## Course Pathways For High School Students 2024-2025



## SCHOOL LOCATIONS

## HIGH

25 Chancellor
26 Courtland
27 Massaponax
28 Riverbend
29 Spotsylvania

## LEGEND

## Voting Districts

 Chancellor Courtland Salem Battlefield Lee HillBerkeley
Livingston

## MIDDLE

18 Battlefield
19 Chancellor
20 Freedom
21 Ni River
22 Post Oak
23 Spotsylvania
24 Thornburg

## CENTERS

30 JJWCC
31 CAREER AND TECH

4 Cedar Forest
5 Chancellor
6 Courthouse Road
7 Courtland
8 Harrison Road
9 Livingston
10 Parkside
11 Riverview
12 Robert E. Lee
13 Salem
14 Smith Station
15 Spotswood
16 Lee Hill
17 Wilderness

Mark B. Taylor Superintendent

Kelly Guempel Deputy Superintendent Chief Academic Officer

Allen Hicks Executive Director of Secondary Education \& Leadership

Allison Langridge Executive Director of Student Support Services

## Directory of High Schools

## SCPS High Schools

CHANCELLOR HIGH SCHOOL

6300 Harrison Road
Fredericksburg, VA 22407
540.786.2606

Principal - Dr. Abe Jeffers
COURTLAND HIGH SCHOOL
6701 Smith Station Road
Spotsylvania, VA 22553
540.898.4445

Principal - Cliff Conway
MASSAPONAX HIGH SCHOOL
8201 Jefferson Davis Highway
Fredericksburg, VA 22407
540.710.0419

Principal - Dr. Jay Lancaster
RIVERBEND
12301 Spotswood Furnace Road
Fredericksburg, VA 22407
540.548.4051

Principal - Xavier Downs
SPOTSYLVANIA HIGH SCHOOL
6975 Courthouse Road
Spotsylvania, VA 22551
540.582.3882

Principal - Rob Marchetti

## Centers

JOHN J. WRIGHT EDUCATIONAL \& CULTURAL CENTER
7565 Courthouse Road
Spotsylvania, VA 22551
540.582.7583

Principal - Ms. Terecia Gill
SPOTSYLVANIA CAREER \& TECHNICAL CENTER
6713 Smith Station Road
Spotsylvania, VA 22553
540.898.2655

Principal - Mr. Reitha Abed

The full contents of this course selection guide are available online at www.spotsylvania.k12.va.us

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## Introduction

## Our Mission

Together, we prepare our students for their future.

## Our Vision

We inspire and empower each student to develop essential skills and access multiple pathways in pursuit of their dreams. Every day, each child yearns to come to school, excited about learning.

## Our Core Values

- Quality
- Equity
- Innovation
- Inclusivity
- Collaboration
- Citizenship
- Stewardship


## ENROLLED

$\pi$
ENLISTED
ENGAGED


## Finding your E

As our vision and mission statements indicate, we want students to come to school excited about learning as we prepare them for their futures. Upon graduating from high school, we want students to have the tools necessary to choose the post-secondary plan that is right for them. Spotsylvania County Public Schools encourages students to select one of four options after graduation: Enrolled, Enlisted, Employed or Engaged in their Community. The 4Es provide an end goal for each of our students to look forward to upon leaving SCPS.

The pathways included in this guide provide students with a potential sequence to pursue the E of their choosing. The pathways are 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.

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 for your E. The pathways suggest courses that align with specific career interests. Please read, learn, ask questions, and plan wisely.

## 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.

## What's Your E?

## ENROLLED

Upon graduation, students will pursue post-secondary education at a 2 -year community college, 4-year university, or trade school
EMPLOYED

Upon graduation, students will gain meaningful employment in a field that is a career interest of the student

## ENLISTED

Upon graduation, students will enlist in a branch of the U.S. Military to include the Army, Marines, Navy, Air Force,

Coast Guard or Space Force


Upon graduation, students will have the life skills necessary to be active members of their community

## Career Pathways

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 four-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, Accommack, and Middlesex. These projections are from 2016 to 2026.

Each career pathway is broken down into 1 of the 17 career clusters recognized in the Commonwealth of Virginia. The 17 career clusters include:

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, Audio/Video Tech, and Communication
- Business Management and Administration
- Finance
- Education and Training
- Human Services
- Government and Public Administration
- Law, Public Safety, Corrections, and Security
- Health Sciences
- Hospitality and Tourism
- Marketing, Sales \& Service
- Information Technology
- Science, Technology, Engineering and Mathematics (STEM)
- Manufacturing
- Transportation, Distribution, and Logistics
- Energy

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).


## Career Clusters



## Agriculture, Food, and Natural Resources Pathways

## 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 ProgramLevel 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

## Postsecondary 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 Postsecondary 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


## FUTURE CAREER GROWTH PROJECTIONS

(Projections based on Regional Statistics)
Veterinary Assistants and Laboratory Animal Caretakers - 27\%

Veterinary Technologists and Technicians - 29\%

Recreation Workers - 13\%
Landscaping - 14\%
Occupational Health and Safety Specialists - 7\%

Farming, Fishing \& Forestry Workers - 11\%

Veterinarians - $25 \%$

## Student Organizations

- FFA


## Agriculture, Food, and Natural Resources Pathways

|  | Sth Grade | 9th Grade | 10th Grade | l1th Grade | l2th Grade |
| :--- | :--- | :--- | :--- | :--- | :--- |
| English | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | 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 |
|  |  |  |  |  <br> Composition |  <br> Composition |
|  |  |  |  | DE College Composition | DE College Literature |
|  | Choose One: | Math 8 | Choose One: | Choose One: | Choose One: |

## 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 $12 \%$, and 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, 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

## Postsecondary Options from Spotsylvania Career \& Technical Center

- Registered Apprenticeship Programs of Electricity, Plumbing, and HVAC-R


## Postsecondary Options at 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


## Postsecondary Options at a 4-year University

- 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

|  | 8th Grade | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | 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 Lang./Comp. | AP English Lit./Comp. |
|  |  |  |  | DE College Composition | DE College Literature |
| Math | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Math 8 | Algebra I | Geometry | AFDA | Algebra II |
|  | Algebra I | Geometry | Hon Algebra II | Algebra II/ Hon Algebra II | Applied Math |
|  | Geometry | Hon Algebra II | Math Analysis/ DE Pre-Calculus | DE Pre-Calculus/ Math Analysis | Math Analysis/ DE Pre-Calculus |
|  |  |  |  | AP Calculus/ DE Calculus | AP Statistics |
| Science | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Physical Science | Environmental Science | Biology | Earth Science | Earth Science II |
|  | Hon Physical Science | AP Environmental Science | Hon Biology | Chemistry | Physics/AP Physics/ DE Physics |
|  |  |  | AP Biology with Chemistry | AP Chemistry | Any Science |
| Social Studies | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | World History I | World Geography | World History II | US History | Government |
|  | Hon World History I | AP Human Geography | AP World History II | AP US History | AP Government |
| Health \& PE | Health/PE 8 | Health/PE 9 | Health/PE 10 |  |  |
| World Language | World Language I through AP |  |  |  |  |
| Per. Fin./Econ |  |  | Economics \& Personal Finance |  |  |
| Possible <br> Additional <br> Courses | Tech Systems | Manufacturing Systems | Construction Tech | Carpentry, Electricity, or HVAC I | Carpentry, Electricity, or HVAC II |
|  |  | Engineering Exploration | Engineering Studies | Architectural Drafting I or Mechanical Drafting I | Architectural Drafting II or Mechanical Drafting II |
|  |  | Drafting I | Architectural Drafting II or Mechanical Drafting II | Architectural Drafting II or Mechanical Drafting II |  |

## 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.

## Postsecondary 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 Postsecondary 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

|  | 8th Grade | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | 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 Lang./Comp. | AP English Literature/Comp. |
|  |  |  |  | DE College Composition | DE College Literature |
| Math | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Math 8 | Algebra I | Geometry | AFDA | Algebra II |
|  | Algebra I | Geometry | Hon Algebra II | Algebra II/ Hon Algebra II | Applied Math |
|  | Geometry | Hon Algebra II | Math Analysis/ DE Pre-Calculus | DE Pre-Calculus/ Math Analysis | Math Analysis/ DE Pre-Calculus |
|  |  |  |  | AP Calculus/ DE Calculus | AP Statistics |
| Science | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Physical Science | Environmental Science | Biology | Earth Science | Earth Science II |
|  | Hon Physical Science | AP Environmental Science | Hon Biology | Chemistry | Physics/AP Physics/ DE Physics |
|  |  |  | AP Biology with Chemistry | AP Chemistry | Any Science |
| Social Studies | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | World History I | World Geography | World History II | US History | Government |
|  | Hon World History I | AP Human Geography | AP World History II | AP US History | AP Government |
| Health \& PE | Health/PE 8 | Health/PE 9 | Health/PE 10 |  |  |
| World Language | World Language I through AP |  |  |  |  |
| Per. Fin./Econ |  |  | Economics \& Personal Finance |  |  |
| Possible <br> Additional <br> Courses | Art Grade 6/Art Grade 7/ <br> Art Grade 8 | Art I | Art II | Art III | Art IV, AP Studio Art |
|  | Hands On Music | Theatre Arts I | Theatre Arts II | Theatre Arts III | Theatre Arts IV |
|  | Theatre Arts |  | Technical Theatre | Theatre Seminar (CHHS \& M | IB Theatre Arts |
|  | Band | Concert Performance Band/ Symphonic Band/ Performance Jazz Band |  |  |  |
|  | Chorus | Chorus/ Select Chorus/ Concert Chorus/ Vocal Ensemble/ Contemporary Ensemble |  |  |  |
|  | Orchestra | Basic Strings/ Concert Performance Orchestra/ Symphonic Performance Orchestra |  |  |  |
|  |  |  | Music Theory | AP Music Theory/ IB Music |  |
|  |  |  |  | Sculpture I | Sculpture II |
|  |  |  |  | Dance I (CoHS) | Dance II (CoHS) |
|  |  |  |  |  |  |
|  |  | Intro to Video Production | Advanced Video Production |  |  |

## Business Management and Administration/Finance

## Summary of Pathway

Do you want to be a Chief Executive Officer (CEO) or Chief Financial Officer (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

## Postsecondary 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 Postsecondary 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

|  | 8th Grade | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | 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 Lang./Comp. | AP English Lit./Comp. |
|  |  |  |  | DE College Composition | DE College Literature |
| Math | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Math 8 | Algebra I | Geometry | AFDA | Algebra II |
|  | Algebra I | Geometry | Hon Algebra II | Algebra II/ Hon Algebra II | Applied Math |
|  | Geometry | Hon Algebra II | Math Analysis/ DE Pre-Calculus | DE Pre-Calculus Math Analysis | Math Analysis/ DE Pre-Calculus |
|  |  |  |  | AP Calculus/ DE Calculus | AP Statistics |
| Science | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Physical Science | Environmental Science | Biology | Earth Science | Earth Science II |
|  | Hon Physical Science | AP Environmental Science | Hon Biology | Chemistry | Physics/ AP Physics/ DE Physics |
|  |  |  | AP Biology with Chemistry | AP Chemistry | Any Science |
| Social Studies | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | World History I | World Geography | World History II | US History | Government |
|  | Hon World History I | AP Human Geography | AP World History II | AP US History | AP Government |
| Health \& PE | Health/PE 8 | Health/PE 9 | Health/PE 10 |  |  |
| World Language | World Language I through AP |  |  |  |  |
| Per. Fin./Econ |  |  | Economics \& Personal Finance |  |  |
| Possible <br> Additional <br> Courses | Information Technology Fundamentals | Introduction to Marketing | Fashion Marketing/ Sports Marketing | Marketing | Advanced Marketing w/ Co-op or Marketing Management |
|  |  | MOS I | MOS II | DMWT I | DMWT II |
|  |  |  | Business Management |  |  |

## 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

## Postsecondary 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 Postsecondary 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

|  | 8th Grade | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | 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 Lang./Comp. | AP English Lit./Comp. |
|  |  |  |  | DE College Composition | DE College Literature |
| Math | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Math 8 | Algebra I | Geometry | AFDA | Algebra II |
|  | Algebra I | Geometry | Hon Algebra II | Algebra II/ Hon Algebra II | Applied Math |
|  | Geometry | Hon Algebra II | Math Analysis/ DE Pre-Calculus | DE Pre-Calculus Math Analysis | Math Analysis/ DE Pre-Calculus |
|  |  |  |  | AP Calculus/ DE Calculus | AP Statistics |
| Science | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Physical Science | Environmental Science | Biology | Earth Science | Earth Science II |
|  | Hon Physical Science | AP Environmental Science | Hon Biology | Chemistry | Physics/ AP Physics/ DE Physics |
|  |  |  | AP Biology with Chemistry | AP Chemistry | Any Science |
| Social Studies | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | World History I | World Geography | World History II | US History | Government |
|  | Hon World History I | AP Human Geography | AP World History II | AP US History | AP Government |
| Health \& PE | Health/PE 8 | Health/PE 9 | Health/PE 10 |  |  |
| World Language | World Language I through AP |  |  |  |  |
| Per. Fin./Econ |  |  | Economics \& Personal Finan |  |  |
| Possible Additional Courses | Family \& Consumer Science | Individual Development | AP Psychology |  |  |
|  |  |  | Psychology/ Sociology |  |  |
|  |  |  |  | Child Development \& Parenting | Nutrition \& Wellness |
|  |  |  |  | DE Teachers for Tomorrow I | DE Teachers for Tomorrow II |
|  |  |  |  | Early Childhood I | Early Childhood II |
|  |  |  |  | Cosmetology I | Cosmetology II |

## Government and 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

## Postsecondary 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 Postsecondary 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 <br> (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


## Government and Public Administration/Law, Public Safety, Corrections, and Security Pathways

|  | 8th Grade | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | 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 Lang./Comp. | AP English Lit./Comp. |
|  |  |  |  | DE College Composition | DE College Literature |
| Math | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Math 8 | Algebra I | Geometry | AFDA | Algebra II |
|  | Algebra I | Geometry | Hon Algebra II | Algebra II/ Hon Algebra II | Applied Math |
|  | Geometry | Hon Algebra II | Math Analysis/ DE Pre-Calculus | DE Pre-Calculus Math Analysis | Math Analysis/ DE Pre-Calculus |
|  |  |  |  | AP Calculus/ DE Calculus | AP Statistics |
| Science | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Physical Science | Environmental Science | Biology | Earth Science | Earth Science II |
|  | Hon Physical Science | AP Environmental Science | Hon Biology | Chemistry | Physics/ AP Physics/ DE Physics |
|  |  |  | AP Biology with Chemistry | AP Chemistry | Any Science |
| Social Studies | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | World History I | World Geography | World History II | US History | Government |
|  | Hon World History I | AP Human Geography | AP World History II | AP US History | AP Government |
| Health \& PE | Health/PE 8 | Health/PE 9 | Health/PE 10 |  |  |
| World Language | World Language I through AP |  |  |  |  |
| Per. Fin./Econ |  |  | Economics \& Personal Finance |  |  |
| Possible <br> Additional <br> Courses |  | Latin American History/ African American History |  |  |  |
|  | Information Technology Fundamentals | Cybersecurity Fundamentals | Cybersecurity Operations | Advanced Cybersecurity Operations |  |
|  |  | JROTC I | JROTC II | JROTC III | JROTC IV |
|  |  |  | AP Psychology/IB Psychology |  |  |
|  |  |  |  | Criminal Justice/ Sociology |  |

## 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, Health Care Technician, 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

## Postsecondary 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 Postsecondary Options at a 4-year University

- Bachelor of Arts \& Sciences - General Studies, Pre-BSN Specialization
- Bachelor 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\%
Medical Assistant - 37\%
Dental Assistant - 27\%
Dentist - 26\%
Nurse Practitioner - 47\%
Home Health Aid - 44\%
Physical Therapy Assistant 60\%
Student Organizations

- HOSA
- Science National Honor Societies (school specific)
- FFA
- Science National Honor Societies (school specific)


## Health Sciences Pathways



## Hospitality and 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 Culinary, Hospitality, Tourism, and Recreation programs at the Career and Tech Center.

## Certifications Earned

National Restaurant Association Pro-Start Certification
ServSafe Manager's Certifications
Customer Service Certification
Workplace Readiness

## Postsecondary 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 Postsecondary 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


## Hospitality and Tourism/Marketing Pathways

|  | 8th Grade | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | 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 Lang./Comp. | AP English Lit./Comp. |
|  |  |  |  | DE College Composition | DE College Literature |
| Math | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Math 8 | Algebra I | Geometry | AFDA | Algebra II |
|  | Algebra I | Geometry | Hon Algebra II | Algebra II/ Hon Algebra II | Applied Math |
|  | Geometry | Hon Algebra II | Math Analysis/ DE Pre-Calculus | DE Pre-Calculus Math Analysis | Math Analysis/ DE Pre-Calculus |
|  |  |  |  | AP Calculus/ DE Calculus | AP Statistics |
| Science | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Physical Science | Environmental Science | Biology | Earth Science | Earth Science II |
|  | Hon Physical Science | AP Environmental Science | Hon Biology | Chemistry | Physics/ AP Physics/ DE Physics |
|  |  |  | AP Biology with Chemistry | AP Chemistry | Any Science |
| Social Studies | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | World History I | World Geography | World History II | US History | Government |
|  | Hon World History I | AP Human Geography | AP World History II | AP US History | AP Government |
| Health \& PE | Health/PE 8 | Health/PE 9 | Health/PE 10 |  |  |
| World Language | World Language I through AP |  |  |  |  |
| Per. Fin./Econ |  |  | Economics \& Personal Fina |  |  |
| Possible Additional Courses | Family \& Consumer Science II | Intro to Marketing | Fashion Marketing/ Sports Marketing | Marketing | Advanced Marketing |
|  |  | Individual Development |  | Business Management |  |
|  |  | Intro to Culinary Arts | Culinary Arts I | Culinary Arts II/Baking \& Pastry Specialization |  |
|  |  | Intro to Hospitality | Hospitality I | Hospitality II | Marketing Management |

## Information Technology and 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, Computer Systems Technology, 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

## Postsecondary Options at Germanna Community College

- Associate of Applied Sciences - Information System Technology Information Management of Network Security, Information System Technology - Networking, and Technical Studies, and Industrial Maintenance Technology
- 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 Postsecondary 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 Computer Systems Administrators - 13\%

Civil Engineers - 10\%
Aerospace Engineers - 13\%
Mechanical Engineers - 12\%

## Student Organizations

- SkillsUSA
- FBLA
- TSA


## Information Technology and STEM Pathways

|  | 8th Grade | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | 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 Lang./Comp. | AP English Lit./Comp. |
|  |  |  |  | DE College Composition | DE College Literature |
| Math | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Math 8 | Algebra I | Geometry | AFDA | Algebra II |
|  | Algebra I | Geometry | Hon Algebra II | Algebra II/ Hon Algebra II | Applied Math |
|  | Geometry | Hon Algebra II | Math Analysis/ DE Pre-Calculus | DE Pre-Calculus Math Analysis | Math Analysis/ DE Pre-Calculus |
|  |  |  |  | AP Calculus/ DE Calculus | AP Statistics |
| Science | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Physical Science | Environmental Science | Biology | Earth Science | Earth Science II |
|  | Hon Physical Science | AP Environmental Science | Hon Biology | Chemistry | Physics/ AP Physics/ DE Physics |
|  |  |  | AP Biology with Chemistry | AP Chemistry | Any Science |
| Social Studies | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | World History I | World Geography | World History II | US History | Government |
|  | Hon World History I | AP Human Geography | AP World History II | AP US History | AP Government |
| Health \& PE | Health/PE 8 | Health/PE 9 | Health/PE 10 |  |  |
| World Language | World Language I through AP |  |  |  |  |
| Per. Fin./Econ |  |  | Economics \& Personal Finan |  |  |
| Possible Additional Courses | IT Fundamentals | MOS I | MOS II | DMWT I | DMWT II |
|  |  | Cybersecurity Fundamentals | Cybersecurity Operations | Advanced Cybersecurity Operations |  |
|  |  | Cybersecurity Fundamentals | Computer Systems Technology I | Computer Systems Technology II |  |
|  |  | AP Computer Science Principles |  | Computer Math (C++) | AP Computer Science JAVA |
|  |  | Engineering Explorations/Engineering Studies |  |  |  |

## Manufacturing/Transportation, Distribution, and Logistics

## 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 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 Welding, Auto Service, and Auto Collision at the Spotsylvania Career and Technical Center.

## Certifications Earned

Automotive Service Excellence Student Examinations

## Postsecondary Options at Germanna Community College

- Associate of Applied Science Technical Studies: Industrial Maintenance
- Career Studies Certificate - Automotive Diagnostician; Automotive Technician
- Industrial Maintenance Technology


## Sample Postsecondary 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, and Logistics Pathways

|  | 8th Grade | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | 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 Lang./Comp. | AP English Lit./Comp. |
|  |  |  |  | DE College Composition | DE College Literature |
| Math | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Math 8 | Algebra I | Geometry | AFDA | Algebra II |
|  | Algebra I | Geometry | Hon Algebra II | Algebra II/ Hon Algebra II | Applied Math |
|  | Geometry | Hon Algebra II | Math Analysis/ DE Pre-Calculus | DE Pre-Calculus Math Analysis | Math Analysis/ DE Pre-Calculus |
|  |  |  |  | AP Calculus/ DE Calculus | AP Statistics |
| Science | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Physical Science | Environmental Science | Biology | Earth Science | Earth Science II |
|  | Hon Physical Science | AP Environmental Science | Hon Biology | Chemistry | Physics/AP Physics/ DE Physics |
|  |  |  | AP Biology with Chemistry | AP Chemistry | Any Science |
| Social Studies | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | World History I | World Geography | World History II | US History | Government |
|  | Hon World History I | AP Human Geography | AP World History II | AP US History | AP Government |
| Health \& PE | Health/PE 8 | Health/PE 9 | Health/PE 10 |  |  |
| World Language | World Language I through AP |  |  |  |  |
| Per. Fin./Econ |  |  | Economics \& Personal Finance |  |  |
| Possible Additional Courses | Tech Systems | Welding I | Welding II Auto Service I | Auto Service I Auto Service II | Auto Service II |
|  | Information Technology Fundamentals | Manufacturing Systems | Construction Tech Auto Collision I | Auto Collision I Auto Collision II | 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 at the Germanna campus or online. 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 - Associate's of Arts and Sciences

|  | Sth Grade | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| :--- | :--- | :--- | :--- | :--- | :--- |
| English | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | English 8 | English 9 | English 10 | AP English 11 | AP English 12 |
|  | Hon English 8 | Hon English 9 | Hon English 10 | DE English 11 | DE English 12 |
| Math | Choose One: | Choose One: | Choose One: | Choose One: | Choose One: |
|  | Algebra I | Geometry | Hon Algebra II | Math Analysis/ <br> DE Pre-Calculus | AP Calculus/ <br> DE Calculus |
|  | Geometry | Hon Algebra II | Math Analysis/ <br> DE Pre-Calculus | AP Calculus/ <br> DE Calculus | AP Calculus BC |
|  |  | Choose One: | Choose One: | Choose One: | Choose One: |

[^0]
## High School Information <br> Requirements for a Standard Diploma

# GRADUATION REQUIREMENTS: Standard Diploma 

(22) Total Credits


## High School Information <br> Requirements for an Advanced Studies Diploma

GRADUATION REQUIREMENTS: Advanced Studies Diploma
(26) Total Credits


## 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 week's 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 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 25 -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 25 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

Starting with 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. 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).
3. 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 lessons 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 the school division's website 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 school website and logging in using their network login and password. In addition, librarians work with classroom teachers in all curriculum areas to support instruction and teach 21 st 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/or highly-motivated high school students with a challenging, differentiated, and interdisciplinary program in science, mathematics, social sciences, and English. This half-day program utilizes real-time 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.

The Commonwealth Governor's School Courses 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)
AP Pre-Calculus (3165G)
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 Virginia
> This is an online, fee-based program developed in conjunction with former Governor Warner's Early College Scholars Initiative. Spotsylvania County students may enroll if an AP class is not offered at their school due to low student enrollment requests. Information is available online and from the school counselor.

## Credit Recovery

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 Lang/Comp AP Music Theory
AP English Lit/Comp AP French
AP German
AP Spanish
AP Statistics
AP Biology
AP Government
AP Chemistry
AP Physics I \& II
AP Psychology
AP Seminar
AP Environmental Science AP Research

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-byexamination program for over 40 years, accepted by 2,900 colleges and universities and administered in over 1,800 test centers.

## International Baccalaureate Diploma <br> 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, open-mindedness, 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. Studentsmust maintain both attendance and grade requirements set by the college 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 college enrollment documents prior to admission. Qualifying students register through the high school in spring and pay the tuition to the high school at the beginning of the school year.

## 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 graduation before the principal will approve 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 $\qquad$ 0-4 units
Sophomore 5 units
Junior 10 units
Senior. $\qquad$ 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 Changes

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 the spring based on student requests and staff availability, all course request changes are due by the last day of school. Students will not be permitted to change their courses for the following school year after the last day of school.

Counselors review student schedules and make schedule adjustments prior to the opening of school when one or more of the following instances occur:

- Prerequisite has not been met
- Student has previously earned credit for a course
- Student is missing a block or class is listed twice
- College has recommended an increase in rigor
- Student has failed with a teacher previously

To maintain the integrity of the educational experience, counselors are not permitted to make schedule changes for the following instances:

- Student has changed their mind
- Student wants to be in class with friends
- Students wants a different teacher, lunch, or block
- Student received an alternate elective


## Dropping Courses \& Level Changes

> The Spotsylvania County Schools grading scale for high school students is:
$\mathrm{A}=90-100$
$\mathrm{~B}=80-89$
$\mathrm{C}=70-79$
$\mathrm{D}=60-69$
$\mathrm{~F}=$ Below 60

There will be no record made on the permanent record of courses dropped during the first 14 weeks of a full year course and during the first 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.

Students are permitted to request a level change in a course (ie. AP to Honors; Honors to Standard) within the first nine weeks. Level change requests must obtain approval from administration. A level change will likely result in multiple changes to a student's schedule and is dependent on course availability. Students are not permitted to request a level change after the first 9 weeks.

## 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.

- 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, they 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:

|  | Non-Weighted <br> 4.5 Scale | Weighted <br> 5.5 Scale |
| :--- | :---: | :---: |
| $98-100=\mathrm{A}$ | 4.50 | 5.50 |
| $95-97=\mathrm{A}$ | 4.25 | 5.25 |
| $90-94=\mathrm{A}$ | 4.00 | 5.00 |
| $88-89=\mathrm{B}$ | 3.75 | 4.75 |
| $86-87=\mathrm{B}$ | 3.50 | 4.50 |
| $84-85=\mathrm{B}$ | 3.25 | 4.25 |
| $80-83=\mathrm{B}$ | 3.00 | 4.00 |
| $78-79=\mathrm{C}$ | 2.75 | 3.75 |
| $76-77=\mathrm{C}$ | 2.50 | 3.50 |
| $74-75=\mathrm{C}$ | 2.25 | 3.25 |
| $70-73=\mathrm{C}$ | 2.00 | 3.00 |
| $68-69=\mathrm{D}$ | 1.75 | 2.75 |
| $66-67=\mathrm{D}$ | 1.50 | 2.50 |
| $64-65=\mathrm{D}$ | 1.25 | 2.25 |
| $60-63=\mathrm{D}$ | 1.00 | 2.00 |
| 59 or less $=\mathrm{F}$ | 0 | 0 |

The subjects listed below are designated as weighted courses:

- Advanced Placement classes
- IB courses (11th \& 12th grade)
- Dual Enrollment classes
*Weighted Courses transferred from other school divisions that do not correspond with this list will not receive weighted credit in Spotsylvania County Public Schools.

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 <br> 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 College 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
Debate
Reading Across the Content
Advanced Placement Seminar
Advanced Placement Research

## FINE ARTS

Art I
Art II
Art III
Art IV
Advanced Placement Studio Art
IB Visual Arts
Computer Art Graphics I
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
Tenor Bass Choir/Treble Choir I/II
Concert Chorus I/II
Contemporary Ensemble
Select Tenor Bass Choir/Select Treble Choir I/II
Vocal Ensemble I/II
Music Theory
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
American Sign Language I
American Sign Language II
American Sign Language III

## 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 English for Speakers of Other Languages V

## HEALTH AND PHYSICAL EDUCATION

Health and Physical Education Grade 9
Physical Education and Driver's Ed Grade 10
Strength and Conditioning I
Strength and Conditioning II
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
Advanced Placement Pre-Calculus
Dual Enrollment Pre-Calculus
Dual Enrollment Calculus
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 Analysis and Approaches
IB Math Applications and Interpretations

## SCIENCE

Environmental Science
Earth Science
Honors Earth Science
Earth Science II: Advanced Topics
Advanced Placement Environmental Science
IB Environmental Systems and Societies SL
Biology
Honors Biology
Advanced Placement Biology
IB Biology
Biology II: Advanced Survey of Biology Topics
Chemistry I
Chemistry II
Advanced Placement Chemistry
IB Chemistry
Physics
Advanced Placement Physics 1
Dual Enrollment Physics
Advanced Placement Physics II
Human Anatomy and Physiology
Earth Science II: 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
IB Psychology
Sociology
African American History
Latin American History
Criminal Justice
21st Century Global Issues

## CAREER \& TECHINICAL EDUCATION <br> AGRICULTURAL EDUCATION

Introduction to Animal Science
Small Animal Care
Agri-Business
Advanced Agri-Business

Horticulture Production
Greenhouse Operations

## BUSINESS AND INFORMATION TECHNOLOGY MOS I <br> MOS II <br> Design, Multimedia and Web Technologies I <br> Design, Multimedia and Web Technologies II <br> Economics \& Personal Finance <br> Business Management <br> IB Business Management <br> Cybersecurity Fundamentals <br> Cybersecurity Operations <br> Advanced Cybersecurity Operations

## EDUCATION \& TRAINING

Dual Enrollment Teachers for Tomorrow I
Dual Enrollment Teachers for Tomorrow II

## FAMILY AND CONSUMER SCIENCES

Individual Development
Intro to Culinary Arts
Child Development and Parenting
Introduction to Hospitality, Tourism, and Recreation

## MARKETING EDUCATION

Marketing Exploration
Fashion Marketing
Sports and Entertainment Marketing
Marketing
Advanced Marketing
Marketing Management
Strategic Marketing

## TECHNOLOGY EDUCATION

Manufacturing Systems
Construction Technology
Technical Drawing and Design
IB Design and Technology
Architectural Drawing and Design
Engineering Drawing and Design
Engineering Exploration
Engineering Studies

## TRADE \& INDUSTRY PROGRAM

 COURSES
## CONSTRUCTION/MECHANICAL TRADES

Carpentry I
Carpentry II
Carpentry III
Electricity I (Residential Wiring)
Electricity II (Residential Wiring)
Electricity III
Heating, Ventilation, Air Conditioning \& Refrigeration (HVAC/R) I
Heating, Ventilation, Air Conditioning \& Refrigeration (HVAC/R) II

INFORMATION TECHNOLOGIES COURSES
Computer Systems Technology I
Computer Systems Technology II

## MASS COMMUNICATION COURSES

Introduction to Video Production
Video Production II
Advanced Video Production III

## TRANSPORTATION COURSES

Auto Collision Repair I
Auto Collision Repair II
Automotive Service Technology I
Automotive Service Technology II

## PERSONAL SERVICES COURSES

Cosmetology I
Cosmetology II
DRAFTING, DESIGN \& CAD
Drafting, Design, and CAD I
Drafting, Design, and CAD II Mechanical Drafting,
Design, and CAD II Architectural

## FAMILY \& CONSUMER SCIENCES

Culinary Arts I
Culinary Arts II
Baking and Pastry Specialization
Early Childhood Education I
Early Childhood Education II
Hospitality, Tourism and Recreation I
Hospitality, Tourism and Recreation II
HEALTH, MEDICAL \& PROTECTIVE SERVICES
Veterinary Science I (DE option)
Veterinary Science II (DE option)
Dental Assistant I
Dental Assistant II
Medical Assistant I
Medical Assistant II
Dual Enrollment Health Care Technician Emergency Medical Technician (DE Option)

## ADDITIONAL OPPORTUNITIES

Independent Study
JROTC I
JROTC II
JROTC III
JROTC IV

## MANUFACTURING

Welding I
Welding II
Welding III

## High School Course Descriptions

## English

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
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 articulately 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 College 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 College Literature (ENG 245-246)

Course \#: 1185
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 College Literature offers two Germanna Community College (GCC) courses 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 as well as American literary texts from diverse time periods, genres, and authors. Students will analyze literary works within their historical, cultural, social, and/or literary contexts. They will develop critical thinking and interpretive skills through discussion, interpretation, and analysis of these texts. Summer assignments may be required. Students are required to earn a 70 or better during the first semester to continue in the second semester portion of the course.

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 welldocumented 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 \& IB1198Recommended: 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
Credit: 1 Unit
Recommended: Grades 10-12
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
Credit: 1 Unit

## Recommended: Grades 11-12

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 afterschool publication activities.

## Journalism IV

Course \#1212
Credit: 1 Unit
Recommended: Grades 11-12
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 afterschool publication activities.

## Yearbook Production

Course \#1220, 1221, 1222, 1223
Recommended: Grade 9-12

## 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.

## 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.

## 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 ChHS, 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 ChHS, 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
Credit: 1 Unit 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, sharpener, sketchbooks, and colored pencils) for completing assignments.

## Art III

Course \#: 9140
Credit: 1 Unit

## Recommended: Grades 11-12

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 selfdirected 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, sharpener, sketchbooks, and colored pencils) for completing assignments.

## Art IV

Course \#: 9145
Credit: 1 Unit
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, sharpener, sketchbooks, and colored pencils) for completing homework 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, sharpener, sketchbooks, and colored pencils) for completing assignments.

## IB Visual Arts (HL/SL)

## Course \#: IB9194 \& IB9195

Recommended: Grades 11-12
Credit: 1 Unit per course

## Prerequisites: Art I \& II, admittance to IB program

 Examination: IB Visual Arts ExamThis 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 that 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.

## Computer Art Graphics I

Course \#: 9160
Recommended: Grades 10-12
Credit: 1 Unit

## Prerequisite: Art I

Pilot at Chancellor High School Only
This course places emphasis on the production of artistic computer imagery, rather than commercial/web graphics. Students will use various software platforms to examine and alter images for computer graphic and fine art applications. The study of aesthetics and the history of art will be included in the course. Students will combine natural art media, scanned images and digital photography with computer imagery. Students will be required to produce digital portfolios.

## Sculpture I

Course \#: 9121

## Recommended: Grades 10-12

## Credit: 1 Unit

## Prerequisites: Art I or teacher recommendation

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 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.

## Fer Dance

## Dance I

Course \#: 1450
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
(audition opportunity available)

## 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.

## Theater

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 HistoryCourse \#: 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 problemsolving 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. 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 Notes: Health and Safety Contract required. Lab fee MAY be required (discuss with your school's theatre director).
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.

## 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 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.


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.

## Beginning Strings

Course \#:9245
Recommended: 9-12
Credit: 1Unit
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 9-12Credit: 1 Unit (one unit of credit is earned each year taken) Prerequisites: Successful Audition at discretion of 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.

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.

Chorus courses are designed to develop musicianship and healthy vocal production and to provide experiences in ensemble singing and sight-reading. Students will be scheduled into the non-auditioned course until the audition process is completed. Students are required to provide prescribed concert attire and are required to participate in after-school rehearsals and performances.

## Tenor Bass Choir/Treble Choir I/II

Course \#: (I) 9260A/9262A, (II) 9261A/9263A
Recommended: Grades 9-12
Credit: 1 Unit (one unit of credit is earned for each year taken) Emphasis will be placed on basic vocal techniques, ear training, and note learning. Choral balance, diction, and phrasing will be considered in all work. Choral students will be introduced to various styles of chorus music from madrigals to rock. Movement in music will be introduced at this level.

## Concert Chorus I/II

Course \#: 9285, 9286 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.

## Contemporary Ensemble

Course \#: 9287
Recommended: Grades 9-12
Credit: 1 Unit

## Prerequisite: Audition required

This is a performance-based class. Emphasis is placed on vocal techniques, ear training, and note learning. Choral balance, diction, and phrasing are considered in all work. Movement in music is integrated into the curriculum at this level.

Select Tenor Bass Choir/Select Treble Choir I/II
Course \#: (I) 9296A/9265A, (II) 9299A/9267A
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 1/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.

## 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.

## (4) World Language

Students who elect to study a world language will have access to five years of sequential language study, expanding student access to information and to future professional opportunities. Students develop communicative proficiency in the language and cultural understanding by becoming aware of other people's unique ways of life. Success in a world language will be supported by reliable work, attendance habits, and with active participation in the classroom. To develop appropriate and sequential skills in listening, speaking, reading, and writing, students should expect a variety of classroom activities designed to facilitate language acquisition.

## French I

Course \#: 5110
Recommended: Grades 9-12

## 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 9-12

## Credit: 1 Unit

## Prerequisites: 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-high
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$\mathrm{mid} /$ 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 <br> 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
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
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 9-12
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 10-12
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 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 $5, \mathrm{AP}$, 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
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
Credit: 1 Unit Credit: 1 Unit Prerequisite: 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
Credit: 1 Unit
Students will continue to develop their communication skills, with emphasis on interpretive reading, by reading both more complex level-appropriate texts as well as some texts written by authentic authors. Students will continue to develop an intercultural competence by using Latin to investigate cultural products and practices of the Romans.

## Latin IV

Course \#: 5340
Credit: 1 Unit
Recommended: Grades 10-12
Prerequisite: Latin III
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 V

Course \#: 5350
Credit: 1 Unit
Recommended: Grades 11-12 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
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 9-12
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 9-12

## 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 practices and interacting appropriately in language and behavior.

## Spanish for Native and Heritage Speakers I-IV

Course \#: 5511, 5521, 5531, 5541 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 10-12

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.

## American Sign Language I

Course \#: 5990V
Recommended: Grades 10-12
Credit: 1 Unit

## Note: Course offered online through Virtual Virginia

This course provides an introduction to the basic skills in production and comprehension of American Sign Language (ASL). The course focuses on the alphabet, numbers, fingerspelling, vocabulary, and grammar, which will lead to increased communicative and cultural proficiency in ASL. The culture, history, current events, and traditions of the deaf community are introduced through selected readings, visual recordings, and other authentic materials. Each student should be able to carry on a short conversation with another student by the end of the course. Also, students will develop the practical skills and knowledge necessary for basic interactions within the deaf community.

## American Sign Language II

Course \#: 5995V
Recommended: Grades 11-12
Credit: 1 unit
Note: Course offered online through Virtual Virginia In this course students will build upon the skills that were taught in American Sign Language I and continue to increase their ability to comprehend and respond with increasing accuracy to expressive American Sign Language (ASL). ASL II provides basic instruction in production and comprehension, vocabulary, and grammar, and eventually leads to increased communicative and cultural proficiency in ASL. Emphasis is placed on the progressive development of expressive and receptive skills. The culture, history, current events, and traditions of the deaf community are introduced on the appropriate level through selected
readings, visual recordings, and other authentic materials. Students will be able to converse with another student or individuals within the deaf community, with emphasis on appropriate language used in common communication settings.

## American Sign Language III

Course \#: 5997V
Recommended: Grade 12

## Credit: 1 unit

Note: Course offered online through Virtual Virginia In this course, students will build upon the skills that were taught in ASL II and continue to increase their ability to comprehend and respond with increasing accuracy to expressive American Sign Language. ASL III provides advanced instruction in production and comprehension, vocabulary, and grammar, leading to increased communicative and cultural proficiency in ASL. Emphasis is placed on the progressive development of expressive and receptive skills. The culture, history, current events, and traditions of the Deaf community are expounded upon through selected readings, visual recordings, and other authentic materials. Visually attending, signing, individual feedback, interactive activities and group activities are designed to instruct, reinforce, connect language skills, and develop signacy. This course includes applications, problem solving, higher-order thinking skills, and performance based and project-based assessments.


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.

## English for Speakers of Other Languages (ESOL) I

 Course \#: 5710 Recommended: Grades 9-12 Credit: 1 UnitPrerequisites: 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
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 \#: 5730Recommended: 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 (ESOL) V

Course \#: 5735
Recommended: Grades 9-12
Credit: 1 Unit
Prerequisites: WIDA ACCESS score or W-APT screening This course will continue to refine all English language skills. Reading, writing, listening, and speaking will be emphasized through the skills and knowledge necessary for content courses. Students will analyze and interpret texts using complex language structures. Students will read a variety of texts and compose written responses for a range of purposes.

## 5

 Health \& Physical EducationTwo 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 <br> Recommended: Grade 10

## Credit: 1 Unit

Prerequisites: Health \& Physical Education Grade 9 Students in 10th 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 \& Conditioning I

## Course \#: 7640

Recommended: Grades 11-12 Credit: 1 Unit
This Physical Education 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 complement them, along with an understanding of how the human body benefits from cardiovascular activity.

## Strength \& Conditioning II

Course \#: 7645
Recommended: Grade 12

## Credit: 1 Unit

Prerequisite: Strength \& Conditioning I
This elective course will increase and expand on topics covered in Strength \& Conditioning I. In this course, students will participate in daily weight training and cardiovascular activities specific to student wellness, fitness, and performance goals. Participants will gain knowledge of muscle groups and exercises that complement them as well as 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.

## $\pi$ 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 nonsequential 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 9-12

## 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 I

Course \#: 3131
Recommended: Grades 9-10

## Credit: 1 Unit

This course is the first part of a two-part Algebra I course. 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 \#: 3132
Recommended: Grades 9-10
Credit: 1 Unit

## Prerequisites: Successful completion of Algebra I, Part 1 Examination: SOL

This course 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
Credit: 1 Unit
Recommended: Grades 9-12 Prerequisite: 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 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, Functions, \& Data Analysis
Course \#: 3134
Recommended: Grades 11-12

## Credit: 1 Unit

## Prerequisites: Algebra 1 and Geometry

This course must be taken before Algebra II. It may be applied toward an advanced diploma if followed by Algebra II. Within the context of mathematical modeling and data analysis, students will study functions and their behaviors, systems of inequalities, probability, experimental design and implementation, and analysis of data. Data will be generated by practical applications arising from science, business, and finance. Students will solve problems that require the formulation of linear, quadratic, or exponential equations or a system of equations. The infusion of technology in the course will assist in modeling and investigating functions and data analysis.

## 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
Prerequisite: 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 problemsolving 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 trigonomic 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 (MTH 161/162) Course \#: 3161 Recommended: Grades 11-12 <br> Credit: 1 Unit ( 6 semester hours of college credit with a grade of 70 or better each semester) <br> Prerequisites: Algebra II; staff recommendation, and Germanna entrance requirement

Pre-Calculus 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 functions. 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 (MTH 263/264)

Course \#: 3230 Recommended: Grade 12
Credit: 1 Unit ( 8 semester hours of college credit with a grade of 70 or better each semester)
Prerequisites: MTH 161-162, staff recommendation.
Germanna entrance requirement, $C$ or better in Pre-Calc Calculus is a Germanna Community College course that is taught at the high school. This weighted course carries one (1) weighted high school credit and eight (8) 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. Students are required to earn a 70 or better during the first semester to continue in the second semester portion of the course.

## Computer Mathematics (C++)

Course \#: 3199
Recommended: Grades 9-12

## Credit: 1 Unit

## Prerequisite: Geometry

The major focus of this course is to provide experience in using the computer to solve problems set up using mathematical models. Programming 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

## Prerequisite: 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)
Prerequisite: 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)
Prerequisite: 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


#### Abstract

Course \#: 3178 Recommended: Grade 12 Credit: 1 Unit (possible college credit with appropriate score on the AP exam) Prerequisite: 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 <br> Recommended: Grades 9-12

Credit: 1 Unit (possible college credit with appropriate score on the AP exam)
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)
Prerequisite: 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 Math Analysis and Approcahces (HL/SL)
Course \#: IB 3186/3188; IB 3193/3194 Recommended: Grades 10-12 Credit: 1 unit
Prerequisites: Dual Enrollment Pre-Calculus, Honors Algebra II, Teacher Recommendation
Examination: IB Math AA SL/HL Exam
This two-year course covers topics that are both traditionally part of a pre-university mathematics course (functions, trigonometry, calculus) as well as topics that are amenable to investigation, conjecture and proof, for instance the study of sequences and series. The course allows the use of technology, however, it has a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments. Students will complete an internal and external assessment for this course and the completion of this course will fulfill the requirement for group 5 (mathematics) for the IB Diploma. This course culminates with an IB external assessment that provides the possibility of college credit.

## IB Math Applications and Interpretations (SL)

Course \#: IB 3187/3191 Recommended: Grades 11-12
Credit: 1 unit per course
Prerequisites: Honors Algebra II, Teacher

## Recommendation

Examination: IB Math AI SL Exam
This course will cover the topics of numbers and algebra; functions; geometry and trigonometry; statistics and probability; calculus; and mathematics exploration to enable students to apply mathematics in multiple realistic, historical and cultural perspectives and develop their conceptual understanding of the world using the content and skills of 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 humankind'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.

## Earth Science II: Advanced Topics

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.

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.

IB Environmental Systems and Societies SL
Course Number: IB4280 Recommended Grades: 11-12 Credit: 1 Unit
Prerequisites: Successful completion of Chemistry and Biology
Examination: IB Environmental Systems and Societies SL Exam
IB Environmental Systems and Societies is firmly grounded in both a scientific exploration of environmental systems in their structure and function, and in the exploration of cultural, economic, ethical, political and social interactions of societies with the environment. Students will become equipped with the ability to recognize and evaluate the impact of our complex system of societies on the natural world. The course requires a systems approach to environmental understanding and promotes holistic thinking about environmental issues. Teachers explicitly teach thinking and research skills such as comprehension, text analysis, knowledge transfer and use of primary sources. They encourage students to develop solutions at the personal, community and global levels.

## 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 and physiology of organisms. Laboratory investigations will be conducted which reinforce principles taught in the classroom.

## Biology II: Advanced Survey of Biology Topics Course \#: 4320 Recommended: Grades 11-12

Credit: 1 Unit
Prerequisite: 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
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 of 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

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 all the requirements of the course.

## Dual Enrollment Physics (PHY 201-202)

Course \#: 4650
Recommended: Grade 12
Credit: 1 Unit (also transferable college credit hours (4) with a grade of 70 or better each semester) Prerequisite: DE Pre-calculus or Math Analysis and Germanna entrance requirements

## Note: Fee required

This course is a Germanna Community College (GCC) course taught in high school. Students will explore topics such as mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics. College credits earned will transfer to all Virginia Community Colleges and most colleges and universities.

## Advanced Placement Physics II

Course \#: 4574 Recommended: Grades 11-12 Credit: 1 Unit (College credit, pending AP Exam score) Prerequisites: Successful completion of AP Physics I and have taken or be concurrently taking Pre-Calculus or an equivalent course.
Students will explore topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. Students participating in Advanced Placement Physics II will be expected to take the College Board exam in addition to fulfilling the requirements of the course.

## IB Physics HL

Course Numbers: IB 4580; IB 4590
Recommended: 11-12
Credit: 1 Unit
Prerequisites: Successful completion of Honors Algebra II Examination: IB Physics HL/SL Exam
IB Physics HL is a two year algebra based Physics course. Concepts covered in the first year are Newtonian Mechanics and include: motion, forces, work and energy, momentum, circular motion, momentum, thermal physics, and fluids. The second year we study Electricity and Magnetism. Topics covered include: charge, statics, simple circuits, magnetic induction, optics, and electrical power production. Additional units covered are Relativity and Engineering Principles.

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.

## Earth Science II: Oceanography

Course \#: 4251
Recommended: Grades 12
Credit: 1 Unit
Prerequisites: Successful completion of Earth 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.

## History \& Social <br> Science

Social studies courses are designed to immerse students in the content knowledge and skills necessary to understand the world in which they live. Students take a combination of geography, history, and government courses that enhance their world view through the analysis of primary and secondary historical documents, the application of geospatial knowledge, and by examining the relationship between good citizenship and government. The mandatory social studies curriculum begins with World Geography in the ninth grade. Students then progress over the next two years to gain a strong base of historical knowledge in World History II and Virginia \& United States History. The required curriculum culminates in the 12th grade with Virginia \& United States Government as students approach the precipice of adult citizenship. In addition to the mandatory curriculum, there are several electives that students can take according their interests. Advanced Placement, IB, and Dual-Enrollment options are available for students who wish to further challenge themselves.

## World Geography

Course \#: 2210
Recommended: Grade 9
Credit: 1 Unit
Examination: SOL
Students will examine the environmental and cultural patterns of the major world regions. Critical thinking
skills will be developed and applied as students examine demographic and economic data and investigate the causes, effects, and possible solutions to current international conflicts, problems, and environmental concerns. Map skills will be extended as students use an atlas and varied types of maps in regional studies, build spatial perceptions, and develop a mental map of the world. Democratic values and citizenship will be reinforced as students develop an appreciation of the cultural diversity of the world, learn to work cooperatively with classmates, and build an appreciation and concern for the environment.

## 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 <br> Course \#: 2221 <br> 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 <br> Course \#: 2319 Recommended: Grade 11 <br> 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 <br> Course \#: 2440 <br> Recommended: Grade 12 <br> 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 United States Government

Course \#: 2445 Recommended: Grade 12
Credit: 1 Unit (College credit, pending AP exam score) Examination: Advanced Placement Test
Students will gain an analytical perspective on government and politics in the United States. Students will learn basic facts, concepts, and theories pertaining to United States government and politics, understand typical patterns of
political processes and behavior and their consequences, and analyze and interpret basic data. The course will be presented at the college level and follows an outline proposed by the College Board.

## Dual Enrollment Western Civilization (HST 101-102) Course \#: 2446 <br> Recommended: Grades 11-12 <br> Credit: 1 Unit (also transferable college credit hours (6) with a grade of 70 or better each semester) <br> Prerequisite: Germanna entrance requirements <br> Note: Fee required

This course examines the development of western civilization from ancient times to the present. The first semester of the course surveys the origins and development of the Western world, including the critical influence of the Ancient Near East, Greece, Rome, Byzantium, the Islamic caliphates and the European states. It will also examine the birth of the major monotheistic religions, religious conflicts, and the co-evolution of religion and state. The second semester of the course is a survey of Western Civilization from the seventeenth century through the present. It explores the political, diplomatic, economic, social, intellectual, and cultural history of Western Civilization beginning around 1600 C.E. The focus is primarily on Europe and Russia, but also explores how Africa, the Americas, and Asia engaged with the West from Exploration through Decolonization.

## 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
Prerequisites: VA/US History, AP Government, admittance to IB program
Examination: 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: 0.5 Unit

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 <br> Course \#: 2902 <br> Recommended: Grades 10-12 <br> 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.

## IB Psychology (SL)

Course \#: IB1450
Recommended: Grades 11-12

## Credit: 1 Unit

## Examination: IB Psychology SL Exam

An introduction to three different approaches to understanding behavior: the biological, cognitive, and sociocultural approaches. Students study and critically evaluate the knowledge, concepts, theories, and research that have developed understanding in these fields. The contribution and the interaction of the three approaches is understood through the four options in the course, focusing on areas of applied psychology: abnormal psychology, developmental psychology, health psychology, and the psychology of relationships. This course promotes and understanding of the various approaches to research and how they are used to critically reflect on the evidence as well as assist in the design, implementation, analysis, and evaluation of the students' own investigations. Overarching themes of research and ethics surround all course material.

## Sociology

Course \#: 2500
Recommended: Grades 10-12
Credit: 0.5 Unit
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 \#: 2370
Recommended: Grades 9-12

## Credit: 1 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: 0.5 Unit
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.

## Criminal Justice

Course \#: 2420
Credit: 0.5 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

## 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.

## -2 Career \& Technical Education

The Career and Technical Education (CTE) curriculum provides classes that appeal 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 and 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, Educators Rising 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.

# Agriculture 

Introduction to Animal Science
Course No. 8008 Recommended: Grades 9-12
Credit: 1 Unit
Industry Certification: Beef Quality Assurance (BQA)
This course will explore different agricultural career skills pertaining to animal systems-particularly breeding, nutrition and management of livestock as well as mechanics laboratory experience (woodworking, metalworking, etc.). Students have the opportunity to participate in the co-curricular student organization, the National FFA. 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 (CCTP)
Students enrolled in this course will be required to take an industry certification exam that includes eight hours of documented work with dog handling. This course
will introduce the student to common pet small animals focusing on the breed variety, nutrition, health, and habitat maintenance. Students will be encouraged to participate in the co-curricular student organization, the National FFA. Students will be required to have a supervised agricultural project related to the course.

## Small Animal Care with Cooperative Education Course \#: 8084 Recommended: Grades 11-12 <br> Credit: 2 Units <br> Industry Certification: Continental Kennel Club Canine Care and Training, Level I (CCTP)

Students enrolled in this course will be required to take an industry certification exam that includes eight hours of documented work with dog handling. This course will introduce the student to common pet small animals focusing on the breed variety, nutrition, health, and habitat maintenance. Students will be encouraged to participate in the co-curricular student organization, the National FFA. Students will be required to have a supervised agricultural project related to the course. Students will combine classroom instruction with supervised on-the-job training in a local agricultural business (an average of 11 hours per week for 36 weeks).

## Agri-Business

Course \#: 8022
Credit: 1 Unit
Prerequisites: Successful completion of Introduction to Animal Science, Plant Production or Small Animal Care Industry Certification: Workplace Readiness for the Commonwealth
Students develop necessary knowledge and skills for employment in the agricultural industry. The course emphasizes developing agricultural business personal finance, agriculture economics, and personal employment skills. Students will participate in laboratory skills based around woodworking, welding, plumbing, small engine maintenance, and electrical. Students have the opportunity to participate in the co-curricular student organization, the National FFA. Students who meet the early release requirements may participate in the agricultural cooperative education program and in this course must participate in a supervised agricultural project. Students enrolled in this course will be expected to take an industry certification exam.

## Agri-Business with Cooperative Education

Course \#: 8026 Recommended: Grades 11-12
Credit: 2 Units
Prerequisites: Successful completion of Introduction to Animal Science, Plant Production or Small Animal Care Industry Certification: Workplace Readiness for the Commonwealth
Students develop necessary knowledge and skills for
employment in the agricultural industry. The course emphasizes developing agricultural business personal finance, agriculture economics, and personal employment. Students will participate in laboratory skills based around woodworking, welding, plumbing, small engine maintenance, and electrical. Students have the opportunity to participate in the co-curricular student organization, the National FFA. Students in this course must participate in a supervised agricultural project. Students will combine classroom instruction with supervised on-the-job training in a local agricultural business (and average of 11 hours per week for 36 weeks). Students enrolled in this course will be expected to take an industry certification exam.

## Advanced Agri-Business

Course \#: 8024
Recommended: Grades 11-12
Credit: 1 Unit
Prerequisite: 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. Students have the opportunity to participate in the cocurricular student organization, the National FFA. 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.

## Advanced Agri-Business with Cooperative Education

Course \#: 8027 Recommended: Grades 11-12
Credit: 2 Units
Prerequisite: 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. Students have the opportunity to participate in the cocurricular student organization, the National FFA. Student participation is required in a supervised agricultural project related to the course. Students will combine classroom instruction with supervised on-the-job training in a local agricultural business (an average of 11 hours per week for 36 weeks). Students enrolled in this course will be expected to take an industry certification exam.

## Horticulture Production

Course \#: 8034
Recommended: Grades 9-12
Credit: 1 Unit
This course will explore the different areas within the Horticulture industry including highlighting career skills in floral, landscaping design, greenhouse management, and turf-grass. Students are encouraged to participate in
the co-curricular student organization, the National FFA. Participation is required in a supervised agricultural project related to the course.

## Horticulture Production with Cooperative Education

Course \#: 8036

## Recommended: Grades 11-12

Credit: 2 Units
This course will explore the different areas within the Horticulture industry, highlighting career skills in floral, landscaping design, greenhouse management, and turfgrass. Students are encouraged to participate in the co-curricular student organization, the National FFA. Participation is required in a supervised agricultural project related to the course. Students will combine classroom instruction with supervised on-the-job training in a local agricultural business (an average of 11 hours per week for 36 weeks).

## Greenhouse Operations

Course \#: 8035C
Recommended: Grades 11-12
Credit: 1 Unit

## Prerequisite: Horticulture Production

Industry Certification: Pesticide Management
This course will explore the operating procedures for a greenhouse including developing plant production facilities, business management, and marketing skills are emphasized to prepare students for careers in the greenhouse industry. Students are encouraged to participate in the co-curricular student organization, the National FFA. Students may qualify for work release. 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 Operations with Cooperative Education

 Course \#: 8037 Recommended: Grades 11-12Credit: 2 Units

## Prerequisite: Horticulture Production

Industry Certification: Pesticide Management
This course will explore the operating procedures for a greenhouse including developing plant production facilities, business management, and marketing skills are emphasized to prepare students for careers in the greenhouse industry. Students are encouraged to participate in the co-curricular student organization, the National FFA. Participation is required in a supervised agricultural project related to the course. Students will combine classroom instruction with supervised on-the-job training in a local agricultural business (an average of 11 hours per week for 36 weeks). Students enrolled in this course will be expected to take an industry certification exam.

$\square$Business \& Information Technology

## Information Technology Fundamentals (ITF)

## Course \#: 6670 <br> 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 <br> Prerequisites: MOS I

Industry Certification: MOS 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 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 SpecialistStudents 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

## Prerequisite: 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 graduation requirements, 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

 Note: This course meets the Economics \& Personal Finance graduation requirementThis 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 Operations

Course \#: 6304
Recommended: Grades 10-12
Credit: 1 Unit

## Prerequisite: 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. This course 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 exam.

## Advanced Cybersecurity Operations

Course \#: 6306
Recommended: Grades 11-12
Credit: 1 Unit

## Prerequisites: Cybersecurity Operations

Students will explore security analysis and network security, monitoring and detecting security incidents in information systems and networks. The course introduces tools and tactics to manage cybersecurity risks, identify common threats, evaluate an organizations security, collect and analyze cybersecurity intelligence, and handle cybersecurity incidents. Students will understand threats, attacks and vulnerabilities, architecture and design considerations in a business environment, implementation of security operations, risk and incident response, ethics, and cryptography.

## Dual Enrollment Teachers for Tomorrow I (EDU 200)

Course \#: 9063
Recommended: Grades 10-12
Credit: 2 Units (also transferable college credit hours (3) with a grade of 70 or better each semester)
Prerequisite: 3.0 GPA, application, and teacher recommendations
Teachers for Tomorrow I is a Germanna Community College course that is taught at the high school. This course 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 (EDU 207)

Course\#: 9072C Recommended: Grade 11-12 Credit: 2 Units (also transferable college credit hours (3) with a grade of 70 or better each semester) Prerequisite: Teachers for Tomorrow I
Teachers for Tomorrow II is a Germanna Community College course that is taught at the high school. 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.

# F. 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.

## Introduction to Culinary Arts

Course \#: 8274 Recommended: Grades 9-12

## Credit: 1 Unit

Students investigate food safety and sanitation, culinary preparation foundations, basic culinary skills, diverse cuisines, service styles, nutrition and menu development, and the economics of food. Students also explore postsecondary education options and career opportunities within the food service industry. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/ or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

## Child Development \& Parenting

Course \#: 8232
Recommended: Grades 9-12
Credit: 1 Unit
Students will 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. Although this course is available to all high school students, due to the sensitive topics discussed in this class, it is highly recommended for mature students. 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 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.

## (1) Marketing

## Marketing Exploration

Course \#: 8110
Recommended: Grades 9-10
Credit: 1 Unit
Marketing Exploration 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 $\square$ requirement) Prerequisites: Marketing Exploration (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: Marketing Exploration (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.

## Strategic Marketing

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
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). Students enrolled in this course will be required to take an industry certification exam.


Manufacturing Systems
Course \#: 8425
Recommended: Grades 9-12
Credit: 1 Unit
Industry Certification: Workplace Readiness for the Commonwealth
This course will provide an orientation to careers in various fields of manufacturing. Emphasis will be placed on manufacturing systems, safety, materials, production, business concepts, and the manufacturing process. Students will participate in individual and team activities to create products that demonstrate critical elements of manufacturing.

## Construction Technology

Course \#: 8431 Recommended: Grades 10-12
Credit: 1 Unit
Industry Certification: Workplace Readiness for the Commonwealth
Students explore commercial, industrial, residential, public works, and institutional technologies to help them understand construction careers. Through handson projects, students learn proper safety procedures for tools and machinery, while exploring preconstruction and construction processes and investigating evolving
technologies. Students apply mathematics concepts and principles used in construction.

## Technical Drawing \& Design

Course \#: 8435
Recommended: Grades 9-12
Credit: 1 Unit
In this foundation course, students design, sketch, and make technical drawings, models, or prototypes of real design problems while learning the language of technical drawing and design. The course introduces the language of graphic communication to all science, technology, engineering, and mathematics (STEM) students and is especially recommended for those planning a future in engineering and architecture.

## 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: 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.

## Architectural Drawing \& Design

Course \#: 8437
Recommended: Grades 10-12
Credit: 1 Unit

## Prerequisite: Technical Drawing \& Design Industry Certification: Revit

Students learn the principles of architecture and increase understanding of working drawings and construction techniques learned in Technical Drawing \& Design. Experiences includes residential and commercial building designs, rendering, model development, and structural details. Students use sketching, technical drawing and computer-aided drawing and design (CADD) equipment. This course is especially beneficial to future architects, interior designers, or home builders. Students will be required to sit for an industry certification.

## 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 they 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 teambased presentations, proposals, and technical reports.

## Engineering Studies

Course \#: 8491

## Recommended: Grades 10-12

Credit: 1 Unit

## Prerequisite: 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.

## 켠 Trade \& Industry

Courses listed in this section are taught at the Spotsylvania Career \& Technical Center. Students ride a bus to the Center and back to their home school for these classes.

There is an application process in place for admittance to many of these classes. Students should see their school counselor for application materials. Preference for enrollment to classes that have a 1st and 2nd year, which lead to a program completion certificate will be given to 10th and 11th grade students. Twelfth grade students are allowed to enroll in first year courses or Career Pathways courses only on a space available basis.

Each course is a two or four-period block. Students participate in various work-based learning opportunities. Students who select these courses should understand that participation in co-curricular student organizations is strongly encouraged. Students also participate in local, state, and national skills competitions. All Career and Technical Center students are expected to join, and participate in, their trade-related student organizations.

## Carpentry I

Course \#: 8601A
Recommended: Grades 10-11
Credit: 2 Units
Industry Certification: OSHA 10
SCTC Application is required for admission
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 \#: 8602A
Recommended: Grades 11-12
Credit: 2 Units

## Prerequisite: Carpentry I

Industry Certification: NCCER Carpentry Certification
SCTC application is not required upon successful completion of prerequisite course
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 also 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.

## Carpentry III

Course \#: 8603
Recommended: Grade 12
Credit: 2 Units
Prerequisite: Carpentry II
Industry Certification: NCCER Carpentry Certification CTSO: SkillsUSA
SCTC application is not required upon successful completion of prerequisite course
Carpentry III is an advanced course that allows students to gain in-depth knowledge and hands-on experience in construction skills. Students explore specialized areas in carpentry, such as building decks and porches, alternative framing, interior finishes, drywall installation and finishing, as well as energy efficiency and green technology.
Exploration of licensure requirements and entrepreneurial opportunities are emphasized.

## Electricity I (Residential Wiring)

Course \#: 8533A
Recommended: Grades 10-11
Credits: 2 Units
Industry Certification: OSHA 10
CTSO: SkillsUSA
SCTC Application is required for admission
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 \#: 8534A
Recommended: Grades 11-12
Credit: 2 Units
Prerequisites: Electricity I
Industry Certification: NCCER Electricity Certification CTSO: SkillsUSA
SCTC application is not required upon successful completion of prerequisite course
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.

Electricity III
Course \#: 8535

## Recommended: Grade 12

Credit: 2 Units
Prerequisites: Electricity I and/or Electricity II plus teacher recommendation
Industry Certification: NCCER Electricity Certification CTSO: SkillsUSA
Through hands-on experiences, students continue building skills in the installation, operation, maintenance, and repair of electrical systems, with emphasis on industrial applications. They also study lighting fixtures, overcurrent protection, service equipment, motor controls, transformers, grounding, and the National Electrical Code (NEC) Book.

## Heating, Ventilation, Air Conditioning \& Refrigeration (HVAC/R) I

Course \#: 8503A Recommended: Grades 10-11
Credit: 2 Units
Industry Certification: OSHA 10
CTSO: SkillsUSA

## SCTC Application is required for admission

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 \#: 8504A Recommended: Grades 11-12
Credit: 2 Units
Prerequisites: HVAC/R I
Industry Certification: EPA Technician Exam 608
CTSO: SkillsUSA
SCTC application is not required upon successful completion of prerequisite course
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.

## Information Technologies

## Computer Systems Technology I <br> Course \#: 8622 Recommended: Grades 10-12 <br> Credit: 2 Units <br> SCTC Application is required for admission <br> Students enter the world of computer technology and gain practical experience in disassembling, upgrading, troubleshooting, and assembling computer systems and laptops. Students will install, configure, and secure various operating systems. Students will troubleshoot computers and peripherals and use system tools and diagnostic software. They develop skills in computer networking and resource sharing. Students will also explore the relationships between internal and external computer components.

## Computer Systems Technology II

Course \#: 8623
Recommended: Grades 11-12
Credit: 2 Units
Prerequisites: Computer Systems Technology I Industry Certification: CompTIA A + , ITF + SCTC application is not required upon successful completion of prerequisite course
This advanced course provides students with training in procedures for maintaining, troubleshooting, and securing computer systems, portable devices, and networks. Students will explore: basic network design, connectivity, and infrastructure; basic cybersecurity concepts; computer and mobile device hardware and operating systems; customer service and industry best practices; cloud computing and virtualization; basic software development and database management. Students will gain a basic understanding of emerging information technologies including mobile, cloud and virtualization. The course prepares students for postsecondary education and training, and a successful career in information technology. Upon completion of the course, students may qualify to take CompTIA's ITF+ and A + certification exams.

## 咸 <br> Mass Communications

## Introduction to Video Production

Course \#: 8688
Recommended: Grades 9-11
Credits: 2 Units
SCTC Application is required for admission
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.

## Video Production II

Course \#: 8689
Recommended: Grades 10-12
Credit: 2 Units
Prerequisites: Video Production I
Industry Certification: Adobe Certified Professional Premiere Pro
SCTC application is not required upon successful completion of prerequisite course
This course builds upon knowledge and skills from Intro to Video Production. Students will generate fiction and non-fictional media content further enhancing their digital media production skills by entering the studio and control rooms to become proficient with industrystandard equipment and software. Students will put their knowledge of digital media production into action with the use of sophisticated tools and equipment while developing personal portfolios. Students will create original productions, assemble a professional digital portfolio, and investigate the dynamic media production industry. Students will research postsecondary opportunities and formulate strategies for both college and career success. At the end of the second year, students take the industry credential: Adobe Certified Professional Premiere Pro exam.

## Advanced Video Production III

Course \#: 8690
Recommended: Grades 11-12

## Credit: 2 Units

## Prerequisite: Video Production II <br> Industry Certification: <br> CTSO: SkillsUSA <br> SCTC application is not required upon successful completion of prerequisite course

This course builds upon knowledge and skills from Video Production I and II. Students will demonstrate mastery of media production knowledge and skills. They will create original productions, assemble a professional digital portfolio, and investigate the dynamic media production industry. Students will research postsecondary opportunities and formulate strategies for both college and career success. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

## Transportation

## Auto Collision Repair I

Courses \#: 8676
Recommended: Grades 10-12
Credit: 4 Units
Industry Certification: ASE Test in Collision Repair SCTC Application is required for admission
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: Grades 11-12
Credit: 4 Units
Prerequisites: Auto Collision Repair I
Industry Certification: ASE Test in Collision Repair SCTC application is not required upon successful completion of prerequisite course
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: Grades 10-12
Credit: 4 Units
Industry Certification: ASE Tests in Automotive
SCTC Application is required for admission
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; audiovisual 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: Grades 11-12
Credit: 4 Units
Prerequisites: Automotive Service Technology I Industry Certification: ASE Tests in Automotive
SCTC application is not required upon successful completion of prerequisite course
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 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.

## Personal Services

## Cosmetology I

Course \#: 8745

Recommended: Grade 11

## Credit: 4 Units

## SCTC Application is required for admission

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
Prerequisite: Cosmetology I
Industry Certification: Virginia State Licensing Exam (Social Security Number and other documentation are required for this credential)

SCTC application is not required upon successful completion of prerequisite course
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, which requires a Social Security Number and other documentation to take this examination.


> Architectural/Mechanical Drafting, Design \& CAD

Drafting, Design \& CAD I
Course \#: 8530
Recommended: Grades 9-11
Credit: 2 Units
SCTC Application required to be considered for admission
This class introduces students to Drafting by focusing on the fundamental concepts, techniques, and standards used to create drawings. The course begins with the use of manual drafting equipment to create drawings and produces a solid foundational understanding of how drafters interpret and visualize 3D objects and place them into a two dimensional format. Additionally, the course introduces Computer Aided Design (CAD). During this phase, students will apply mastered skills to create CAD drawings while learning dimensioning, section and pictorial view creation, and 3D printing. This beginning level drafting class provides the student a great foundation for the transition to Drafting II.

## Drafting, Design \& CAD II Mechanical <br> Course \#: 8531 <br> Recommended: Grades 10-12

Credit: 2 Units
Prerequisites: 8530 Drafting, Design and CAD I Industry Certification: ADDA Certified Drafter exam SCTC application is not required upon successful completion of prerequisite course
Students will focus on the mechanical engineering aspect of drafting and design. Both Computer Aided Design (CAD) and manual drafting will be taught and utilized in class. Students will learn how to create various types of section views, isometric views, oblique views, perspective views, working drawings, and assembly drawings. Other topics learned and drawn will include bolt and screw threads, welding symbols, geometric dimensioning and tolerancing, gear design, and auxiliary views. In addition to drawings,
students will also learn about basic shop processes and machine shop layout. At the completion of the course students will be eligible to take the American Design Drafting Association (ADDA) Apprentice Drafter Certification exam. Students also have the option to enroll in both Drafting II classes (course numbers 8531 and 8532) for a four-credit option.

## Drafting, Design \& CAD II Architectural

 Course \#: 8532Recommended: Grades 10-12
Credit: 2 Units
Prerequisites: 8530 Drafting, Design and CAD I Industry Certification: ADDA Certified Drafter exam SCTC application is not required upon successful completion of prerequisite course
Students will focus on the residential drafting aspect of architectural design. Both Computer Aided Design (CAD) and manual drafting will be taught and utilized in class. Students will learn construction symbols and terminology; how to create various wall sections; stair layouts; wall sections; plot layouts including house style and orientation; the rules for architectural dimensioning; and how to draw a complete set of house plans including floor plan, foundation plan, electrical plan, elevations views, plot layouts and artistic renderings. At the completion of the course students will be eligible to take the American Design Drafting Association (ADDA) Apprentice Drafter Certification exam. Students also have the option to enroll in both Drafting II classes (course numbers 8531 and 8532) for a four-credit option.

## \& Manufacturing

Welding I
Course \#: 8672A
Recommended: Grades 10-11
Credit: 2 Units
Industry Certification: OSHA 10 Card
SCTC Application required to be considered for admission
Welding is required by a wide variety of industries, anywhere fusible materials and high heat are needed to manufacture, repair, or alter tools and products. Students are taught to use manual welding, cutting, and electrical arc welding processes to fabricate and join metal parts according to diagrams, blueprints, and specifications. Students will also learn safety-related practices and techniques, including earning the Occupations Safety and Health Administration (OSHA) 10 card.

## Welding II

Course \#: 8673A
Recommended: Grades 11-12
Credit: 2 Units
Prerequisites: Welding I
Industry Certification: NOCTI Welding Exam

SCTC application is not required upon successful completion of prerequisite course
Advanced welding students will fine-tune their craft and perform welds in various positions, using multiple welding processes. Welding is required by a wide variety of industries, anywhere fusible materials and high heat are needed to manufacture, repair, or alter products. Professional welders are in high demand and can earn accordingly.

## Welding III

Course \#: 8674
Recommended: Grade 12
Credit: 2 Units

## Prerequisite: Welding II

Industry Certification: NOCTI Welding Exam
SCTC application is not required upon successful completion of prerequisite course
This welding capstone course teaches students the industry's emerging technologies, along with shielded metal arc welding (SMAW) and flux-cored arc welding (FCAW). Students will also learn to operate a computer numerical control (CNC) cutting table. Students are prepared to earn relevant industry credentials toward employment in production or manufacturing facilities. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

## $x$ Family \& Consumer Sciences Cluster

Culinary Arts I
Course \#: 8275A
Recommended: Grades 10-11
Credit: 2 Units
Industry Certification: ServSafe
SCTC Application required to be considered for admission 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 \#: 8276A
Recommended: Grades 11-12
Credit: 2 Units
Prerequisite: Culinary Arts I
Industry Certification: ServSafe
SCTC application is not required upon successful completion of prerequisite course
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.

## Baking and Pastry Specialization <br> Course \#: 8279 <br> Recommended: Grades 11-12 <br> Credit: 2 Units <br> Prerequisites: Culinary Arts I <br> Industry Certification: ServSafe <br> SCTC application is not required upon successful completion of prerequisite course

The Culinary Arts Specialization course provides students with skills and knowledge to pursue careers in the food service industry, specifically, baking and pastry. In a handson environment, students apply nutritional principles, plan menus, use business and mathematical skills, select and maintain food service equipment, and adhere to safety and sanitation standards. The curriculum continues to place a strong emphasis on science and mathematics knowledge and skills, critical thinking, practical problem-solving, and entrepreneurial opportunities within the field of culinary arts.

## Early Childhood Education I

Course \#: 8285A
Recommended: Grades 11-12
Credit: 2 Units
SCTC Application required to be considered for admission 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). Workbased 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 \#: 8286A
Recommended: Grade 12
Credit: 2 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.
SCTC application is not required upon successful completion of prerequisite course
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. Workbased 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.

## Hospitality, Tourism and Recreation I

Course \#: 8202
Recommended: Grades 10-11
Credit: 2 Units
Industry Certification: Guest Service Gold Tourism Certification
SCTC Application required to be considered for admission Students begin preparation for employment in hospitality industries by focusing on principles of operations in food services, recreation, hospitality planning, and business relations. Special attention is paid to the development of culinary skills (food sanitation, food preparation, and serving) and customer service skills.

Hospitality, Tourism and Recreation II<br>Course \#: 8203<br>Recommended: Grades 11-12<br>Credit: 2 Units<br>Prerequisites: Hospitality, Tourism and Recreation I Industry Certification: Front Desk Representative Certification<br>SCTC application is not required upon successful completion of prerequisite course<br>Students continue preparation for employment in hospitality

industries by focusing on principles of operations in travel and tourism, lodging, food services, hospitality planning, and business relations. Special attention is paid to the development of skills used in the lodging industry (rooms, sales and marketing, front office, and housekeeping divisions) and customer-service skills. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

## - W/ $\mu$ - Health \& Medical Cluster

Veterinary Science I/DE Veterinary Science I Course \#: 8088/8088D Recommended: Grades 11-12
Credit: 2 Units
Dual Enrolled Credit: 6 credits through Blue Ridge Community College
Prerequisites: (Recommended) Small Animal Care Industry Certification: Certified Vet Assistant Exam SCTC Application is required for admission
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 / DE Veterinary Science II
Course \#: 8089C/8089D Recommended: Grade
12 Credit: 2 Units
Dual Enrolled Credit: 6 credits through Blue Ridge Community College
Prerequisite: Veterinary Science I/DE Veterinary Science I (DE requires a 2.0 GPA minimum)
Industry Certification: Certified Vet Assistant Exam SCTC application is not required upon successful completion of prerequisite course
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.

## Dental Assistant I

Course \#: 8328A
Recommended: Grade 11
Credit: 2 Units
SCTC Application is required for admission
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 \#: 8329A
Recommended: Grade 12
Credit: 2 Units
Prerequisite: Dental Assistant I
Industry Certification: Certified Dental Assistant and
National Entry Level Assistant Radiation Health and Safety Exam
SCTC application is not required upon successful completion of prerequisite course
Students will build on the 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
Industry Certification: Certified Medical Administrative Assistant Exam (CMAA)
SCTC Application is required for admission
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
Prerequisite: Medical Assistant I
Industry Certification: Certified Clinical Medical Assistant Exam (CCMA)
SCTC application is not required upon successful completion of prerequisite course
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 Health Care Technician
Course \#: 8355, 8356, 8368 Recommended: Grade 12
Credit: 2 Units (also transferable college credit hours (7) with a grade of 70 or better)
Prerequisite: $2.0+$ GPA, Algebra II \& Germanna application
Industry Certification: Certified Nursing Assistant and CPR Certification (Social Security Number and other documentation are required for this credential.) CTSO: HOSA
Note: Fee required, COVID vaccine may be required SCTC Application is required for admission
The dual-enrollment health care technician opportunity is a combination of three courses, including HCT 101: Health Care Technician I and HCT 102: Health Care Technician II. Students have the opportunity to earn 7 dual enrollment credits through Germanna Community College and receive a Career Studies certificate. Health Care Technician teaches basic care skills with an emphasis on physical, social, emotional, and spiritual needs of patients. Covers procedures, communication and interpersonal relations, observation, charting and reporting, care planning, safety and infection control, anatomy and physiology, nutrition and patient feeding, and ethics, death and dying. Prepares multi-skilled health care workers to care for patients of various ages with a special emphasis on geriatric nursing, home health, and long- and short-term care. Students will also have the opportunity to learn and be prepared to safely administer medication in specific settings, or to assist in client self-administration of medications, and will gain an understanding of basic pharmacology (terminology,
abbreviations, classifications, drug actions, purpose and effects of medication, drug information resources, and drug labeling requirements). This course is approved by the State Board of Nursing. Upon completion of the Health Care Technician program, students are eligible to sit for the Certified Nursing Assistant and Medication Aide industry certifications.

## Emergency Medical Technician

Course \#: 8333/8334 Recommended: Grade 12
Credit: 2 Units
Industry Certification: Emergency \& Fire Management Services Assessment
Note: Fee required
SCTC Application is required for admission
The tasks for this course represent the National Emergency Medical Services (EMS) Educational Standards. Students build on their knowledge and skills for providing basic life support by focusing on the areas of emergency medical services (EMS) operations, medical emergencies, and management of special patient populations. Supervised field experience that includes at least 10 patient contacts outside school hours is required. Successful completion of all course requirements and instructor endorsement may lead to eligibility to take the National Registry of Emergency Medical Technicians (NREMT) cognitive exam. Students must meet the requirements of the Functional Position Description for the Basic Life Support Provider (refer to EMS.TR.14B and 12VAC5-31-1501 in the Virginia Administrative Code). Students must complete a minimum of 85 percent of the didactic and lab aspects of the course, per 12VAC5-31-1501. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

Independent Study
Course \#:0115
Recommended: Grades 10-12
Credit: 1 Unit
Students in an Independent Study Course (ISC) will pursue a topic of interest that is not offered within the school curriculum. Students will develop their own course syllabus to include a minimum of four products and eight presentations during the course. The course will be counted as an elective and graded on a regular basis. Students will receive a final grade for the course that will be included in the GPA. Students do not need to be identified as gifted to
register for this course. For more information, see your Gifted Coordinator or School Counselor for an ISC brochure.

## 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. To participate in one or more of the JROTC co-curricular teams, Raiders and/or Drill Team, students are required to have a physical after May 1st and prior to participation in any team activity.
Industry Certification: ASVAB
SCTC Application is required for admission
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, complete JROTC I, have the approval of their principal and the Senior Army Instructor to enroll \& be able to participate in the physical training program. To participate in one or more of the JROTC co-curricular teams, Raiders and/or Drill Team, students are required to have a physical after May 1st and prior to participation in any team activity.
Industry Certification: ASVAB
SCTC Application is required for admission
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. To participate in one or more of the JROTC co-curricular teams, Raiders and/or Drill Team, students are required to have a physical after May 1 st and prior to participation in any team activity. Industry Certification: ASVAB
SCTC Application is required for admission 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 \& be able to participate in the physical training program. To participate in one or more of the JROTC co-curricular teams, Raiders and/or Drill Team, students are required to have a physical after May 1st and prior to participation in any team activity. Industry Certification: ASVAB SCTC Application is required for admission Students in the JROTC IV course will learn advanced leadership principles and application. Students 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: $\qquad$ Advanced Studies Standard

Pathway: $\qquad$

School Year:

Name of Course Taken
Credits/Verified


[^0]:    *Recommended summer course

