical Science SOL for 9th grade students enrolling  
Examination: Advanced Placement Test and Earth  
The AP Environmental Science course reflects learning that analyzes environmental concepts and processes to achieve understanding in order to propose and justify solutions to environmental problems. The course teaches students how to apply science to the solutions of important social problems. It also provides opportunities to practice applying scientific methods to practical, real-life problems. Students participating in Advanced Placement Environmental Science are expected to take the College Board exam.

**Earth Science II**  
Course #: 4220  
Recommended: Grade 12  
Credit: 1 Unit  
Prerequisites: Successful completion of Earth Science  
Students will delve deeper into the studies of Astronomy and Meteorology. Students will collect and analyze weather data to forecast the weather, storms, and other related weather phenomena. Students will investigate thermal, electrical, optical, and other properties of the atmosphere. Astronomy topics will include methods and tools used to investigate the universe, universal laws, galaxies, stellar evolution, the solar system, planetary motion, and the exploration of space.

**Biology II- Seminar**  
Course #: 4320  
Recommended: Grades 11-12  
Credit: 1 Unit  
Prerequisites: Successful completion of Biology  
Students will learn entomology, vertebrate anatomy, bacteriology, genetics, and botany. Students develop this
knowledge through research, laboratory activities, data analysis, and class discussion. This course will include the requirement of long-term projects such as creating an insect collection, conducting several dissections, analyzing bacteria cultures, and creating a plant collection. To be successful, students must be able to work independently as well as cooperatively with classmates and manage their time effectively.

**Advanced Placement Biology**

**Course #: 4370**  
**Recommended: Grades 10-12**  
**Credit: 1 Unit (College credit, pending AP Exam Score)**  
**Prerequisites:** Successful completion of Biology and completion or concurrent enrollment in Chemistry is recommended  
**Examination:** Advanced Placement Test and SOL  
**Note:** May be double-blocked

Students will learn the equivalent of a college introductory biology course. Topics discussed in depth will include: biochemistry, cell energetics, cell composition, molecular genetics, and the systematics, physiology, and ecology of organisms including humans. Students will gain understanding and appreciation of scientific research with required laboratory activities. The course will proceed at a rapid pace following an outline proposed by the College Board. In addition to completing the requirements of the course, students participating in Advanced Placement Biology will be expected to take the Advanced Placement exam as provided by the College Board and the Biology End-of-Course Test, if not previously taken.

**IB Biology (HL)**

**Course #: IB4380 & IB4390**  
**Recommended: Grades 11-12**  
**Credit: 1 unit per course**  
**Prerequisites:** Honors Biology, Chemistry, admittance to IB program  
**Examination:** IB Biology exam, Biology SOL

This two-year IB Biology course will provide students with an overview of the major principles and processes in the areas of molecular and cellular biology, genetics, ecology, and organisms. Laboratory work is an integral part of this course, and students will be required to submit written laboratory reports. Students will design and implement their own laboratory investigations and will participate in the interdisciplinary Group 4 science research project. The second year will provide an introduction to advanced anatomy and physiology and plant biology. Laboratory work will continue to be an integral part of the course, and students will be required to submit written laboratory reports that will be internally assessed by the classroom teacher as well as externally assessed by trained IB examiners. The course will culminate with IB examinations that provide the possibility of college credit.

**Chemistry I**

**Course #: 4410B**  
**Recommended: Grades 11-12**  
**Credit: 1 Unit**  
**Prerequisites:** Completion of Algebra I and concurrent enrollment in or completion of Algebra II recommended  
**Examination:** SOL

Students will gain a broad, general understanding of the fundamental principles of chemistry. Laboratory investigations will be conducted which reinforce principles taught in the classroom.

**Chemistry II**

**Course #: 4420**  
**Recommended: Grades 11-12**  
**Credit: 1 Unit**  
**Prerequisites:** Successful completion of Algebra II and Chemistry I

Students will gain knowledge of biochemistry, chromatography, nuclear chemistry, qualitative and quantitative analysis, oxidation reduction, equilibrium, gas laws, and stoichiometry. Enrolled students may have an interest in a career in chemistry or any related fields such as biology, engineering, or medicine.

**Advanced Placement Chemistry**

**Course #: 4470**  
**Recommended: Grades 11-12**  
**Credit: 1 Unit; (College credit, pending AP Exam score)**  
**Prerequisites:** Successful Completion of Algebra II and Chemistry I  
**Examination:** Advanced Placement Test & SOL  
**Note:** May be doubled blocked

This course will provide an in-depth understanding of the fundamentals of chemistry and a reasonable competence in dealing with chemical problems. Upon successful completion of the course, students will be able to comprehend the development of principles and concepts, demonstrate application of principles, relate fact to theory and properties to structure, and understand systematic nomenclature. The course will emphasize chemical calculations and mathematical formulation of principles. The course follows an outline proposed by the Advanced Placement Board. Students participating in Advanced Placement Chemistry will be expected to take the College Board exam in addition to fulfilling all the requirements of the course including taking the chemistry end-of-course test if not previously taken.

**IB Chemistry (HL)**

**Course #: IB4480& IB4490**  
**Recommended: Grades 11-12**  
**Credit: 1 Unit per course**  
**Prerequisites:** Honors Biology, Chemistry, admittance to IB program  
**Examination:** IB Chemistry exam, Chemistry SOL

This two-year course provides a survey of the major principles of chemistry including the structure of matter,
kinetic theory of gases, chemical equilibrium, chemical kinetics, thermodynamics, acid-base theory, and organic chemistry. The first year emphasizes problem solving, proficiency in mathematical usage, and improvement and expansion of laboratory techniques as related to contemporary chemistry to include experimental design. Students will participate in the interdisciplinary Group 4 science research project. The second year emphasizes research techniques, advanced laboratory techniques, advanced problem solving and synthesis of prior knowledge to investigate IB option topics. During both years of this course, laboratory work will be integral and students will be required to submit written laboratory reports. Students will design and implement their own laboratory investigations that will be both internally assessed by the classroom teacher as well as externally assessed by trained IB examiners. The end-of-course IB examinations provide the possibility of college credit.

Physics
Course #: 4510B  Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: Completion of Algebra I and Geometry. Current enrollment in Algebra II or a higher-level math course.
Students will explore physical phenomena observed in our everyday world. Emphasis will be placed on the study of motion, forces, energy, optics, electricity, and magnetism. Laboratory work with proper collection and analysis of data, will be stressed. Physics is recommended for students who are interested in math, engineering, technology, or science. An understanding of basic mathematical concepts is an integral part of this class.

Advanced Placement Physics I
Course #: 4570  Recommended: Grades 11-12
Credit: 1 Unit (College credit, pending AP Exam score)
Prerequisites: Successful completion or concurrent enrollment in Algebra II
Examination: Advanced Placement Test
Students will explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. Students participating in Advanced Placement Physics I will be expected to take the College Board exam in addition to fulfilling the requirements of the course.

Human Anatomy & Physiology
Course #: 4330  Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: Successful completion of Biology and completion or concurrent enrollment in Chemistry
Students will gain an in-depth understanding and working knowledge of the structure and function of the human body. The course will cover the eleven systems of the human body with emphasis on the mechanisms that maintain homeostasis. Laboratory and clinical case studies will be used to illustrate anatomical and physiological concepts. Careers in the medical sciences are explored.

Oceanography
Course #: 4250  Recommended: Grades 10-12
Credit: .5 Unit
Prerequisites: Successful completion of Environmental Science
Students will gain an in-depth understanding of oceanography concepts presented in Earth Science. Students will study the physical properties of sea water, marine chemistry, salinity, density, circulation within
the oceans, waves, currents, tides, and oceanographic instruments and research. Emphasis will be placed on the major skills of practicing oceanographers and scientists.

Marine Science
Course #: 4620  Recommended: Grades 10-12
Credit: .5 Unit
Prerequisites: Successful completion of Environmental Science
Students will learn about ecology, anatomy, and physiology of ocean dwelling organisms and the ocean's chemistry and physiology. Saltwater aquaria will be maintained as a part of the classroom instruction.

Advanced Placement Human Geography
Course #: 2212  Recommended: Grades 9-12
Credit: 1 Unit (College credit, pending AP Exam score)
Examination: Advanced Placement Test & SOL
This course will provide an overview of the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students will employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They will also learn about the methods and tools geographers use in their science and practice. The course is presented at the college level and follows an outline proposed by the College Board. Students should be prepared for a rigorous workload above that of standard advanced classes.

World History 1500 AD (C.E.) to Present
Course #: 2221  Recommended: Grade 10
Credit: 1 Unit
Examination: SOL
Students will explore the diversity of culture and the evolution of human history from 1500 to the present. Students will examine the development of the world's major political, economic, and legal systems; artistic and literary movements; technological changes; trade patterns; religions; and the influential people of history.

Advanced Placement World History
Course #: 2380  Recommended: Grades 10-12
Credit: 1 Unit (College credit, pending AP Exam score)
Examination: Advanced Placement Test & World History SOL
Note: It is recommended that students take Honors English with this course.
Students will gain a rigorous, thematic survey of global history with an emphasis on 1200 AD (C.E.) to the present. Students will examine and analyze the broad themes of cross-cultural interaction that have shaped human history. Students will develop an understanding of the principle themes in history and learn to support arguments with clear and persuasive writing. The course will be presented at the college level and follows an outline proposed by the College Board. Students should be prepared for a rigorous workload above that of standard advanced classes.

Virginia & United States History
Course #: 2360  Recommended: Grade 11
Credit: 1 Unit
Examination: SOL
Students will chronicle the history of the United States from the first European colonization of the Americas to
the present. Students will gain knowledge of historically identified individuals and groups, domestic and foreign policies, political and economic history, and American culture.

**Advanced Placement United States History**

Course #: 2319  
Recommended: Grade 11  
Credit: 1 Unit (College credit, pending AP exam score)  
Examination: Advanced Placement Test & SOL  
Note: Honors English is recommended in conjunction to this course.

Students will gain analytical skills and factual knowledge necessary to deal critically with issues and problems in United States history. This course will include an in-depth analysis of major developments and assessments of historical materials, evidence, and interpretations. Students will learn to assess historical materials, develop the skills to arrive at decisions of informed judgment, and to present arguments and evidence in clear and persuasive writing. The course will be presented at the college level and follows an outline proposed by the College Board.

**Virginia & United States Government**

Course #: 2440  
Recommended: Grade 12  
Credit: 1 Unit  
Students will examine the structure and functions of our federal form of government. The decision-making processes at the local, state, and national levels will be emphasized. The foundations of American government, the politics of American democracy, and constitutional rights and responsibilities will be explored in depth. United States political and economic systems will be compared to those of other nations, with emphasis on the relationships between economic and political freedoms. Economic content includes the United States market system, supply and demand, and the role of the government in the economy. Democratic values and citizen participation will be stressed throughout the course.

**Advanced Placement European History**

Course #: 2399  
Recommended: Grades 10-12  
Credit: 1 Unit (College credit, pending AP exam score)  
Examination: Advanced Placement Test  
Note: It is recommended that students take Honors English with this course.

Students will learn about the major events, movements, and personalities in European History from the late Middle Ages to the present. Students will develop an understanding of the principle themes in modern and historical interpretation, and an ability to express historical understanding in writing. The course will be presented at the college level and follows an outline proposed by the College Board. Students will be expected, in addition to requirements of the course, to take the exam provided by the College Board as well as the World History: 1500 AD (C.E.) to Present SOL, if not taken previously and passed social studies end-of-course test.

**IB History (HL)**

Course #: IB2360 & IB2361  
Recommended: Grades 11-12  
Credit: 1 Unit per course  
Prerequisites: AP Human Geography, AP Government, admittance to IB program  
Examination: VA US History SOL (11th grade), IB History exam (12th grade)

Students in this two-year course will learn American political, economic, social systems and further develop their skills of interpretation and analysis. Each year, students will demonstrate historical analysis by discussion, presentation, and written work including an internally
assessed research paper. The course culminates in a series of external assessments that include document-based questions, short essay response, and an internally assessed research paper which provide the possibility of college credit.

**Psychology**

Course #: 2900  
Recommended: Grades 10-12  
Credit: .5 Unit Elective Course  

Students will gain an introduction to the study of individual human behavior. Students will be given the opportunity to explore subjects studied by behavioral scientists and apply psychological concepts to everyday human problems and life.

**Advanced Placement Psychology**

Course #: 2902  
Recommended: Grades 10-12  
Credit: 1 Unit (college credit, pending AP exams score)  
Examination: Advanced Placement Test  

Students will learn the basics of systematic and scientific study of human behavior and mental processes. Students will be exposed to the psychological facts, principles and phenomena associated with each of the major subfields within psychology. They will also learn about the methods psychologists use in their science and practice. The students will study topics of biological bases of behavior, sensation and perception, states of consciousness, learning cognition, motivation and emotion, developmental psychology, personality, testing and individual differences, abnormal psychology, treatment of psychological disorders, and social psychology. The course will be presented at the college level and follows an outline proposed by the College Board.

**Sociology**

Course #: 2500  
Recommended: Grades 10-12  
Credit: .5 Unit Elective Course  

Students will analyze the causes and effects of various human relationships. This course will promote an awareness of basic human needs and the development of skills and attitudes that enable individuals to contribute positively toward improved human relations in the family, school, and community.

**African American History**

Course #: 2371  
Recommended: Grades 9-12  
Credit: .5 Unit  

Students will examine the role African Americans have played in American history and promotes cultural awareness. Critical thinking, through the lens of power, politics, economics, and geography, will be developed. Students will trace the trials, tribulations, and triumphs of race relations in the United States.

**Latin American History**

Course #: 2994  
Recommended: Grades 9-12  
Credit: .5 Unit Elective Course  

This course will survey Latin American civilization from early civilizations to the present, emphasizing the events, ideas, and institutions that have shaped, influenced, and defined Latin America’s place in the world. This course will enable students to understand current events, crises, conflicts and their causes, and implications for the future. Most of the material used will be interdisciplinary and range from novels, historical works, scholarly articles, and excerpts from documentary and semi-documentary films.

**Debate**

Course #: 2996  
Recommended: Grades 9-12  
Credit: .5 Unit  

Students will learn the fundamentals of debating. Topics will include researching a subject in order to debate the pros and cons of the subject as well as preparing a presentation that is timely and includes poise, articulation, complex vocabulary and other desirable public speaking characteristics. Students will engage in debates within class.

**Criminal Justice**

Course #: 2420  
Recommended: Grades 11-12  
Credit: .5 Unit  

Students will study the problem of crime in America and the legislative and judicial responses to it. Topics will include crime statistics, law enforcement procedures, the judicial process, and appropriate legislation.

**21st Century Global Issues**

Course #: 2999  
Recommended: Grades 10-12  
Credit: 0.5 Unit Elective Course  

Note: This course is only offered at RHS.  

Students will consider world issues through the perspectives of history, science, statistics, and media. Students will study issues facing the modern world such as terrorism, population growth, environmental damage, and nuclear proliferation. In order to best analyze these issues, the class will draw strongly on the Virginia Standards of Learning for English (9-12), World Geography, World History, and Geography I & II, Probability & Statistics, and Earth Science. Students will interact with several forms of media, such as newspapers, magazines, and Internet broadcasts. The goal of this course is to prepare each student with the knowledge, understandings, and skills necessary to engage with a diverse audience around these global issues.
The Career and Technical Education (CTE) curriculum provides classes that speak to a wide variety of student interests and talents. There are both sequential courses (i.e., the two-year block programs) and non-sequential courses contained in the course offerings. Particular attention should be given to the prerequisites and length of time for completion of programs in the career and technical curriculum. The student should carefully consider his/her skills, physical stamina and interest before enrolling in a two-year program. Students who complete a CTE Program are eligible to take Industry Certification or Credentialing Exam.

Co-curricular Organizations - Students are expected to participate in the co-curricular organizations for each career and technical area. The organizations are: FFA, FBLA, FCCLA, HOSA, DECA, TSA, and SkillsUSA. Organizational dues are required.

NOTE: Some of the programs require the purchase of workbooks, specified equipment or materials, and/or charge a lab fee.

Agri-Business
Course #: 8022 Recommended: Grades 10-12
Credit: 1 Unit
Prerequisites: Successful completion of Introduction to Animal Science, Plant Production or Small Animal Care
Industry Certification: Workplace Readiness for the Commonwealth
This course will emphasize developing agricultural business concepts from the perspective of the employee. Students will use on-site laboratories to further enhance practical knowledge in the agricultural industry. Emphasis will be placed on leadership development through participation in the co-curricular student organization, the National FFA Organization. Students who meet the early release requirements may participate in the agricultural cooperative education program. Participation is required in a supervised agricultural project related to the course. Students enrolled in this course will be required to take an industry certification exam.

Advanced Agri-Business
Course #: 8024 Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: Successful completion of Agri-Business
Industry Certification: Workplace Readiness for the Commonwealth
This course will enhance agricultural business opportunities from the perspective of the owner/operator. Classroom activities will stimulate entrepreneurial activities. In this course, the student will be able to apply theories and competencies learned in prior agricultural courses as related to the agricultural industry. Emphasis will be placed on leadership development through participation in the co-curricular student organization, the National FFA Organization. Students who meet the early release requirements may participate in the agricultural cooperative education program. Participation is required in a supervised agricultural project related to the course. Students enrolled in this course will be expected to take an industry certification exam.

Introduction to Animal Science
Course No. 8008 Recommended: Grades 9-12
Credit: 1 Unit
This course will develop agricultural career skills pertaining to animal science and technology. Career skills will include breeding, nutrition, health, and management of livestock. On-site laboratories will provide students with animal opportunities to develop skills for careers in the animal industry along with mechanical skills. Emphasis will be placed on leadership development through participation in the co-curricular student organization, the National FFA Organization. Participation is required in a supervised agricultural project related to the course. Students enrolled in this course will be expected to take an industry certification exam.

Small Animal Care
Course #: 8083 Recommended: Grades 9-12
Credit: 1 Unit
Industry Certification: Continental Kennel Club Canine Care and Training, Level I
This course will introduce the student to common small animals which directly influence our everyday life. Focus will be on the extensive development of entry-level skills related to the pet care industry. Students will take a lab based approach to pet handling, feeding and habitat maintenance. Emphasis will be placed on leadership development through participation in the co-curricular student organization, the National FFA Organization. Participation is required in a supervised agricultural project related to the course. Students enrolled in this course will be required to take an industry certification exam that includes eight hours of documented work with dog handling.
Agriculture Cooperative Education
Course #: 8023, 8025  Recommended: Grades 11-12
Credit: 1 Unit per course (Supervised on-the-job training)
Prerequisites: Enrolled in Agri-Business, Advanced Agri-Business, OR Greenhouse Production & Management
The Agriculture Cooperative Education Program is a one-year, one-credit course which is to be taken in addition to a higher level agriculture course. This program will link classroom instruction to real life, supervised on-the-job training. The teacher-coordinator will work directly with the on-site supervisor to develop individual training plans that are compatible with the student's career focus.

Plant Production
Course #: 8034  Recommended: Grades 9-12
Credit: 1 Unit
This course will explore agricultural career skills in plant science. Students will receive instruction in crop production through hands-on experiences. Other topics include floral and landscaping design, greenhouse management, and introduction to the turf-grass industry. Emphasis will be placed on leadership development through participation in the co-curricular student organization, the National FFA Organization. Participation is required in a supervised agricultural project related to the course. Students enrolled in this course will be expected to take an industry certification exam.

Greenhouse Production and Management
Course #: 8035  Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: Plant Production
This course will explore the operating procedures for a greenhouse. Units of instruction include developing plant production facilities, science application in plant production, and identification of plants. Business management, leadership development, and marketing skills are emphasized to prepare students for careers in the greenhouse plant production and management industry. Emphasis will be placed on leadership development through participation in the co-curricular student organization, the National FFA Organization. Students who meet the early release requirements may participate in the Agricultural Cooperative Education program. Participation is required in a supervised agricultural project related to the course. Students enrolled in this course will be expected to take an industry certification exam.

I.T. Fundamentals (ITF)
Course #: 6670  Recommended: Grade 8 ONLY
Credit: 1 High School Credit
This course introduces students to a wide range of basic computer topics including: an introduction to the Microsoft Office package (MS Word, Access, PowerPoint and Excel), computer networking, maintenance and troubleshooting, computer hardware, internet research (including usage and safety), basic web page creation using html programming, fundamental technology skills, and exploration of career opportunities within the Information Technology field. This course is only offered to 8th grade middle school students.

Microsoft Office Systems I (MOS I)
Course #: 6612  Recommended: Grades 9-12
Credit: 1 Unit
Industry Certification: MOS Specialist
In this course students refine and develop skills through project-based learning. Students apply problem-solving skills to real-life situations through database, spreadsheet, presentation, and word processing software. This course also includes an introduction to the Internet, ethics, and Web based programming. This course will prepare students for Microsoft Office Specialist (MOS) certification.

Microsoft Office Systems II (MOS II)
Course #: 6613  Recommended: Grades 10-12
Credit: 1 Unit
Prerequisites: MOS I
Industry Certification: MOS Master Specialist
Students will develop advanced skills in word processing, database management, and spreadsheets. Integrated software and multimedia applications are also covered. Use of the Internet is an integral part of the course, to include Web page development. This course will prepare students for Master Microsoft Office Specialist (MOS) certification.

Design, Multimedia & Web Technologies I (DMWTI)
Course #: 6630  Recommended: Grades 10-12
Credit: 1 Unit
Prerequisites: MOS I or Teacher Recommendation
Industry Certification: MOS Specialist
Students develop proficiency in using desktop publishing software to create a variety of printed and electronic publications. Students will incorporate journalistic principles in design and layout of publications. Students will use sophisticated hardware and software to develop web sites and multimedia presentations. The complexity and rapidly
expanding usage of multimedia presentations in many organizations make this portion of the course very important for students planning to pursue business or further education opportunities. This course will prepare students for Microsoft Office Specialist (MOS) certification.

Design, Multimedia & Web Technologies II (DMWTII)
Course #: 6633          Recommended: Grades 11-12
Credit: 1 Unit
Prerequisites: DMWTI
Industry Certification: MOS Specialist
Students develop advanced skills in creating interactive media, web sites, and publications for print and electronic distribution. Students work with sophisticated hardware and software, applying skills learned to real-world projects. Completion of this course may prepare students for industry certifications. This course will prepare a student for Microsoft Office Specialist (MOS) certification.

Business Management
Course #: 6135          Recommended: Grades 10-12
Credit: 1 Unit
Industry Certification: Workplace Readiness for the Commonwealth
In this course, students will study basic management concepts and leadership styles as they explore business ownership, planning, economics, international business, and human relations issues such as employee motivation and conflict resolution. Quality concepts, project management, problem-solving, and ethical decision making are integral parts of this course. Students enrolled in this course will be expected to take an industry certification exam.

Economics & Personal Finance (EPF)
Courses #: 6120B          Recommended: Grades 10-12
Credit: 1 Unit
Industry Certification: W!SE Financial Literacy
Students will learn how to navigate financial decisions and how to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career readiness. Students will complete the Ever-Fi Financial Literacy module as an online experience. To meet Standard Diploma requirements for graduation, the W!SE Financial Literacy test (State-approved Industry credential) will be administered to all students enrolled in Economics & Personal Finance.

IB Business Management (SL)
Course #: IB6135          Recommended: Grades 11-12
Credit: 1 Unit
Examination: IB Business Management exam
This two-year course will develop students’ knowledge and understanding of business management theories. Students will learn to analyze, discuss, and evaluate business activities at local, national, and international levels. Students will explore a range of organizations from all sectors and the socio-cultural and economic contexts in which those organizations operate. The course will cover key characteristics of business and the business functions of human resource management, finance and accounting, marketing, and operations management. The course will allow students to develop a holistic understanding of today’s complex and dynamic business environment.

Cybersecurity Fundamentals
Course #: 6302          Recommended: Grades 9-12
Credit: 1 Unit
This course will focus on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity. Students enrolled in this course will be expected to take an industry certification exam.

Cybersecurity Networking Defense Operations
Course #: 6304          Recommended: Grades 10-12
Credit: 1 Unit
Prerequisites: Cybersecurity Fundamentals
This course is designed to teach many aspects of computer support, network configuration and network administration. Students learn network architecture, topologies and exploration of network media. Students will learn how to monitor network traffic and analyze network systems for security vulnerabilities using tools such as WireShark, Nmap and Netcat. This course may cover software-based network operating systems, such as Windows Server or Linux. CNDO will prepare students with a foundation in network architecture with a focus on identifying security measures to physical and digital threats to networking systems. Students enrolled in this course will be required to take an industry certification.
IB Information Technology Global Society
Course #: IB6613  Recommended: Grade 11
Credit: 1 Unit
Prerequisite: Addmittance to the IB Program
In this course, students will participate in discussion of social and ethical considerations related to IT developments; scenarios used to address IT developments in specified themes; and the terminology of IT systems, concepts, and tools relating to IT developments. The course will take an integrated approach, encouraging students to make informed judgments and decisions about the role of information and communication technologies in contemporary society.

Family & Consumer Sciences
Individual Development
Course #: 8210  Recommended: Grades 9-12
Credit: 1 Unit
This course will focus on hands-on problem solving of relevant issues faced by teens at this critical stage of their development. Emphasis will be placed on enhancing personal development and self-esteem, managing stress, achieving career goals, enhancing family and peer relationships, and managing conflict. In addition, the course will focus on the practical problems related to managing human and material resources, making consumer decisions related to clothing, healthy food choices, and family housing. All students will participate in the co-curricular organization FCCLA. Students enrolled in this course will be expected to take an industry certification exam.

Nutrition & Wellness
Course #: 8229  Recommended: Grades 11-12
Credit: 1 Unit
This course will be an in-depth study of good nutrition and physical and mental wellness with required laboratory experiences focused on promoting wellness and good health, relating food choices to wellness, planning food choices, obtaining and storing food, preparing and serving food, and selecting and using appropriate equipment. All students will participate in the co-curricular organization FCCLA. Students enrolled in this course will be expected to take an industry certification exam.

Child Development & Parenting
Course #: 8232  Recommended: Grades 9-12
Credit: 1 Unit
Students enrolled in Child Development and Parenting focus on balancing work and family, analyzing parenting roles and responsibilities, ensuring a healthy start for mother and child, evaluating support systems that provide services for parents, and evaluating parenting practices that maximize human growth and development. All students will participate in the co-curricular organization FCCLA. Students enrolled in this course will be expected to take an industry certification exam.

Introduction to Hospitality, Tourism & Recreation
Course #: 8259  Recommended: Grades 9-12
Credit: 1 Unit
This course will focus on developing professional skills and using emerging technologies to prepare for employment in the global industry, rich in diverse career opportunities. The program will include instruction in the industries.

Dual Enrollment Teachers for Tomorrow I
Course#: 9063  Recommended: 11-12
Credit: 2 Units (also transferable college credit hours (3) with a grade of 70 or better each semester)
Prerequisite: 2.7 GPA, application, and teacher recommendations
Teachers for Tomorrow strives to kindle student interest, understanding, and appreciation of the teaching profession. This DE program explores careers in education. Students learn history, pedagogy, governance, and best practices of teaching. Students will also participate in leadership opportunities through the student organization, Educators Rising (conference & competition).

Dual Enrollment Teachers for Tomorrow II
Course#: 9072C  Recommended: 12
Credit: 2 Units (also transferable college credit hours (3) with a grade of 70 or better each semester)
Prerequisite: Teachers for Tomorrow I
Students continue to explore careers in the Education and Training Cluster and pathways. This course provides the opportunity for students to prepare for careers in education as they research postsecondary options, learn about the process of teacher certification in Virginia, and participate in a practicum experience.

Dual Enrollment Teachers for Tomorrow II
Course#: 9072C  Recommended: 12
Credit: 2 Units (also transferable college credit hours (3) with a grade of 70 or better each semester)
Prerequisite: Teachers for Tomorrow I
Students continue to explore careers in the Education and Training Cluster and pathways. This course provides the opportunity for students to prepare for careers in education as they research postsecondary options, learn about the process of teacher certification in Virginia, and participate in a practicum experience.
of lodging, food and beverage, travel and tourism, and recreation and fitness. All students will participate in the co-curricular organization FCCLA. Students enrolled in this course will be expected to take an industry certification exam.

**Marketing**

**Introduction to Marketing**
Course #: 8110  Recommended: Grades 9-10  
Credit: 1 Unit  
Introduction to Marketing will provide students with the competencies needed for successful entry-level employment in marketing occupations. Students will learn social, economic, and marketing skills necessary for employment in marketing occupations including retail, wholesale, and service businesses. Specific skills learned will include interviewing, resume-writing, selling, marketing, promotion, advertising, business math, and business communications.

**Fashion Marketing**
Course #: 8140  Recommended: Grades 10-12  
Credit: 1 Unit  
**Industry Certification: Customer Service**  
Fashion Marketing will provide students with a basic knowledge of the apparel and accessories industry and the skills necessary for successful entry-level employment in fashion marketing careers. Students will learn how apparel and accessories are designed, manufactured, distributed, and promoted. Students will learn how trends develop; how buyers select merchandise for retail stores; and how the basic marketing functions of planning, pricing, promoting and distributing work in the fashion industry. Students will also learn basic human relations, math, and economics skills as they apply to this fast-paced industry.

**Sports & Entertainment Marketing**
Course #: 8175  Recommended: Grades 10-12  
Credit: 1 Unit  
**Industry Certification: Customer Service**  
This introductory course will help students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports and entertainment industries. Students will investigate the components of customer service skills, branding, product development, pricing and distribution strategies, business structures, sales processes, social media, sponsorships and endorsements, as well as promotion plans needed for sports and entertainment events. The course will also support career development skills and will allow students to explore career options.

**Marketing with Co-Op (Supervised on-the-job training)**
Course #: 8120  Recommended: Grades 11-12  
Credit: 2 Units (Meets 1 block and has a job requirement)  
**Prerequisites: Introduction to Marketing (waived with instructor’s approval)**  
**Industry Certification: Customer Service**  
This course will provide students with competencies that enable them to obtain and succeed in their chosen marketing occupation. Students will develop skills in selling, communications, product development, promotion, interviewing, and human relations. Skills learned in this course can be applied to a wide range of career options. Students will combine classroom instruction with supervised on-the-job training in a local marketing business (an average of 11 hours per week for 36 weeks). Students enrolled in this course will be required to take an industry certification exam.

**Marketing**
Course #: 8121  Recommended: Grades 11-12  
Credit: 1 Unit  
**Prerequisites: Introduction to Marketing (waived with instructor’s approval)**  
**Industry Certification: Customer Service**  
This course will provide students with competencies that enable them to obtain and succeed in their chosen marketing occupation. Students will develop skills in selling, communications, product development, promotion, interviewing, and human relations. Skills learned in this course can be applied to a wide range of career options. Students enrolled in this course will be required to take an industry certification exam.

**Advanced Marketing Co-Op (Supervised on-the-job training)**
Course #: 8130  Recommended: Grade 12  
Credit: 2 Units (meets 1 block and has a job requirement)  
**Prerequisites: Marketing 8120/8121 or for seniors only Sports & Entertainment Marketing 8175 and/or Fashion Marketing 8140 with instructor’s approval**  
**Industry Certification: Customer Service**  
This course will provide students with in-depth knowledge of the marketing functions and prepare them for employment in supervisory and/or management positions. Competencies learned will include supervision, human resource development, purchasing and inventory control, distribution, market planning, and sales promotion. Students will combine classroom instruction with supervised on-the-job training in a local marketing business (an average of 11 hours per week for 36 weeks). Students enrolled in this course will be required to take an industry certification exam.
Marketing Management
Course #: 8132  Recommended: Grade 12
Credit: 1 Unit
Note: College credit with an appropriate score on the CLEP.
Industry Certification: Customer Service
This is a specialized course for seniors with a career interest in marketing, management, or entrepreneurship who plan to attend college and/or students planning to major in medicine, law, engineering, or other fields who will be responsible for the operation of a practice or business. The course will provide students with an understanding of planning, implementing, and controlling marketing activities. Activities will include designing products/services to meet customer needs, designing pricing strategies to achieve profitable use of resources, implementing distribution procedures, and evaluating personal selling and sales promotion activities to assure users have sound basis for their buying choices. Upon successful completion of this course, students will be eligible to take the College Level Examination Program (CLEP), which can be recognized for college credit. Students enrolled in this course will be expected to sit for an industry certification exam.

Technical Drawing & Design
Course #: 8435  Recommended: Grades 9-12
Credit: 1 Unit
In this foundation course, students learn the basic language of technical drawing and design, and they design, sketch, and make technical drawings, models, or prototypes of real design problems. The course is especially recommended for future engineering and architecture students.

IB Design & Technology (SL)
Course #: IB4585 & IB4586
Recommended: Grades 11-12
Credit: 1 Unit per course
Prerequisites: Technical Drawing & Design and Admittance to the IB program
Examination: IB Design Tech Exam
This two-year course will require the use of the design cycle as a tool, which provides the methodology used to structure the inquiry and analysis of problems; the development of feasible solutions; and the testing and evaluation of the solution can be defined as a model, prototype, product or system that students have developed independently. DP Design Technology will help students develop critical thinking and design skills which they can apply in a practical context. Students will complete a design project and two external assessments at the conclusion of the course.

Engineering Drawing & Design
Course #: 8436  Recommended: Grades 10-12
Credit: 1 Unit
Prerequisites: C or better in Technical Drawing & Design
Industry Certification: AutoCAD
Students will use a graphic language for product design, technical illustration, evaluation of designs, and engineering drawings. Students will increase their understanding of drawing techniques learned in the prerequisite course and gain an understanding of technical drawing careers in modern industry. Adhering to established engineering standards, students will use Computer Assisted Drafting (CAD) equipment, drafting skills and techniques, and descriptive geometry to solve design problems. They will work in teams to design solutions for an identified need. This course prepares students for the Autodesk Certified User Examination approved by the Virginia Board of Education. During this second year course, students will sit for the AutoCAD Autodesk Certified User Examination.
Engineering Explorations
Course #: 8450  Recommended: Grades 9-12
Credit: 1 Unit
Students will examine technology and engineering fundamentals in relation to solving real-world problems. Students will investigate engineering history, including major engineering achievements, and examine the principle engineering specialty fields and their related careers. Students will practice engineering fundamentals, using mathematical and scientific concepts, and they will apply the engineering design process through participation in hands-on engineering projects. Students will communicate project-related information through team-based presentations, proposals, and technical reports.

Engineering Studies
Course #: 8491  Recommended: Grades 10-12
Credit: 1 Unit
Prerequisites: C or better in Engineering Explorations
Industry Certification: Inventor
This course is designed for students who intend to pursue engineering studies in college. Engineering Studies will prepare students by emphasizing integration of Mathematics, Science, and English concepts and skills into engineering problems in a curriculum demanding rigorous study habits and other college-level skills. Students will be encouraged to become routinely inquisitive through brainstorming and prototyping. Students will practice basic engineering skills and communication of technical information while applying the engineering design process to complete engineering projects. This course will prepare students for the Autodesk Inventor Examination approved by the Virginia Board of Education.

Construction & Mechanical Trades Career Pathways
Course #: 9070
Recommended: Grades 10-12 (preference for enrollment will be given to 10th graders)
Credit: 2 Units
Students will be exposed to four areas of home construction via nine-week exploratory classes in Masonry, Carpentry, Electricity and Heating, Ventilation, and Air-conditioning (HVAC). Students will learn appropriate safety procedures, tool usage, construction, and mechanical theory. Students will have opportunities to perform hands-on procedures in each area of the construction trades. A combination of labs, shop work, projects, and tests will be used to evaluate student performance. This introductory course is for any student interested in an overview of the building trades industry or who may want to specialize in a particular construction or mechanical area as an 11th or 12th grader.

Carpentry I
Course #: 8601  Recommended: Grade 11
Credit: 4 Units
Industry Certifications: International Code Council Certificates of Achievement Exams and OSHA 10
Students will learn about a variety of building materials, proper use of tools, leveling, and layout. The class will cover building plans, reading building specifications, codes, and footings of foundations, forms, and roofing. Students will learn about shop safety and OSHA standards on the job. House construction will be the main line of study with commercial building construction mixed in. A background in technical drawing, math, and general shop procedures is recommended.

Carpentry II
Course #: 8602  Recommended: Grade 12
Credit: 2 Units
Prerequisites: Carpentry I
Industry Certifications: International Code Council Certificates of Achievement Exams and OSHA 10
In this course, the installation of windows and doors, exterior finishing, insulation, interior finishing, and
trim will be covered. Students will be introduced to stair construction, cabinet making, and installation of insulation, drywall, and trim. Other forms of optional construction will also be covered. Classroom instruction will be supplemented with a variety of laboratory projects. Occasionally, Carpentry II students will work on small local construction jobs outside of school. A senior work experience program will be available to qualified students.

**Electricity I (Residential Wiring)**
Course #: 8533  
Recommended: Grade 11  
Credit: 4 Units  
Industry Certifications: International Code Council Certificates of Achievement Exams and OSHA 10  
Students will be taught different types of circuits along with the basics of residential and commercial wiring. Students will use a variety of hands-on classroom activities to master wiring concepts and test electrical appliances. The cause and effect of electricity and electronics will be studied. A good background in mathematics, basic technical drawing, and physical science is very helpful.

**Electricity II (Residential Wiring)**
Course #: 8534  
Recommended: Grade 12  
Credit: 2 Units  
Prerequisites: Electricity I  
Industry Certifications: International Code Council Certificates of Achievement Exams and OSHA 10  
Students will study basic electronics, electrical procedures for maintenance, and the service and repair of AC and DC electric motors. Students will learn the theory of electricity and electronics, mathematics as it applies to electricity and wiring, along with the reading of schematics and other scientific principles. Class work will include a variety of wiring projects both in the classroom and occasionally outside the classroom.

**Heating, Ventilation, Air Conditioning & Refrigeration (HVAC/R) I**
Course #: 8503  
Recommended: Grade 11  
Credit: 4 Units  
Industry Certification: EPA Technician Exam 608  
This course will provide students with a solid foundation in basic knowledge and skills for entering the HVAC/R field. Instruction will include lab and trade safety, hand tool usage, principles of thermodynamics, refrigeration cycle, compressors, piping and tubing instruction, soldering and brazing, mathematics for HVAC/R, electrical fundamentals, and customer relation skills. Students will learn EPA laws and regulations pertaining to proper refrigeration handling. Students will have the opportunity to receive Environmental Protection Agency (EPA) Certification for refrigerant recovery.

**Heating, Ventilation, Air Conditioning & Refrigeration (HVAC/R) II**
Course #: 8504  
Recommended: Grade 12  
Credit: 2 Units  
Prerequisites: HVAC/R I  
Industry Certification: EPA Technician Exam 608  
This course will provide students with opportunities to further their knowledge and skills in the field of HVAC/R. Instruction will include troubleshooting electrical circuits, residential and commercial systems, heat pumps, and gas and oil furnaces. Coverage specific to refrigeration in the food service industry will be emphasized, with practical applications and lab activities. Emphasis will continue on EPA laws and regulations pertaining to proper refrigeration handling. Students will have the opportunity to receive Environmental Protection Agency (EPA) Certification for refrigerant recovery and additional credentials.

**Bricklaying/Masonry I**
Course #: 8512  
Recommended: Grade 11  
Credit: 4 Units  
Industry Certifications: International Code Council Certificates of Achievement Exams and OSHA 10  
Students will develop the basic skills to use both hand and power tools, as well as machinery and equipment, related to brick and block masonry construction. Students focus on problem-solving and employability skills while performing entry-level brick masonry tasks. Projects will highlight kitchen and bathroom tile techniques, exposure to stone/granite and dry scaping (such as cobblestone drives), and stone techniques for exterior fireplaces and pool surrounds. Safety will be emphasized and students will have the opportunity to earn the 10 hour OSHA card. Additionally, students will be encouraged to join the student co-curricular organization, SkillsUSA, and participate in student competitions at the district, state, and national levels.

**Bricklaying/Masonry II**
Course #: 8513  
Recommended: Grade 12  
Credit: 2 Units  
Prerequisites: Masonry I  
Industry Certifications: International Code Council Certificates of Achievement Exams and OSHA 10  
Students will further refine and expand their skills in the use of hand and power tools, as well as machinery and equipment, to construct masonry wall systems typical of the 21st century. Students will learn to read plans and blueprints and estimate material costs/needs. Additionally, students will construct more advanced projects such as fireplace, steps, stoops, back splashes, and shower enclosures. Students may have the opportunity to experience work-based learning. Additionally, students will be given the opportunity to join the student co-curricular
Cybersecurity Systems Technology I
Course #: 8628  Recommended: Grades 10-12
Credit: 2 Units
Prerequisites: Cybersecurity Fundamentals
Students will enter the world of computer technology and will gain practical experiences in assembling a computer system. Students will install, configure, and secure various operating systems. Students will troubleshoot computers and peripherals and use system tools and diagnostic software. They will develop skills in computer networking and resource sharing. In addition, students will explore the relationships between internal and external computer components. Upon successful completion of the course, students may qualify to take the CompTIA A+ certification exam.

Cybersecurity Systems Technology II
Course #: 8623  Recommended: Grade 12
Credit: 2 Units
Prerequisites: Cybersecurity Systems Technology I
Industry Certification: Comp TIA A+ Certification
Building on the knowledge obtained in Cybersecurity Systems Technology I, students will move on to Cisco’s CCNA Routing & Switching: Introduction to Networks curriculum to complete the state standards for Computer Systems Technology. This will be followed by an intense cycle of CompTIA A+ certification preparation with the goal of taking and passing the A+ exam by the end of the course. The final piece of instruction will be determined by individual student interest for various paths within the IT field. Independent study, mini-course modules will include: basic computer programming, cyber/cloud security, entrepreneurship, Internet of Everything, VOIP, Smart Grid and/or Linux Essentials.

Video Production Pathways
Course #: 9072  Recommended: Grades 10-12
Credit: 2 Units
This exploratory course is for students interested in video production or media studies. Students will explore careers in mass media studies and communication with an emphasis on audio and video production techniques. Students will be introduced to the interconnectedness of all communication media from print to digital media sources. Students will write news stories; advertisements; public service announcements; and learn how to evaluate media sources for information, authenticity, and purpose. Students will have the opportunity to create hands-on video projects using state of the art equipment. Preference for enrollment will be given to 10th graders.

Introduction to Video Production
Course #: 8688  Recommended: Grades 11-12
Credits: 2 Units
Students will learn to think and work like media producers by engaging in hands-on production projects. Students will also use theoretical and hands-on experiences to understand the media production process as they learn industry-standard tools. They will explore jobs and careers in the dynamic and growing industry of television and media production and understand the impact of media and its function as entertainment, persuasion, information, and instruction.

Advanced Video Production
Course #: 8689  Recommended: Grade 12
Credit: 2 Units
Prerequisites: Video Production I
Industry Certification: Adobe Certified Associate: Premiere Pro 2108 Examination
Students will become media producers as they take real-world projects from conception to production. They will continue to develop and master skills that are essential to the industry as they function in various professional roles. This course will provide the groundwork needed as students prepare for two or four-year college level communication classes. Students will develop plans and portfolios to help them achieve their goals following high school graduation.
Auto Collision Repair I
Course #: 8676
Recommended: Grade 11
Credit: 4 Units
Industry Certification: ASE Test in Collision Repair
The Auto Collision Repair Program is based on an I-CAR and NATEF program of instruction in the repair of automobile collision damage. The student, through a variety of classroom and hands-on shop activities, will be prepared in the basics of non-structural analysis and damage repair, structural analysis and damage repair, and refinishing. Experiences in Applied Science and Technology and especially in sheet metal work are helpful to the student. The student should have a strong interest in automobiles and a creative ability with metals and plastics. Students will be eligible to take various ASE tests in Collision Repair.

Auto Collision Repair II
Course #: 8677
Recommended: Grade 12
Credit: 4 Units
Prerequisites: Auto Collision Repair I
Industry Certification: ASE Test in Collision Repair
In Auto Collision Repair II, the student will improve upon competencies learned in Auto Collision Repair I, including the areas of structural repair and non-structural damage repair. Advanced topics, such as frame inspection and repair, plastic repair and adhesives, will be covered. Refinishing techniques will be improved as well as solving paint application problems and learning the operation of a computerized paint-mixing system. Body shop management skills are developed, and the student will be introduced to estimating repair damage. In the second semester, the student may be eligible for the senior work experience program.

Automotive Service Technology I
Course #: 8506
Recommended: Grade 11
Credit: 4 Units
Industry Certification: ASE Tests
In Automotive Service Technology, students will be introduced to selective theories and skills required of an Automotive Service Excellence (ASE) certified automotive technician. Automotive Service Technology I uses the National Automotive Technician Educational Foundations (NATEF) Curriculum and will include instruction in career opportunities, safety, tool and equipment use, and general shop practices. In-depth theory and diagnosis and repair of the automotive electrical and brake systems will be covered as well as a brief introduction to manual transmissions and drive lines. The student will be exposed to the automotive service industry through classroom lectures; audio-visual media; shop demonstrations; and hands-on experience using components, donated cars and trucks, and customer motor vehicles. Students will be eligible to participate in the Automotive Youth Services Program (AYES), which involves interning, and job shadowing opportunities.

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Course #: 8676
Recommended: Grade 11
Credit: 4 Units
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Auto Collision Repair II
Course #: 8677
Recommended: Grade 12
Credit: 4 Units
Prerequisites: Auto Collision Repair I
Industry Certification: ASE Test in Collision Repair
In Auto Collision Repair II, the student will improve upon competencies learned in Auto Collision Repair I, including the areas of structural repair and non-structural damage repair. Advanced topics, such as frame inspection and repair, plastic repair and adhesives, will be covered. Refinishing techniques will be improved as well as solving paint application problems and learning the operation of a computerized paint-mixing system. Body shop management skills are developed, and the student will be introduced to estimating repair damage. In the second semester, the student may be eligible for the senior work experience program.

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Course #: 8506
Recommended: Grade 11
Credit: 4 Units
Industry Certification: ASE Tests
In Automotive Service Technology, students will be introduced to selective theories and skills required of an Automotive Service Excellence (ASE) certified automotive technician. Automotive Service Technology I uses the National Automotive Technician Educational Foundations (NATEF) Curriculum and will include instruction in career opportunities, safety, tool and equipment use, and general shop practices. In-depth theory and diagnosis and repair of the automotive electrical and brake systems will be covered as well as a brief introduction to manual transmissions and drive lines. The student will be exposed to the automotive service industry through classroom lectures; audio-visual media; shop demonstrations; and hands-on experience using components, donated cars and trucks, and customer motor vehicles. Students will be eligible to participate in the Automotive Youth Services Program (AYES), which involves interning, and job shadowing opportunities.

Automotive Service Technology II
Course #: 8507
Recommended: Grade 12
Credit: 4 Units
Prerequisites: Automotive Service Technology I
Industry Certification: ASE Tests
Automotive Service Technology II will continue with the National Automotive Technician Educational Foundations (NATEF) Curriculum and will include the theory of operation and service of the suspension and steering systems and fuel, ignition, and emission systems. Limited instruction will also be given in automotive air conditioning. Students will be encouraged to take various Automotive Service Excellence (ASE) tests, as well as participate in the Automotive Youth Services Program (AYES), which involves interning and cooperative education experiences.

Cosmetology I
Course #: 8745
Recommended: Grade 11
Credit: 4 Units
In this introductory course, students will study hair, skin, and nails and their related care. Students will be grounded in theory as they prepare to practice procedures in a clinical lab setting or classroom, using manikins for manipulative skill practice. Theory will include study of bacteriology, chemistry, math, and terminology related to the cosmetology field. The first-year course will emphasize personal safety, professionalism, and sanitation and disinfection of equipment and facilities. Students will develop skills in shampooing and conditioning hair, as well as styling and cutting hair and develop skills in manicure and pedicure procedures.

Cosmetology II
Course #: 8746
Recommended: Grade 12
Credit: 4 Units
Prerequisites: Cosmetology I
Industry Certification: Virginia State Licensing Exam
In this advanced course, students will 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 will be trained in safe chemical processes related to permanent waves, relaxers, soft-curl permanent waves, lightening, and coloring hair. They will also develop artistic...
skills with wigs and hair additions. In addition, students will learn to care for skin, hands, and feet, developing experience in providing facials, manicures, pedicures, and nail enhancements. A business management unit will focus on managing the salon. This course will prepare students for the Virginia State Licensing Exam.

Architectural/Mechanical Drafting, Design & CAD

Drafting, Design & CAD I
Course #: 8530  Recommended: Grade 11
Credit: 2 Units
Students will explore drafting careers and will be introduced to the theory and the manipulative skills necessary to produce and complete accurate drawings based on the ideas and sketches of engineers, architects, and designers. Students will focus on performing mechanical drafting and design operations, geometric drawings, dimensions, and tolerances using the drafting board and CAD.

Drafting, Design & CAD II Mechanical
Course #: 8531  Recommended: Grade 12
Credit: 2 Units
Prerequisites: 8530 Drafting, Design and CAD I
Industry Certification: ADDA Certified Drafter exam
Students will specialize in mechanical engineering aspect of drafting and design. Both board and Computer Assisted Design will be taught and utilized in class. Students will learn various thread types and patterns used in industry; CAD terminology and construction; spur, bevel, and worm gear terminology and construction; prism, cylinder, pyramid and cone line development and construction to make line, bar and die charts; basic shop processes; and machine shop layout, full working drawing sets and solving various engineering design problems. Upon completion of the course, students will be eligible for the American Drafting and Design Association (ADDA) Certified Drafter test. Students may enroll in both classes (course numbers 8531 and 8532) for a four-credit option.

Drafting, Design & CAD II Architectural
Course #: 8532  Recommended: Grade 12
Credit: 2 Units
Prerequisites: 8530 Drafting, Design and CAD I
Industry Certification: ADDA Certified Drafter exam
Students will specialize in architectural design aspects of residential and commercial drafting and design. Both board and Computer Assisted Design will be taught and utilized in class. Students will learn foundation construction symbols and terminology; various wall sections; stair lay-outs; wall sections with windows illustrated; plot layouts including house style and orientation; the rules for architectural dimensioning; how to identify roof types used; and how to draw a complete set of house plans including foundation, HVAC layout, electrical and plumbing layout, elevations, plot layout and artist rendering. Upon completion of the course, students will be eligible for the American Drafting and Design Association (ADDA) Certified Drafter test. Students may enroll in both classes (course numbers 8531 and 8532) for a four credit option.

Metal Trades

Metal Trades I (9th Grade)
Course #: 8672  Recommended: Grade 9
Credit: 2 Units
Prerequisites: Recommendation by home school personnel for first-time ninth graders
Students will focus on the importance of safety in using hand tools and power machines. Students will learn how to recondition tools and layout and form sheet metal projects. Students will study welding theory and metallurgy. In addition, students will learn how to cut plate steel with the plasma arc cutting process and weld the metal using the shielded metal arc welding and gas metal arc welding processes.

Metal Trades II (10th Grade)
Course #: 8673  Recommended: Grade 10
Credit: 2 Units
Prerequisites: Recommendation by home school personnel
This program will be appropriate for students considering a construction or transportation career and technical program for their 11th and 12th grade years. Many of the skills and procedures used in these classes will be introduced in Metal Trades. Metal Trades II will build on many of the areas covered in Metal Trades 9, including advanced types of arc welding. Students will also be introduced to blueprint reading, weld inspection, and metallurgy. During the spring semester, students will be given the opportunity to explore other vocational areas. Students are not required to have taken Metal Trades in 9th grade to take the 10th grade class.
Culinary Arts I
Course #: 8275     Recommended: Grade 11
Credit: 4 Units
Industry Certification: PROSTART 1 and SERVE Safe
Students will participate in the National Restaurant Association PROSTART Year 1 program of study. Students will learn hands-on restaurant training and sanitation and acquire skills as waiter staff and kitchen staff. The fundamentals of baking and pastry making, as well as food preparation techniques, equipment identification, meal presentation, menu planning, and time management will also be taught. Students will receive instruction in microbiology of food spoilage, nutrition, storage preparation, food handling, and cost accounting. Life Management Skills will provide students with basic skills for success in Culinary Arts. Students will spend a major portion of their class time in kitchen production. Students will be eligible for the PROSTART 1 certification at the end of the year.

Culinary Arts II
Course #: 8276     Recommended: Grade 12
Credit: 4 Units
Prerequisites: Culinary Arts I
Industry Certification: PROSTART 2 and SERVE SAFE
Students will participate in the National Restaurant Association PROSTART Year 2 program of studies. Students will participate in the National Restaurant Association ServSafe program of studies for national certification. Instruction will include the preparation of special dishes and salads, methods of broiling, deep fat frying, steaming, menu planning, commercial food management, and management of food service personnel, waiter and waitress training, and laboratory and food operation. Instruction will also include advanced baking and pastry techniques, commercial food management, management of food service personnel, catering, menu design, and product pricing. Students will spend a major portion of their class time in kitchen production. Students will be eligible for the PROSTART 2 certification at the end of the year. This certification will allow for articulation with various post-secondary culinary training institutions.

Early Childhood Education I
Course #: 8285     Recommended: Grade 11
Credit: 4 Units
Students will be prepared to be primary providers of home, family, or institution-based childcare services by focusing on lesson planning, organizing, conducting meaningful play and learning activities, guidance techniques, facility design, child monitoring and supervision, childcare ethics, record keeping, and referral procedures. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of early childhood education will be emphasized. Practical experiences (e.g., on-site lab, local daycare centers, elementary schools, other institutions) under the supervision of the instructor will be required. Students will also prepare for continuing education leading to careers in early childhood fields (e.g., medical, social services, and education). Work-based learning methods of instruction will be encouraged for this course. Students will combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Early Childhood Education II
Course #: 8286     Recommended: Grade 12
Credit: 4 Units
Prerequisites: Early Childhood Education I
Industry Certification: AAFCs: Early Childhood Education Examination
Note: Students working in local daycare centers will be required to pay for background checks and TB tests, as well as provide their own transportation.
Students will focus on occupational skills needed by personnel employed in early childhood-related fields such as education, medical/health care, social services, counseling, psychology, and entrepreneurship. Work-based learning experiences (e.g., on-site lab, local daycare centers, elementary schools, other institutions) under the supervision of the instructor will be required. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of early childhood education will be emphasized. Work-based learning methods of instruction will be encouraged for this course.

Veterinary Science I
Course #: 8088     Recommended: Grades 11-12
Credit: 2 Units
Prerequisites: Successful completion of Small Animal Care
Industry Certification: Certified Vet Assistant Exam
This course will prepare students for postsecondary education and/or careers in veterinary medicine or related fields. Students will develop their skills in anatomy, nutrition, medical terminology, sanitation, clinical exams, and handling animals. Live animal handling may occur. Course content will also include facility maintenance and office function, and safety practices. Students will also expand their knowledge of animal science and the care of
animals, including animal structure and function, microbes and disease prevention, parasitology, and genetics and breeding.

**Veterinary Science II**
**Course #: 8089C**
**Recommended: Grades 11-12**
**Credit: 2 Units**
**Industry Certification: Certified Vet Assistant Exam**
Students develop more advanced skills and techniques for assisting the veterinarian/technician in the following areas: performing first aid and surgery, applying aseptic techniques, performing technical functions, administering medication, handling death and dying, working with wildlife, and performing office functions. On-the-job clinical instruction coordinated by the instructor may be included in veterinary offices or animal clinics. Supervised Agricultural Experience (SAE) and related student organization activities are encouraged. All students will be expected to take the Certified Vet Assistant exam.

**Introduction to Health & Medical Pathways**
**Course #: 8302**
**Recommended: Grades 10-12 (Preference given to 10th graders)**
**Credit: 2 Units**
This course will introduce students to a variety of health care careers and develops basic skills required in all health and medical sciences. Students will understand the key elements of the U.S. health care system and learn basic health care terminology, anatomy and physiology for each body system, form an understanding of diseases and disorders associated with these body systems, therapeutic interventions, and the fundamentals of both basic emergency and trauma care. Throughout the course, instruction will emphasize safety, cleanliness, asepsis, professionalism, accountability, and efficiency within the health care environment. Students will also begin gaining job-seeking skills for entry into the health and medical sciences field.

**Dental Assistant I**
**Course #: 8328**
**Recommended: Grade 11**
**Credit: 4 Units**
Students will be introduced to careers in dentistry, including dental (general and specialists) hygienist, dental assistant, dental laboratory technician, and dental receptionist. Students will learn about and practice the skills utilized in these professions while attaining all the skills necessary to become a dental assistant. Study will include infection control and OSHA standards, anatomy and physiology, tooth morphology, oral histology, preventive dentistry, applied psychology, effective communication, office administration and management, use of dental software, operative dentistry techniques, and dental materials/laboratory skills.

**Dental Assistant II**
**Course #: 8329**
**Recommended: Grade 12**
**Credit: 4 Units**
**Prerequisites: Successful completion of Dental Assistant I**
**Industry Certification: Certified Dental Assistant and National Entry Level Assistant Radiation Health and Safety Exam**
Students will build on curriculum covered in Dental Assistant I. Units of study include medical emergencies, coronal polishing, dental radiology, nutrition, and advanced laboratory techniques. Students will also have the opportunity to participate in internships in local private dental offices and public health facilities where they participate in all phases of dental care delivery. Students will be eligible to take the Virginia Dental Radiation and Safety Exam certifying them to take dental x-rays in the Commonwealth of Virginia.

**Medical Assistant I**
**Course #: 8345**
**Recommended: Grade 11**
**Credit: 2 Units**
**Prerequisites: Recommended Introduction to Health and Medical Sciences 8302**
**Industry Certification: Certified Medical Administrative Assistant Exam: CMAA**
Students will gain foundational knowledge in basic anatomy and physiology, medical ethics, medical asepsis, terminology, medical mathematics, and legal responsibilities. Students will also develop basic skills and techniques to assist the healthcare provider and/or other medical professionals in patient examinations, basic emergency care, simple laboratory tests, and administrative duties. Additionally, students will explore medical assisting career pathways through Health Occupations Student Association (HOSA), potential on-the-job clinical instruction, and/or observation in a healthcare facility.

**Medical Assistant II**
**Course #: 8346**
**Recommended: Grade 12**
**Credit: 2 Units**
**Prerequisites: Successful completion of Medical Assistant I**
**Industry Certification: Certified Clinical Medical Assistant Exam (CCMA)**
Students will apply and implement medical-assisting skills and techniques learned in Medical Assistant I. They will also learn management of health records; cardiopulmonary resuscitation; care and use of equipment; collection and analysis of laboratory specimens; special diagnostic testing related to basic diseases and disorders, treatment, and medication; and job preparedness skills. Successful completion of the program may lead to employment in a healthcare setting. Additionally, students will explore career pathways through Health Occupations Student Organization (HOSA).
Dual Enrollment Nurse Aide I (Healthcare Technician 101, 102, and 115)
Course #: 8360                Recommended: Grades 12
Credit: 2 credits (also transferable college credit hours (10) with a grade of 70 or better each semester)
Prerequisites: Introduction to Health and Medical Sciences (10th Grade), Virginia Community College Placement Test ENG 111 Eligible (or completion of DE English 11) and demonstrated competency into MTE1-MTE2
NOTE: There is a separate application process for this course, please see your counselor for further information, there are costs associated with this class
Industry Certification: Nurse Aide Credential, Medication Aide Credential
This occupational preparation course teaches basic healthcare skills with emphasis on physical, social, emotional, and spiritual needs of patients. The course covers procedures, communications and interpersonal relations; observation, charting and reporting; care planning, safety and infection control; anatomy and physiology; nutrition and patient feeding; ethics, death and dying. It will prepare students to be multi-skilled health care workers and to care for patients of various ages with special emphasis on geriatric nursing, home health, long and short term care facilities. Students will be prepared to safely administer, or to assist in client self-administration of medications in specific settings. Sixty-eight hours of offsite clinical experience outside the regular school day is a requirement of the class. The program requires additional expenditures for the student's health assessment, immunizations, urine drug screen, criminal background check, student liability, uniforms, supplies, and equipment, which are required for clinical assignments. Prior to the onset of the first clinical session, the student must provide criminal background check.

Independent Study
Course #: 0115                Recommended: Grades 10-12
Credit: 1 Unit
Prerequisites: Committee Approval
Students in an Independent Study Course (ISC) will pursue a topic of interest that is not offered within the school curriculum. This requires a committee review of the student's written proposal prior to the beginning of the school year. If approved, students will create a minimum of one major product, two oral presentations, and two minor products. A limited number of proposals will be accepted. The course will be counted as an elective and graded on a regular basis. Students will receive a grade for the course that will be included in the GPA. For more information, see your Gifted Coordinator or school counselor for an ISC brochure.

Mentor Apprenticeship Program
Course #: 0029                Recommended: Grade 12
Credit: 1 Unit
Students in the Mentor Apprenticeship Program will gain independent research skills, attend group seminars, and participate in off-site real world experience within the mentor's career field. Students will be matched with an adult in a professional field or in an area which the learner has interest. The student will maintain a log of activities, complete an individual project, conduct interviews, and critique readings in the field of study. Student will receive a grade for the course that will be included in the GPA. For more information, see your Gifted coordinator.

JROTC I
Course #: 7913                Recommended: Grades 9-10
Credit: 1 Unit
Prerequisites: All interested students are required to complete an application and submit it to their counselor and the appropriate Senior Army Instructor. Total unit endorsement is restricted by the United States Army. Students must be able to participate in the physical training program.
Industry Certification: ASVAB
Students in the JROTC I course will learn critical thinking, planning, communication, and organizational skills with the study of the fundamental aspects of American citizenship, physical fitness, and an overview of American history. Students will learn the dangers of substance abuse and the importance of personal goal setting. Additionally, students will study Army customs, consumer education and budgeting, ceremonial drill, first aid and map reading. Wearing of the supplied Army uniform, as well as meeting
minimum personal appearance standards, will be required on a weekly basis.

**JROTC II**

**Course #: 7916**  
**Recommended: Grades 10-11**

**Credit:** 1 Unit

**Prerequisites:** Students must complete a return application. Completion of JROTC I. Students must have the approval of their principal and the Senior Army Instructor to enroll. Students must be able to participate in the physical training program.

**Industry Certification:** ASVAB

Students in the JROTC II course will build upon the skills and knowledge taught in level I. Students will continue their study of citizenship by examining ethical dual behavior and the principles of participatory democracy. They will develop team building skills while developing their skills in drill. Students will learn leadership and management qualities, first aid skills, intermediate map reading skills, American history, and different aspects of technology and communication. Wearing of the supplied Army uniform, as well as meeting minimum personal appearance standards, will be required on a weekly basis.

**JROTC III**

**Course #: 7918**  
**Recommended: Grades 11-12**

**Credit:** 1 Unit

**Prerequisites:** Students must complete a return application. Completion of JROTC II (LET-1) Students must have the approval of their principal and the Senior Army Instructor to enroll. Students must be able to participate in the physical training program.

**Industry Certification:** ASVAB

Students in the JROTC III course will learn advanced leadership and principles of management, advanced life skills, orienteering and history. Wearing of the supplied Army uniform, as well as meeting minimum personal appearance standards, will be required on a weekly basis. The National Endowment for Financial Education Program will also be presented. Select students will be able to lead in the development of Level I students.

**JROTC IV**

**Course #: 7919**  
**Recommended: Grade 12**

**Credit:** 1 Unit

**Prerequisites:** Students must complete a return application, have successfully completed JROTC I, II, and III. Students must be able to participate in the physical training program.

**Industry Certification:** ASVAB

Students in the JROTC IV course will learn advanced leadership principles and application. Student will learn about the organization of the department of defense and its teaching skills. The National Endowment for Financial Education Program will also be presented.
Program Planning Guide

Diploma Type: ____ Advanced Studies
____ Standard

Pathway: ____________________________

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