

# **Secondary** School Course Offerings

# ACADEMIC OPTIONS 2022-2023

College, Career and Citizen-Ready!

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NEWPORT NEWS

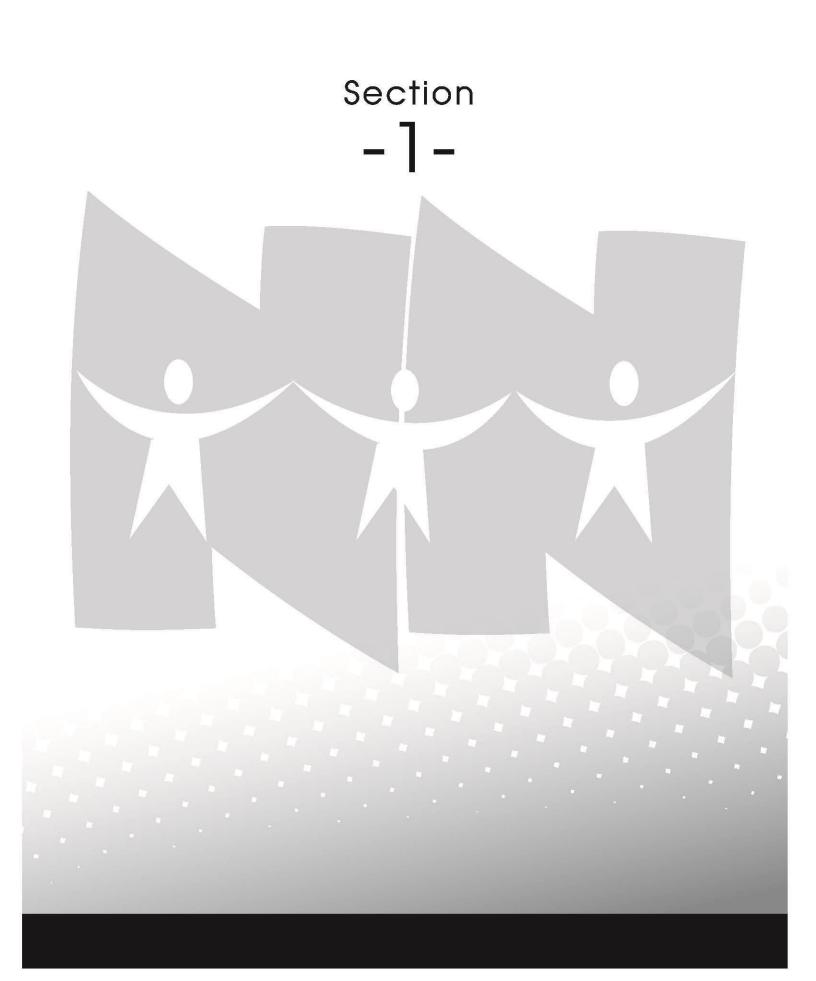
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PUBLIC SCHOOLS

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Grade 6	Year		Grade 7	Year –	Grade 8		Year –
English	1.		English	1.	English	1.	
Math	2.		Math	2.	Math	2.	
Science	3.		Science	3.	Science	3.	
Social Studies	4.		Social Studies	4.	Social Studies	4.	
	5.			5.		5.	
	6.			6.		6.	
	7.			7.		7.	
Career Interests:		Career Interests:		Career Interests:			
Educational Goals:		Educational Goals:		Educational Goals:			
Summer Plans:			Summer Plans:		Summer Plans:		
Grade 9 Year _		Grade 10	Year –	_ Grade 11 Year		Grade 12	Year –
English 9		English 10		English 11		English 12	
Math		Math		Math		Math	
Earth Science or Biology		Biology or Chemistry		Science		Science	
Wd. Geography		, Wd. History		VA & US History		VA & US Gov't	
Wd. Lang or Elective		Wd. Lang or Ele		Wd. Lang or Elective		Wd. Lang or Elective	
Health I / PE		Health II/Driver II	Ed/PE	Elective		Elective	
Elective Elective			Elective		Elective		
Career Interests: Career Interests		:	Career Interests:		Career Interests:		
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Colleges and employers look for more than a transcript of grades when considering an applicant. Although there are many ways to present yourself, the template below will help you to create a more attractive profile for the organization considering you as a student or employee.

OBJECTIVE: What do you want to do? What do you hope to achieve?

SKILLS: What can you do that makes you unique?

CLUBS/ORGANIZATIONS: To what organizations do you belong, and what leadership roles do you hold?

WORK EXPERIENCE: What jobs or internships (paid or unpaid) have you had? What responsibilities did you have at each?

COMMUNITY SERVICE: What have you done to help your community? i.e. working with the Red Cross, planning neighborhood gatherings, delivering campaign literature, etc.

INTERESTS: In what sports have you participated? What are your hobbies?

# HIGH SCHOOL PROGRAM PLANNING INFORMATION

#### Preparation for College

All colleges have different entrance requirements. Before you select high school courses, check the requirements of several colleges that interest you. If you are undecided about a college, use the following guidelines in making your high school course selections.

- 1. Take four years of math and science. Most 4-year colleges require at least Algebra II for entrance.
- 2. Take at least three years of a world language. Many colleges do not list a world language requirement, but indicate that three or four years are highly desirable. Students wishing to take Advanced Placement French, German or Spanish as a senior must complete level I in the eighth grade.
- 3. Colleges prefer that students take the most challenging courses possible, pursue a full academic program for four years and demonstrate service to their community. Your course selections should be a reflection of your career pathway.
- 4. Students should take the PSAT in the 10<sup>th</sup> and/or 11<sup>th</sup> grade. If a four-year college is a part of your career pathway, then you should take the SAT (<u>https://sat.collegeboard.org/home</u>)and/or ACT (<u>http://www.act.org</u>) in the 11<sup>th</sup> and/or 12<sup>th</sup> grade.
- 5. Always seek the advice of your school counselor.

#### Preparation for Employment

There are numerous opportunities in Newport News Public Schools for students to prepare for entry into a career. In some cases, you may take a high school program that allows you to work in the afternoon and receive high school credit for your job. These programs are called cooperative education programs. Use the following general guidelines in choosing courses to prepare for employment.

- 1. Take Career and Technical Education (CTE) courses to find out which program is most interesting to you.
- 2. Choose a CTE pathway that interests you and ask your teacher or counselor the order in which you should take the courses in order to gain the necessary skills to work in that occupational area. In most cases, you will need to be enrolled in courses for at least two years to complete the program.
- 3. Plan your program to include the courses necessary to gain occupational skills and certifications. Also, include other courses that may be related to your chosen career pathway.

Career Pathways is a PK-12 approach that connects students to career exploration and development. Students investigate careers and participate in work-based learning experiences to advance their career goals. Career Pathways consist of 16 pathways focusing on a variety of careers.

>>> EXCITE. EXPLORE. ENGAGE.

# NNPS Pathways

• Agriculture, Food & Natural Resources

NNPS

- Architecture and Construction
- Arts, Audio/Visual Technology and Communications
- Business Management and Administration
- Education and Training
- Finance
- Government and Public Administration
- Health Science



Elementary students investigate a variety of careers and post-secondary opportunities to **EXCITE** learning. Middle school students **EXPLORE** career options to inform their academic choices and postsecondary education.

Explore 7

#### • Hospitality and Tourism

- Human Services
- Information Technology
- Law, Public Safety, Corrections and Security
- Manufacturing
- Marketing
- Science, Technology, Engineering & Mathematics
- Transportation, Distribution & Logistics



High school students **ENGAGE** in practical experiences and develop skills for success in careers and post-secondary education.

# Pathway Experiences

Career Speakers College & Career Fairs Workplace Tours Career Clubs Job Shadowing Career Investigation Projects Mentors

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Career Exploration Course Pathways Portfolios Internships Virtual Job Shadowing Culminating Projects Service Learning Student Apprenticeships

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www.nnschools.org/careerpathways College, Career and Citizen-Ready!

## **DUAL ENROLLMENT**

In partnership with Thomas Nelson Community College (TNCC), high school juniors and seniors may be eligible to receive college credit for courses taken in Newport News Public Schools. In order to dual enroll with Thomas Nelson, students must:

- 1. Apply online to TNCC at <u>www.tncc.edu/apply</u>,
- Test for eligibility or provide SAT, ACT, PSAT, or Math SOL scores. Qualifying scores for admission to the program can be found at <u>http://www.tncc.edu/dual</u>. Thomas Nelson provides the Virginia Placement test at no charge to students. It is very important to take the placement test seriously and practice beforehand. Practice is available on TNCC's website at <u>http://www.tncc.edu/admissions/testing/prepare</u> and
  - Students wishing to take MTH 163, 164, 173, 174, 180, 240, 277, 285; CHM 111, 112; PHY 241, 242 must take the math placement test regardless of standardized test scores. These courses are generally offered at the Governor's School for Science and Technology.
- 3. Submit a Dual Enrollment College Registration Form by the registration deadline to your teacher. The courses listed below are currently offered for dual enrollment at NNPS, however not all courses are taught in all schools.

Students who complete dual enrollment courses receive both credit toward high school graduation and college credit on an official Thomas Nelson Community College transcript. These credits may be used to continue college at TNCC, or transfer to other institutions. For more information regarding dual enrollment opportunities, contact your school counselor for course and teacher availability.

Note: Courses must have a dual enrollment approved teacher to receive TNCC credit, and are subject to change.

TNCC Courses	College Credits Earned	NNPS High School Course Name	NNPS Program Area & Course Number		
	ACADEMIC COURSES				
ART 283	3	Computer Art II	AR1200		
ENG111	3	AP Language & Composition	English – EN3300		
ENG 112	3	Honors English 12	English 12 – EN4200 <i>(Early College Only)</i>		
HIS 121, 122	6	AP US History	Social Studies – SS3300		

# **CAREER AND TECHNICAL EDUCATION**

In Newport News, Career & Technical Education (CTE) serves students in grades 6-12 and provides learning experiences in seven program areas:

- Business & Information Technology
- Family & Consumer Sciences
- Health & Medical Sciences
- Marketing Education
- Military Science
- Technology Education
- Trade & Industrial Education

These seven program areas offer over 70 different courses in some of the top career areas that exist globally. CTE students learn academic concepts in an applied instructional setting, which prepares them for success and enhanced earning potential in their chosen career fields. This instruction allows students to receive postsecondary education credits while completing their high school diploma requirements. Students participating in these dual enrollment and industry certification programs gain fundamental knowledge that facilitates a smooth transition into a college or career setting.

#### **Industry Certification**

Beginning in the 2018-2019 school year, first time ninth grade students are required to complete an Advanced Placement, International Baccalaureate, or Honors course OR earn a board- approved Career and Technical Education (CTE) credential to meet graduation requirements for both the Standard and Advanced diplomas.

Students entering high school as a first-time ninth grader in 2015-2016 through 2017-2018 are still required to earn a Board-approved CTE credential to meet graduation requirements for the Standard diploma only.

The CTE credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginal Workplace Readiness Skills (WRS) for the Commonwealth Assessment.

All CTE courses prepare students for the possible Career and Technical Education Consortium of States Workplace Readiness Skills for the Commonwealth certification. This is a customized certification based on Virginia's essential 22 Workplace Readiness Skills embedded in all CTE high school course frameworks. For the class of 2017 and beyond, an Industry Certification is required to graduate with a Standard Diploma.

#### Business & Information Technology

Courses in the Business & Information Technology program area prepare students for possible certifications in:

- Microsoft Office Specialist (MOS)
- Working in Support of Education (W!SE) Financial Literacy
- Microsoft Technology Associate (MTA)

#### Family & Consumer Sciences

Courses in the Family & Consumer Sciences program area prepare students for possible certifications in:

- American Association of Family & Consumer Sciences (AAFCS):
  - $\circ \quad \text{Culinary Arts} \\$
  - o Food Science Fundamentals

Health & Medical Sciences

Courses in the Health & Medical Sciences program area prepare students for possible certifications in:

- National Occupational Competency Testing (NOCTI)
  - Health Assisting Assessment
  - Nurse Assisting Examination
  - National Nurse Aide Assessment Program (NNAAP); Virginia Board of Nursing Education

#### Marketing

Courses in the Marketing program area prepare students for possible certifications in:

- National Retail Federation (NRF):
  - o Customer Service & Sales
  - o Business of Retail: Operations & Profit

#### Military Science

Courses in the Military Science program area prepare students for possible certifications in:

• ASVAB (Armed Services Vocational Aptitude Battery) Examination

#### Technology Education

Courses in the Technology Education program area prepare students for possible certifications in:

- Autodesk Certified User:
  - o AutoCAD
  - $\circ$  Inventor
  - o **Revit**
- Microsoft Technology Associate (MTA) Software Development Fundamentals
- Project Lead the Way End-of-Course Tests

#### Trade & Industrial Education

Courses in the Trade & Industrial Education program area prepare students for possible certifications in:

- National Occupational Competency Testing Institute (NOCTI)
  - Television Production
  - Emergency and Fire Management Services
- Skills USA
  - o Criminal Justice and CSI Examination

# **GENERAL INFORMATION ON COURSE SELECTION**

- Every high school student makes a 4-year educational plan in the 9th grade that will lead to a career pathway. A copy of this plan is kept in the school counseling office and a copy is sent home to the parents. You should review and update your 4-year educational plan before making any course selections for the following year. Use the Education Plan form, found on page 2, as a guide.
- 2. Review carefully the course descriptions included in this guide. Share the information with your parents. If they have any questions regarding the courses or your course selections, they should contact your school counselor.
- 3. All students must carry a full schedule of classes.
- 4. Two Courses in the Same Subject Area (Policy IIE)

A student will not be permitted to take two (2) required English courses at the same time except as permitted in this paragraph. If a student fails one semester of a required English course, the student will

repeat that semester while enrolled in the next required course. A student who fails both semesters of a required English course will be required to repeat both semesters of the course before progressing to the next level. Students may take two English classes during the fourth year of high school if successful completion of the resulting schedule satisfies the requirements for graduation.

Initial enrollment for a required English class will be permitted only during the regular school term. A student will not be permitted to register for a required English course for the first time in summer school.

Students may be permitted to take U.S. History and Government at the same time; however, students should be encouraged and advised to take Virginia and U.S. History prior to taking Virginia and U.S. Government.

- 5. The school division offers several Biology II courses, many of which are semester courses in which a half credit is awarded upon successful completion. A student may use only one Biology II credit towards science requirements for graduation. If a student earns more than 1 credit in Biology II courses, he/she will receive elective credit for anything beyond 1 credit.
- 6. The deadline for enrolling in a new course is through the third week of the first nine weeks of any semester. Withdrawal during the second nine-week period is not permitted. If approved, the requested withdrawal could occur at the end of the first semester once final grades have been recorded.
- 7. NCAA : A student athlete who wishes to play sports at the college level must plan carefully, starting in the ninth grade, to ensure that he/she has met the high school requirements for eligibility to play sports in college. Student athletes preparing to participate in Division I or Division II college athletics should inform their school counselor and must register with the NCAA Clearinghouse. Applications are available on the NCAA Eligibility Center website at: <u>www.ncaa.org/eligibilitycenter</u>.

# **ADVANCED PLACEMENT (AP)**

The Advanced Placement (AP) Examinations Program is a service provided by College Board. High school students may take college-level examinations each spring and, depending upon their scores, may be awarded college credit and/or advanced placement at participating colleges and universities. All NNPS students who take AP courses must take the corresponding AP test in order to earn the full weighted credit for the course. Newport News Public Schools will pay for AP tests to be given to all students enrolled in appropriate courses.

Advanced Placement Examinations are administered in May of each year. In June, the examinations are graded on a five-point scale: 5 = extremely well qualified; 4 = well qualified; 3 = qualified; 2 = possibly qualified; and 1 = no recommendation. In July, the scores are sent to the students, their designated colleges, and their home schools. Colleges that participate in the Advanced Placement Examinations Program will then consider full or partial credit for scores of three or better.

Students enrolled in an AP course must work at an AP level throughout the course and put forth their best effort on the tests to be successful. The benefits of taking Advanced Placement courses include:

- getting a head start on college-level work
- improving writing skills and sharpening problem-solving techniques
- developing the study habits necessary for tackling rigorous course work
- studying subjects in greater depth and detail
- the opportunity to earn credit or advanced standing at participating colleges and universities

Visit the College Board website for more information: <u>https://apstudent.collegeboard.org/home</u>.

# HIGH SCHOOL OPTIONS

Students attending high school in Newport News have many options for study as they prepare for college and careers. Programs at the high school level develop both a strong foundation of general knowledge and skills and specialized competency in areas in which students have particular interests.

All Newport News high schools offer a comprehensive program to prepare students for work or further study at a college, university or technical program. Courses are offered in English, social studies, math, science, world languages, fine arts, physical education and many occupational specialties. All high schools offer Advanced Placement (AP) instruction and accelerated classes as well as a wide choice of athletics and other activities. Career and Technical Education (CTE) courses at all high schools offer a program that links academic and technical skills attainment. All NNPS high schools have met or exceeded the standards for full accreditation by the state of Virginia.

Newport News Public Schools offers the following types of high schools:

- 1. comprehensive schools provide a complete and well-balanced educational program and serve children in specific neighborhoods or attendance zones
- 2. specialty academies serve special needs of particular groups of students and have specific entrance requirements
- 3. magnet schools:
  - offer a specialized focus in the curriculum or distinctive type of environment or instruction
  - serve children from across the city (every child is eligible to apply)
  - are designed to maintain the racial balance of the student body

# THE GOVERNOR'S SCHOOL FOR SCIENCE AND TECHNOLOGY

The Governor's School for Science and Technology (GSST) at New Horizons Regional Education Center is operated by Gloucester, Hampton, Newport News, Poquoson, Williamsburg-James City County and York County Schools. The Governor's School provides a cohesive, innovative science and mathematics program that does the following:

- Embraces quality programming standards for gifted students recommended by the Virginia Department of Education and the National Association for Gifted Children
- Provides a cohesive sequence of courses in science, research, and mathematics
- Provides opportunities for social peer interaction, as well as career and college
- Provides leadership education and opportunities throughout the program

The Governor's School is a two-year, half-day program for 11<sup>th</sup> and 12<sup>th</sup> graders. Additional courses will be taken at the home high school to complete an Advanced Diploma degree. Each strand provides a unique emphasis on both the science subject matter and associated career fields. Students will be able to participate in one of the following three strands:

- The Engineering Strand involves an intense, rigorous study of fundamental principles of engineering and calculus-based physics.
- The Biological Science Strand provides insights into organic and inorganic chemistry in conjunction with cell and molecular biology by employing advanced technologies utilized in medicine, forensic science and research labs.
- The Computational Science and Engineering Strand combines the study of structured and objectoriented programming with applications in practical, non-calculus based physics scenarios.

With small class sizes and advanced-degreed faculty, the learning environment at the Governor's School is truly unique. Each course has been specifically structured to incorporate best practices for gifted students. Each strand requires completion of one year of high school biology, one year of high school chemistry and Algebra II/Trig prior to admission. For the engineering strand, students must have successfully completed Math Analysis (Pre-Calculus) prior to admission. All strands encompass a math course during both the junior and senior year. Placement in the appropriate math course will be determined upon admission at the end of 10th grade. In addition, each strand will foster research through a Research Methods and Ethics course the junior year and an Honors Research and Mentorship placement the senior year.

In total, students will spend approximately three hours daily at the Governor's School, taking three courses each year during the two-year program.

#### Scientific Research Experience

During their two years at the Governor's School, students will experience hands-on science through classroom experimentation and individualized project research.

- The junior year research experience involves:
- various aspects of research methodology,
  - ethics and statistics,
  - critical thinking skills,
  - scientific writing and communication skills and
  - a research project for submission to the Tidewater Science Fair.
- During the senior year, students participate in an Honors Research and Mentorship experience with a professional. Final projects are presented to the local scientific and professional community as a culminating experience in May. The opportunity to work with a professional in research is an invaluable experience toward career pursuits.

#### Applied Leadership

A variety of school activities, clubs and competitions provide students with opportunities to cultivate their leadership skills. Social interaction and community building are integral components of the program. The Student Advisory Board provides another opportunity for students to lead their peers in the organization of the program and school travel activities.

#### Admissions Procedures

Admission to the program is highly competitive. Test scores, teacher recommendations and course grades will be used to determine which students will be invited to participate in the Governor's School Pre-Admissions Series offered in 9<sup>th</sup> and 10<sup>th</sup> grade. Designated students will take prerequisite courses offered at their high schools and will participate in informational sessions that will acquaint them with and prepare them for the two-year program. Final acceptance into the Governor's School in the spring of their 10<sup>th</sup> grade year will be dependent on math and science GPAs, teacher recommendations and PSAT scores.

See the available courses for <u>The Governor's School for Science and Technology program</u> in this guide.

For more information, visit the GSST web site at <u>www.nhgs.tec.va.us/governorsschool/</u> or call 757-766-1100, ext. 3313.

#### The Pre-Admissions Series Program (PAS) for Students Entering 9th and 10th Grade

The Pre-Admissions Series Program is a program for high-achieving students who are seriously considering attending the Governor's School for Science and Technology. The PAS series is comprised of informational sessions, which taken together, will provide guidance to prospective GSST parents and students on how students can prepare themselves in 9th and 10th grade to gain acceptance and achieve success at both GSST and a competitive college. This PAS program aims to educate those students and their parents about:

- The program model of the GSST.
- The features of each of the three academic strands.
- The course prerequisites necessary for acceptance into each strand.
- How students can develop their talents in the classroom and beyond.
- How students can maximize their success in competitive college admissions.

#### How Do Students Apply?

Students can apply to the PAS in winter of their 8<sup>th</sup> or 9<sup>th</sup> grade year. Interested 8<sup>th</sup> or 9<sup>th</sup> grade students considering the PAS should complete an application and return it to their school counselor. Admission is highly competitive. Test scores, teacher recommendations and course grades are used to determine which students will be invited to participate in the PAS during their 9<sup>th</sup> or 10<sup>th</sup> grade years. Designated PAS students will take prerequisite courses offered in their high schools and will participate in a variety of activities that will acquaint them with GSST. If students and their parents decide that the GSST is a good match for their interests, they will submit a formal application to the GSST in their tenth grade year.

#### For more Pre-Admissions Series information, visit

http://www.nhgs.tec.va.us/governorsschool/preadmissions.php or call 757-766-1100, ext. 3313.

## THE INTERNATIONAL BACCALAUREATE (IB) PROGRAM

The International Baccalaureate Diploma Program at Warwick High School in grades 11 and 12 is an internationally recognized course of study. The rigorous coursework is designed to provide students with a well-rounded education and to facilitate geographic and cultural mobility.

While the International Baccalaureate program provides a two-year curriculum and students could apply during their sophomore year, students generally apply for participation in Pre-Diploma classes in grades nine and ten. The course of studies for the first two years prepares students for this rigorous academic program.

Beginning in the junior year, IB students take weighted, college-level courses leading to IB exams. Other requirements of the IB Diploma include a 4,000-word essay and participation in extra-curricular or community service activities. Students interested in the IB Diploma program should complete level I of a modern world language and take algebra or geometry in eighth grade.

Transportation to Warwick High School is provided by the school division for all IB students.

Students sit for international assessments and, where appropriate, Advanced Placement (AP) exams to assist them in earning advanced standing or college credit. Many colleges recognize the IB program and offer academic credit for those who score well on the IB examinations.

The IB Program offers special features in addition to the traditional strengths of a liberal arts curriculum.

#### Theory of Knowledge (TOK)

TOK is a required interdisciplinary course intended to stimulate critical reflection upon the knowledge and experience gained inside and outside the classroom. TOK challenges students to question the bases of knowledge, to be aware of subjective and ideological biases and to develop a personal mode of thought based on analysis of evidence expressed in rational argument. The key element in the IBO's educational philosophy, Theory of Knowledge seeks to develop a coherent approach to learning which transcends and unifies the academic subjects and encourages appreciation of other cultural perspectives.

#### Creativity, Activity, Service (CAS)

CAS is a fundamental part of the diploma curriculum. The CAS requirement takes seriously the importance of life outside the world of scholarship, providing a refreshing counterbalance to the academic self-absorption some may feel within a demanding school program. Participation in theatre productions, sports, and community service activities encourages young people to share their energies and special talents while developing awareness, concern, and the ability to work cooperatively with others. The goal of educating the whole person and fostering a more compassionate citizenry comes alive in an immediate way when students reach beyond themselves and their books.

#### Extended Essay

Diploma candidates are required to undertake original research and write an extended essay of some 4,000 words. This project offers the opportunity to investigate a topic of special interest and acquaints students with the kind of independent research and writing skills expected at a university. There are currently 64 subjects, including 36 in the languages area, in which the essay may be written.

See the available courses in the International Baccalaureate (IB) Program in this guide.

For more information about the IB program, visit the program's website at: http://warwick.nn.k12.va.us/ib/.

# EARLY COLLEGE PROGRAM IN NEWPORT NEWS

The Early College Program is a partnership between Newport News Public Schools and Thomas Nelson Community College. The program is offered to qualified high school seniors in Newport News Public Schools who are prepared and interested in accelerating their coursework toward a college degree after they graduate from high school. The courses offered within this program are all part of the Commonwealth College Course Collaborative, whereby Virginia public colleges and universities have agreed to accept transfer credit for these courses as part of their college's general educational requirements.

Who is eligible?

- Students who are able to complete all high school Advanced Diploma requirements by the end of the first semester of their senior year.
- Students who successfully place into TNCC's English 111 (College Composition I) and English 112 (College Composition II) through the TNCC placement test, and successfully complete both courses with a grade of "C" or better during the first semester of their senior year.
- 3.0 minimum grade point average

What are the benefits?

- Provides students the opportunity to earn up to 19 transferable college credits at a reduced tuition rate
- Reduces the amount of time needed to earn a college or university degree
- Textbooks and transportation are provided by NNPS
- A Newport News Public Schools academic advisor is housed on the campus of TNCC
- Academic support is available to each student by NNPS and TNCC
- Students may participate in their high school's extra-curricular activities while attending TNCC

Website: http://www.nnschools.org/earlycollege/

## EARLY CAREER IN WELDING

The Early Career Program is a partnership between Newport News Public Schools, the Newport News Education Foundation, Virginia Peninsula Chamber of Commerce and Thomas Nelson Community College (TNCC). The program is designed for high school seniors who plan to pursue a vocational certificate after they graduate from high school. The program is designed for high school seniors to pursue certification that will open employment opportunities in the skilled trades industry immediately following graduation.

Who is eligible?

- Students who have completed all SOL requirements needed for the standard diploma prior to the start of senior year.
- Students who are able to complete all high school standard diploma requirements by the end of the first semester of their senior year.
- Students are able to matriculate to the welding program after completing the full year of English 12 and US Government during their senior year. Students will complete these courses through an online curriculum.

What are the benefits?

- Qualify for a high paying welding career in five months. (Average starting wages \$15-\$20/hr)
- Receive concentrated hands-on welding training in an accelerated learning environment from the region's best welding instructors.
- Job placement support is provided throughout the program.
- Small, interactive classes allowing welding instructors to provide individual attention to trainees.
- Families receive drastically discounted rate for the full welding certification program.

# MAGNET SCHOOLS

In addition to the comprehensive curriculum, students can apply to magnet programs, which allow them to focus more intensely on their career and academic interests. These programs include the fine arts and communications magnet at Woodside High School, the Governor's STEM Academy at Heritage High, the Governor's Health Sciences Academy at Warwick High, the University magnet at Heritage and the Aviation magnet at Denbigh. Students must apply to magnet programs. Transportation is provided to all programs.

For a complete guide to the magnet process and more information, please see your school counselor or visit <u>http://sbo.nn.k12.va.us/magnet/</u>.

#### Aviation Academy – Denbigh High School

Students at the Denbigh Aviation Academy may take courses in the following program areas:

- Aerospace Engineering
- Aviation Maintenance
- Flight Operations
- Aviation Security and Safety

#### **Distinctive Features**

- Small community of learning with a collegiate atmosphere
- Participate in community service, job shadowing and internships, and other leadership activities
- Profit from partnerships with business, higher education, professional and other groups
- State of the art facility that includes 3D printers, 3D scanners, a wind tunnel, flight simulators and virtual reality labs
- Developing skillsets that all employees need to be successful in the workforce
- Multiple aircraft for students to work on as well as taxi on runway
- A true hands-on facility that mirrors the Aviation/Aerospace workspace

#### Website: http://avi.nn.k12.va.us/

Brochure: http://sbo.nn.k12.va.us/magnet/documents/magnet\_aviation.pdf

#### Governor's STEM Academy - Heritage High School

Students at the Governor's STEM Academy at Heritage High School may take courses in the following program areas:

- Engineering and Robotics
- Computer Networking and Cybersecurity
- Computer Science and Game Design

#### Distinctive Features

Students will:

- Gain STEM literacy skills through an interdisciplinary curriculum that connects the four areas of science, technology, engineering and math
- Benefit from specialized, project-based courses which develop critical-thinking, problem-solving and decision-making skills, preparing them for high-wage and high-demand careers
- Acquire greater communication skills and develop workplace readiness skills
- Receive opportunities to earn industry certifications preparing them to be more competitive in the workforce and when applying to advanced training schools or postsecondary institutions
- Obtain meaningful, real-life, hands-on experiences in their career pathway
- Profit from opportunities for internships, mentorships, job shadowing, and cooperative education, which provide students with advantages when entering postsecondary education and/or the workplace

# Website: <u>http://heritage.nn.k12.va.us</u>

#### Brochure: http://sbo.nn.k12.va.us/magnet/documents/magnet\_heritage.pdf

#### University Magnet - Heritage High School

Students may take courses in the following program areas:

- Arts and Humanities
- Behavioral and Social Sciences
- Business/Marketing
- Mathematics and Science
- Natural Sciences
- Visual and Performing Arts

#### Distinctive Features

Students will:

- Acquire an Advanced Studies Diploma and explore various career pathways
- Complete at least six (6) Honors and/or Advanced Placement classes upon graduation to prepare them to be globally competitive
- Participate in community service, job shadowing and internships, and other leadership activities
- Profit from partnerships with business, higher education, industry professional and mentors

Website: <u>http://heritage.nn.k12.va.us/about.html</u>

Brochure: http://sbo.nn.k12.va.us/magnet/documents/magnet\_heritage\_univ.pdf

#### Governor's Health Sciences Academy - Warwick High School

Students at the Governor's Health Sciences Academy at Warwick High School may take courses in the following program areas:

- Therapeutic Services
- Diagnostic Services
- Health Informatics and Support Services
- Biotechnology Research and Development

Distinctive Features

- Integrated curriculum helps students establish connections between mathematics, science and technology
- Opportunities to learn about careers through mentors, career and technical education student organizations, career clubs, work site visits, guest speakers, internships and job shadowing experiences
- Participate in health-related school events
- Receive opportunities to earn health science related industry certifications preparing them to be competitive in the work-force and when applying to advanced training schools or post-secondary institutions.
- Obtain real-life and hands-on experiences through the use of the diagnostic and clinical health science labs

Website: <u>http://warwick.nn.k12.va.us/</u> Brochure: <u>http://www.nnschools.org/magnet/documents/magnet\_warwick.pdf</u>

### Arts & Communication Magnet – Woodside High School

Students may specialize in:

- Music theory, musicianship, performing, composing, arranging
- Dance with emphasis on ballet and modern dance, choreography, and dance history and theory
- Drama acting, directing, producing, stagecraft, scenery, lighting, costumes
- Creative writing create original poetry, prose, essays, scriptwriting, historical fiction and critical reviews
- Communications journalism, television production, engineering and technology and public relations
- Visual arts :
  - Studio painting, printmaking, drawing, ceramics, sculpture, mixed media
  - Technology computer art, video as art, web design
  - Photography darkroom and digital.

**Distinctive Features** 

- Arts instruction at a depth, level, and rigor not found in other Newport News high schools
- Opportunities to pursue an intensive study of the arts to enhance the student's overall academic program, including many extra arts opportunities such as: shows, field trips, visiting artists, master classes and more
- Chance to work and study with arts professionals
- Interdisciplinary study linking the arts with other disciplines
- Creative writers experience one-on-one conferences, peer evaluations, group readings, visiting authors and the Writing Center

Website: <u>http://woodside.nn.k12.va.us/magnet.html</u> Brochure: <u>http://www.nnschools.org/magnet/documents/magnet\_woodside.pdf</u>

### **SUMMER INSTITUTE FOR THE ARTS**

The Newport News Summer Institute for the Arts (SIA) offers an intensive six-week program in dance, drama, music and visual arts each summer. Students are selected by a panel of area artists and educators based on written applications, auditions, review or portfolios and interviews.

The Institute is normally held at Woodside High School with specialty workshops held throughout the city. Tuition is charged and will be announced in the spring. Classes normally meet 7:30 a.m. – 2:00 p.m., Monday through Thursday, June through August (specific dates to be announced). The staff consists of practicing artists, university staff and local educators.

Students, from rising eighth graders to high school seniors, residing in Newport News are eligible for the program. Students will receive one weighted credit (+.5 value) for completing an Institute course.

Students may pick up application forms and audition information from any fine or performing arts teacher or from the school counseling office in the spring. Completed applications must be returned to the school counseling office sometime in March, and auditions are usually in April. For more information, please call 757-591-4561 or 757-591-4911.

#### Institute Programs

Dance – Students will study ballet, jazz and modern dance. Course work will include dance history, a survey of dance forms and a study of pivotal performers. Workshops will be offered in folk and ethnic dance, character dance, improvisation and personal grooming for dance activities.

Visual Arts – Students will be given concentrated instruction and experiences in drawing as the basis for all other art skills. Art history and appreciation, including instruction and field trips to area galleries and museums will be included. Workshop opportunities in painting, sculpture, computer graphics and other media will be offered.

Music – The program will include instruction and performance in vocal or instrumental music. Additional studies will include music theory, the evolution of music, composition and arranging. Workshops in conducting, opera, musical theater, electronic music, recording techniques, career opportunities and related areas will be offered.

Drama – Students will receive advanced level instruction in voice, diction, stage movement, stagecraft and design, character development and acting. Workshops in stage combat, mime, improvisation, Shakespeare, musical theater, summer theater, puppetry, auditioning, lighting and set design, directing and careers in drama will be offered.

Program Objectives

- To develop the unique talents of students
- To provide a forum for the display of student's works
- To enhance student's abilities to analyze, interpret and evaluate the arts
- To increase student's awareness of career opportunities in the arts

## POINT OPTION

The Point Option High School program began in 1973 and offers a unique opportunity for students in grades 9-12 to experience teaching and learning in a non-traditional way. It also offers students of ability and determination a "second chance" to recapture credits and/or to accelerate their graduation to enter the workforce or postsecondary education. As a small teaching and learning community of 90-100 students, Point Option emphasizes personal responsibility and self-reliance as keys to student success. Students choosing to attend will be held to the highest ethical and behavioral standards.

The program is dedicated to the education of the whole person while offering youth who struggle to fit into the traditional high school environment a viable opportunity for success. Point Option is a specialty center, offering NNPS students a high school program designed to engage, empower through cross-curriculum projects, community connections and experiential learning.

Point Option is a "school of choice" requiring an application process. It differs from the comprehensive high school by offering smaller class sizes, flexibility in scheduling students, distance learning opportunities, weekly science field trips, an on-site fitness center, an outdoor education program, and daily scheduled teacher-led tutoring sessions in all subject areas both during and after school. Students in good standing may remain at Point Option to complete all graduation requirements while receiving their diploma from their zoned school upon completion of those requirements.

#### **Admission Process**

Students must complete and submit an application for admission and attend an interview with the Principal and School Counselor.

The online application can be found at <u>http://pointoption.nn.k12.va.us/</u> in the "Families" section.

# VIRTUAL LEARNING ACADEMY

The Virtual Learning Academy at Point Option makes remote learning personal by creating a true community of educators and learners focused on academic and social success. The program moves beyond remote pandemic learning; students develop collaborative relationships with faculty and their peers.

Students enrolled in the VLA program are eligible to participate in extracurricular activities and athletics at their assigned school. The VLA has strong community partnerships that permit our students to participate in meaningful learning and socially engaging field trips and activities.

The NNPS Virtual Learning Academy (VLA) is an online learning option for students in middle and high school. These rigorous classes meet or exceed Virginia's Standards of Learning (SOLs) and align with NNPS graduation requirements. Web-based classes include core subject matter content such as English, math, science and history as well as electives, special education services, and Advanced Placement (AP) courses. Specific course offerings will be determined based on student enrollment and teacher availability.

Variety of Course Offerings: Middle and high school courses in the VLA include a blend of synchronous (live) and asynchronous (independent) instruction led by NNPS teachers.

Learning Community: The VLA is committed to meeting the needs of a diverse student population and advancing academic outcomes by providing equitable access to the learning environment for all students. Flexibility: As one of Newport News Public Schools specialty programs for middle and high school students, the Virtual Learning Academy provides students with choice and voice in how, when, and where they learn.

Students enrolled in the NNPS Virtual Learning Academy must take part in an in-person orientation at the start of the school year and may be asked to meet with teachers in-person for select screenings, assessments, or conferences.

Students are selected for the NNPS Virtual Learning Academy through an application process. The steps to apply are as follows:

- Review Virtual Learner Characteristics Students and families should review all information on this page to decide if the Virtual Learning Academy will meet their learning needs and goals.
- Take Self-Assessment (*optional*) Prospective VLA students should complete the <u>self-assessment</u> with a parent or guardian to determine if virtual learning is a good fit for their learning needs. This self-assessment will take approximately 5-10 minutes to complete. Answer each question to the best of your ability.
- Complete the Online Application After completing the self-assessment, complete the <u>Virtual Learning Academy (VLA) Application</u>. Once submitted, you will receive a decision notification via email within a few weeks.

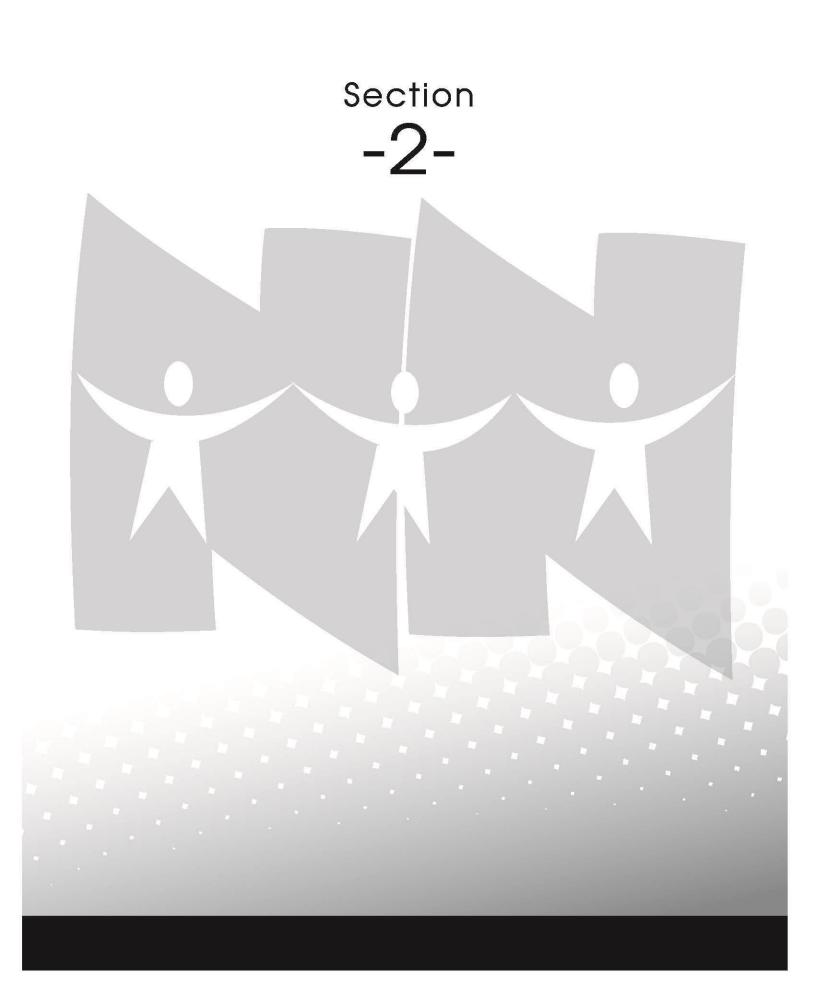
# GED OPTIONS FOR HIGH SCHOOL STUDENTS

While Newport News Public Schools would like to see all students graduate with a standard diploma, we realize that some students face challenges that make it difficult to meet that goal. As students become older and encounter circumstances that put them behind in their studies, they may begin to see graduation as an unreachable goal. Some students think about dropping out; however, NNPS would like these students to consider other options for gaining a high school credential.

If a standard diploma is no longer a realistic goal for you, please consider the General Educational Development (GED) program. The GED is recognized by over 90% of employers and accepted by a majority of colleges and universities. It is considered the equivalent of a high school diploma in many states. Those students who are at least 16-18 years of age and significantly behind in their progress toward graduation should consider an Individual Student Alternative Education Plan (ISAEP). GED instruction is available to Newport News Public Schools students through an ISAEP. Parental/guardian permission is required if under the age of 18.

To enter the high school GED program, students must complete an application and take a battery of 4 computer-based tests consisting of: science, social studies, math and reasoning through language arts. Sixteen-year-old students must score a minimum of 145 in 3 subjects and a minimum of 140 in the fourth subject, as well as a 7.5 on the TABE reading test before entering the ISAEP program.

For answers to your questions about the program, contact your guidance department or the Program Administrator of Outreach Services, Jane Moreland, at 757-928-6765, ext. 38840.



# **GRADUATION REQUIREMENTS (POLICY IKF)**

To graduate from high school, a student will meet the minimum requirements set forth by the Virginia Department of Education.

# **REQUIREMENTS FOR A STANDARD DIPLOMA**

To graduate with a Standard Diploma, students must earn 22 standard units of credit described in the table below, and of the standard units of credit earned, students will earn the following number of verified units of credit:

- 1. Students entering 9th grade for the first time before 2018-2019: English-two; math-one; science-one; history/social science-one; and one additional verified unit of credit of the student's own choosing.
- 2. Students entering the 9th grade for the first time in 2018-2019 or later: English-two; math-one; science-one; history/social science-one.

Students who complete the requirements for a standard diploma with a cumulative grade point average of 3.60 or better at the end of their senior year will receive a Board of Education Seal on the diploma.

1. Credits Required for Graduation with a Standard Diploma

Beginning with students entering ninth grade for the first time in 2013-2014, a student must also:

- 1. Earn a board-approved career and technical education credential. The credential could include, but not be limited to, the successful completion of an industry certification, state license exam, a national occupational competency assessment, or the Virginia workplace readiness skills assessment.
- 2. Successfully complete one virtual course, which may be non-credit bearing.
- Beginning with students entering ninth grade for the first time in 2018-2019, a student must also:
- 1. Complete an Advanced Placement, honors, or International Baccalaureate course <u>or</u> earn a career and technical education credential that has been approved by the Board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to earn credit. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness skills assessment.
- 2. Successfully complete one virtual course, which may be non-credit bearing.

Discipline Area	Units of Credit Beginning with 9th Graders entering 2011-2012 and beyond	Number of Credits Required to be Verified with 9 <sup>th</sup> Graders 2011-2012 to 2017-2018	Number of Credits Required to be Verified with 9 <sup>th</sup> Graders 2018- 2019 and beyond
English	4	2	2
Mathematics <sup>1</sup>	3	1	1
Laboratory Science <sup>2, 6</sup>	3	1	1
History and Social Sciences <sup>3, 6</sup>	3	1	1
Health and Physical Education	2		
Foreign Language, Fine Arts or Career and Technical Education <sup>7</sup>	2		
Economics and Personal Finance	1		
Electives <sup>4</sup>	4		
Student Selected Test⁵		1	
Total	22	6	5

<sup>1</sup>Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I, Geometry, Algebra, Functions, and Data Analysis, Algebra II, or other mathematics courses above the level of Algebra II. The board shall approve courses to satisfy this requirement.

<sup>2</sup>Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines: earth sciences, biology, chemistry, or physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma. The board shall approve courses to satisfy this requirement.

<sup>3</sup>Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and one course in either world history or geography or both. The board shall approve courses to satisfy this requirement.

<sup>4</sup>For the 2011-2012 academic year and beyond: Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

<sup>5</sup>A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics or other areas as prescribed by the board in <u>8VAC20-131-110</u>.

<sup>6</sup>For the 2011-2012 academic year and beyond: Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association, or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (i) the student-selected verified credit and (ii) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board of Education as an additional test to verify student achievement.

<sup>7</sup> For the 2011-2012 academic year and beyond: Pursuant to <u>§ 22.1-253.13:4 of the Code of Virginia, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education.</u>

#### Additional Requirements for Graduation

- AP, Honors, IB, Dual Enrollment, Work-Based Learning, or CTE Credential Students shall (i) complete an Advanced Placement, honors, International Baccalaureate, or dual enrollment course; or (ii) complete a high-quality work-based learning experience, as established by Board guidance on work-based learning; or (iii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the advanced studies diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.
- Virtual Course Students shall successfully complete one virtual course, which may be a non-creditbearing course or a required or elective credit-bearing course that is offered online. Guidance on this requirement is provided in the <u>Guidance Document Governing Certain Provisions of the SOA (8VAC20-131)</u> (Word).

- First Aid, CPR, and AED Training Students shall be trained in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED), including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in <u>8VAC20-131-420</u> rd (B).
- Demonstration of the 5 C's In accordance with the Profile of a Virginia Graduate, students shall acquire and demonstrate foundational skills in <u>Virginia's 5 C's</u> I<sup>st</sup>: critical thinking, creative thinking, collaboration, communication, and citizenship.
- 2. Sequential Electives

Beginning with the graduating class of 2003, at least two sequential electives are required for the Standard Diploma. Sequential electives may be in any discipline as long as the courses are not specifically required for graduation.

- Courses used to satisfy the one unit of credit in a fine arts or career and technical education course may be used to partially satisfy this requirement.
- An exploratory course followed by an introductory course may not be used to satisfy the requirement.
- An introductory course followed by another level of the same course of study may be used.
- Sequential electives do not have to be taken in consecutive years.
- 3. Locally Awarded Verified Credits for the Standard Diploma
  - Students entering 9th grade prior to 2018-2019 may be awarded locally verified credits in any subject up to three times to fulfill the requirements for verified credits for the standard diploma. To be eligible for locally awarded verified credit, a student must:
    - pass the high school course but not pass the related Standards of Learning test or approved substitute;
    - score within a 375-399 scale score range on any administration of the Standards of Learning test after taking the test at least twice;
    - have earned fewer than four of the verified credits required for the standard diploma; and
    - demonstrate achievement in the academic content through the appeal process that follows.

In the appeal process for the student, a review panel will be established at the school consisting of an administrator, the School Counseling Director, and the Lead Teacher for the appropriate content area. The panel will review the student's record for the course in question and grant the verified credit if the student has met the eligibility criteria listed above.

No more than three verified credits may be awarded through this process. Students entering 9th grade prior to 2018-2019 may not use locally awarded verified credits for the Advanced Studies Diploma.

- Students entering 9th grade 2018-2019 and after may be awarded <u>one</u> locally verified credits in any subject to fulfill the requirements for verified credits for a standard or advanced diploma. To be eligible for locally awarded verified credit, a student must:
  - pass the high school course but not pass the related Standards of Learning test or approved substitute;
  - score within a 375-399 scale score range on any administration of the Standards of Learning test after taking the test at least twice;
  - have earned fewer than four of the verified credits required for the standard diploma; and
  - demonstrate achievement in the academic content through the appeal process that follows.

In the appeal process for the student, a review panel will be established at the school consisting of an administrator, the School Counseling Director, and the Lead Teacher for the appropriate content area. The panel will review the student's record for the course in question and grant the verified credit if the student has met the eligibility criteria listed above.

- 4. Locally Awarded Verified Credits for Students with Disabilities Students with disabilities who are eligible for credit accommodations, as stipulated in each student's IEP (Individual Education Plan)/504 plan, may be awarded locally verified credits in English and mathematics. (All students who meet certain criteria may be eligible for locally awarded verified credits in science and social studies in accordance with section #3 above.) To be eligible to earn locally awarded verified credits in English, mathematics, science and social studies, a student with a disability must:
  - Pass the high school course;
  - score within a 375-399 scale score range on any administration of the Standards of Learning test after taking the test at least twice; and
  - demonstrate achievement in the academic content through an appeal process administered at the local level.

In the appeal process for the student, a review panel will be established by the Superintendent, or his/her designee. The panel will review the student's record for the course in question and grant the verified credit if the student has met the eligibility criteria listed above. There is no set maximum number of certified credits that a student with a disability may be awarded through this process. Students may not use locally awarded verified credits for the Advanced Studies Diploma. Students entering 9th grade 2018-2019 and beyond may only use one locally awarded Verified Credit towards an Advanced Diploma.

#### **REQUIREMENTS FOR AN ADVANCED STUDIES DIPLOMA**

- 1. To graduate with an Advanced Diploma, students must earn 26 standard units of credit described in the table below, and of the standard units of credit earned, students will earn the following number of verified units of credit:
  - Students entering 9th grade for the first time before 2018-2019: English-two; math-two; science-two; history/social science-two; and one additional verified unit of credit of the student's own choosing
  - Students entering the 9th grade for the first time 2018-2019 or later: English-two; math-one; science-one; history/social science-one.
- 2. Students who complete the requirements for an Advanced Studies Diploma with an average grade of 3.00 or better at the end of their senior year and successfully complete college-level coursework that will earn the student at least nine transferable credits in Advanced Placement (AP), International Baccalaureate (IB), or dual enrollment courses will receive the Governor's Seal on the diploma.
- 3. Beginning with students entering ninth grade for the first time in 2013--2014, a student must successfully complete one virtual course, which may be non-credit bearing.
- 4. Students entering 9<sup>th</sup> grade for the first time in 2018-2019 or late must Complete an Advanced Placement, honors, or International Baccalaureate course <u>or</u> earn a career and technical education credential that has been approved by the Board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to earn credit. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness skills assessment.

Discipline Area	Units of Credit Beginning with 9th Graders entering 2011-2012 and beyond	Number of Credits Required to be Verified with 9 <sup>th</sup> Graders 2011-2012 to 2017-2018	Number of Credits Required to be Verified with 9 <sup>th</sup> Graders 2018- 2019 and beyond
English	4	2	2
Mathematics <sup>1</sup>	4	2	1
Laboratory Science <sup>2</sup>	4	2	1
History and Social Sciences <sup>3</sup>	4	2	1
Foreign Language <sup>4</sup>	3		
Health and Physical Education	2		
Fine Arts or Career and Technical Education	1		
Economics and Personal Finance	1		
Electives	3		
Student Selected Test⁵		1	
Total	26	9	5

Credits Required for Graduation for an Advanced Diploma

<sup>&</sup>lt;sup>1</sup>Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The board shall approve courses to satisfy this requirement.

<sup>&</sup>lt;sup>2</sup>Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. The board shall approve additional courses to satisfy this requirement.

<sup>3</sup>Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and two courses in either world history or geography or both. The board shall approve additional courses to satisfy this requirement.

4For the 2010-2011 academic year only: Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

<sup>5</sup>A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education, economics or other areas as prescribed by the board in <u>8 VAC20-131-110</u>.

#### Additional Requirements for Graduation

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

Requirements for Diploma Seals from the Board of Education

1. Requirements for the Governor's Seal

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

- Requirements for a Board of Education's Seal Students who complete the requirements for a Standard Diploma or Advanced Studies Diploma with an average grade of "A" shall receive a Board of Education Seal on the diploma.
- 3. Requirements for Board of Education's Career & Technology Education Seal

The Board of Education's Career and Technical Education Seal will be awarded who earn a Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain a "B" or better average in those courses

a. or pass an examination or an occupational competency assessment in a career and technical education concentration or specialization that confers certification or occupational competency credential from a recognized industry, trade or professional association

- b. or acquire a professional license in that career and technical education field from the Commonwealth of Virginia. The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.
- 4. Requirements for Board of Education's Diploma Seal for Science, Technology, Engineering & Math (STEM) The Board of Education's STEM Seal will be awarded to students who earn either a Standard Diploma or an Advance Studies Diploma and satisfy all Math and Science requirements for the Advanced Studies dipmoa with a "B" average of better in all coursework, and
  - a. successfully complete a 50 hour or more work-based learning opportunity in a STEM area, and
  - b. and satisfy all requirements for a Career and Technical Education concentration. A concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the CTE Administrative Planning Guide. A complete listing can be found at the following website: <u>http://www.doe.virginia.gov/instruction/career\_technical/path\_industry\_certification/index.shtml</u>
  - c. and pass one of the following:
    - a Board of Education CTE STEM-H credential examination, or
    - an examination approved by the Board that confers a college-level credit in a STEM field.
- 5. Requirements for Board of Education's Seal of Advanced Mathematics and Technology (Available to students entering high school prior to 2018-2019.)

The Board of Education's Seal of Advanced Mathematics and Technology will be awarded to students who earn either a Standard or Advanced Studies Diploma.

- a. and satisfy all of the mathematics requirements for the Advanced Studies Diploma (four units of credit including Algebra II, two verified units of credit) with a "B" average or
- b. better
- c. and do one of the following
  - pass an examination in a career and technical education field that confers certification from a recognized industry, or trade or professional association
  - acquire a professional license in a career and technical education field from the Commonwealth of Virginia
  - pass an examination approved by the Board that confers college-level credit in a technology or computer science area. The board of education shall approve all professional licenses and examinations used to satisfy these requirements.
- 6. Requirements for a Board of Education's Seal for Excellence in Civics Education The Board of Education's Seal for Excellence in Civics Education will be awarded to students who earn either a Standard or Advanced Studies diploma and
  - a. complete Virginia and United States History and Virginia and United States Government courses with a grade of "B" or higher
  - b. have good attendance and no disciplinary infractions as determined by local school board policies
  - c. complete 50 hours of voluntary participation in community service or extracurricular activities. Activities that would satisfy this requirement include:
    - volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate;
    - participating in Boy Scouts, Girl Scouts, or similar youth organizations;
    - participating in JROTC;
    - participating in political campaigns or government internships, or Boys State, Girls State, or Model General Assembly; or
    - participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.

7. Requirements for Board of Education's Seal of Biliteracy

The Board of Education's Seal of Biliteracy will be awarded to students who earn a Board of Educationapproved diploma and:

- d. pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level;
- e. and are proficient at the intermediate-mid level or higher in one or more language other than English, including American Sign Language, as demonstrated through an assessment from a list to be approved by the Superintendent of Public Instruction
- 8. Requirements for Board of Education's Seal for Excellence in Science and the Environment The Board of Education's Seal for Excellence in Science and the Environment will be awarded to students who enter the ninth grade for the first time in the 2018-2019 year and thereafter, and meet each of the following criteria:
  - a. earn either a Standard or Advanced Diploma
  - b. 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
  - c. 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.

# **GOVERNOR'S EARLY COLLEGE SCHOLARS PROGRAM**

The *Early College Scholars* program allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma. The result is a more productive senior year and a substantial reduction in college tuition. Students earning a college degree in seven semesters instead of eight can save an average of \$5,000 in expenses.

To qualify for the Early College Scholars program, a student must:

- have a "B" average or better;
- be pursuing an Advanced Studies Diploma; and
- take and complete college-level course work (i.e., Advanced Placement, International Baccalaureate, Cambridge, or dual enrollment) that will earn at least 15 transferable college credits.

*Early College Scholars* are supported by Virtual Virginia and the Commonwealth College Course Collaborative. Virtual Virginia provides statewide access to college-level courses while the Commonwealth College Course Collaborative defines the subjects high school students can complete and receive college degree credit from participating public and private colleges and universities.

See your school counselor for more information or visit the following website: <u>http://www.doe.virginia.gov/instruction/graduation/early\_college\_scholars/index.shtml</u>. The Governor's Early College Scholars Program agreement can be found at the back of this book.

# **NEWPORT NEWS SCHOLARS PROGRAM**

- 1. The NNPS Scholars Program is designed to provide an academically challenging and intellectually stimulating advanced course of study; to recognize students' academic achievements beyond the advanced requirements for graduation; and to further enhance the NNPS Advanced Placement course offerings. The Superintendent's Seal of Distinction will be awarded on the diplomas of students who successfully complete the Scholars Program.
- 2. Requirements for the Scholars Program include:
  - a. All requirements for the NNPS Advanced Studies Diploma
  - b. As part of the graduation requirements, at least five Advanced Placement courses (at least one for each core content area English, social studies, science, and mathematics as well as a dual enrollment (college course) or an additional Advanced Placement course must be included in the student's program of study to qualify for a *Scholars Seal*. The Advanced Placement examination must be taken for all Advanced Placement credits applied toward the Scholars Program.
  - c. A four-course sequence in at least one world language.
  - d. Projects. The student must individually complete both of the following requirements:
    - 1. Individual *Scholars Project* research paper/project or multi-media project.
      - The *Scholars Project* must be pre-approved by the Division Scholars Committee. This committee will meet three times during each academic year, and the proposal should be submitted one week prior to an announced meeting date for consideration at that meeting.
      - The project will be selected by the student in an area of his/her interest.
      - The project must go beyond requirements for any course taken while in high school. International Baccalaureate senior papers and other senior projects may be expanded to meet the *Scholars Project* requirement.
      - The project must have a tangible product such as an advanced research paper/thesis, a complex multi-media project, or a specialized portfolio.
      - The project must culminate in a formal Scholars Presentation before an audience. The *Scholars Project* and presentation must be given no later than the end of the third quarter of the senior year.
      - The *Scholars Project* presentation should be a minimum of 15 minutes and a maximum of 30 minutes. A question and answer period should follow the presentation.
    - 2. One hundred hours of elective community service which should be completed by the end of the eleventh grade. "Community Service" for this project is defined as, "Voluntary unpaid work for the good of others." The following guidelines describe hours that may be used for this community requirement.
      - Community service for this project must directly benefit the citizens of Newport News.
      - The 100 hours must be served on one focused service project in the area of the student's choice. The project should demonstrate a commitment, which is served over at least six sessions.
      - A plan for the community service project must be presented to and be pre-approved by the Division Scholars Committee. The project proposal may be presented for approval as early as the freshman year, but no later than May 15 of the junior year.
      - Community service hours credited toward the *Scholars Program* must be beyond hours required by any course, extra-curricular activity, or other school or community program requirement
      - No monetary compensation may be received by the student for these hours.
      - A log of hours verified by the supervising adult from the appropriate community organization must be turned in to the Scholars Program Coordinator (suggested completion by the end of the student's eleventh grade year).
      - The student will meet with the Scholars Committee to reflect on the community service experience at one of the three annual Scholars Committee meetings.

- Adjustments to the required timeline will be considered on a case-by-case basis for students who transfer into NNPS during the 11<sup>th</sup> or 12<sup>th</sup> grade year.
- 3. The *Scholars Project* and elective community service may be coordinated as two components of a single project.

See your school counselor for more information. <u>The Newport News Program Application</u> can be found at the back of this book.

# **REQUIREMENTS FOR OTHER DIPLOMAS**

- 1. **Requirements for the Modified Standard Diploma** (Effective for students entering the ninth grade prior to the 2013-2014 school year)
  - a. Every student will be expected to pursue a Standard Diploma or Advanced Studies Diploma. The Modified Standard Diploma program is intended for certain students at the secondary level who have a disability and are unlikely to meet the credit requirements for a Standard Diploma. Eligibility and participation in the Modified Standard Diploma program shall be determined by the student's Individualized Education Program (IEP) team including the student, where appropriate, at any point after the student's eighth grade year.
  - b. The school must secure the informed written consent of the parent/guardian and the student to choose this diploma program after review of the student's academic history and full disclosure of the student's options.
  - c. The student who has chosen to pursue a Modified Standard Diploma shall also be allowed to pursue the Standard or Advanced Studies Diploma at any time throughout that student's high school career, and the student must not be excluded from courses and tests required to earn a Standard or Advanced Studies Diploma.
  - d. Students pursuing the Modified Standard Diploma will pass the 8<sup>th</sup> grade English (Reading, Literature, and Research) and mathematics Standards of Learning tests to meet the literacy and numeracy requirements. Students may substitute a higher-level Standards of Learning test (i.e., end of course English [Reading], Algebra I, Algebra, or Geometry) for the 8<sup>th</sup> grade SOL tests in English (Reading, Literature, and Research) and mathematics or other substitute tests approved by the Virginia Board of Education.

Discipline	Standard Credits
English	4
Mathematics <sup>1</sup>	3
Science <sup>2</sup>	2
History and Social Science <sup>3</sup>	2
Health and Physical Education	2
Fine Arts or Career and Technical Education	1
Electives <sup>4</sup>	6
Total	20

<sup>1</sup>Courses completed to satisfy the Mathematics requirement will include content from among applications of algebra, geometry, personal finance, and statistics in courses that have been approved by the Virginia Department of Education (VDOE).

<sup>2</sup>Courses completed to satisfy the Science requirement will include content from at least two of the following: applications of earth science, biology, chemistry, or physics in courses approved by the VDOE.

<sup>3</sup>Courses completed to satisfy the History and Social Sciences requirement will include one unit of credit in U.S. and Virginia History and one unit of credit in U.S. and Virginia Government in courses approved by the VDOE.

<sup>4</sup>Courses to satisfy the Electives requirement will include at least two sequential electives in the same manner for the Standard Diploma.

2. Requirements for the Applied Studies Diploma

Students identified as disabled who meet the requirements of their individualized education programs, but do not meet the requirements for the Advanced Studies Diploma, Standard Diploma, or Modified Standard Diploma, will be awarded an Applied Studies Diploma.

- 3. Requirements for the General Achievement Adult High School Diploma
  - a. The General Achievement Adult High School Diploma is an option for high school dropouts and individuals who exit high school without a diploma. Individuals who are at least 18 years of age and not enrolled in public schools or not otherwise meeting the compulsory school attendance requirements set forth in the code of Virginia shall be eligible to earn the General Achievement Adult High School Diploma.
  - b. The required number of standard units of credit may be earned by enrolling in a public school if the individual meets the age requirements, a community college or other institution of higher education, an adult high school program, or correspondence, distance learning, and online courses.
  - c. Credit and assessment requirements for the General Achievement Diploma are as follows:
    - 1. Successfully completes the GED program that meets Virginia Board of Education (VBOE) requirements.
    - 2. Earns a VDOE-approved career and technical credential, such as the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia Workplace Readiness Skills Assessment.
    - 3. Successfully completes the following courses that incorporate or exceed the applicable Standards of Learning:

Discipline Area	Standard Units of Credit Required	Assessment Required
English	4	
Mathematics <sup>1</sup>	3	
Science <sup>2</sup>	2	
History and Social Sciences <sup>3</sup>	2	
Electives <sup>4</sup>	9	
Total	20	passing score on GED Examination

- <sup>1</sup>Courses completed to satisfy the Mathematics requirement will include content in mathematics courses that incorporate or exceed the content of courses approved by the VBOE to satisfy any other VBOE-recognized diploma.
- <sup>2</sup>Courses completed to satisfy the Science requirement will include content in science courses that incorporate or exceed the content of courses approved by the VBOE to satisfy any other VBOE-recognized diploma.
- <sup>3</sup>Courses completed to satisfy the History and Social Sciences requirement will include one unit in U. S. and Virginia History and one unit of credit in U. S. and Virginia Government in courses that incorporate or exceed the content of courses approved by the VBOE to satisfy any other VBOE-recognized diploma.
- <sup>4</sup>Courses to satisfy the elective requirements shall include at least two sequential electives in an area of concentration or specialization, which may include career and technical training.
- 4. Requirements for an Adult High School Diploma
  - a. Adult high school diplomas may be granted to students not subject to the compulsory attendance requirements of <u>§ 22.1-254</u> of the Code of Virginia.
  - b. Credit

- 1. Satisfactory completion of 108 hours of classroom instruction in a subject shall constitute sufficient evidence for one unit of credit toward a high school diploma.
- 2. When, in the judgment of the principal or the superintendent, an adult not regularly enrolled in the grades 9 through 12 high school program is able to demonstrate by examination or other objective evidence, satisfactory completion of the work, the adult may receive credit in accordance with policies and procedures of the School Board. It is the responsibility of the school division to document the types of examinations employed or other objective evidence used, the testing or assessment procedures, and the extent of progress in each case.
- 3. Credits earned in adult high school programs shall be transferable as prescribed in the "Regulations Establishing Standards for Accrediting Public Schools in Virginia" within the schools of the school division and shall be transferable to public secondary schools outside the sponsoring school division.
- c. Diploma
  - 1. A diploma, as provided by VDOE regulation, shall be awarded to an adult who completes all requirements of the diploma regulated by the VDOE, with the exception of health and physical education requirements in effect at the time the adult graduates.
  - 2. An adult high school diploma shall be awarded to an adult student who completes the course credit requirements in effect for a VBOE diploma, with the exception of health and physical education requirements, at the time the adult student first entered the ninth grade. The requirement for specific assessments may be waived if the assessments are no longer administered to students in Virginia public schools.
  - 3. An adult high school diploma shall be awarded to an adult student who demonstrates though applied performance assessment full mastery of the National External Diploma Program Competencies, as promulgated by the American Council on Education and validated and endorsed by the United States Department of Education.

# 5. Certificate of Program Completion

Students in each of the categories noted below will be given a Certificate of Program Completion and will not be permitted to participate in the school commencement exercises:

- Students who successfully complete all academic coursework required for either the Advanced Studies or Standard Diplomas, but who have not yet obtained the necessary verified credits required by the state for the awarding of a diploma.
- Students with disabilities who successfully complete all academic coursework required for the Modified Standard Diploma, but who have not earned passing scores on the eighth grade reading and mathematics SOL tests.

Students who are awarded a Certificate of Program Completion may continue to take the Standards of Learning tests needed to upgrade their certificate to a diploma.

# **COURSE CREDIT**

1. Alternative Methods of Granting Credit

The standard unit of credit for graduation is based on a minimum of 140 clock hours of instruction. Certain nontraditional learning environments such as alternative learning centers or residential treatment centers offer credits based on other criteria. Students entering Newport News Public Schools from such nontraditional institutions may receive credit towards graduation upon review of their transcript by the Assistant Superintendent for Instructional Services to ensure that the content of the course for which credit is awarded is comparable to 140 clock hours of instruction and upon validation of competency. The Director of Curriculum and Instruction will implement procedures permitting school principals to grant credit when it is evident that the course content from the former institution is comparable to 140 clock hours of instruction.

2. Counting College Credits toward High School Graduation

Beginning in the middle school years, students will be counseled as to opportunities for beginning postsecondary education prior to high school graduation. Students taking advantage of such opportunities will not be denied participation in school activities for which they are otherwise eligible. Whenever possible, students will be encouraged and afforded opportunities to take college courses simultaneously for high school graduation and college degree credit, under the following conditions:

- a. prior written approval of the high school Principal has been obtained;
- b. all requirements for high school graduation are completed at the end of the first year of college;
- c. the course(s) for which high school credit is to be issued corresponds to that needed for high school graduation (i.e., one year of college English for one credit of English);
- d. the college course(s) for which high school credit is to be granted is part of the student's program leading to college graduation, as evidenced by an official transcript.
- 3. Course Credit Policy for Cooperative Education

The cooperative education programs are designed for students who wish to combine classroom instruction with supervised on-the-job training in occupations of their choice. Students in a cooperative education program have consecutive periods in their daily school schedule for on-the-job training activities and scheduled time to allow the student to be employed. Cooperative education students may receive credit for both classroom instruction and work experience.

4. Credit for Courses Taught By Special Education Teachers

Special education students who are able to learn material designed for their age/grade level, but whose handicap necessitates specially designed instruction which cannot be provided in a regular class taught by a subject matter teacher, may earn unit credit toward graduation for subjects taught by highly qualified special education teachers. This policy applies only if the following criteria are met:

- a. the course is comparable in scope and sequence to its general education counterpart, providing a minimum of 140 clock hours of instruction;
- b. there is a course outline that includes the objectives of the course, the skills the student is expected to gain, and the text/materials to be used;
- c. there are stated procedures for evaluation of the progress of the student toward the course objectives which assure that the student has attained the expected skills and knowledge; and
- d. the special education teacher plans cooperatively with the general education teacher of the subject.

The policy will be implemented using established school division procedures.

- 5. Credit for New Horizons Regional Educational Centers: Governor's School for Science and Technology When a student is enrolled for one-half day in the regular high school program and the other half at the New Horizons Regional Educational Centers: Governor's School for Science and Technology (GSST), the student receives credits for work successfully completed at the center.
- 6. College Credit Option in Sequential Courses of Study

If a student has completed the highest level of a sequential course of study (e.g. world language or mathematics) that is available in the school division and chooses to pursue higher level coursework in that subject area at a college, upon successful completion of the college course, the student will receive credit which will be weighted at the same level as the highest level of the course that the student completed in the school division.

This policy applies only if the student has received prior permission from the principal to participate in the college course and only after the subject area supervisor has verified that the course is indeed a higher-level course than the one completed at the high school.

(This policy does not prohibit a student from completing a college level course for no credit towards the high school diploma. Prior permission of the principal is required, however, for any student to take a college course during regular school hours). All costs (tuition, books, fees, transportation, etc.) associated with a student taking a college course are the responsibility of the student and will not be shared by the school division.

- 7. Transfer of Students
  - a. A secondary school will accept credits toward graduation received from other accredited secondary schools and schools accredited through the Virginia Council for Private Education(VCPE). The Board will review on an annual basis the accrediting procedures of the VCPE and direct any changes and modifications of such procedures in relation to the authority granted under these provisions. Students transferring into a Virginia public school shall be required to meet the requirements per regulations specified in <u>8 VAC 20-131-50</u> of the State Board of Education to receive a Standard or Advanced Studies Diploma except as modified by subsection E below. To receive a Special Diploma, Modified Standard Diploma, General Achievement Diploma, or Certificate of Program Completion, a student must meet the requirements prescribed by the Standards of Quality.
  - b. Standard or verified units of credit earned by a student in a Virginia public school will be transferable without limitation regardless of the accreditation status of the Virginia public school in which the credits were earned.
  - c. Transfer grades and credits from other school divisions will be accepted by Newport News Public Schools provided the courses are compatible with local and state regulations. Weighted credit will be awarded only to those transfer courses that are also weighted in Newport News Public Schools and will be computed according to NNPS procedure (reference IKC-P, Class Rankings/Grade Point Averages/Honor Graduates). If a transfer student completed a weighted course in another school division prior to the academic year that the course was first offered for credit by the Newport News school division, the student will not receive weighted credit for the course.
  - d. Records of transferred students will be sent directly to the school receiving the student upon request of the receiving school in accordance with the provisions of the "Management of the Student's Scholastic Records in Virginia."
  - e. The academic record of a student transferring into Virginia public schools from other than a Virginia public school, will be evaluated to determine the number of standard units of credit that have been earned, including credit from schools outside the United States, and the number of verified units of credit needed to graduate in accordance with subsection E below. Virginia public schools will accept standard and verified units of credit from other Virginia public schools and state-operated programs. Standard units of credit also will be accepted for courses satisfactorily completed in accredited colleges and universities when the student has been given credit by the previous school attended.
  - f. Students transferring above grade 10 from schools or other education programs that do not require or give credit for health and physical education will not be required to take these courses to meet graduation requirements.

However, no transfer student will earn fewer than the following number of verified units nor will such students be required to take SOL tests for verified units of credit in courses previously completed at another school or program of study unless necessary to meet the requirements listed in 1 and 2 below:

g. Students transferring into a Virginia public school from other than a Virginia public school after the tenth grade will be encouraged to earn as many credits as possible toward graduation that are prescribed according to regulations specified in <u>8 VAC 20-131-50</u> of the State Board of Education. Students may substitute courses required in other states in the same content areas if the student is unable to meet the specific content requirements of <u>8 VAC 20-131-50</u> without taking a heavier than normal course load in any semester, by taking summer school, or by taking courses after the time when he otherwise would have graduated.

- 1. For a Standard Diploma:
  - Students entering a Virginia high school for the first time during the ninth grade or through the first 20 days of instruction of the tenth grade will earn credit as prescribed in <u>8 VAC 20-131-50</u>;
  - Students transferring in after the first 20 days of instruction of the tenth grade through the first 20 days of instruction of the eleventh grade will earn a minimum of four verified units of credit: one each in English, mathematics, history, and science. Students who complete a career and technical education program sequence may substitute a certificate, occupational competency credential, or license for either a science or history and social science verified credit pursuant to <u>8 VAC 20-131-50</u>; and,
  - Students transferring in after the first 20 days of instruction of the eleventh grade through the first 20 days of instruction of the twelfth grade will earn a minimum of two verified units of credit: one in English and one of the student's choosing.
- 2. For an Advanced Studies Diploma:
  - Students transferring in at the ninth or at the beginning of the tenth grade will earn credit as prescribed in <u>8 VAC 20-131-50</u>;
  - Students transferring in during the tenth grade or at the beginning of the eleventh grade will earn a minimum of six verified units of credit: two in English, and one each in mathematics, social studies, and science, and one of the student's choosing.
  - Students transferring in during the eleventh grade or at the beginning of the twelfth grade will earn a minimum of four verified units of credit: one in English and three of the student's choosing.
  - Students transferring into a Virginia secondary school after the first semester of their eleventh grade year, must meet the requirements of <u>8 VAC 20-131-60.G.1.c</u> or <u>E.2.c</u>. Students transferring after 20 instructional hours per course of their senior or twelfth grade year shall be given every opportunity to earn a Standard or Advanced Studies or Modified Diploma. If it is not possible for the student to meet the requirements for a diploma, arrangements should be made for the student's previous school to award the diploma. If these arrangements cannot be made, a waiver of the verified unit of credit requirements may be available to the student. The Department of Education may grant such waivers upon request by the local school board in accordance with guidelines prescribed by the Board.
  - The transcript of a student who graduates or transfers from a Virginia secondary school shall conform to the requirements of <u>8 VAC 20-160-10</u> Regulations Governing Secondary School Transcripts.
- 8. High School Courses Taken in Middle School

When students in middle school successfully complete courses offered for credit in grades 9-12, credit will be counted toward meeting the standard units required for graduation provided the courses meet SOL requirements or are equivalent in content and academic rigor to those courses offered in high school. Verified units of credit are awarded when students achieve a passing score on end-of-course SOL tests.

The course grades for high school credit courses taken in middle school become a part of the high school transcript and are included in the student's grade point average.

Virginia Board of Education Regulation <u>8 VAC 20-131-90.C</u> allows parents to request that final grades in credit-bearing courses taken in middle school be omitted from the student's transcript and the student not earn high school credit for the course. The credit-bearing courses are Algebra I, Geometry, and World Language. The parents' request must be in writing to the school principal prior to July 1 following completion of the eighth grade.

### 9. Credit Requirements for Grade Classification The credit requirements for grade classification in the secondary schools are as follows:

Grade 10	Grade 11	Grade 12
5 credits	11 credits	16 credits

The credits required for classification as a twelfth grade student must be accompanied by a schedule of classes that will enable the student to graduate by June of that school year. Any exception to this classification must be for exceptional circumstances approved personally by the principal.

Note: The accreditation status of a high school shall not be included on the student transcript provided to colleges, universities, or employers. The Board expressly states that any student who has met the graduation requirements established in 8 VAC 20-131-50 and has received a Virginia diploma holds a diploma that should be recognized as equal to any other Virginia diploma, regardless of the accreditation status of the student's high school. It is the express policy of the Board that no student shall be affected by the accreditation status of the student's school. The Board shall take appropriate action, from time to time, to ensure that no student is affected by the accreditation status of the student is affected

Revised: July, 1983; July 27, 1988; July 1992; August 1992; May 18, 1994; January 22, 1997; November 12, 1997; December 17, 1997; May 17, 2000; February 19, 2003; March 2003; January 19, 2004; April 21, 2004; May 16, 2006; December 12, 2006; December 2007; December 2010; February 12, 2012; February 19, 2013

# GRADE POINT AVERAGE AND CLASS RANKING OF SECONDARY STUDENTS

# Grade Point Average

Grade point averages will be provided for students in grades 9 through 12. Grade point average (GPA) and will be based upon the grades the student has earned in courses for which high school credit is awarded (including failing grades, repeated courses, summer school, night school and credit courses taken prior to grade nine). If a student repeats a course, only the higher of the two grades will be computed in the average.

Class Rank

- 1. Class ranking in Newport News Public Schools will be provided for students in grades 9 through 12.
- 2. Class ranking will be based upon the grades the student has earned in courses for which high school credit is awarded. This includes eighth grade accelerated courses in Algebra, Geometry, World Languages, and courses at the Governor's School for Science and Technology (GSST) for which high school credit is awarded.
- 3. Students will be ranked at the end of each semester.
- 4. Rank in class will be computed to the thousandth of a percent with the thousandth place truncated and no rounding imposed.
- 5. For purpose of designation of student honors and for college admission information, the end of the first semester of the senior year will serve as the cutoff date for computation of class rank.

# 6. In computing class rank of students, the following scale will be used:

Letter Grade	Points for Advanced Standing Courses (IB, AP, GSST)	Points for Honors Courses (H, Pre-IB)	Points for Standard Courses
А	5	4.5	4
В	4	3.5	3
С	3	2.5	2
D	2	1.5	1
F	0	0	0

- 7. Course weighting is assigned based upon the recommendation of the division curriculum committee and approval of the School Board. All courses identified for advanced standing contain a mandated external evaluation component. Students who do not participate in the external evaluation (i.e. AP exam) will receive honors weighted credit.
- 8. Class rank is to be determined by assigning the student with the highest GPA a rank of number one (1) in the class; the second highest, the rank of number two (2), etc. In cases where more than one student has the same numerical average, all students with that average will be given the same rank. The next highest average will assume the next rank position that will indicate the number of students having a higher rank. Rank will be computed to the hundredths place. Place value beyond the hundredths place will not be considered.

Example:

Student No.	GPA	Rank	The student with the next highest grade
1	4.00	Rank 1	average would have the
2	4.00	Rank 1	rank of five (5) in the class, indicating that
3	3.98	Rank 3	there are four students who rank higher.
4	3.98	Rank 3	who rank nighter.

# 9. Selection of Honors Graduates

Class ranking computed at the completion of the first semester of the senior year will be used to determine honor graduates. A student with a 3.0 average is to be considered an honor graduate. A student with a 3.4 average will be recognized as graduating with highest honors.

All students will be informed in writing of the procedures used for computing rank in class and for selecting honor graduates.

The student with the highest class rank is to be declared the valedictorian of the graduating class. In instances when more than one student holds the numerical rank of one, all students holding the rank are to be declared co-valedictorians. A student who is a full-time college student and simultaneously completing requirements for a high school diploma is not eligible to be declared valedictorian or salutatorian of the class.

### 10. National Honor Society

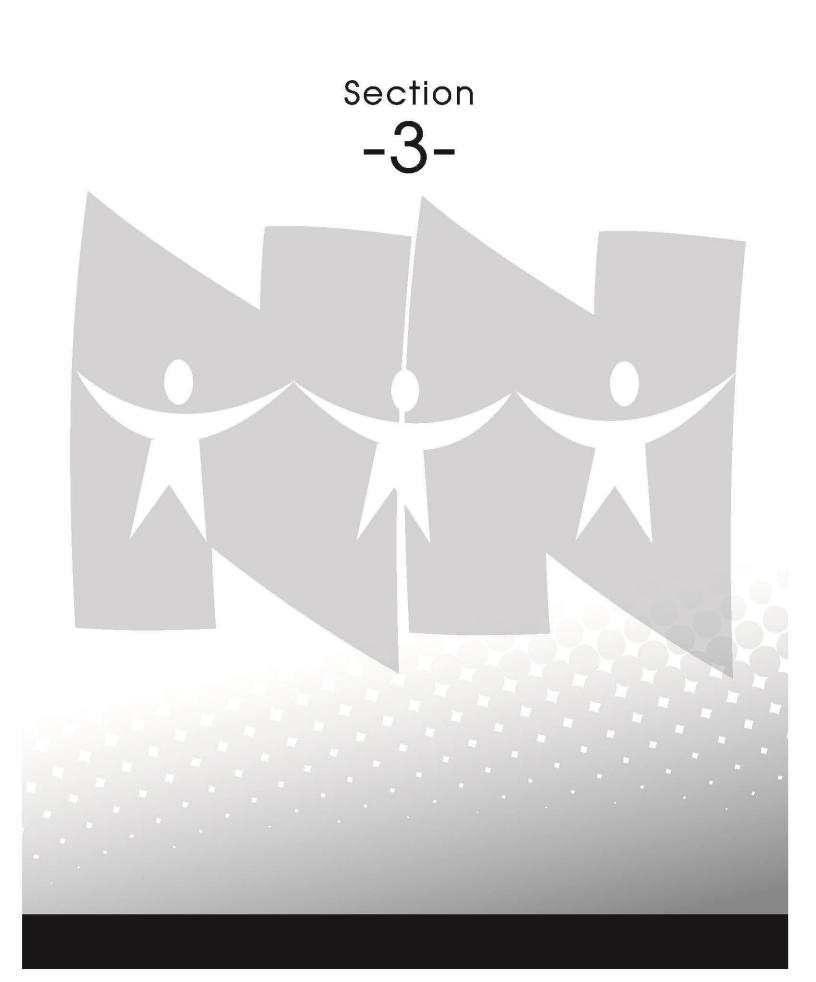
Membership standards for the National Honor Society are established in each high school. To be considered for membership, a student must have a minimum grade point average and meet other criteria as established by each school.

# SECONDARY GRADING SCALE

A division-wide numerical scale is used for grading student performance in NNPS secondary schools. NOTE: Only letter grades appear on report cards and transcripts.

The numerical scale is:

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





You have B ways to earn your two required Physical Education graduation credits.

# Traditional Method

- Student will enroll in 2 semesters of Health and 2 semesters of PE during the regular school day.
- Course work is completed in the classroom and gymnasium during the school year.
   Considerations:
  - Student will dress in appropriate PE attire throughout the semester
  - No cost
  - 90 days of classroom/gymnasium experience

# After-School (8th period course)

- Student and parent will attend a mandatory orientation meeting for Wellness/Fitness Mgmt on the first Tuesday of the semester (contact your school counselor for specific date and time).
- Student will obtain a gym membership at one of NNPS partner gyms (YMCA, OneLife Fitness, Riverside Fitness or CrossFit OP).
- Students will log regular gym hours throughout the semester.
- Written assignments are completed through an online portal.

### Considerations

- Self-paced course requires effective time management skills and self-motivation
- Cost of gym membership (discounted rates may apply)
- Flexible scheduling
- Internet access required to complete online assignments

# Summer School

- Summer sessions 1 and 2 offer Health I, Health II, Outdoor Ed I and Outdoor Ed II annually.
- Sessions are 7:30 a.m. 2 p.m., Monday through Thursday for three weeks.
- Students will earn .5 credit for each session completed.
- Outdoor Education classes are held at Newport News Park and include activities such as hiking, biking, canoeing, fishing and camping.
- Daily attendance is required for successful completion of course.

### Considerations:

- Outdoor summer weather conditions
- Summer school costs apply
- Full day program
- Each session is 12 days in length

Have questions? Contact your school counselor.





You have 🔂 ways to earn your required

Personal Finance

# graduation credit.

# **Traditional Method**

- Student will enroll in both semesters of course as one of 7 regular class periods.
- Coursework is completed in the classroom with a blended format of face-to-face and online instruction.

# Considerations:

No cost

# **Summer School**

- Students will complete this required yearlong course during summer session 1 and summer session 2 (mid-June through beginning August). Student will only report to class on Mondays and will complete remaining course work online at home.
- Student will earn credit for both semesters of course while only required to pay cost of one semester.
- Coursework is completed independently (average of 3-4 hours per day).
- Instructor is available for students needing additional assistance.

Considerations:

Summer school costs apply

# After-School (8th period course)

- Student will complete this yearlong course in an after-school format.
- Students will complete all formal assessments in after-school sessions.
- Students will complete coursework at home.

### Considerations:

- No additional cost
- Internet access required to complete online assignments

Have questions? Contact your school counselor.

College, Career and Citizen-Rea



You have 👪

# Advanced Placement Courses

to choose from.

# Art

# • AP Art History

- AP Music Theory
- AP Studio Art: 2-D Design
- AP Studio Art: 3-D Design
- AP Studio Art: Drawing
- **Mathematics**
- AP Statistics
- AP Calculus AB
- AP Calculus BC

# **History & Social Studies**

- AP Human Geography
- AP Psychology
- AP US History
- AP US Government and Politics
- AP World History: Modern
- AP Comparative Government
- AP Macroeconomics
- AP Microeconomics

# English

- AP English Language
- AP English Literature

# **Sciences**

- AP Environmental Science
- AP Biology
- AP Chemistry
- AP Physics C: Electricity and Magnetism
- AP Physics C: Mechanics
- AP Physics I: Algebra-based
- AP Physics II : Algebra-based
- AP Computer Science A
- **AP** Computer Science Principles

# **World Languages**

- AP French Language
- AP German Language
- AP Latin Language
- AP Spanish Language

# Colleges want to see RIGOROUS courses on your transcript!

All courses are not available in a traditional classroom format at each high school, but may be offered through other delivery methods. Please see your school counselor for more information.

College, Career and Citizen-Ready!



# You have **5** ways to improve your **Grade Point Average**

As a NNPS student, your goal is to maintain a GPA of 3.0 or above throughout high school

# Weighted Courses

- Enroll in and successfully complete Honors level classes each year. Students earn additional (.5) credit for every honors class passed.
- Enroll in and successfully complete AP level classes each year. Students earn additional (1.0) credit for every AP class passed.

# Considerations:

- No additional class time.
- Weighted courses demonstrate rigor of coursework which is the #1 factor used in determining college admissions decisions.

# **Grade Recovery**

- Sign up for after school grade recovery program that provides the opportunity to improve low marking period grades by one full letter grade.
   Considerations:
  - Each high school determines which courses will be offered in this format.
  - After-school attendance is mandatory for every session scheduled.

# **Summer School**

Retake core course for grade improvement. English, Social Studies and Science courses are available for repeat credit only. (Student must have been enrolled in the class previously)

**Grad Point** 

Considerations:

motivation.

high school.

Retake a course utilizing the NNPS

Self-paced course requires effective

credit recovery online portal.

time management skills and

Limited space available in each

• Take a course during the summer to make room for more rigorous class during the school year. Health, PE, Math and Personal Finance are available in the summer for original credit. (Student does not have to have been enrolled in the class previously.)

### Considerations:

- Costs apply
- Can earn 1/2 credit in 12 days (1 session)
- Can earn 1 credit in 24 days (2 sessions)

# **Summer Institute of the Arts**

Enroll in an intensive six week arts program and earn one honors weighted credit.
 Considerations:

- Costs apply
- Full day program including both summer sessions

College, Career and Citizen-Ready!



NNPS students are allowed to retake classes for grade improvement for any course in which an undesirable final grade was earned.



# You have 6 ways to LOAVO SCHOOL in order to EXTORE YOUR LOAPPIND Opportunities

# **Early College Program**

- Qualifying seniors complete HS graduation requirements at the end of Semester 1 of senior year.
- During Semester 2, student attends Thomas Nelson Community College.
- Textbooks, transportation and partial tuition are provided by NNPS.
- Students may continue to participate in all extra-curricular activities while attending TNCC.
- Students can earn up to 19 transferable college credits.

# **Early Career Program in Welding**

- Qualifying seniors complete HS graduation requirements at the end of Semester 1 of senior year.
- During Semester 2, student attends Thomas Nelson Community College with opportunity to complete 5 certifications in welding.
- Textbooks, transportation and partial tuition are provided by NNPS.
- Students may continue to participate in all extra-curricular activities while attending TNCC.
- After successful program completion, the student will enter the workforce with a highly marketable skillset.

# **Career & Technical Education Cooperative Education (COOP)**

- Program includes a combination of classroom instruction and on-the-job training.
- Students are required to work part time and receive course credit for their job performance.
- Work release periods allow for flexible scheduling. Credit can also be earned through an after school job experience (8th period).
- Students can earn one elective credit for job experiences.

# Service Learning Internship

- Opportunity for students to connect their interests, skills and abilities with real life experiences for future careers.
- Student must accrue at least 70 hours (per semester) to earn course credit.
- Course requires a contract that provides guidelines and requirements for the project.
- Abbreviated school schedule allows opportunity for internship to be completed during the school day.
- School counselor will assist with coordination of service learning experience.



# **Honors Internship**

- Opportunity for students to connect their interests, skills and abilities with real life experiences for future careers while earning a honors weighted credit.
- Student must accrue at least 125 hours (per semester) in a supervised, school approved job to earn weighted course credit.
- Abbreviated school schedule allows opportunity for internship to be completed during the school day.

# **US Government via Distance Learning**

- · Course restricted to seniors only.
- Student will complete assignments outside of the classroom utilizing online instruction through Desire 2 Learn (D2L) program.
- Classroom teacher is available for assistance during regularly scheduled class period.
- Any student earning a "D" or "F" in the class will return to the traditional classroom setting until the grade improves.

Students can take additional vocational courses at *New Horizons Regional Education Center* as well as participate in an innovative program of science and mathematics at *The Governor's School for Science and Technology.* See your school counselor for more information.

> Have questions? Contact your school counselor.





# You have 6 High School Programs

# that will allow you to attend a school

# other than your zoned school.

Applications are available at any Newport News school, the administration building and on the NNPS website at www.nnschools.org/magnet.

Applications are due in January for the next school year. High school magnet and specialty program applications are open to rising 9th graders only. Upper classmen should contact the program director directly to apply.

Transportation is provided for all students participating in any of the NNPS magnet and specialty programs.

# Aviation Academy @ Denbigh High

A specialized four-year science, technology, engineering and mathematics (STEM) program that prepares highly motivated high school students for rewarding careers by developing 21st Century Workplace skills through engineering technology in aviation maintenance and computers.

### Areas of study:

Aerospace Safety & Security

Flight Operations

Aviation Technology

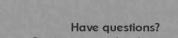
Aerospace Engineering

# Governor's STEM Academy @ Heritage High

A program of study designed to expand options for students in science, technology, engineering and mathematics (STEM) with a focus on teamwork, effective communication and application of STEM principles *Areas of study:* 

• Engineering and Robotics

- Networking and Cybersecurity
- Computer Science and Game Design



Contact your school counselor.

# University Magnet @ Heritage High

An academically rigorous four-year program to prepare students in becoming responsible lifelong learners with demonstrated abilities in creative problem-solving, critical thinking and decision-making

#### Focus of study:

- 2 Honors and/or 1 AP level course per year
- Participation on College and Career Prep, SAT/ACT Prep and Senior Seminar
- Community Service, Job Shadowing and Internship Experiences

# Governor's Health Science Academy @ Warwick High

A program combining academic coursework and clinical experiences in a challenging and collaborative school environment to prepare students for careers in the health sciences

#### Areas of study:

- Therapeutic Services
- Diagnostic Services
- Health Informatics and Support Services
- Biotechnology Research & Development

# International Baccalaureate Program @ Warwick High

An internationally recognized and rigorous course of study designed to provide students with a well-rounded education and to facilitate geographical and cultural mobility

Focus of study includes pre-IB/IB level courses each year in the following disciplines:

- English Literature
- History of the Americas
- Mathematics

- Laboratory Science
- World Language
- Elective (one year)

# Arts & Communications Magnet @ Woodside High

A four-year program offering students the opportunity for intensive study in the arts as part of a full and well-balanced academic program

#### Areas of study:

- Communications
- Creative Writing
- Dance

- Drama
- Music
- Visual Arts



Scan this QR code with your smart device to learn more.



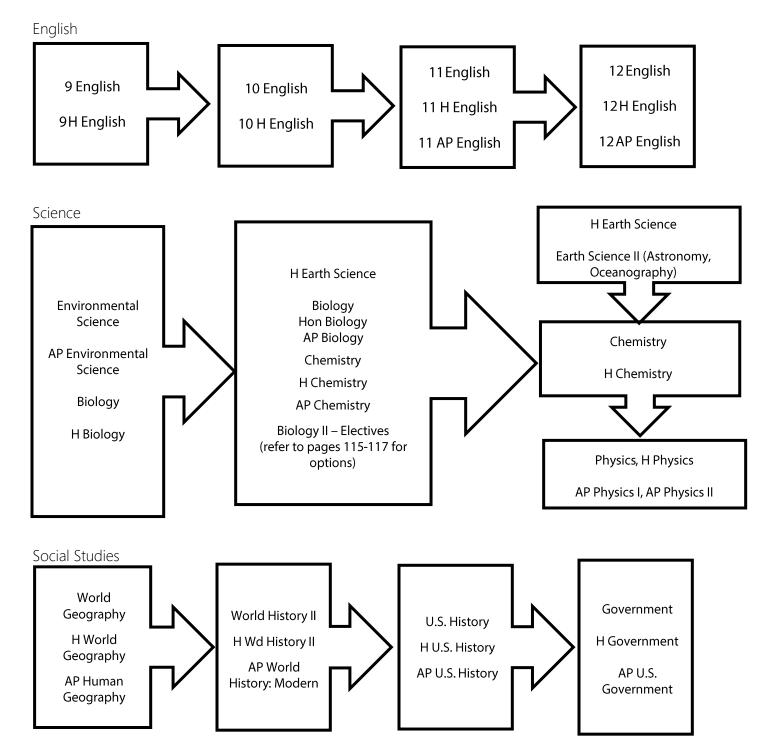
# ACADEMIC OPTIONS GUIDE FOR STUDENTS

# HIGH SCHOOL COURSE SEQUENCES

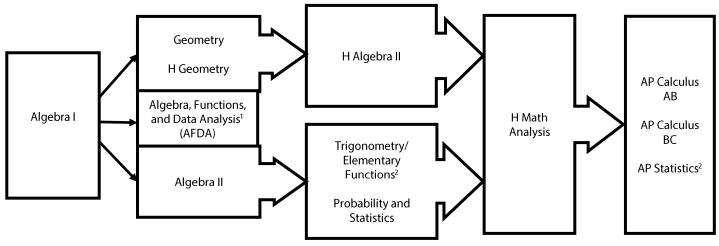
The following flow charts show the sequence of courses for some academic areas.

Additional courses are available at New Horizons Regional Education Center for students who complete the course of study at their home schools in the following subjects: Science, Mathematics.

See your school counselor if you have questions.



# Mathematics

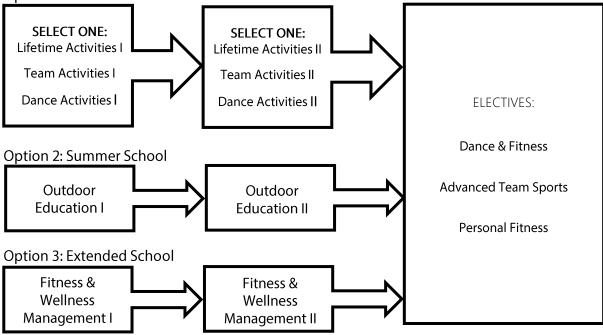


<sup>1</sup>Algebra Functions and Data Analysis cannot be taken AFTER Algebra II. <sup>2</sup>Trignometry/Elementary Functions may also be a prerequisite for AP Statistics.

# Health and Physical Education

Select one of three Physical Education options:





Students may combine options, but with Option 1 (in any combination) it must include Introduction to Fitness.



	Program M	m Model for GSST (**College Credit Subject to Review)		Revised 12.16.19
Engineering Strand	*Prerequisites: Biology and Chemistry with a Math minimum of Pre-Calculus	of Pre-Calculus		
11th Grade	Calculus-based Engineering Physics I & II	Research Methodology w/ Statistical Analysis	Calculus/MV-LA	4 HS/18-19 college credits
	2 HS Science/8 TNCC credits	1 HS Elective/3 TNCC Statistics credits	1 HS Math/8 TNCC credits Calculus 1 HS Math/7 TNCC credits MV-LA	
12th Grade	Calculus-based Engineering Physics III &IV	Honors Research/Mentorship	Multivariable-Linear Algebra/Applied Calculus/Differential Equations (DE)	5 HS/9-13 college credits
	2 HS Science/4 TNCC credits *pending approval	2 HS Electives/2 TNCC credits	1 HS Math/7 TNCC credits MV-LA 1 HS Math/3TNCC credits Applied Calculus 1HS Math/3 TNCC credits DE	Total 9HS/27-32 college credits
<b>Biological Science Strand</b>	*Prerequisites: Biology and Chemistry with a Math minimum of Algebra II/Trig *Biological Science - It is highly recommended that students take high school Physics at their home school division	of Algebra II/Trig *Biological Science - It is highly recommen	ded that students take high school Physics at their home	school division
11th Grade	Advanced Chemical Analysis	Research Methodology w/ Statistical Analysis	Modern Pre-Calculus/Calculus/MV-LA	4 HS/17-19 college credits
	2 H5 Science/8 TNCC credits	1 HS Elective/3 TNCC Statistics credits	1 H5/6 TNCC credits for Pre-Calculus 1 H5 Math/8 TNCC credits Calculus 1 H5 Math/7 TNCC credits MV-LA	
12th Grade	Advanced Biological Analysis	Honors Research/Mentorship	Calculus/Multivariable-LA/Applied Calculus/ Differential Equations	5 HS/13-18 college credits
	2 HS Science/8 TNCC credits	2 HS Electives/2 TNCC credits	1 HS Math/8 TNCC credits Calculus 1 HS Math/7 TNCC credits MV-LA 1 HS Math/3 TNCC credits Applied Calculus 1HS Math/3 TNCC credits Differential Equations	Total 9 HS/30-37
Computational Science	*Prerequisites: Biology and Chemistry with a Math minimum of Algebra II/Trig	of Algebra II/Trig		
11th Grade	Computational Physics I: Algebra-based Physics I & II	Research Methodology w/ Statistical Analysis	Modern Pre-Calculus/Calculus/MV-LA	4 HS/17-19 college credits
	2 H5 Science/8 TNCC credits	1 HS Elective/3 TNCC Statistics credits	1 H5/6 TNCC credits for Pre-Calculus 1 H5 Math/8 TNCC credits Calculus 1 H5 Math/7 TNCC credits MV-LA	
12th Grade	Engineering Design, Innovation & Entrepreneurship	Honors Research/Mentorship	Calculus/Multivariable-Linear Algebra/Applied Calculus/Differential Equations	5 HS/19-24 college credits
	2 HS Science/14 TNCC credits *pending approval	2 HS Electives/2 TNCC credits	1 HS Math/8 TNCC credits Calculus 1 HS Math/7 TNCC credits MV-LA 1 HS Math/3 TNCC credits Applied Calculus 1HS Math/3 TNCC credits Differential Equations	Total:9 HS/36-43 college credits
*th is imperative that students mee **Dual Enrollment credits and fees	*t is imperative that students meet with their school counselor to ensure requirements for Advanced Diploma are met. ** Dual Enrollment credits and fees, (which are determined by the Virginia Community College System and Thomas Nelson Community) are not guaranteed and are subject to change at any time based on staffing and course College requirements (TNCC).	ioma are met. i Thomas Neison Community) are not guaranteed and are subject	t to change at any time based on staffing and course Colleg	requirements (TNCC).

# **ART COURSES**

# **ART GRADE 6**

Course Number: RN6ART

#### Prerequisites: None

#### Grade Level: 6

Art Grade 6 is an exploration of the elements of art and the principles of design as a framework, students investigate a variety of experiences and concepts. Students explore various two-dimensional and three-dimensional art media using a variety of expressive and technical approaches.

# **ART GRADE 7**

Course Number: AR7300

#### **Prerequisites:** None

#### Grade Level: 7

Art Grade 7 emphasizes exploration of the creative process through analysis of the elements of art and the principles of design. Students develop technical skills that empower them to communicate ideas visually, with the focus on realistic representations of their environment.

#### **ART GRADE 8**

#### Course Number: AR8300

#### Prerequisites: None

#### Grade Level: 8

Art Grade 8 emphasizes application of more complex technical skills as students manipulate the elements of art and the principles of design, art media and ideas. Students acquire art skills that enable them to make conscious choices of media and techniques for expressive purposes.

#### **ART I: FOUNDATIONS OF ART**

#### Course Number: AR0100

Prerequisites: None

#### Grade Level: 9-12

#### Credit: 1/2 credit per semester

Art I: Foundations of Art emphasizes the development of abilities to recognize visual arts content and concepts. Students will develop skills to create, discuss and understand original works of art. Students will maintain a portfolio documenting their accomplishments.

### **ART 2D: DRAW/PAINT**

Course Number: AR0200

#### Prerequisites: Art I: Foundations or successful completion of Visual Art SIA with recommendation of art teacher.

#### Grade Level: 9-12

#### Credit: 1/2 credit per semester

Art 2D: Draw/Paint is an intermediate level course that emphasizes the importance of content, concepts and skills involved in the creation of original works of art. The student will demonstrate his/her understanding of mark making and design principles as applied to two-dimensional surfaces. Two-dimensional media may include drawing, painting, printmaking, mixed media and/or digital processes. In addition, art history, critical evaluation and aesthetics issues will be addressed. Students will continue to maintain a portfolio and select representative work to take to the next level of study.





# **ART 3D: SCULPTURE/CRAFTS**

Course Number: AR0300 Prerequisites: Art I: Foundations of Art or successful completion of Visual Art SIA with recommendation of art teacher. Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

Art 3D: Sculpture/Crafts is an intermediate level course intended to address engagement with physical space and materials. In this course, the student should demonstrate his/her understanding of design principles as they relate to depth and space. The course emphasizes the importance of content, concepts, and skills involved in the creation of original works of art. Included are components of art history, critical evaluation and aesthetics. Selected works of art and other products will be added to the portfolio and carried forward to the next level of study.

### **CAREER DEVELOPMENT IN THE VISUAL ARTS**

Course Number: AR0089

Prerequisites: Art I: Foundations of Art

Grade Level: 9-12

#### Credit: ½ credit

This course will prepare students for a career or college setting by exploring topics such as selecting a career focus, technology for the 21st century artist, new art forms and emerging artists. Copyright laws for visual artist, preparing work for display and applying for commissions will also be studied. Students will develop and maintain a digital portfolio. Internships, guest speakers and behind the scene experiences will be sought to provide students insight into what it takes to reach their art career goals. *This is a one semester course*.

#### **HISTORY OF ART**

Course Number: AR0079

Prerequisites: Art I: Foundations of Art

Grade Level: 10-12

#### Credit: ½ credit

This course will acquaint the student with the varied avenues humanity has used to express itself through the visual arts. The course provides a balanced approach by combining art history, art criticism, and personal art production. History of Art provides a foundation to students to be future artists, historians, critics and patrons of the arts. *This is a one semester course*.

#### **INTRODUCTORY ART**

Course Number: AR0019

**Prerequisites:** None

Grade Level: 9-12

#### Credit: ½ credit

Introductory Art is a one-semester exploratory course designed to appeal to pupils who have little background knowledge in visual art. In the course students experience a variety of art media to further their appreciation of visual arts. It is not to be considered an alternative to Art I, nor can it count toward the sequential art program. *This is a one semester course*.

#### **COMPUTER ART I**

#### Course Number: AR1100

#### Prerequisites: Art I: Foundations of Art or recommendation of art teacher

#### Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

Computer Art I is a two-semester course focusing on the development of skills necessary to utilize standard computer tools and software in the creation of visual art, graphic designs and imaging. The course will focus on basic art design concepts, personal expression and creative problem solving. In addition, it will provide students with experiences exploring careers in the field of computer graphics.

# **COMPUTER ART II**

Course Number: AR1200

#### Prerequisites: Computer Art I or recommendation of art teacher

Grade Level: 10-12

#### Credit: 1/2 credit per semester



Computer Art II is a two-semester course that will continue to develop skills and provide experiences needed to enter career fields in visual arts, computer graphics and animation. Greater emphasis will be placed on creative problem solving and career simulation assignments. Students will maintain a digital portfolio.

### **HONORS MEDIA ARTS**

#### Course Number: AR3600

#### Prerequisites: Successful completion of Computer Art I or teacher recommendation

Grade Level: 10-12

#### Credit: 1/2 credit per semester

#### OFFERED ONLY AT WOODSIDE HS

Media Arts is a wo-semester focusing on the development of skills necessary to explore time-based and interactive arts such as video, animation, web design, and game design. The course builds on basic digital visual art skills and emphasizes storytelling, duration, hybridization, interactivity, and points of view. In addition, students will focus on communication, creative problem solving, and personal expression.

# **AP ART HISTORY**

#### Course Number: AR3300

#### Prerequisites: None

Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

AP Art History is a comprehensive study of the history of art. The course includes study of architecture, painting, sculpture, and other art forms, within cultural and historical contexts. Students will examine the major forms of artistic expression in the past and present, including our own and that of other cultures. Students will learn to express opinions, conduct research, and to compare and contrast styles verbally and in writing. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.

# **ART PORTFOLIO DEVELOPMENT**

#### Course Number: AR3100

#### Prerequisites: 2 credits in art; teacher recommendation and portfolio demonstrating serious interest and

proficiency in art production

#### Grade Level: 10-12

### Credit: ½ credit per semester (+0.5 weighted credit)

This course is designed for students who plan to continue to an Advanced Placement Studio Art course and/or make art or an art related subject a college or career choice. Students will develop technical and conceptual art making skills. 2D and 3D techniques, art history, art appreciation, and related areas of art are explored and developed. Students will work with the teacher to develop an individualized plan of instruction based on areas of artistic interest. Students are required to develop a portfolio of original ideas demonstrating a personal focus for art production.

### **AP STUDIO ART: 2D DESIGN**

Course Number: AR3210

#### Prerequisites: 2 credits in Art; teacher recommendation and portfolio demonstrating advanced art skills

#### Grade Level: 10-12

#### Credit: ½ credit per semester (+1.0 weighted credit)

The portfolio for AP 2D Design is intended to address two-dimensional (2D) design issues. The unifying idea for the portfolio is that the student focuses on making decisions about how to use the elements of art and principles of design to create works of art that convey meaning. Any two-dimensional medium may be used for this portfolio. Each student develops and submits a portfolio that serves as a direct demonstration of achievement. The course guidelines are based on AP portfolio requirements. Coursework includes hands-on project development as well as research and writing assignments. The course is designed for



the art student who wishes to pursue college-level study while still in high school, and for the student who is seriously interested in the practical experience of art. Students are required to keep a portfolio and research workbook (journal/sketchbook).

# AP STUDIO ART: 3D DESIGN

#### Course Number: AR3220

# Prerequisites: 2 credits in Art, teacher recommendation and portfolio demonstrating advanced art skills Grade Level: 10-12

#### Credit: ½ credit per semester (+1.0 weighted credit)

The portfolio for AP 3D Design is intended to address three-dimensional (3D) design issues. Works that are submitted for this portfolio explore depth and space by addressing issues related to mass, volume, and form. The focus is on using the elements of art and principals of design to create 3D works of art that convey meaning. Any three-dimensional medium may be used for this portfolio. Each student develops and submits a portfolio that serves as a direct demonstration of achievement. The course guidelines are based on AP portfolio requirements. Coursework includes hands-on project development as well as research and writing assignments. The course is designed for the art student who wishes to pursue college-level study while still in high school, and for the student who is seriously interested in the practical experience of art. Students are required to keep a portfolio and research workbook (journal/sketchbook).

### **AP STUDIO ART: DRAWING**

#### Course Number: AR3230

# Prerequisites: 2 credits in Art, teacher recommendation and portfolio demonstrating advanced art skills Grade Level: 10-12

#### Credit: ½ credit per semester (+1.0 weighted credit)

In AP Drawing, portfolio mastery of drawing may be demonstrated through a wide range of approaches and media. The unifying focus for this portfolio is the exploration of art that involves direct mark making on a surface. Light and shade, line quality, rendering of form, composition, surface manipulation and the illusion of depth are among the drawing issues that can be addressed. Each student develops and submits a portfolio that serves as a direct demonstration of achievement. The course guidelines are based on AP portfolio requirements. Coursework includes hands-on project development as well as research and writing assignments. The course is designed for the art student who wishes to pursue college-level study while still in high school, and for the student who is seriously interested in the practical experience of art. Students are required to keep a portfolio and research workbook (journal/sketchbook).

### **INTRODUCTORY PHOTOGRAPHY**

#### Course Number: AR0029

#### Prerequisites: Successful completion of Art I or art teacher recommendation

#### Grade Level: 9-12

#### Credit: ½ credit

This course is a basic introduction to photography designed to be completed in one semester. Students will learn how to see the world through the camera and utilize photography as an image-making medium. The course introduces the functions of the single lens reflex camera and basic darkroom procedures for developing and printing black and white film. Students will investigate new technologies utilizing the digital image and the computer. *This is a one semester course*.

### **PHOTOGRAPHY I**

#### Course Number: AR3400

# Prerequisites: Successful completion of Art I Foundations, Introductory Photography or teacher recommendation

# Grade Level: 10-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

Photography I is an introductory course in basic darkroom and digital photography techniques. Students will learn the operations and functions of digital and film cameras. Basic darkroom processes and digital editing software will be introduced. Emphasis will be placed on developing creative expression by integrating technical knowledge with aesthetic approaches. In addition, the course will explore the history of photography and encourage students to develops career interest areas.

# **PHOTOGRAPHY II**

Course Number: AR3420

#### Prerequisites: Successful completion of Photography I

Grade Level: 10-12

#### Credit: 1/2 credit per semester

Photography II is designed for students who have received credit for one full year of photography. Students investigate new areas in photographic media and often have a choice of camera formats and technologies for in-depth exploration. Emphasis is on thematic exploration for personal expression and on building a photographic portfolio.

### **DIGITAL PHOTOGRAPHY**

#### Course Number: AR0039

#### Prerequisites: Art I Foundations, Introductory Photography, SIA or teacher recommendation

#### Grade Level: 9-12

#### Credit: ½ credit

Students will explore the creative possibilities of their digital cameras from a fine art approach. Emphasis will be placed on composition, lighting and subject choices. Traditional photo editing with basic computer software will be introduced. Students will be required to save all work in a digital portfolio. Students may repeat this course a second semester to advance skills. *This is a one semester course*.

# **INTRODUCTORY CERAMICS**

#### Course Number: AR0049

#### Prerequisites: Successful completion of Art I Foundations or teacher recommendation

### Grade Level: 9-12

#### Credit: ½ credit

Ceramics is a semester course focusing on the introduction of hand-built pottery methods. Relief and sculptural techniques will be explored. *This is a one semester course*.

### CERAMICS

Course Number: AR0400

#### Prerequisites: Successful completion of Art I Foundations or teacher recommendation

#### Grade Level: 9-12

#### Credit: 1/2 credit per semester

Ceramics is a full year course beginning with traditional hand built pottery methods and exploring the discipline of wheel throwing in ceramics production. Basic glaze and glaze chemistry will be covered. These techniques will be explored in the context of ceramic art historically and in contemporary art forms. This course also explores the use of ceramic materials in the larger context of sculptural possibilities. An emphasis on research and introspection is expected through the development of a personal portfolio.



# **CAREER & TECHNICAL EDUCATION COURSES**



# <u>Aviation</u>

The following courses are offered only at Denbigh High School Aviation Academy: **AEROSPACE TECHNOLOGY I** *Course Number: AV1210* 

Prerequisites: None

#### Grade Level: 9 Credit: 1 credit yearlong course

#### OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

This offers an introduction to flight, space, and supporting technologies through a hands-on approach. Students explore the aviation and space industries through the history of aviation, working with aerodynamics and aircraft components, addressing maintenance and safety issues, assessing flight conditions, examining airport and flight operation, and analyzing the concepts of rocketry and space.

# **AEROSPACE TECHNOLOGY II**

Course Number: AV1220

Prerequisites: Aerospace Technology I

Grade Level: 10

#### Credit: 1 credit yearlong course

#### OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Aerospace Technology II provides an advanced exploration of flight, space travel, and supporting technologies through a problem-solving method and practical application. Students explore concepts in aircraft operations; aircraft design, flight safety and maintenance; airport infrastructure; rocket technology; space systems; and living and working in the aerospace Environment.

# **CRIMINAL JUSTICE I**

Course Number: AV1410

**Prerequisites:** None

Grade Level: 9

Credit: 1 credit yearlong course

#### OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Students are introduced to the legal foundations and processes, and the principles, techniques, and practices for exploring careers within the criminal justice system as it relates to aviation safety and security.

### **HONORS CRIMINAL JUSTICE II**

Course Number: AV1450

Prerequisites: Criminal Justice I

Grade Level: 10

### Credit: 2 credit yearlong course (+0.5 weighted credit)

### OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Students learn the legal foundations and processes, the principles, techniques, and practices for exploring careers within the criminal justice system as it relates to aviation safety and security, and the history of terrorism in the United States. Students combine classroom instruction and supervised, practical experience throughout the school year.

# **INTRODUCTION TO ENGINEERING DESIGN- AEROSPACE**

Course Number: AV1110

Prerequisites: None

Grade Level: 9

#### Credit: 1 credit yearlong course

#### OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

In this foundation course students use 3-D computer modeling software as they learn the engineering- design process and solve design problems for which they develop, analyze, and create product models. *This is a Project Lead the Way course* 

# HONORS DIGITAL ELECTRONICS IN AVIATION

Course Number: AV1160

#### *Prerequisites: Introduction to Engineering Design -Aerospace Grade Level: 10*

# Credit: 1 credit yearlong course (+0.5 weighted credit)

OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Students use computer simulations to learn about the logic of electronics as they design, test, and actually construct circuits and devices. They apply control system programming and explore sequential logic and digital circuitry fundamentals. Topics in computer circuitry are also presented. *This is a Project Lead the Way course*.

# **AVIATION MAINTENANCE TECHNOLOGY I**

Course Number: AV1230

Prerequisites: Aerospace Technology II

Grade Level: 11

Credit: 1 credit yearlong course

#### OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Students will work with airframe and control surfaces, power plants, and basic aviation electricity and perform ground operations and servicing procedures, as specified by FAA requirements. Students will also practice lab and tool safety, study career pathways, apply academic principles to aviation maintenance tasks, and research and use maintenance publications, forms, and records.

Max enrollment: 16 students.

# HONORS AVIATION MAINTENANCE TECHNOLOGY II

Course Number: AV1250

Prerequisites: Aviation Maintenance Technology I

Grade Level: 12

Credit: 2 credit yearlong course (+0.5 weighted credit)

OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Students will explore design features of aircraft through drawings and blueprints, aircraft materials and processes, weight and balance procedures, and fluid lines and fittings. Additionally, students will be taught care and maintenance techniques, such as how to identify and correct corrosion, practice lab and tool safety, and apply academic principles while working with aircraft. **Max enrollment: 16 students.** 



# TECHNICAL AIRCRAFT PILOT TRAINING I



Course Number: AV1310

Prerequisites: None Grade Level: 9 Credit: 1 credit yearlong course OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Students will obtain knowledge necessary to complete the FAA Private Pilot Airplane Written Examination. There are flight simulation lessons that support the ground lessons. This course covers Aerodynamic Principles, Powerplant and Related Systems, Flight Instruments Aircraft Performance, Weather Theory, Weather Reports and Forecasts, Federal Aviation Regulations, National Transportation Safety Board, VFR Charts, Airspace, Airport Markings and Operations, Radio Communication, Pilot age and Dead-reckoning Navigation, Radio Navigation, Flight Planning, and flight Physiology, as well as hands-on activities. **Max enrollment: 20 students.** 

# HONORS AIRCRAFT PILOT TRAINING II

Course Number: AV1350

Prerequisites: Aircraft Pilot Training I

Grade Level: 10

Credit: 2 credit yearlong course (+0.5 weighted credit)

#### OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Students continue their pursuit in learning more about the pilot career and build on prior information learned in the Aviation Pilot Training I course. Students participate in flight training, ground school, and simulator instruction to support the flight syllabus while studying meteorology, aerodynamics, navigation, physiology, airfield and flight environments, aircraft maneuvers, and aircraft weight and balance. **Max enrollment: 20 students.** 

# **AEROSPACE ENGINEERING**

Course Number: AV1130

Prerequisites: Honors Digital Electronics in Aviation

Grade Level: 11

### Credit: 1 credit yearlong course

### OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

In this specialized course, students are taught about aerodynamics, astronautics, space-life sciences, and systems engineering through hands-on engineering problems and projects. *This is a Project Lead the Way course.* 

# **PUBLIC SAFETY IN AVIATION I**

Course Number: AV1430 Prerequisites: Honors Criminal Justice II Grade Level: 11 Credit: 1 credit yearlong course OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Students perform procedures related to law enforcement and aviation safety occupations, including learning the history of the criminal justice system; policing skills; the rule of law; crime scene investigation; the role of the course; communications systems; and first aid and CPR techniques.

# HONORS PUBLIC SAFETY IN AVIATION II

Course Number: AV1460 Prerequisites: Public Safety in Aviation I Grade Level: 12 Credit: 2 credit yearlong course (+0.5 weighted credit) OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Students perform procedures related to law enforcement and aviation safety occupations, including learning policing; the rule of law; the role of the courts, including juvenile justice; the history and fundamentals of the fire service; building construction; ventilation; salvage, overhaul, and HazMat standards.

### HONORS AIR TRAFFIC CONTROLLER

Course Number: AV1360

Prerequisites: Aviation Operations Management Grade Level: 12 Credit: 2 credit yearlong course (+0.5 weighted credit)

OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

This course will help students understand the skills necessary and the importance of ensuring a smooth flow of air traffic arriving and departing from an airport. Students will experience the role of Air Traffic Controllers in the operation and management of airports, as well as training and career opportunities in this field. Instruction will take place on Function and History of Air Traffic Control, Duties and Responsibilities, Military Air Traffic Control, Meteorology, Emergency situations and other related topics. Knowledge will be obtained related to passing the FAA Air Traffic Control exam. **Max enrollment: 20 students.** 

# **AVIATION OPERATIONS MANAGEMENT**

Course Number: AV1330

Prerequisites: Honors Aircraft Pilot Training II Grade Level: 11 Credit: 2 credit yearlong course

### OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Students explore the aviation industry, acquiring skills in airport operations, air traffic control, and addressing airport-specific concerns. Special emphasis placed on real-world scenarios and problem-solving, students are taught to inspect airfields, handle airport emergencies, design an airport, and control the airport environment in the same way these issues are being addressed in the industry today.

# HONORS UNMANNED AIRCRAFT SYSTEMS

Course Number: AV1370

#### Prerequisites: Completion of Aerospace Technology I, Aircraft Pilot I and II. Grade Level: 11-12 Credit: 1 credit yearlong course (+.5 weighted credit)

OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

This course prepares students to fly drones under the Federal Aviation Administration's (FAA) Guidelines. Students will learn about the National Airspace System and will design and operate small drones. Knowledge will be obtained related to passing the UAS (Unmanned Aircraft Systems) industry certification exam.

# HONORS ENGINEERING DESIGN & DEVELOPMENT CAPSTONE

Course Number: AV1150 Prerequisites: Aerospace Engineering Grade Level: 12

Credit: 1 credit yearlong course (+0.5 weighted credit) OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

In this capstone course in Project Lead the Way, teams of students, guided by community mentors, work together to research, design, and construct solutions to engineering problems. Students synthesize knowledge, skills, and abilities through an authentic engineering experience. Students are expected to develop and formally present an independent-study project and a team-oriented project that are critiqued by an evaluation committee. *This is a Project Lead the Way course*.





# AL Business & Information Technology

Course Number: RN6KEY

#### Grade Level: 6

This course is designed for middle school students to develop touch skills for entering alphabetic,

and professional documents.

# **COMPUTER SOLUTIONS**

#### Course Number: BU7006

#### Grade Level: 7

This exploratory course introduces students to the basic skills of computer technology required by the Standards of Learning. Word processing, spreadsheets, databases and presentation software will be included in the course content.

# DIGITAL TECHNOLOGY FOUNDATIONS

#### Course Number: BU8006

Prerequisites: None

#### Grade Level: 8

This course introduces the use of new and emerging data input tools that are becoming the standard in today's work and educational settings. Students will develop proficiency in the use of speech recognition software, digital cameras, digital video cameras and input tools for entering and manipulating text and data.

# **DIGITAL APPLICATIONS**

Course Number: BU0209

#### Grade Level: 9, 10

#### Credit: 1/2 credit semester course

Students demonstrate an understanding of computer concepts through application of knowledge. Students learn to use software packages and local and worldwide network communications systems. Students develop or review correct keyboarding techniques and gain a basic knowledge of word processing, spreadsheet, database, graphics and telecommunications applications.

### **BUSINESS LAW**

Course Number: BU0309

#### Prerequisites: None

Grade Level: 10-12

#### Credit: 1/2 credit semester course

Students examine the foundations of the American legal system. Students explore economic and social concepts as they relate to legal principles and to business and personal laws. *This is a one semester course.* 

# INFORMATION TECHNOLOGY FUNDAMENTALS

#### Course Number: BU1000

Prerequisites: None

#### Grade Level: 9

### Credit: 1 credit yearlong course

Information Technology (IT) Fundamentals introduces the essential skills needed for students to pursue specialized programs leading to technical and professional careers and certifications in the IT industry. The course provides an introductory framework as students prepare for higher-level certification programs and courses such as A+, CISCO, etc. Students have an opportunity to investigate career opportunities in four major IT areas: Information Services and Support, Network Systems, Programming and Software Development, and Interactive Media.

# **COMPUTER NETWORK SOFTWARE OPERATIONS**

Course Number: BU0530

Prerequisites: Information Technology Fundamentals

Grade Level: 10

### Credit: 1 credit yearlong course

OFFERED ONLY AT HERITAGE HIGH SCHOOL GOVERNOR'S STEM ACADEMY

Course is designed to teach many aspects of computer support and network administration. Students learn networking concepts, usage of components, peer-to-peer network systems, client service networks, installation of network and workstation operating systems, set up and manage user accounts, create and implement security plans, communication protocols, troubleshooting techniques for systems and client server networks, website management, and other advanced networking readiness. The course prepares students for postsecondary education and training and a successful career in information technology.

# **ADVANCED COMPUTER NETWORK SOFTWARE OPERATIONS (HONORS)**

Course Number: BU0550

Prerequisites: Computer Network Software Operations

Grade Level: 11

### Credit: 1 credit yearlong course (+0.5 weighted credit)

# OFFERED ONLY AT HERITAGE HIGH SCHOOL GOVERNOR'S STEM ACADEMY

Course continues to teach aspects of network administration, focusing on the management and support of network users and systems. The topics learned include understanding the responsibilities of computer professionals, training end users, evaluating new technology, developing system policies, troubleshooting workstations, managing network services and protocols, and effectively using email and business communications. Students learn communication protocols, troubleshooting techniques for systems and client-server network, website management, and other advanced networking topics. Techniques that are used to install operating systems, set up and manage accounts, load software, and create and implement security plans are taught.

# PROGRAMMING

Course Number: BU5100

Prerequisites: Successful completion of Algebra I

Grade Level: 9

# Credit: 1 credit yearlong course

### OFFERED ONLY AT HERITAGE HIGH SCHOOL GOVERNOR'S STEM ACADEMY

Students in the Programming course explore programming concepts, use algorithmic procedures, implement programming procedures with one or more standard languages, and master programming fundamentals. Coding is used throughout the course. Graphical user interfaces may be used as students design and develop interactive multimedia applications, including game programs. In addition, students employ HTML or JavaScript to create Web pages. Students develop their employability skills through a variety of activities.

# **AP COMPUTER SCIENCE PRINCIPLES**

Course Number: BU5300

Prerequisites: Programming

Grade Level: 10

# Credit: 1 credit yearlong course (+1.0 weighted credit)

Students design, implement and interpret computer-based solutions to problems in several application areas, becoming knowledgeable about programming concepts, algorithm designs, and documentation of the computer solution. The course material emphasizes those concepts outlined by the College Board and prepares students to take the Advanced Placement Computer Science Principles test.



# TECHNICAL PRINCIPLES OF BUSINESS & MARKETING



Course Number: BU1109

Prerequisites: None

Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit semester course

Students explore the roles of business and marketing in the free enterprise system and the global economy. Students study how basic financial concepts of banking, insurance, credit, taxation, and investments provide a strong background as they prepare to make decisions as consumers, wage earners and citizens. *This is a one semester course.* 

#### **BUSINESS MANAGEMENT**

Course Number: BU1520

Prerequisites: None

Grade Level: 10-12

#### Credit: 1 credit yearlong course

Students study basic management concepts and leadership styles as they explore business ownership, planning, operations, finance, human relations and the global market place. Quality concepts, project management, problem-solving and ethical decision-making are an integral part of the course.

#### COMPUTER INFORMATION SYSTEMS

Course Number: BU1600

Prerequisites: None

Grade Level: 9-12

#### Credit: 1 credit yearlong course

Students apply problem-solving skills to real-life situations through word processing, spreadsheet, and database software; multimedia presentations; and integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, telecommunications and emerging technologies.

### **ADVANCED COMPUTER INFORMATION SYSTEMS (HONORS)**

Course Number: BU1650

#### **Prerequisites: Computer Information Systems**

Grade Level: 11, 12

#### Credit: 1 credit yearlong course (+0.5 weighted credit)

Students apply problem-solving skills to real–life situations through advanced integrated software applications. Students work individually and in groups to explore advanced computer maintenance, website development, programming, networking, emerging technology and employability skills. Completion of this course may prepare the student for industry certification.

### ACCOUNTING

Course Number: BU1710

Prerequisites: None

Grade Level: 10-12

#### Credit: 1 credit yearlong course

Students study the basic principles, concepts, and practices of the accounting cycle. Topics covered include analyzing transactions, journalizing and posting entries, preparing payroll records and financial statements, and managing cash systems. Students learn fundamental accounting procedures using a manual and an electronic system.

#### **ADVANCED ACCOUNTING (HONORS)**

Course Number: BU1740

Prerequisites: Accounting

Grade Level: 11, 12

#### Credit: 1 credit yearlong course (+0.5 weighted credit)

Students gain in-depth knowledge of accounting procedures and techniques used to solve business problems and make financial decisions. Students use accounting and spreadsheet software to analyze and interpret business applications.

# **ECONOMICS & PERSONAL FINANCE**

Course Number: BU1750, BU1760

**Prerequisites:** None

Grade Level: 11,12

#### Credit: 1 credit yearlong course

Students learn how to navigate the financial decisions they must face and to make informed decisions

related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. In addition to developing personal finance skills, students in the 36-week course will also study basic occupational skills and concepts in preparation for entry-level employment in the field of finance. The course incorporates all economics and financial literacy objectives included in the Code of Virginia §22.1-200.03B.

# **DESIGN, MULTIMEDIA & WEB TECHNOLOGIES**

Course Number: BU1800

Prerequisites: None

Grade Level: 10-12

#### Credit: 1 credit yearlong course

Students develop proficiency in creating desktop publications, multi-media presentations/projects, and websites incorporating principles of layout and design using industry standard application software. Students design portfolios that may include business cards, newsletters, mini-pages, web pages, multimedia presentations/ projects, calendars and graphics. Completion of this course may prepare students for industry certifications.

# Family and Consumer Sciences

### FAMILY AND CONSUMER SCIENCE EXPLORATORY I

#### Course Number: RN6FAC

#### Grade Level: 6

This course provides a foundation for managing individual, family, career, and community roles and responsibilities. Students focus on areas of individual growth, goal setting, strengthening families, and awareness of personal safety and wellness. They also explore saving and spending practices, clothing care, food preparation, positive and caring relationships with others; and careers.

### FAMILY AND CONSUMER SCIENCE EXPLORATORY II

#### Course Number: WF7006

#### Grade Level: 7

Students focus on individual development, maintain their personal environments, apply nutrition and wellness practices, manage consumer and family resources, create textile, fashion, and apparel products, and explore careers related to Family and Consumer Sciences such as child care.

### FAMILY AND CONSUMER SCIENCE EXPLORATORY III

#### Course Number: WF8006

#### Grade Level: 8

Students experience in-depth studies of nutrition and wellness, food preparation, relationships, personal environments; textiles, fashion and apparel, consumer resources, child development and care, and leadership service in action.



# TECHNICAL INTRODUCTION TO CULINARY ARTS



#### Course Number: WF1110

Prerequisites: None

Grade Level: 9-11

#### Credit: 1 credit yearlong course

The Introduction to Culinary Arts curriculum provides students with opportunities to explore career options and entrepreneurial opportunities within the food service industry. Students investigate food safety and sanitation, explore culinary preparation foundations, practice basic culinary skills, explore diverse cuisines and service styles, investigate nutrition and menu development, and examine the economics of food.

#### **NUTRITION AND WELLNESS**

Course Number: WF1130

**Prerequisites:** None

Grade Level: 9-11

#### Credit: 1 credit yearlong course

Students enrolled in Nutrition and Wellness focus on making choices that promote wellness and good health; analyzing relationships between psychological and social needs and food choices; choosing foods that promote wellness; obtaining and storing food for self and family; preparing and serving nutritious meals and snacks; selecting and using equipment for food preparation; and identifying strategies to promote optimal nutrition and wellness of society. Students will determine career options in the field of food science, nutrition and wellness.

# HONORS FOOD SCIENCE AND DIETETICS

Course Number: WF1250

#### Prerequisites: Nutrition and Wellness or Introduction to Culinary Arts

**Co-requisite:** Chemistry

Grade Level: 11-12

#### Credit: 1 credit yearlong course (+0.5 weighted credit)

Through laboratory and other practical experiences, students will develop a deeper appreciation for the food system and the impact of science on the food and nutrition industries. Students will explore the food sources; the science and technology of food production and processing; and implications for individual and global health and wellness.

# Health & Medical Sciences

#### **INTRODUCTION TO HEALTH & MEDICAL SCIENCES**

Course Number: HS1100

Prerequisites: None

Grade Level: 9

#### Credit: 1 credit yearlong course

#### OFFERED ONLY AT WARWICK HIGH SCHOOL GOVERNOR'S HEALTH SCIENCES ACADEMY

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

# **PRINCIPLES OF BIOMEDICAL SCIENCE**

Course Number: HS3100

Prerequisites: Enrolled in the Governor's Health Sciences Academy for Biotechnology Research and Development

Grade Level: 9

Credit: 1 credit yearlong course

# OFFERED ONLY AT WARWICK HIGH SCHOOL GOVERNOR'S HEALTH SCIENCES ACADEMY

In the introductory course of the Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

# **HUMAN BODY SYSTEMS**

Course Number: HS3110

Prerequisites: Successful completion of Principles of Biomedical Science

Grade Level: 11

Credit: 1 credit yearlong course

#### OFFERED ONLY AT WARWICK HIGH SCHOOL GOVERNOR'S HEALTH SCIENCES ACADEMY

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal manikin, use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

# **HEALTH INFORMATICS**

Course Number:

Prerequisites: Introduction to Health & Medical Sciences

Grade Level: 11

# Credit: 1 credit yearlong course

# OFFERED ONLY AT WARWICK HIGH SCHOOL GOVERNOR'S HEALTH SCIENCES ACADEMY

Students will have the opportunity to explore the importance of safeguarding electronic healthcare information. Students will be introduced to the various technologies and trends that affect the healthcare industry to include the history of health information technology (IT) in the United States, the Electronic Health Record (EHR), ethical and privacy issues, and cybersecurity and data breaches.

# HEALTH ASSISTING CAREERS

Course Number: HS4100

Prerequisites: Medical Terminology

Grade Level: 11

Credit: 1 credit yearlong course

#### OFFERED ONLY AT WARWICK HIGH SCHOOL GOVERNOR'S HEALTH SCIENCES ACADEMY

Students explore opportunities in the health care field by developing basic skills common to several assisting careers. They study body structure and function, principles of health, microbes, and disease, and an overview of the health and patient care system. Supervised work-based learning may begin as part of the course in health care setting and is managed by the health and medical sciences education teacher.



CAREER &

ECHNIC



# MEDICAL TERMINOLOGY

Course Number: HS2100 Prerequisites: Introduction to Health & Medical Sciences is recommended Grade Level: 10 Credit: 1 credit yearlong course

#### OFFERED ONLY AT WARWICK HIGH SCHOOL GOVERNOR'S HEALTH SCIENCES ACADEMY

Medical Terminology is designed to help students learn health care language. Topics are presented in logical order, beginning with each body system's anatomy and physiology and progressing through pathology, diagnostic procedures, therapeutic interventions and finally pharmacology. Students learn concepts, terms and abbreviations for each topic.

# HONORS MEDICAL CLINICAL PRACTICE I

Course Number: HS4150

Prerequisites: Introduction to Health and Medical Sciences

Grade Level: 12

#### Credit: 1 credit yearlong course (+0.5 weighted credit)

#### OFFERED ONLY AT WARWICK HIGH SCHOOL GOVERNOR'S HEALTH SCIENCES ACADEMY

Course is offered as an occupational preparation course beginning at the eleventh grade level, emphasizes the study of nursing occupations as related to the health care system. Students study normal growth and development, simple body structure and function, and medical terminology and are introduced to microbes and disease. They receive elementary skill training in patient-nursing assistant relationships; taking and recording of vital signs; cardiopulmonary resuscitation; and bathing, feeding, dressing, and transporting of patients in hospitals and nursing homes. Limited on-the-job instruction in nursing homes and hospitals is part of the course. This course can be used as an introduction to practical nursing.

# **MEDICAL LABORATORY TECHNOLOGY I**

Course Number: HS5100

Prerequisites: Medical Terminology

Grade Level: 11

#### Credit: 1 credit yearlong course

#### OFFERED ONLY AT WARWICK HIGH SCHOOL GOVERNOR'S HEALTH SCIENCES ACADEMY

Students gain foundational knowledge and skills appropriate for a variety of medical-related career paths in the field of medical technology. Students are introduced to diagnostic and therapeutic laboratory procedures that support medical research and practice, and investigate safety, quality assurance, and ethical concerns associated with the field of medical technology.

# HONORS MEDICAL LABORATORY TECHNOLOGY II

Course Number: HS5150

Prerequisites: Medical Laboratory Technology I

Grade Level: 12

#### Credit: 1 credit yearlong course (+0.5 weighted credit)

#### OFFERED ONLY AT WARWICK HIGH SCHOOL GOVERNOR'S HEALTH SCIENCE ACADEMY

Students will build on the foundational knowledge and skills obtained in Medical Laboratory Technology I. Students will use the basic principles necessary to perform competently in the areas of Hematology, Clinical Chemistry, Clinical Microbiology, Immunohematology, and Immunology/Serology. Competency includes performing the technique correctly, understanding the theory of the procedures, and interpreting the results. Weekly laboratory activities will stress actual student performance of the routine tests normally seen in the clinical setting.

#### **MEDICAL INTERVENTIONS**

Course Number: HS3120

Prerequisites: Successful completion of Human Body Systems

Grade Level: 11

#### Credit: 1 credit yearlong course

OFFERED ONLY AT WARWICK HIGH SCHOOL GOVERNOR'S HEALTH SCIENCES ACADEMY

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

# HONORS BIOMEDICAL INNOVATION

Course Number: HS3150

Prerequisites: Successful completion of Medical Interventions

Grade Level: 12

#### Credit: 1 credit yearlong course (+0.5 weighted credit)

#### OFFERED ONLY AT WARWICK HIGH SCHOOL GOVERNOR'S HEALTH SCIENCES ACADEMY

In the final course of the Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent design project with a mentor or advisor from a university, medical facility, or research institution.

# **Marketing**

#### MARKETING

Course Number: MK0100

**Prerequisites:** None

Grade Level: 11, 12

#### Credit: 1 credit yearlong course

Students examine activities in marketing and business important for success in marketing employment and postsecondary education. Students will learn how products are developed, branded and sold to businesses and consumers. Students will analyze industry trends and gain hands-on experience in the marketing of goods, services and ideas. Topics will include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues and the impact of technology on the marketplace. This course reinforces mathematics, science, English and history/social science Standards of Learning (SOL).

# **ADVANCED MARKETING (HONORS)**

#### Course Number: MK0250

#### Prerequisites: Marketing, Sports & Entertainment Marketing or Fashion Marketing

#### Grade Level: 12

#### Credit: 1 credit yearlong course (+0.5 weighted credit)

Students gain knowledge of marketing functions as they relate to supervisory and management responsibilities and develop skills needed for advancement. Students will prepare for advancement in marketing careers and postsecondary education. Advanced Marketing is the advanced cooperative program, which allows students to pursue the development of marketing competencies necessary for advancement in full-time employment or postsecondary education in marketing.



# TECHNICAL



# **FASHION MARKETING**

Course Number: MK1200

Prerequisites: None

Grade Level: 9-12

Credit: 1 credit yearlong course

This specialized marketing course is offered for students who have identified an occupational interest in the wholesale or retail marketing of men's, women's, and/or children's clothing and related items. Students will gain basic knowledge of the apparel and accessories industry and the skills necessary for successful employment in the apparel business. Emphasis is given to fashion purchasing and selling, fashion cycles, fashion coordination and sales promotion.

# SPORTS AND ENTERTAINMENT MARKETING

Course Number: MK1300

**Prerequisites:** None

Grade Level: 10-12

# Credit: 1 credit yearlong course

Sports, Entertainment and Recreation Marketing is a specialized course for students with a career interest in the fields of sports, entertainment or recreation. The course is designed to equip students with entry-level competencies in the areas of sponsorship, promotion, advertising, legal contracts, event marketing and communications. In addition, the course work provides students with a fundamental knowledge of global marketing and allows them to apply critical thinking and decision-making skills to current industry case studies. Guest speakers, field trips, short-term shadowing experiences and DECA participation provide relevance to the curriculum.

# **ENTREPRENEURSHIP EDUCATION**

Course Number: MK1600

Prerequisites: None

Grade Level: 10-11

#### Credit: 1 credit yearlong course

In this course, students will be introduced to the exciting world of creating, owning, and launching their own businesses. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle. They will learn the skills needed to build and manage a successful 21st century business.

# **ADVANCED ENTREPRENEURSHIP EDUCATION (HONORS)**

Course Number: MK1750

#### Prerequisite: Entrepreneurship Education

Grade Level: 10-12

# Credit: 1 credit yearlong course (+0.5 weighted credit)

This course is designed for students who wish to concentrate on advanced strategies for entrepreneurship, building upon concepts introduced in Entrepreneurship Education. The focus of the course is on development of a business plan and small business management. Students will establish, market, and maintain a business.

# Military Science

# AIR FORCE MILITARY SCIENCE I – IV

Course Number: MS1210, MS1220, MS1230, MS1250

Prerequisites: Senior Instructor recommendation for Air Force Military Science IV

Grade Level: 9-12

#### Credit: 1 credit yearlong course (+0.5 weighted credit for Air Force Military Science IV) OFFERED ONLY AT MENCHVILLE HIGH SCHOOL

Four levels of Air Military Science are available and are designed to instill the values of citizenship, service and personal responsibility and to instill a sense of accomplishment. Instruction covers military history, management, leadership and customs and courtesies. Numerous extracurricular opportunities are available to cadet cops members including honorary societies, drill/color guard teams and athletics/physical fitness activities. Enrolled students must maintain acceptable standards of appearance, conduct and academic achievement. Cadets can compete for 3 and 4-year college scholarships. Air Force Military Science IV is an optional course designed for the Cadet corps. Enrollment is selective and requires senior instructor recommendation.

# **ARMY MILITARY SCIENCE I – IV**

Course Number: MS1110, MS1120, MS1130, MS1150

#### Prerequisites: Senior Instructor recommendation for Army Military Science IV

Grade Level: 9-12

#### Credit: 1 credit yearlong course (+0.5 weighted credit for Army Military Science IV) OFFERED ONLY AT DENBIGH HIGH SCHOOL

Four levels of Army Military Science are available and are designed to instill the values of citizenship, service and personal responsibility and to instill a sense of accomplishment. Instruction covers military history, management, leadership and customs and courtesies. Numerous extracurricular opportunities are available to cadet corps members including honorary societies, drill/color guard teams and athletics/physical fitness activities. Enrolled students must maintain acceptable standards of appearance, conduct and academic achievement. Cadets can compete for 3 and 4-year college scholarships. Army Military Science IV is an optional course designed for the Cadet corps. Enrollment is selective and requires senior instructor recommendation.

# NAVAL MILITARY SCIENCE I – IV

Course Number: MS1310, MS1320, MS1330, MS1350

# Prerequisites: Senior instructor recommendation for Naval Military Sciences IV

Grade Level: 9-12

#### Credit: 1 credit yearlong course (+0.5 weighted credit for Naval Military Science IV) OFFERED ONLY AT HERITAGE HIGH SCHOOL & WARWICK HIGH SCHOOL

Four levels of Naval Military Science are available and are designed to instill the values of citizenship, service and personal responsibility and to instill a sense of accomplishment. Instruction covers military history, management, leadership and customs and courtesies. Numerous extracurricular opportunities are available to cadet corps members including honorary societies, drill/color guard teams and athletics/physical fitness activities. Enrolled students must maintain acceptable standards of appearance, conduct and academic achievement. Cadets can compete for 3 and 4-year college scholarships. Naval Military Science IV is an optional course designed for the Cadet corps. Enrollment is selective and requires senior instructor recommendation.



TECHNICAL Technology Education



# INTRODUCTION TO TECHNOLOGY

Course Number: RN6TEC

Grade Level: 6

Students study technological resources through problem-solving processes and various hands- on activities. They relate the impact of technology on society, environment, and culture to future consequences and decisions.

# **INVENTIONS & INNOVATIONS**

Course Number: TE7006

#### Grade Level: 7

Students make models of significant inventions that have advanced society. After studying these developments, they explore contemporary technological problems facing them, their community, or the world and apply systematic procedures to invent new products or innovations as solutions.

# **TECHNOLOGICAL SYSTEMS**

Course Number: TE8006

#### Grade Level: 8

Students combine resources and techniques to create systems, attaining comprehension of how technological systems work. Students will explore, design, analyze, and evaluate technological systems. By simulating systems and assessing the ir impacts, students gain insight into how to approach the problems and opportunities of a technological world. Students will also explore technology-oriented careers.

# **TECHNICAL DRAWING AND DESIGN**

Course Number: TE0100

#### Prerequisites: None

Grade Level: 9-11

#### Credit: 1 credit yearlong course

In this foundation course, students learn the basic language of technical drawing and design, and they design, sketch, and make technical drawings, models, or prototypes of real design problems. The course is especially recommended for future engineering and architecture students.

# **ENGINEERING DRAWING AND DESIGN**

Course Number: TE0200

Prerequisites: Technical Drawing and Design

Grade Level: 10-12

#### Credit: 1 credit yearlong course

Students use a graphic language for product design, technical illustration, evaluation of designs, and engineering drawings. They increase their understanding of drawing techniques learned in the prerequisite course. Students use computers, calculators, and descriptive geometry and adhere to established standards to solve design problems. They work in teams to design solutions for an identified need.

# HONORS ARCHITECTURAL DRAWING AND DESIGN

Course Number: TE0350

Prerequisites: Technical Drawing and Design

Grade Level: 10-12

#### Credit: 1 credit yearlong course (+0.5 weighted credit)

Architectural Drawing is a course designed to present general principles, practices and techniques of residential and commercial building designs and rendering model making structural details and community planning. Students use computer-aided drawing and design (CAD) equipment and established standards or codes to prepare models for presentation.

# HONORS DIGITAL ELECTRONICS IN ROBOTICS

Course Number: TE1170

Prerequisites: Principles of Engineering

Grade Level: 10

Credit: 1 credit yearlong course (+0.5 weighted credit)

OFFERED ONLY AT HERITAGE HIGH SCHOOL GOVERNOR'S STEM ACADEMY

Students use computer simulations to learn about the logic of electronics as they design, test, and actually construct circuits and devices. They apply control system programming and explore sequential logic and digital circuitry fundamentals. Topics in computer circuitry are also presented. *This is a Project Lead the Way course*.

# HONORS DIGITAL ELECTRONICS IN AVIATION

Course Number: TE1160

Prerequisites: Principles of Engineering

Grade Level: 10

Credit: 1 credit yearlong course (+0.5 weighted credit)

# OFFERED ONLY AT DENBIGH HIGH SCHOOL AVIATION ACADEMY

Students use computer simulations to learn about the logic of electronics as they design, test, and actually construct circuits and devices. They apply control system programming and explore sequential logic and digital circuitry fundamentals. Topics in computer circuitry are also presented. *This is a Project Lead the Way course*.

# INTRODUCTION TO ENGINEERING DESIGN

Course Number: TE1400

Prerequisites: None

Grade Level: 9

# Credit: 1 credit yearlong course

# OFFERED ONLY AT HERITAGE HIGH SCHOOL GOVERNOR'S STEM ACADEMY

In this foundation course students use 3-D computer modeling software as they learn the engineering-design process and solve design problems for which they develop, analyze, and create product models. Students use the engineering design process, applying math, science, and engineering standards to hands-on projects. Students work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work. *This is a Project Lead the Way course*.

# DIGITAL VISUALIZATION

Course Number: TE2200

Prerequisites: AP Computer Science Principles

Grade Level: 11

# Credit: 1 credit yearlong course

# OFFERED ONLY AT HERITAGE HIGH SCHOOL GOVERNOR'S STEM ACADEMY

Students will gain experiences related to computer animation by solving problems involving 3D object manipulation, storyboarding, texture mapping, lighting concepts and environmental geometry. They will produce animations that include interdisciplinary projects related to science, engineering and the entertainment industry. A major emphasis will be the production of a portfolio that showcases examples of original student work.







# **HONORS MODELING & SIMULATION TECHNOLOGY**

Course Number: TE2350 Prerequisites: Digital Visualization

Grade Level: 12

Credit: 1 credit yearlong course (+0.5 weighted credit)

#### OFFERED ONLY AT HERITAGE HIGH SCHOOL GOVERNOR'S STEM ACADEMY

Students will explore the use of modeling, simulation, and game development software to solve real-world problems in science, technology, engineering and mathematics (STEM). The activities include evaluating physics simulations, programming games for educational purposes and creating visualization systems with 3D models. Students will develop an understanding of the systems, processes, tools and implications of the field of modeling and simulation technology.

# HONORS CYBERSECURITY

Course Number: TE0550

Prerequisites: Computer Network Software Operations

Grade Level: 12

#### Credit: 1 credit yearlong course (+0.5 weighted credit)

#### OFFERED ONLY AT HERITAGE HIGH SCHOOL GOVERNOR'S STEM ACADEMY

Course will provide learners with principles of data and technology that frame and define cybersecurity. Students will gain insight into the importance of cybersecurity and the integral role of cybersecurity professionals. The interactive curriculum will provide a dynamic learning experience where users can explore foundational cybersecurity principles, security architecture, risk management, attacks, incidents, and emerging Information Technology and Information Security technologies.

# **PRINCIPLES OF ENGINEERING**

Course Number: TE2400

Prerequisites: Introduction to Engineering Design

Grade Level: 10

#### Credit: 1 credit yearlong course

#### OFFERED ONLY AT HERITAGE HIGH SCHOOL GOVERNOR'S STEM ACADEMY

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. *This is a Project Lead the Way course*.

#### **HONORS ENGINEERING DESIGN & DEVELOPMENT**

Course Number: TE1160

Prerequisites: Honors Digital Electronics in Robotics

Grade Level: 12

#### Credit: 1 credit yearlong course (+0.5 weighted credit)

#### OFFERED ONLY AT HERITAGE HIGH SCHOOL GOVERNOR'S STEM ACADEMY

The knowledge and skills students acquire throughout PLTW Engineering come together in Engineering Design and Development (EDD) as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on any post-secondary program or career. *This is a Project Lead the Way course*.

# **Television Production**

# **VIDEO & MEDIA TECHNOLOGY**

Course Number: CM2100

**Prerequisites:** None

Grade Level: 9-10

Credit: 1 credit yearlong course

# OFFERED ONLY AT WOODSIDE HIGH SCHOOL

This course offers students an opportunity to study all aspects of video and media productions, from planning and writing for production to operating studio and editing equipment. Students practice various methods of gathering news and information from individuals, research and online resources. In addition, students are introduced to analog and digital principles of film production.

# **TV & MEDIA PRODUCTION I**

Course Number: CM2200 Prerequisites: Video & Media Technology

Grade Level: 10-11

Credit: 1 credit yearlong course

#### OFFERED ONLY AT WOODSIDE HIGH SCHOOL

Students will learn how to think and work like media producers by engaging hands-on production projects. Students will also gain proficiency with the media production process while using 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.

# **HONORS TV & MEDIA PRODUCTION II**

Course Number: CM1150

Prerequisites: TV & Media Production I

Grade Level: 11-12

#### Credit: 2 credit yearlong course (+0.5 weighted credit)

# OFFERED ONLY AT WOODSIDE HIGH SCHOOL

Students will become media producers as they take real-world projects from conception to production. They will continue to develop and master skills that are essential to the industry as they function in various professional roles. In addition, the students will gain both breadth and depth in their abilities with the sophisticated tools and equipment involved in professional media production. They will develop an increased understanding of postsecondary and career pathways and will develop plans and portfolios to help them achieve their goals.

# **HONORS TV & MEDIA PRODUCTION III**

Course Number: CM1250

Prerequisites: TV & Media Production II

Grade Level: 12

#### Credit: 2 credit yearlong course (+0.5 weighted credit)

OFFERED ONLY AT WOODSIDE HIGH SCHOOL

Students will demonstrate mastery of media production knowledge and skills. They will function as media producers by creating original productions as they develop and market programs for target audiences. Students will assemble a professional digital portfolio to advance postsecondary and career goals. Students will assemble a professional digital portfolio to advance postsecondary and career goals. Students will assemble a professional digital portfolio to advance postsecondary and career goals. Students will assemble a professional digital portfolio to advance postsecondary and career goals. Students will assemble a professional digital portfolio to advance postsecondary and career goals. They will investigate the dynamic media production industry and identify opportunities for real world experiences (e.g., internship, job shadowing). Students will research postsecondary opportunities and formulate strategies for both college and career success.



# TECHNICAL



# **TELECOMMUNICATIONS I**

Course Number: CM1300

Prerequisites: None Grade Level: 11-12

Credit: 2 credit yearlong course (+0.5 weighted credit)

# OFFERED ONLY AT THE TELECOMMUNICATIONS CENTER

Students will learn about the technological and competitive advances now transforming the communications industry. This course will introduce students to the basic concepts and structural elements of voice, video, and data communications industry. Topics will include an introduction to signal transmission, attenuation, distortion, and signal propagation over cables, fiber, and air. User-premises based telecommunications platforms, switching, wiring, and networking, as well as facilities that provide and support telecommunications systems will be studied. Students will participate in hands-on instruction to create video productions. **Max enrollment: 20 students.** 

# HONORS TELECOMMUNICATIONS II

Course Number: CM1350

Prerequisites: Telecommunications I

Grade Level: 11-12

# Credit: 2 credit yearlong course (+0.5 weighted credit)

# OFFERED ONLY AT THE TELECOMMUNICATIONS CENTER

Students will build on the foundations learned in Telecommunications I to learn about advanced telecommunication systems. Students participate in hands on instruction in TV and video production, producing and directing. Students will learn how to operate video cameras, video drones, audio and lighting equipment, and professional editing software to create and produce video projects including promotional videos, news packages, commercials and music videos. Through a special partnership with NASA, students produce educational videos for classroom instruction. **Max enrollment: 20 students.** 



# ENGLISH AS A SECOND LANGUAGE (ESL)

The English as a Second Language (ESL) program is the language instructional educational program provided to all students who are designated as an English Learner per a state approved English language assessment tool.

Recently arrived English Learners (ELs) at English Language Proficiency (ELP) levels 1.0-2.9, receive a minimum of two blocks (or as needed) of ESL instruction by an ESL teacher. These students also have the option to audit the following courses: World Geography, English 11, and/or Earth Science. Students registered under audit mode do not take the end-of-course assessment for that course and will not receive credit(s). These codes should be utilized to expose students to the academic language of the content and in preparation to retake the course under a credit bearing status.

English Learners at ELP levels 3.0-4.3, receive a minimum of one block of ESL instruction by an ESL teacher in either an ESL specific course or collaborative ESL content course.

ESL program services are offered at Denbigh High School.

# ESL I

# Course Number: ES1110

Prerequisites: ESL Teacher / Welcome Center recommendation based on language assessment. Student must be enrolled in the ESL program.

# Grade Level: 9-12

# Credit: ½ English credit per semester and ½ elective credit per semester

Students will be introduced to significant literary texts and extensive nonfiction while learning English and becoming familiar with U.S. culture and the rules, responsibilities, and opportunities of students in a U.S. high school. They will learn reading, writing, listening, speaking, and comprehension skills in English needed to function in an academic setting. Students learn

vocabulary; study grammar, word order, and parts of speech; practice oral communication; and develop listening comprehension by learning sounds, intonation, and rhythm. Additional course content is determined by each student's diagnosed needs.

# ESL II

#### Course Number: ES1120



Prerequisites: ESL I or ESL Teacher/Welcome Center recommendation based on language assessment. Student must be enrolled in the ESL program.

#### Grade Level: 9-12

#### Credit: ½ English credit per semester and ½ elective credit per semester

Students will be introduced to significant literary texts and extensive nonfiction with a focus on literacy skills and contentspecific language concepts that are aligned with the academic courses they are studying. Students continue to learn about American culture and customs. Students will increase vocabulary: expand knowledge of grammar; improve listening, oral, and reading comprehension; develop writing skills; and read about and discuss American customs, history, and geography. Writing will encompass narrative, expository and persuasive forms for a variety of purposes and audiences.

#### ESL III

Course Number: ES1130

Prerequisites: ESL II or ESL Teacher/Welcome Center recommendation based on language assessment. Student must be enrolled in the ESL program.

#### Grade Level: 9-12

#### Credit: 1/2 elective credit per semester

Students continue to gain proficiency in the English skills of listening, speaking, reading and writing with classwork being aligned to core academic requirements of English 9 or higher with adapted materials and appropriate accommodations. Students continue to learn about American history and culture nuances and become better prepared for other academic courses. Students will expand vocabulary in test-taking terminology, idioms, vocations, and daily situations; increase knowledge of grammar; improve listening comprehension and oral communication; and increase reading comprehension skills for standardized test preparation.

#### ESL IV

#### Course Number: ES1140

Prerequisites: ESL III or ESL Teacher/Welcome Center recommendation based on language assessment. Student must be enrolled in the ESL program.

#### Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> elective credit per semester

#### Location: Denbigh HS

This course is designed for expanding level 4 ELs students who are preparing to exit the ESL program. Students will focus on listening, speaking, reading and writing aligned with the current content areas curricula for diagnostic reinforcement. They will expand vocabulary for daily living, competencies and standardized tests; master reading comprehension skills to include research/library skills, cause and effect, sequencing, and concepts rather than literal translation; and strengthen written communication and review grammar usage.

# **ESL LANGUAGE AND CULTURES I**

#### Course Number: ES0110

Prerequisites: Designed for ESL level 1-2 students

Grade Level: 9-12

#### Credit: ½ World Language credit per semester or ½ elective credit per semester

#### Location: Denbigh HS

This course is designed to help recently arrived ELs adjust to life in their community and school environment. Students experience U.S. culture and customs through the printed word and use of hands-on materials such as phone books, money, calendars and much more. An introduction to American history and principles of basic math will be integrated into the study of culture and customs. This course will help students develop a vocabulary to express all aspects of American culture and will help them develop an awareness of the environment of the U.S. Students will read cross-cultural information, develop career goals and develop creative expressions and logical thinking.



# **ESL LANGUAGE AND CULTURES II**

Course Number: ES0120 Prerequisites: Designed for ESL level 2-3 students Grade Level: 9-12

#### Credit: ½ World Language credit per semester or ½ elective credit per semester

#### Location: Denbigh HS

This course is designed to help emerging and developing ELs adjust to life in their community and school environment. Students will have the opportunity to experience U.S. culture and customs through the printed word and use of hands-on materials such as phone books, money, calendars and much more. An introduction to American history and principles of basic math will be integrated into the study of culture and customs.

# **ESL SCIENCE FOUNDATIONS**

#### Course Number: ES2100

Prerequisites: Recently arrived level 1-2 EL, ESL Welcome Center recommendation based on language assessment.

Student must be enrolled in the ESL Program.

Grade Level: 9-11

#### Credit: 1/2 credit per semester

Students will be introduced to the language of science in all four major branches of science to include Biology, Earth Science, Chemistry and Physics. This course is designed to facilitate growth in language acquisition through the lens of science. Students will explore scientific concepts, build foundational science vocabulary, extend oral and written communication skills and increase nonfiction reading comprehension skills through this interactive course.

# INTRODUCTION TO SOCIAL STUDIES FOR ENGLISH LEARNERS

#### Course Number: ES2200

Prerequisites: Recently arrived level 1-2 EL, ESL Welcome Center recommendation based on language assessment.

#### Student must be enrolled in the ESL Program.

#### Grade Level: 9-11

#### Credit: 1/2 credit per semester

Introduction to Social Studies is designed for students in the English Learners Program at Denbigh High School that need additional support with language proficiency. All core social studies themes (World Geography, World History, US History, and Government) will be introduced to build a foundation of background knowledge, key vocabulary, with opportunities to improve oral and written communication skills.

# ENGLISH

# ENGLISH COURSES

**ENGLISH 6** *Course Number: EN6000* 

Prerequisites: None

Grade Level: 6

The sixth-grade student will independently read a variety of fiction and nonfiction, focusing on an appreciation of reading and overall comprehension of text. The student will plan, draft, revise, and edit narratives, descriptions, and explanations, and will also respond to short answer critical thinking questions, paying attention to composition and written expression, as well as usage and mechanics. The student will begin the study of word origins and continue authentic vocabulary development from anchor texts. The student will reflect on their growth as a writer. Additionally, technology will be used as a tool to research, organize, and communicate information. Critical thinking, communication, and collaboration will be stressed.

# **ENGLISH 7**

Course Number: EN7000

**Prerequisites:** None

#### Grade Level: 7

The seventh-grade student will continue to read a wide variety of fiction and nonfiction, focusing on becoming more independent and analytical with text. The student will continue to refine written



composition skills, with special attention to word choice, organization, style, and grammar. The student will continue authentic vocabulary development from anchor texts and will apply research techniques to gather, organize, and communicate information, properly citing sources. The student will reflect on their growth as a writer. Critical thinking, communication, and collaboration will be stressed.

# **ENGLISH 8**

Course Number: EN8000

#### **Prerequisites:** None

#### Grade Level: 8

The student will continue to develop an appreciation for literary genres through a study of wide fiction and nonfiction selections. The student will focus on making inferences, drawing conclusions, interpreting cause-and-effect relationships, differentiating between fact and opinion, and drawing conclusions. The student will plan, draft, revise, and edit writing, with an emphasis on exposition and persuasion to include the counterclaim. The student will apply reading, writing, and research skills in all subjects, as well as respond critically to a wide variety of text. The student will reflect on their growth as a writer. The student will continue authentic vocabulary development from anchor texts. Critical thinking, communication, and collaboration will be stressed.

#### **High School English Courses**

Students must complete four years of required English courses. Summer reading is required of all English students 9-12. Students in grades 11 and 12 have the option of taking AP (Advanced Placement) English. Passing both the English EOC Reading and Writing SOL Tests are required for the two English verified credits needed for graduation.

#### **ENGLISH 9**

Course Number: EN1100, EN1200

Prerequisites: None

#### Grade Level: 9

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+0.5 weighted credit for EN1200 only)

The student will be introduced to various genres, focusing on a balance of fiction and nonfiction that are anchored by a Big Idea. Increased requirements for research and reporting in all subjects will be supported by the use of print, electronic databases, online resources, and other types of media. The student will distinguish between reliable and questionable sources of information. The student will continue authentic vocabulary development from anchor texts, with attention to connotation, idioms, and allusions, and their impact on a text. Writing will be primarily persuasive, for a wide variety of purposes, and audiences, and will include analysis of sources and textual evidence. The student will reflect on their growth as a writer. Critical thinking, communication, and collaboration will be stressed.

# **ENGLISH 10**

Course Number: EN2100, EN2200

Prerequisites: None

#### Grade Level: 10

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+0.5 weighted credit for EN2200 only)

The student will read and analyze a variety of literary texts from different eras and cultures, as well as nonfiction text that relates to the unit's Big Idea. The student will reflect on their growth as a writer and will critique the writing of peers, using analysis to improve writing skills. The student will continue to build research skills by crediting sources and presenting information in a variety of formats appropriate for content. The student will continue authentic vocabulary development from anchor texts. Critical thinking, communication, and collaboration will be stressed.





Course Number: EN3100, EN3200

**Prerequisites:** None

Grade Level: 11

Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+0.5 weighted credit for EN3200 only)

The eleventh-grade student will study both classical and contemporary American literature with nonfiction texts, paired together by the unit's Big Idea. The student will be able to identify the prevalent themes and characterizations present in American literature, which are reflective of history and culture. The student will use fiction and nonfiction texts to draw conclusions and make inferences, using textual evidence to support their claims. The student will continue authentic vocabulary development from the anchor texts. The student will be able to effectively deliver content to their peers and write clear and accurate personal, professional, and informational correspondence with a focus on persuasion and counterclaim. The student will reflect on their growth as a writer. Critical thinking, communication, and collaboration will be stressed.

#### AP ENGLISH 11

Course Number: EN3300

Prerequisites: Satisfactory completion of English 9 and 10

#### Grade Level: 11

#### Credit: ½ credit per semester (+1.0 weighted credit)

The AP English 11 course in Language and Composition is primarily a course in effective writing and critical reading. The writing skills that students come to appreciate through attentive and continued analysis of a variety of prose texts can serve them in their own writing as they become increasingly aware of these skills and their pertinent uses. American Literature is the primary focus for analysis and reflection. The instructional level equals that of college freshman English courses. All SOL requirements are met and students take both the English EOC Reading and the Writing SOL Tests. Students also prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.

# ENGLISH 12

Course Number: EN4100, EN4200

**Prerequisites:** None

Grade Level: 12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+0.5 weighted credit for EN4200)

The twelfth-grade students will read and analyze British literature, as well as nonfiction texts, to explore other cultures. The student will use organizational skills, audience awareness, appropriate grammar, and both verbal and nonverbal presentation skills to plan and deliver effective presentations to peers. This course contains content designed to provide successful transition and entry into college and careers. This course advances students' preparation for critical thinking, college and workplace writing, and career-ready communications, and focuses on the fundamentals of academic writing, with a focus on persuasion and argumentation. The student will reflect on their growth as a writer. Critical thinking, communication, and collaboration will be stressed.

# **AP ENGLISH 12**

Course Number: EN4300

Prerequisites: Satisfactory completion of English 9, 10 and 11

Grade Level: 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

The AP English 12 course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. Writing is an integral part of AP English. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.

#### **BEGINNING COMPOSITION**

Course Number: EE2129

Prerequisites: None

Grade Level: 9, 10

#### Credit: ½ credit

Beginning Composition is designed to help students develop narrative, literary, expository, and technical writing to inform, explain, analyze, and entertain. The course will emphasize planning and organization, writing with a purpose, sentence development, and the use of specific vocabulary and information. Patterns of organization, revision techniques, and editing strategies for the correct use of language, spelling, punctuation, and capitalization will be addressed. *This is a one semester course*.

# **ADVANCED COMPOSITION**

Course Number: EE2130

Prerequisites: Satisfactory completion of English 9 and 10

#### Grade Level: 11, 12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Advanced Composition is designed to give students the writing experience necessary to meet the expectations of college-level composition. Course topics include narration, description and exposition. This course is recommended for students in honors and AP classes.

#### **CREATIVE WRITING**

Course Number: EE2009

#### Prerequisites: Successful completion of English writing portfolio

Grade Level: 9-12

#### Credit: 1/2 credit per semester

Creative writing is designed to help students develop creative writing skills and prepare manuscripts for publication. Students will create individual creative writing booklets, share work in a writer's circle, and contribute to a classroom literary magazine. Whenever possible, students will share completed work with live audiences.

# **CREATIVE WRITING I**

Course Number: EE2010

**Prerequisites:** None

Grade Level: 9-12

#### Credit: 1/2 credit per semester

Students in Creative Writing I will establish skills for the writing of poetry and prose by reading and writing pieces in both genres regularly. They will explore all aspects of good writing through their studies and daily practice. Students will actively display growth through their ability to workshop, revise, and publish pieces in various genres.

# **CREATIVE WRITING II**

#### Course Number: EE2020

#### Prerequisites: Creative Writing I or permission from instructor

#### Grade Level: 9-12

#### Credit: 1/2 credit per semester

Students in Creative Writing II will expand skills in poetry by exploring traditional and modern forms of poetry and creating their own unique poetic style and voice. They will further skills in prose by studying and writing fiction and nonfiction regularly. Students will actively display growth through the ability to workshop, revise, and publish pieces in various genres.



# **CREATIVE WRITING III**

Course Number: EE2030

Prerequisites: Creative Writing II or permission from instructor

Grade Level: 9-12

#### Credit: 1/2 credit per semester

Students in Creative Writing III will expand their skills in poetry, fiction, and nonfiction and begin establishing skills in scriptwriting. Students will work closely with Creative Writing IV to edit, revise, and publish pieces for the literary magazine, establishing skills in technical writing, design, and editing. Students will actively display growth through the ability to workshop, revise, and publish pieces in various genres.

# **CREATIVE WRITING IV**

Course Number: EE2040

#### Prerequisites: Creative Writing III or permission from instructor

Grade Level: 9-12

#### Credit: 1/2 credit per semester

Students in Creative Writing IV will expand their skills across all genres. Students will be responsible for six yearly publications in various mediums, including electronic and print publications. Students will actively strive to concrete their skills as creative and technical writers in this course, and they will display growth through the ability to workshop, revise, and publish pieces in various genres.

# **CAPSTONE CREATIVE WRITING (ADVANCED CREATIVE WRITING)**

Course Number: EE2050

Prerequisites: Creative Writing I-IV (or specific approval from instructor)

Co-requisite: Creative Writing IV (or specific approval from instructor)

Grade Level: 12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Capstone Creative Writing is an honors creative writing course that will prepare students for a career as a published author. Students will complete three full manuscripts in the following genres: novels, play scripts, and poetry. This course will serve as a culminating experience for students in the creative writing magnet.\* Students will prepare all three pieces for publication in this course, and they will be prepared for life as a professional writer/ author after high school. Interested students not in the creative writing teacher to participate in this class.

# **HONORS DEBATE I & II**

Course Number: EE2310, EE2320

Prerequisites: None

Grade Level: 9-12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Debate is designed to help students develop a wide repertoire of speaking skills while developing poise and confidence. The students will be exposed to a variety of speaking and debating experiences both in the classroom and in competition through engagement in multiple speech events sanctioned by the Virginia High School League, Tidewater Debate League and the National Forensic League. This course may be repeated for credit.

# **JOURNALISM I**

Course Number: EE1100

Prerequisites: Successful completion of English 8 or 9

Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

The Journalism I course introduces students to mass media and instructs students in various steps of reporting and news writing. Course content includes techniques for gathering the story, writing different types of stories, layout & design, and management & production of newspapers and other media.

# **HONORS JOURNALISM II**

Course Number: EE1250

Prerequisites: Successful completion of Journalism I

#### Grade Level: 10-12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Journalism II continues to develop a student's ability to write in a journalistic style while improving personal writing style. Course content includes the types, styles, mechanics, and editing of news writing.

# **PHOTOJOURNALISM I**

#### Course Number: EE1400

Prerequisites: Successful completion of English 9 and evidence of above average writing skills. The writing folder may be used for evidence of writing proficiency. Student interest and teacher recommendation will also be considered. Students must meet VHSL eligibility requirements due to the state publication competition that is part of the course requirement.

Grade Level: 10-12

#### Credit: 1/2 credit per semester

This course uses a curriculum for yearbook journalism, which will help the yearbook staff understand how to correctly communicate designs to the publisher. The course includes close-ups of common design application and copy preparation procedures required for printing. This course may be repeated for credit.

# HONORS PHOTOJOURNALISM II

#### Course Number: EE1550

Prerequisites: Successful completion of Photojournalism I and teacher approval

Grade Level: 11-12

#### Credit: 1/2 credit per semester

A continuation of Photojournalism I, students will use the skills they have learned to work on the publication of the school yearbook. Students will use the interpersonal skills learned in Photojournalism I to interview students, collaborate with staff, and photograph events. Advertisements may be sold for publications.

# LITERATURE & FILM I

Course Number: EE2219

#### Prerequisites: None

Grade Level: 11, 12

#### Credit: ½ credit

Literature and Film focuses on a comparative study of several novels and short stories and the films they inspired. Students will read selected literature, view and analyze elements of films, discuss and write analytical and comparative essays, and present independent and group projects to the class. The course emphasizes critical reading of literature and formal writing about films. *This is a one semester course*.

# LITERATURE & FILM II: SCREENWRITING

#### Course Number: EE2249

Prerequisites: Literature & Film I

Grade Level: 11, 12

#### Credit: ½ credit

Literature and Film II is a writing-intensive, hands-on, project based course that will build on the objectives of the Literature and Film I course. Emphasis will be placed on structure and formatting of screenplays, as well as creating film sequences from storyboard to completion. Assignments include screen writing, storyboarding, organizing, and laying out a sequence of film and may also include filming, editing, and presenting a final student-generated short film of not less than 15 minutes. *This is a one semester course*.



PUBLIC SPEAKING

Course Number: EE2229

Prerequisites: None Grade Level: 9-12

Credit: ½ credit

Public Speaking is designed to help students develop and improve public speaking and communication skills. Students will learn to plan, write, and deliver effective speeches and to communicate appropriately in group situations. Students will also design and create Power Point presentations, and use audio-visual equipment and visual aids to enhance the delivery of presentations. Oral interpretation skills will also be developed. *This is a one semester course*.

# **ANCIENT LITERATURE & MYTHOLOGY**

Course Number: EE2239

#### Prerequisites: None

Grade Level: 9-12

#### Credit: ½ credit

Ancient Literature and Mythology focuses on developing a sense of cultural literacy, an understanding of multi-cultural literacy, and an enriched vocabulary. Students will study the mythology of Greece and Rome; writings from the Near and Middle East; and selections from Africa, Scandinavia, North, Central, and South America, and Asia. *This is a one semester course*.

# **PSAT/SAT PREP**

Course Number: MC0069

Prerequisites: Algebra 1 and one semester Geometry

Grade Level: 10-12

#### Credit: no credit or ½ credit

Students will prepare for the verbal and math portions of the SAT. Students will also learn how to improve study skills, develop note-taking strategies and practice time management skills. *This is a one semester course.* 

# **YOUNG ADULT LITERATURE**

Course Number: EE2400

Prerequisites: None

Grade Level: 9, 10

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

Young Adult Literature will enable students to examine several current novels for technique, style, language, theme and relationship to society. Students will keep response journals, participate in literature circles, and present book critiques. Mini projects on contemporary topics will help students understand life through the study of literature. Students may enter second semester.

# THE GOVERNOR'S SCHOOL FOR SCIENCE AND TECHNOLOGY COURSE

# OFFERINGS

Students in the Governor's School for Science & Technology (GSST) program take the courses that follow. Students will select one of three academic strands as their focus for their

Governor's School experience. Each strand provides a unique emphasis on both the science subject matter and associated career fields. All courses are weighted, college-level courses.

# ADVANCED CHEMICAL ANALYSIS

Course Number: NH6000 Prerequisites: High school Biology & Chemistry, Algebra II/Trig Grade Level: 11 Credit: 2 weighted high school credits Location: New Horizons Governor's School

This course focuses on the fundamental principles and laws of chemistry. Extensive laboratory work will serve as the basic tools for students to explore chemistry topics. The course will provide insights into inorganic and organic chemistry. The students will explore advanced concepts such as kinetics, acid/base chemistry, equilibrium, thermochemistry, and electrochemistry. The course will emphasize problem solving through chemical calculations. Advanced Chemical Analysis is a college-level course with a strong focus on laboratory work. It examines topics typically studied during the first year of college by science majors.

# **ADVANCED BIOLOGICAL ANALYSIS**

Course Number: NH6010

Prerequisites: Pre-Calculus; Advanced Chemical Analysis

Grade Level: 12

# Credit: 2 weighted high school credits

# Location: New Horizons Governor's School

In the fall semester, topics in the field of cell and molecular biology will be addressed, some of which include the roles of biological macromolecules, cellular organization and metabolism, and cellular processes such as communication, reproduction, respiration, and photosynthesis. In addition, mechanisms of inheritance and control of gene expression will be examined, followed by a student of developments in biotechnology. In the spring semester, evolution, phylogeny, and the diversity of living things will be discussed, with a special focus on the anatomy of physiology of plants and animals. The laboratory experience is a major component of the course, allowing students the opportunity to use technologies applied in research as well as medical and forensic laboratories while designing their own experiments and analyzing and interpreting their results. The anatomy and physiology of various vertebrate organ systems will be compared while dissecting animals in the laboratory. Advanced Biological Analysis is a college-level course that examines the topics typically studied during the first year of college by biology majors.

# **COMPUTATIONAL PHYSICS**

Course Number: NH6210

Prerequisites: Algebra II/Trig

Grade Level: 11

#### Credit: 2 weighted high school credits for the yearlong course

# Location: New Horizon's Governor's School

Computer Science Course objectives provide a study of the key concepts in object-oriented programming (Java / Python) and design (data abstraction, data encapsulation, composition, inheritance and code re-use and implementation design techniques), programming constructs (primitives, references, classes, methods and interfaces), evaluating expressions (numeric, string and Boolean), program analysis (testing, debugging, run-time exceptions, pre and post conditions, assertions, analysis of algorithms and numerical representation of integers), data structures (strings, lists, one and two dimensional arrays and their accompanying operations – traversals, insertion and deletion), searching (sequential and binary), sorting (selection, insertion and merge sort) and develop an understanding of the ethical and social issues as it relates to the study of Computer Science. The course is a non-calculus treatment of physics dealing with topics in classical and modern physics. Physics course





objectives apply the equations of kinematics to predict the position and the velocity at a later time, Newton's laws of motion to find the acceleration of the objects and to identify other forces in the system, the conservation laws (mechanical energy conservation, and momentum conservation, and angular momentum conservation) to compare the system before and after the interaction, find the solutions of problems involving rectilinear motion, parabolic motion, circular motion, & objects in equilibrium, apply the conservation laws to the solutions of problems involving collisions, conservative & non-conservative

forces, understand the fluid mechanics, such as buoyant force and Bernoulli's equation, solve problems involving thermal expansion, heat transfer, thermodynamic processes & the behavior of ideal gases. Second semester course focuses on fundamental principles of physics covering mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics.

# COMPUTATIONAL SCIENCE: ENGINEERING DESIGN, INNOVATION AND ENTREPRENEURSHIP

Course Number: NH6220

Prerequisites: Computational Physics and Pre-Calculus

Grade Level: 12

#### Credit: 2 weighted high school credits for the yearlong course

#### Location: New Horizons Governor's School

Learning fundamental knowledge of design innovation and science disciplines and the requisite skills to perform research, problem-solve, innovate, and create opportunities in the real world are the overarching goals of this course. The course includes also a series of project-based learning experiences to help the student acquire and apply the skills, tools, and best practices of the STEM profession. Learning tools include, for example, industry standards and research modeling and simulation software, hands-on design and troubleshooting of solid state systems, and industry standard computer-aided-design software, and additive manufacturing fabrication systems. In challenging keystone projects, students are tasked to identify real-world engineering problems or opportunities, to propose and seek client approval for their unique solutions or innovations, then to design, build, and demonstrate their final products. The keystone experiences include professional engagement with research leaders invited from community organizations such as NASA, SNAME, and the Jefferson Labs.

# **COLLEGE MODERN PRE-CALCULUS**

Course Number: NH6090

Prerequisites: Algebra II/ Trig

Grade Level: 11, 12

#### Credit: 1 weighted high school credit for the yearlong course

#### Location: New Horizons Governor's School

This course is an intensive, rigorous approach to mathematics designed to prepare students for college calculus. First semester, students will focus on the algebraic and geometric properties of polynomial, rational, exponential, logarithmic, and trigonometric functions, and engage in discussions about how these models are represented in the real world. Second semester, students will learn the analytic properties of trigonometric functions and geometric conics, as well as learning the properties of polar coordinates, vectors, matrices, parametrics, and sequences and series. *The course concludes with an introduction to calculus*.

# **COLLEGE APPLIED CALCULUS**

Course Number: NH6160

Prerequisites: Algebra II/ Trig

Grade Level: 11, 12

#### Credit: 1 weighted high school credit for the yearlong course

#### Location: New Horizons Governor's School

This course introduces limits, continuity, differential and integration of algebraic, exponential and logarithmic functions, and techniques of integration with an emphasis on applications across the interdisciplinary fields. Students will explore these topics in a hands-on way using authentic problem models and scientific calculators.

# **COLLEGE CALCULUS**

Course Number: NH6080 Prerequisites: Pre-Calculus Grade Level: 11, 12 Credit: 1 weighted high school credit



#### Location: New Horizons Governor's School

This course covers 2 semesters of university-level calculus for scientists and engineers, emphasizing understanding and application. The first semester covers limits and continuity of functions, techniques and applications of differentiation, and introduces integration. The second semester covers applications and advanced techniques of integration, differential equations, sequences and series, and analytical geometry. Upon completion of this course, student will understand both the geometric and rate of change analyses of differential and integral calculus. Students will apply their understanding of calculus to modeling real-world situations mathematically and be able to solve those mathematical models. *Successful completion of this course will prepare students to enroll in multivariable calculus/linear algebra.* 

#### **MULTIVARABLE CALCULUS/LINEAR ALGEBRA**

Course Number: NH6100

# Prerequisites: GSST College Calculus or completion of AP Calculus BC with a score of 5 on the exam, or a score of 4 and permission of the instructor.

Grade Level: 12

#### Credit: 1 weighted high school credit for the yearlong course

#### Location: New Horizons Governor's School

In multivariable calculus, students extend their study of calculus from the plane into 3-dimensional space and beyond. After an initial examination of geometry and algebra of 3-space, students will use differential and integral calculus to study the nature of curves and surfaces in 3-space. Topics include linear approximations of curves and surfaces in 3-space, optimization of functions in several variables, and use of integral calculus to study area, volume, and other applications. The semester concludes with an examination of the calculus vector fields. In linear algebra, students use matrix theory to solve systems of linear equations and apply knowledge of the determinant to describe the nature of those solutions. The algebra and applications of linear transformations will be studied in both real and general vector spaces. Students will calculate eigenvalues and eigenvectors of linear transformations and use these to diagonalize linear systems. Applications include best fit functions and solutions of systems of 1st order, linear differential equations.

# DIFFERENTIAL EQUATIONS AND MATH METHODS IN PHYSICS

#### Course Number: NH6150

Prerequisites: Successful completion of GSST College Calculus

Grade Level: 12

#### Credit: 1 weighted high school credit

#### Location: New Horizons Governor's School

This year long course introduces the methods, theory, and applications of differential equations. The course introduces firstorder, second and higher order linear equations, series solutions, linear systems of first order differential equations, and the associated matrix theory.

# **RESEARCH METHODS & ETHICS WITH STATISTICAL ANALYSIS**



Course Number: NH6120

Prerequisites: None Grade Level: 11 Credit: 1 weighted high school credit for the yearlong course

#### Location: New Horizons Governor's School

This course presents fundamental concepts and statistical reasoning underlying scientific research and engineering design. Students will investigate contemporary issues in scientific research while conducting an independent research or engineering design projects outside of class. Course topics include research technical writing, design strategies, ethical research behaviors, use of primary research literature, preparation of a study proposal, completion of supporting documentation required the Tidewater Science & Engineering Fair, and graphical and statistical methods of data analysis. Students will focus on the use of statistical analyses in real-world applications rather than mere computation. Scientific calculators and Excel will be used. Topics include probability, sampling, estimations, regression analyses, confidence intervals, tests for means and proportions, ANOVA and non-parametric tests. Students give oral presentations of their work and present posters at the GSST Science Fair which is judged by professionals in various fields. Students are encouraged to participate in regional, state and international competitions.

# HONORS RESEARCH AND MENTORSHIP

Course Number: NH6110

**Prerequisites:** Pre-Calculus

Grade Level: 12

#### Credit: 2 weighted high school credits for the yearlong course

#### Location: New Horizons Governor's School

Students explore advanced topics in scientific research with an emphasis on scientific literature and methods leading to the preparation of a research proposal in conjunction with their mentorship work. Students will prepare research documents using Mendeley bibliographic software and La Tex for professional documents preparation. Mentorship involves students in concentrated research or project development in firms and laboratories throughout the Tidewater region. Students are supervised by mentors who are scientists, engineers, physicians and other professionals. Students plan, implement, document and present research or projects chosen in consultation with their mentors. Students refine their research and presentation techniques, problem-solving, critical thinking and leadership skills. Students gain proficiency with statistical software including Excel and R for presentation and analysis of data. *This course provides students with an opportunity to integrate theory, knowledge and application through a research experience*.

# **CALCULUS-BASED ENGINEERING PHYSICS I & II: MECHANICS TO ELECTROMAGNETISM**

Course Number: NH6021, NH6022

#### Prerequisites: Pre-Calculus

Co-requisite: Enrollment in GSST College Calculus Course

Grade Level: 11

#### Credit: 2 weighted high school credits for the yearlong course

#### Location: New Horizons Governor's School

This is a mathematically rigorous course that investigates the principles of classical mechanics, gravitation, periodic motion, electric and magnetic field theory, AC and DC circuit theory, geometric optics through in-depth discussion, concept development, and inquiry-based experimental laboratory activities. The course also develops problem solving skills which emphasize the importance of inquiry in science and integrates the overarching themes of conservation and symmetry. Laboratory experiments use apparatuses such as dynamic tracks, ballistic pendulums, and different LabPro sensors to investigate fundamental physics theories and mathematical concepts. Computer data acquisition software is utilized to collect, analyze, and graph experimental data. The course encourages hands-on activities, class participation and students taking responsibility for their own learning. Students will be provided many opportunities throughout the course to design and carry out investigations and to analyze and evaluate data. Learning fundamental principles, generalizations, and model building and the ability to apply course material to improve thinking, problem-solving, and decision making are essential general goals. Gaining factual knowledge and developing specific skills, competencies and points of view needed by professionals are important general goals.

# CALCULUS-BASED ENGINEERING PHYSICS III & IV: MODERN PHYSICS & APPLIED PHYSICS - ENGINEERING DESIGN PRINCIPLES

#### Course Number: NH6031, NH6032

Prerequisites: Calculus-based Engineering Physics I and II, Calculus

#### Grade Level: 12

#### Credit: 2 weighted high school credits for the yearlong course

#### Location: New Horizons Governor's School

Learning fundamental knowledge of engineering and physics disciplines and the requisite skills to perform research, problemsolve, innovate, and create opportunities in the real world are the overarching goals of this course. Extending the first year physics material, the course includes investigations in modern physics topics such as relativity, quantum mechanics, and nuclear physics, including, for example, conceptual understanding and practical applications of the wave function, Schrodinger's Equation, and radiation and radioactivity. The course includes also a series of project-based engineering learning experiences to help the student acquire and apply the skills, tools, and best practices of the engineering profession. Learning tools include, for example, industry standard engineering and research modeling and simulation software, hands-on design and troubleshooting of solid state electronics and digital systems, and industry standard computer-aided-design software, and additive manufacturing fabrication systems. In challenging keystone projects, students are tasked to identify real-world engineering problems or opportunities, to propose and seek client approval for their unique solutions or innovations, then to design, build, and demonstrate their final products. The keystone experiences include professional engagement with research and engineering leaders invited from community organizations such as NASA, SNAME, and the Jefferson Labs.

# HEALTH AND PHYSICAL EDUCATION COURSES

# **MIDDLE SCHOOL PHYSICAL EDUCATION & HEALTH**

Course Number: PE6000, PE7000, PE8000

#### Prerequisites: None

#### Grade Level: 6-8

The middle school physical education curriculum provides students the opportunity to acquire the knowledge, processes, and skills to become physically educated, physically fit, and responsible in their physical activity choices and behaviors. Students will engage in meaningful physical activity in team sports, lifetime sports, and recreational activities that promote personal enjoyment, challenge, and a health-enhancing level of personal fitness. The health education curriculum addresses health, personal development, risky behaviors and safety topics for the middle school population. The program is designed to help students understand how to achieve and maintain good health for a lifetime. The Family Life curriculum is taught during the health classes.

# MIDDLE SCHOOL INDIVIDUALIZED PHYSICAL EDUCATION

Course Number: PE6410, PE7410. PE8410

#### Prerequisites: None

#### Grade Level: 6-8

This course is designed to allow students with physical limitations to participate in a modified physical education curriculum. The course is designed to provide the necessary modifications for each student that will allow for maximum participation in physical education based on individual limitations. The middle school physical education curriculum provides students the opportunity to acquire the knowledge, processes, and skills to become physically educated, physically fit, and responsible in their physical activity choices and behaviors. Students will engage in meaningful physical activity in team sports, lifetime sports, and recreational activities that promote personal enjoyment, challenge, and a health-enhancing level of personal fitness. The health education curriculum addresses health, personal development, risky behaviors and safety topics for the middle school population. The program is designed to help students understand how to achieve and maintain good health for a lifetime.



#### PHYS. ED.



High School Physical Education, Health, Dance and Sports Medicine Students must complete two semesters (1/2 credit each) of physical education as part of the state-mandated graduation requirement. There are on-site courses as well as off-site courses offered during the school year and summer. Any classes taken on site (at your school during the regular school year) must begin with Lifetime Activities I, Team Activities I, or Dance Activities I. This includes students who have completed Outdoor Education I or Wellness & Fitness Management I off site and are completing their

second requirement on site. Classes can also be taken off site and include the Wellness & Fitness Management I & II courses that are taken during the regular school year after school in approved fitness centers. In addition, there are the summer school offerings of Outdoor Education I & II courses, as well as Freshman Transition Outdoor Education, at Newport News Park. Both the Wellness & Fitness Management courses and the Outdoor Education courses have two sections each and can be taken to complete the physical education requirement.

#### Physical Education Offerings

The following courses can be taken in any order at any time unless otherwise noted by prerequisites. One total credit (two ½ credits) are required in physical education and one total credit (two ½ credits) in health education are required to satisfy division requirements and state standards for graduation. Courses are designed to meet student interest and provide wellness and fitness-based concepts that will encourage health and well-being for a lifetime.

# LIFETIME ACTIVITIES I

Course Number: PE1209

Prerequisites: None

Grade Level: 9

#### Credit: 1/2 credit per semester

This class will introduce students to wellness and fitness-based concepts through participation in the following lifetime activities: archery, in-line skating, tennis, outdoor education. The five health-related fitness components along with the concepts and principles associated with the biomechanics of movement and physical activity, nutrition, energy balance, and social development will be stressed. Students will create a personal fitness plan based on individual needs and interests with application of learned fitness concepts and principles within the plan.

# **TEAM ACTIVITIES I**

Course Number: PE1109

Prerequisites: None

Grade Level: 9

#### Credit: 1/2 credit per semester

This class will introduce students to wellness and fitness-based concepts through participation in the following team activities: floor hockey, tchoukball, softball, flag football. The five health-related fitness components along with the concepts and principles associated with the biomechanics of movement and physical activity, nutrition, energy balance, and social development will be stressed. Students will create a personal fitness plan based on individual needs and interests with application of learned fitness concepts and principles within the plan.

#### **DANCE ACTIVITIES I**

Course Number: PE1309

Prerequisites: None

Grade Level: 9

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

This class will introduce students to wellness and fitness-based concepts through participation in the following dance activities: ballroom, folk, ballet, jazz, and square dance. The five health-related fitness components along with the concepts and principles associated with the biomechanics of movement and physical activity, nutrition, energy balance, and social

development will be stressed. Students will create a personal fitness plan based on individual needs and interests with application of learned fitness concepts and principles within the plan.

# LIFETIME ACTIVITIES II

Course Number: PE2209

Prerequisites: Lifetime Activities I, Team Activities I, Dance Activities I, Wellness & Fitness Management I or Outdoor Education I

#### Grade Level: 9-12

#### Credit: 1/2 credit per semester

This class will continue to build upon the wellness & fitness-based concepts learned in the first-tier physical education courses. Wellness and fitness-based concepts are instructed through participation in the following activities: golf, bowling, biking, and racket sports. The anatomical basis of movement along with the concepts and principles associated with motor skill development, fitness-planning, nutrition, and energy balance continue to be stressed. Students will update their personal fitness plan based on knowledge gained to reflect any changes in individual needs and interests.

# **TEAM ACTIVITIES II**

#### Course Number: PE2109

Prerequisites: Lifetime Activities I, Team Activities I, Dance Activities I, Wellness & Fitness Management I or Outdoor Education I

Grade Level: 9-12

#### Credit: 1/2 credit per semester

This class will continue to build upon the wellness & fitness-based concepts learned in the first-tier physical education courses. Wellness and fitness-based concepts are instructed through participation in the following activities: ultimate frisbee, volleyball, basketball, and soccer. The anatomical basis of movement along with the concepts and principles associated with motor skill development, fitness-planning, nutrition, and energy balance continue to be stressed. Students will update their personal fitness plan based on knowledge gained to reflect any changes in individual needs and interests.

# **DANCE ACTIVITIES II**

Course Number: PE2309

Prerequisites: Lifetime Activities I, Team Activities I, Dance Activities I, Wellness & Fitness Management I or

**Outdoor Education I** 

Grade Level: 9-12

#### Credit: 1/2 credit per semester

This class will continue to build upon the wellness & fitness-based concepts learned in the first-tier physical education courses. Wellness and fitness-based concepts are instructed through participation in the following activities: ballroom, line, tap, country, jazz and modern dance. The anatomical basis of movement along with the concepts and principles associated with motor skill development, fitness-planning, nutrition, and energy balance continue to be stressed. Students will update their personal fitness plan based on knowledge gained to reflect any changes in individual needs and interests.

# INDIVIDUALIZED PHYSICAL EDUCATION I

#### Course Number: PE1409

Prerequisites: Physician Modified Activity Form required as well as collaborative identification and/or recommendation by IPE staff, school counselors, and physical education staff

Grade Level: 9-12

#### Credit: 1/2 credit per semester

This course is designed to allow students with physical limitations to participate in a modified lifetime activities physical education curriculum. The course is designed to provide the necessary modifications for each student that will allow for maximum participation in physical education based on individual limitations. The five health-related fitness components along with the concepts and principles associated with the biomechanics of movement and physical activity, nutrition, energy balance, and social development will be stressed. Students will create a personal fitness plan based on individual needs and limitations with application of learned fitness concepts and principles within the plan.

# PHYS. ED. INDIVIDUALIZED PHYSICAL EDUCATION II



Course Number: PE2409 Prerequisites: Physician Modified Activity Form AND Individualized Physical Education I as well as collaborative identification and/or recommendation by IPE staff, school counselors, and physical education staff Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

This course is designed to allow students with physical limitations to participate in a modified lifetime activities physical education curriculum. The course is designed to provide the necessary modifications for each student that will allow for maximum participation in physical education based on individual limitations. This class will continue to build upon the wellness & fitness-based concepts learned in the first-tier physical education courses. The anatomical basis of movement along with the concepts and principles associated with motor skill development, fitness-planning, nutrition, and energy balance continue to be stressed. Students will update their personal fitness plan based on knowledge gained to reflect any changes in individual needs and interests.

#### **WELLNESS & FITNESS MANAGEMENT I**

Course Number: PE1609

Prerequisites: Student AND Parent MUST attend informational meeting prior to course start in order to enroll;

Meeting time and location TBA.

#### Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

#### OFFERED ONLY AS AN ONLINE OPTION DURING THE REGULAR SCHOOL YEAR

This is an online cooperative venture between approved fitness centers and NNPS for physical education credit. All instruction is online and students are expected to complete the course with limited teacher interaction. This course requires self-discipline and time-management skills. The course is identified as an 8th block class to be taken outside regular school hours. The five health-related fitness components along with the concepts and principles associated with the biomechanics of movement and physical activity, nutrition, energy balance, and social development will be stressed. Students will create a personal fitness plan based on individual needs and interests with application of learned fitness concepts and principles within the plan.

#### **WELLNESS & FITNESS MANAGEMENT II**

#### Course Number: PE2609

Prerequisites: Wellness and Fitness Management I; Student AND Parent MUST attend informational meeting

prior to course start in order to enroll; Meeting date, time and location TBA.

Grade Level: 9-12

#### Credit: 1/2 credit per semester

#### OFFERED ONLY AS AN ONLINE OPTION DURING THE REGULAR SCHOOL YEAR

This is an on-line cooperative venture between approved fitness centers and NNPS for physical education credit. All instruction is online and students are expected to complete the course with limited teacher interaction. This course requires self-discipline and time-management skills. The course is identified as an 8th block class to be taken outside regular school hours. The anatomical basis of movement along with the concepts and principles associated with motor skill development, fitness-planning, nutrition, and energy balance continue to be stressed. Students will update their personal fitness plan based on knowledge gained to reflect any changes in individual needs and interests.

# **OUTDOOR EDUCATION I**

Course Number: PE3403

Prerequisites: None

Grade Level: 9-12

Credit: 1/2 credit per semester

# OFFERED ONLY AT POINT OPTION DURING THE SCHOOL YEAR AND AT NEWPORT NEWS PARK DURING SUMMER SCHOOL IN TWO SEPARATE SESSIONS

This class will introduce students to wellness and fitness-based concepts through participation in the following outdoor activities: hiking, biking, canoeing, cooperative games, ropes initiatives, orienteering, camping, and archery. The five health-

related fitness components along with the concepts and principles associated with the biomechanics of movement and physical activity, nutrition, energy balance, and social development will be stressed. Students will create a personal fitness plan based on individual needs and interests with application of learned fitness concepts and principles within the plan. This course is held at Newport News Park with a maximum enrollment of 13 students per class.



# **OUTDOOR EDUCATION II**

Course Number: PE3413 Prerequisites: Outdoor Education I Grade Level: 9-12 Credit: ½ credit per semester OFFERED ONLY AT POINT OPTION DURING THE SCHOOL YEAR AND AT NEWPORT NEWS PARK DURING SUMMER SCHOOL IN TWO SEPARATE SESSIONS

This class will continue to build upon wellness and fitness-based concepts through participation in the following outdoor activities: hiking, biking, canoeing, cooperative games, ropes initiatives, orienteering, camping, and archery. The anatomical basis of movement along with the concepts and principles associated with motor skill development, fitness-planning, nutrition, and energy balance continue to be stressed. Students will update their personal fitness plan based on knowledge gained to reflect any changes in individual needs and interests. This course is held at Newport News Park with a maximum enrollment of 13 students per class.

# Health Education Requirements and Offerings

Students must complete both Health I and Health II/Driver Education as required by the state for graduation. Each course is ½ credit toward graduation. There are on-site courses as well as summer school courses offered during the school year and summer.

#### HEALTH I

Course Number: PE0169

**Prerequisites:** None

Grade Level: 9

#### Credit: ½ credit

This class integrates a variety of health concepts, skills, and behaviors to plan for lifetime health and wellness. These include awareness and consequences of risky behaviors, disease prevention, overall wellness, and identification of community health resources. Students are encouraged to have an active role in creating a healthy lifestyle for themselves, their families, and their community

# **HEALTH I- ONLINE**

Course Number: PE0109

Prerequisites: None

Grade Level: 9

#### Credit: ½ credit

#### OFFERED ONLY AS AN ONLINE OPTION DURING THE REGULAR SCHOOL YEAR

Online Health I is being offered through Desire2Learn (D2L) and offers the student an option to get the required ½ credit for graduation. There is NO required prerequisite registration meeting with parents and students as there is an informational video embedded in the curriculum and students are required to view the welcome/informational video that unlocks access to the course modules and course information. This course requires self-discipline and time-management skills. This course is identified as an 8th block class to be taken outside regular school hours. All instruction is online and students are expected to complete the course with limited teacher interaction. The students will meet with the instructors at a location TBA for the "hands on" portion of the required CPR instruction. This class integrates a variety of health concepts, skills, and behaviors to plan for lifetime health and wellness. These include awareness and consequences of risky behaviors, disease prevention, overall wellness, and identification of community health resources. Students are encouraged to have an active role in creating a healthy lifestyle for themselves, their families, and their community.

# PHYS. ED. HEALTH II/DRIVER EDUCATION



Course Number: PE0239

Prerequisites: Health I

Grade Level: 10

Credit: 1/2 credit per semester

This course is a combination of Health II and Driver Education with each subject being taught for a nineweek period. Health II continues to build upon the health and wellness concepts introduced in Health I. Comprehensive health and wellness knowledge and skills are taught with student behavior reflective of a conceptual understanding of the issues associated with health maintenance. Community health and health-enhancing behaviors continue to be stressed. The driver education course is designed to provide students with a detailed understanding of the fundamentals of driving and to foster responsible driving attitudes and behaviors.

# **HEALTH II-ONLINE**

Course Number: PE0269

Prerequisites: Health I

Grade Level: 10

Credit: ½ credit

#### OFFERED ONLY AS AN ONLINE OPTION DURING THE REGULAR SCHOOL YEAR

This course WILL NOT be offered in conjunction with the Driver Education course – it is a health course ONLY. However, an option to obtain the Driver Education course is to take the VDOE online offering of the fee-based VADETS Driver Education course. Online Health II is being offered through Desire2Learn (D2L) and offers the student an option to get the required ½ credit for graduation. There is NO required prerequisite registration meeting with parents and students as there is an informational video embedded in the curriculum and students are required to view the welcome/informational video that unlocks access to the course modules and course information. This course requires self-discipline and time-management skills. This course is identified as an 8th block class to be taken outside regular school hours. All instruction is online and students are expected to complete the course with limited teacher interaction. This course continues to build on the health and wellness concepts introduced in Health I. Comprehensive health and wellness knowledge and skills are taught with student behavior reflective of a conceptual understanding of the issues associated with health maintenance. Community health and health-enhancing behaviors continue to be stressed.

# Electives for Physical Education, Health, Sports Medicine and Dance

The following courses are elective courses and may be taken after the required physical education and health courses have been fulfilled.

# **SPORTS MEDICINE**

Course Number: PE0300

Prerequisites: Health I and Health II

Grade Level: 10-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

This course covers basic anatomy, common athletic injuries, and how to care for these injuries using taping techniques, exercise and various modalities. This class will help further education in the field of medicine and assist students in their career choice. There is a nominal supply fee for each semester. *This is an elective course*.

# **ADVANCED TEAM SPORTS**

Course Number: PE3100

#### Prerequisites: Two semesters of physical education and recommendation of physical education staff

Grade Level: 10-12

#### Credit: 1/2 credit per semester

This course is designed to develop specific sports skills and help students learn advanced strategies associated with team play. Apply rules and regulations by officiating games in each sport. Sports may include, but are not limited to, team handball, hockey, soccer, softball, volleyball and basketball. Students will also develop an awareness of career opportunities in the fields of coaching and officiating. Overall fitness, sportsmanship and leadership will be areas of emphasis. *This is an elective course*.

# **PERSONAL FITNESS I**

#### Course Number: PE3200

Prerequisites: Two semesters of physical education and recommendation of physical education

staff

Grade Level: 10-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester and can be taken as an elective after the two required prerequisite

#### classes are completed

Personal Fitness focuses on development of fitness through activities such as team and individual sports; basic, step and boxer aerobics; weight training; circuit training; and power walking. Students will also develop personal fitness goals related to nutrition, weight management and disease prevention. *This is an elective course*.

#### **PERSONAL FITNESS II**

Course Number: PE3210

Prerequisites: Personal Fitness I, two semesters of physical education, and recommendation of physical education staff

Grade Level: 10-12

# Credit: ½ credit per semester and can be taken as an elective after the two required prerequisite classes are

#### completed

Personal Fitness II continues to focus on development of fitness through activities such as team and individual sports; weight training; circuit training; and fitness challenges. Students will also develop personal fitness goals related to nutrition, weight management and disease prevention. *This is an elective course*.

# DANCE/FITNESS

#### Course Number: PE3300

#### Prerequisites: Two semesters of physical education and recommendation of physical education staff

Grade Level: 10-12

#### Credit: 1/2 credit per semester

Emphasis will be placed on various types of dance and fitness related activities. Personal fitness goals will be developed and implemented. Nutrition, weight training, aerobics and disease prevention will be included. *This is an elective course.* 

# **TECHNIQUES OF DANCE I, II & III**

Course Number: PE3510, PE3520, PE3530

#### Prerequisites: Instructor placement

Grade Level: 9-12

#### Credit: 1/2 credit per semester

#### OFFERED ONLY AT WOODSIDE HIGH SCHOOL

Students will receive technical training in Modern Dance, Ballet and Jazz. Emphasis is given to the performing aspect of dance. As students proceed to level II, they will explore anatomy and injury prevention as relevant to the dancer. Students will begin to explore basic choreography concepts in level III.

# **CHOREOGRAPHY**

Course Number: PE3540

Prerequisites: Instructor placement

Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

#### OFFERED ONLY AT WOODSIDE HIGH SCHOOL

Students will learn the choreographic group devices during the first semester and individual choreographic projects during the second semester, while still maintaining technique learned in previous levels.



# PHYS. ED. WORLD DANCE



Course Number: PE3550 Prerequisites: Instructor placement & Techniques of Dance II Grade Level: 9-12 Credit: ½ credit per semester OFFERED ONLY AT WOODSIDE HIGH SCHOOL

Students will focus on a variety of world dance forms, including Flamenco, Balinese and African Diasporic dances. Students must have completed Techniques of Dance II prior to enrollment, and this class may be used as a physical education credit.

# **HISTORY OF DANCE**

Course Number: MC4010

Prerequisites: Techniques of Dance I & II or both Dance/P.E. I & II

Grade Level: 11, 12

Credit: <sup>1</sup>/<sub>2</sub> credit per semester

#### OFFERED ONLY AT WOODSIDE HIGH SCHOOL

The course is designed to cover the history of dance throughout various historical eras, as dance is a direct reflection of what is happening in society. Students will discuss how world events (wars, immigration, cultural practices and environment) help to shape the world of dance today. The course will also look at the codified methods of analyzing dance in terms of special awareness and the use of muscles, and how the bones and muscles work in conjunction to create unique human movement. The class will conclude with rhythmic analysis of music and rhythms and working with musical scores to create choreography. This is a required elective for the Dance Magnet.

# **DANCE COMPANY**

Course Number: PE3560

Prerequisites: Instructor placement

Grade Level: 9-12

Credit: <sup>1</sup>/<sub>2</sub> credit per semester

#### OFFERED ONLY AT WOODSIDE HIGH SCHOOL

Students will focus on creation and rehearsal of pieces for performance both in school and in the community. Placement is based on audition only. Students may be concurrently enrolled in another technical level.



# THE INTERNATIONAL BACCALAUREATE (IB) PROGRAM COURSE

# **OFFERINGS**

The courses that follow are taken by students in the International Baccalaureate (IB) Program. However, where indicated, individual elective courses can be taken by students zoned for

Warwick. The program requires that students enroll in the full curriculum, selecting a subject from each group.

# <u>The Arts</u>

# IB VISUAL ARTS I & II

Course Number: AR4100, AR4200

Prerequisites: Teacher recommendation and portfolio demonstrating serious interest and proficiency in art production

Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

The Visual Arts course enables students to engage in both practical exploration and artistic production, and in independent contextual, visual and critical investigation. The course is designed to enable students to study visual arts in higher education and also welcomes those students who seek life enrichment through visual arts. All students are encouraged to develop their creative and critical abilities and to enhance their knowledge, appreciation and enjoyment of visual arts. Students must complete research and writing assignments as well as hands-on work. *This is an IB elective course*.

# IB MUSIC I & II

#### Course Number: MU4310, MU4320

Prerequisites: Students must have some music background



Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

Through the music course students develop their knowledge and potential as musicians, both personally and collaboratively. Involving aspects of the composition, performance and critical analysis of music, the course exposes students to forms, styles and functions of music from a wide range of historical and socio-cultural contexts. Students create, participate in, and reflect upon music from their own background and those of others. They develop practical and communicative skills which provide them with the opportunity to engage in music for further study, as well as for lifetime enjoyment. *This is an IB elective course*.

# IB THEATRE I & II

Course Number: EE0510, EE0520

#### Prerequisites: None

Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

The Theatre course is designed to encourage students to examine theatre in its diversity of forms from around the world. This may be achieved through a critical study of the theory, history and culture of theatre and will find expression through workshops, compositions, or scripted performance. Students will come to understand that the act of imagining, creating, presenting and critically reflecting on theatre in its past and present contexts embodies the individual and social need to investigate and find explanations for the world around us. The theatre course emphasizes the importance of working individually and as a member of an ensemble. Students are encouraged to develop the organizational and technical skills needed to express themselves creatively in theatre. *This is an IB elective course*.

#### IB FILM I & II

Course Number: EE0710, EE0720

**Prerequisites:** None

Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

Through the study and analysis of film texts and exercises in film-making, the film course explores film history, theory, and socio-economic background. The course develops students' critical abilities, enabling them to appreciate the multiplicity of cultural and historical perspectives in film. To achieve an international understanding within the world of film, students are taught to consider film texts, theories and ideas from the points of view of different individuals, nations and cultures. *This is an IB elective course*.

# **Experimental Science**

The sciences are offered to provide students with opportunity for search and discovery; opportunity for development/understanding of the knowledge of science principles and concepts; and opportunity for the application of knowledge and skills to generate new knowledge and to encourage an awareness of the impact of science on society to prepare for life in a technological age.

# **IB BIOLOGY**

#### Course Number: SC2410, SC2420, SC2400

#### Prerequisites: Satisfactory completion of Biology and Chemistry in grades 9 and 10

#### Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

IB Biology studies the fundamental characteristics of living matter from the molecular level to the vertebrate organism including cells, chemistry of life, genetics, ecology, human health and physiology, nucleic acids and proteins and plant studies.



# **IB CHEMISTRY**

Course Number: SC3400, SC3410, SC3420 Prerequisites: Satisfactory completion of Biology and Chemistry in grades 9 and 10 Grade Level: 11, 12

# Credit: ½ credit per semester (+1.0 weighted credit)

IB Chemistry investigates stoichiometry, atomic theory, bonding, energetics, kinetics, oxidation and reduction and organic chemistry.

# **IB PHYSICS**

#### Course Number: SC4410, SC4420, SC4430

#### Prerequisites: Satisfactory completion of Biology and Chemistry in grades 9 and 10

#### Grade Level: 11, 12

# Credit: ½ credit per semester (+1.0 weighted credit)

IB Physics is an in-depth study of the laws of physics experimental skills, mechanics, optics, sound, electricity, magnetism, atomic and nuclear physics, thermodynamics and biomedical physics.

# **IB ENVIRONMENTAL SYSTEMS**

#### Course Number: SC1400

Prerequisites: Satisfactory completion of Biology and Chemistry in grades 9 and 10

Grade Level: 11, 12

# Credit: ½ credit per semester (+1.0 weighted credit)

IB Environmental Systems provides students with a coherent perspective on the environment; one that is essentially scientific and that enables them to adopt an informed and responsible stance on the wide range of pressing environmental issues that they will inevitably come to face.

# **Individuals & Societies**

# **IB HISTORY OF THE AMERICAS**

Course Number: SS2310, SS3310

# Prerequisites: Satisfactory completion of World History or World Geography and Government in grades 9 and 10 Grade Level: 11, 12

# Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+1.0 weighted credit)

The course aims to promote the acquisition of knowledge and understanding of the past that will serve both as a basis for the development and practice of appropriate skills, and for a better understanding of the present. It seeks to develop an awareness of continuity, change, and different interpretations of the past. Emphasis is placed on studies of the Americas from Canada to South America and 20th century world topics. This course will satisfy the U.S. History credit requirement for the Standard or Advanced Studies diploma. All students take the U.S. History SOL test to earn a verified credit toward graduation.

# **IB SOCIAL & CULTURAL ANTHROPOLOGY I & II**

Course Number: SS5510, SS5520

Prerequisites: None

Grade Level: 11, 12

# Credit: ½ credit per semester (+1.0 weighted credit)

The Social and Cultural Anthropology course offers students the opportunity to explore and understand humankind in all its diversity through the comparative study of cultures and human societies. It places special emphasis on comparative perspectives that challenge cultural assumptions. Anthropology fosters the development of citizens who are globally aware and ethically sensitive. Students in Social and Cultural Anthropology I will come to appreciate how anthropology contributes to an understanding of contemporary issues. *This is an IB elective course*.

# **IB PSYCHOLOGY**

Course Number: SS5310

**Prerequisites:** None

Grade Level: 11, 12



#### Credit: ½ credit per semester (+1.0 weighted credit)

Psychology is the systematic study of human behavior and mental processes. Students can expect to develop an understanding of how psychological knowledge is generated, developed, and applied; resulting in a greater appreciation for the diversity of human behavior. *This is an IB elective course*.

# IB BUSINESS & MANAGEMENT I & II

Course Number: BU1530, BU1540

**Prerequisites:** None

Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

The Business and Management course is designed to develop an understanding of business theory and an ability to apply business principles, practices and skills. It aims to encourage a holistic view of the world of business by promoting an awareness of social and ethical factors in the actions of organizations and individuals in those organizations. Developing international mindedness and an awareness of different cultural perspectives provides students the skills to think critically and appreciate the nature and significance of change in a local and global context. *This is an IB elective course.* 

# **IB INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY I & II**

Course Number: BU1030, BU1040

#### Prerequisites: None

Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

Information Technology in a Global Society is the study and evaluation of the impact of information technology on individuals and society. It explores the advantages and disadvantages of the use of digitized information at the local and global level. It uses an integrated approach, encouraging students to make informed judgments and decisions about the role of information and communication technologies in contemporary society. *This is an IB elective course*.

# **IB PHILOSOPHY I & II**

Course Number: MC0050, MC0060

Prerequisites: None

Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

The emphasis of the Philosophy course is on "doing" philosophy. It focuses on developing students' ability to formulate arguments in a sound and purposeful way, and encourages students to develop intellectually independent and creative ways of thinking. A concern with clarity of understanding lies at the core of the philosophy course. This clarity is achieved through critical and systematic thinking, careful analysis of arguments, and the study of philosophical themes and a close reading of philosophical texts. Through this examination of themes and text the philosophy course allows students to explore fundamental questions that people have asked throughout human history. *This is an IB elective course*.

# Language Acquisition

# **IB LANGUAGE B**

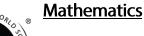
Course Number: Spanish – WL0700, French – WL1700, German – WL2700

Prerequisites: Satisfactory completion of levels 1-3 by the end of grade 10

Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

IB Language B is the study of a world language. Available languages are French, German and Spanish. The aim of the course is to develop speaking, listening, reading and writing skills in the target language and to prepare students to use the language appropriately in a range of situations and contexts.



IB MATHEMATICS: ANALYSIS AND Approaches SL and HL Course Number: Junior Year: MA4140, MA4150; Senior Year: MA4240, MA4160 Prerequisites: Honors Math Analysis

#### Grade level: 11, 12 Credit: 1/2 credit per semester (+1.0 weighted credit)

This two-year course recognizes the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. This course includes topics that are both traditionally part of a pre-university mathematics course (for example, functions, trigonometry, calculus) as well as topics that are amenable to investigation, conjecture and proof, for instance the study of sequences and series at both SL and HL, and proof by induction at HL.

The course allows the use of technology, as fluency in relevant mathematical software and hand-held technology is important regardless of choice of course. However, Mathematics: Analysis and Approaches has a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments.

# **IB MATHEMATICS: APPLICATIONS AND INTERPRETATIONS SL AND HL**

Course Number: Junior Year: MA4440, MA4450; Senior Year: MA4460, MA4640 Prerequisites: Honors Algebra II Grade Level: 11, 12 Credit: 1/2 credit per semester (+1.0 weighted credit)

This two-year course recognizes the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. This course includes topics that are both traditionally part of a pre-university mathematics course (for example, functions, trigonometry, calculus) as well as topics that are amenable to investigation, conjecture and proof, for instance the study of sequences and series at both SL and HL, and proof by induction at HL.

The course allows the use of technology, as fluency in relevant mathematical software and hand-held technology is important regardless of choice of course. However, Mathematics: Analysis and Approaches has a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments.

# Studies in Language and Literature

# **IB LANGUAGE A: LITERATURE**

Course Number: EN 3310, EN 4310

# Prerequisites: Satisfactory completion of English 9 and 10

Grade Level: 11, 12

# Credit: ½ credit per semester (+1.0 weighted credit)

IB English is the study of the language of the country where the course is taught. It is a two-year course that seeks to facilitate the clear expression of ideas; to aid clear, precise presentation of argument; and to assist in the understanding of both oral and written discourse. Its aims are to promote an international perspective through the comparative study of works from the students' own culture and other cultures and to develop understanding and appreciation of the relationships between different works including detailed and critical analysis of written text. All SOL requirements are met and students take the both the English EOC Reading and the Writing SOL Test to earn verified credits toward graduation.

# Additional Requirements

# **IB THEORY OF KNOWLEDGE**

Course Number: MC0039, MC0049

**Prerequisites:** None

Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

Theory of Knowledge is a key element in the educational philosophy of the International Baccalaureate. The course is philosophical in the sense that it is meant to encourage students to acquire a critical awareness of what they and others know through analyzing concepts and arguments and the basis of value judgments. It aims to develop a personal mode of thought based on critical examination of evidence expressed in rational arguments. **This is a required course for all IB Diploma students**.

# **MATHEMATICS COURSES**

#### MATH 6

Course Number: MA6310, MA6410

**Prerequisites:** None

#### Grade Level: 6

Students are transitioned from the emphasis placed on whole number arithmetic in the elementary grades to foundations of algebra. This course emphasizes rational numbers. Students will use ratios to compare data sets; recognize decimals, fractions, and percents as ratios; solve single-step and multi-step problems, using rational numbers; and gain a foundation in the understanding of integers. Students will solve linear equations and use algebraic terminology. Students will solve problems involving area, perimeter, and surface area, work with  $\pi$  (pi), and focus on the relationships among the properties of quadrilaterals. In addition, students will focus on applications of probability and statistics. An **advanced** course is also available.

# MATH 7

Course Number: MA7310, MA7410

**Prerequisites:** None

#### Grade Level: 7

The foundations of algebra are emphasized. Students who successfully complete the grade seven course should be prepared to study Algebra I in grade eight. Topics in grade seven include proportional reasoning, integer computation, solving two-step linear equations and recognizing different representations for relationships. Students will apply the properties of real numbers in solving equations, solve inequalities, and use data analysis techniques to make inferences, conjectures, and predictions. An **advanced** course is also available.

# **MATH 8 – TRANSITION TO ALGEBRA**

Course Number: MA8410

#### Prerequisites: None

#### Grade Level: 8

Students will be introduced to content that reviews or extends concepts and skills learned in previous grades as well as new content that prepares students for more abstract concepts in algebra and geometry. The eighth-grade standards provide students additional instruction and time to acquire the concepts and skills necessary for success in Algebra I. Students will gain proficiency in computation with rational numbers and will use proportions to solve a variety of problems. New concepts include solving multi-step equations and inequalities, graphing linear equations, visualizing three-dimensional shapes represented in two-dimensional drawings and applying transformations to geometric shapes in the coordinate plane. Students will verify and apply the Pythagorean Theorem and represent relations and functions, using tables, graphs and rules. The eighth-grade standards provide a more solid foundation in Algebra I for those students not ready for Algebra I in grade eight.







# ALGEBRA I

#### Course Number: MA1010, MA1111, MA1020, MA1100

Prerequisites: None

Grade Level: 9-12

Credit: <sup>1</sup>/<sub>2</sub> credit per semester

Algebra I is the study of linear and quadratic equations (functions) and inequalities including rational fractional and irrational equations numbers. It is offered one or two periods, one or two years. Passing the Algebra I SOL test is required to earn a verified credit toward graduation.

# GEOMETRY

Course Number: MA2010, MA2100, MA2200

Prerequisites: Algebra I

#### Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+0.5 weighted credit for MA2200 only)

Geometry is a deductive study of Euclidean geometry including space geometry and coordinate geometry. An emphasis is placed on logical reasoning and deductive proof. It is offered one or two periods. An Honors level is available. Passing the Geometry SOL test is required to earn a verified credit toward graduation.

# **ALGEBRA, FUNCTIONS & DATA ANALYSIS**

Course Number: MA2300

Prerequisites: Algebra I

Grade Level: 9-12

#### Credit: 1/2 credit per semester

The course is designed for students who have successfully completed the standards for Algebra I. 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 formulations of linear, quadratic, exponential or logarithmic equations or a system of equations.

# ALGEBRA II/HONORS ALGEBRA II

Course Number: MA3100, MA3220

#### Prerequisites: Algebra I or Geometry

Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+.5 weighted credit for MA3220)

Algebra II is a one-year study of intermediate algebra. The course includes a review of Algebra I topics. New topics studied are sequences and series, logarithmic and exponential functions, complex numbers, and analytic geometry. An Honors course is also available. Passing the Algebra II SOL test is required to earn a verified credit toward graduation.

# TRIGONOMETRY/ELEMENTARY FUNCTIONS

Course Number: MA3300

Prerequisites: Algebra II

Grade Level: 11, 12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

Trigonometry is a study of trigonometric and circular functions and their inverses. The course also includes an introduction to polar coordinates and vectors. Second semester is a study of elementary functions emphasizing the properties of algebraic functions.

## **PROBABILITY & STATISTICS**

Course Number: MA3500

Prerequisites: Algebra II

Grade Level: 11, 12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

Probability and Statistics is a one-year course designed to introduce students to statistical procedures as they apply to real life applications. Students will study data analysis and production, probability and statistical simulation.

# HONORS MATHEMATICAL ANALYSI

#### Course Number: MA4100

#### Prerequisites: Honors Algebra II or Trigonometry/Elementary Functions

Grade Level: 11, 12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Mathematical Analysis is a year study of pre-calculus material. An emphasis is placed on mathematical proof. The course covers a study of infinite sequences and series, analytic geometry from a vector approach, and algebraic, exponential, logarithmic, and trigonometric functions. Dual enrollment college credit may be offered for this course at some school sites. Check with your counselor for availability.

# **AP CALCULUS AB**

Course Number: MA4200

Prerequisites: Mathematical Analysis

Grade Level: 11, 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

Calculus AB is a one-year course intended for students who have a thorough knowledge of algebra, analytic and axiomatic geometry, and trigonometry. It includes the study of elementary functions and differential and integral calculus. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college. Dual enrollment college credit may be offered for this course at some school sites. Check with your counselor for availability.

# **AP CALCULUS BC**

Course Number: MA4210 (Single block)

## Prerequisites: AP Calculus AB

Grade Level: 11, 12

## Credit: .5 credit per semester (+1.0 weighted credit)

Calculus BC is a single period one-year course intended for students who have a thorough knowledge of elementary Functions and differential and integral calculus. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive credit and/or advanced standing in college Check with your school counselor for availability.

# **AP CALCULUS BC**

Course Number: MA4300 (Double block)

## Prerequisites: Mathematical Analysis

Grade Level: 11, 12

## Credit: 1 credit per semester (+1.0 weighted credit)

Calculus BC is a two period one-year course intended for students who have a thorough knowledge of algebra, analytic and axiomatic geometry, and trigonometry. All of the Calculus AB topics are included along with additional advanced topics. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.





## AP STATISTICS

Course Number: MA4500 Prerequisites: Math Analysis or Trigonometry/Elementary Functions

Grade Level: 11, 12

Credit: ½ credit per semester (+weighted credit)

AP Statistics is a one year study of major statistics concepts and the tools for collecting, analyzing, and drawing conclusions from data. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college. With appropriate recommendation this may be taken concurrently with math analysis.

# MISCELLANEOUS ELECTIVE COURSES

# ELECTIVES **PSAT/SAT PREP**



Course Number: MC0069 Prerequisites: Algebra I and one semester of Geometry Grade Level: 10-12 Credit: ½ credit Students will prepare for the math and verbal portions of the SAT. Students will also learn how to improve

study skills, develop note-taking strategies, and practice time management skills. *This is a one semester course*.

# **AP COMPUTER SCIENCE IN JAVA**

Course Number: MA5300

Prerequisites: H Algebra II and H Computer Programming in C++

Grade Level: 11, 12

## Credit: ½ credit per semester (+1.0 weighted credit)

Computer Science extends the concepts of programming studied previously. Programming is done using JAVA. Enrollment is limited to available equipment and facilities. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college

# **INTEGRATIVE STEM**

## Course Number: RN6STM, MC7210, MC8210

## Prerequisites: None

## Grade Level: 6-8

The iSTEM elective course provides students with an option to dive deeper into STEM, STEAM, and Computer Science by engaging in a problem-based curriculum that challenges students to apply their core knowledge to solve problems with career-connections presented in the form of design briefs. The structure of the course is designed to foster Virginia's 5Cs and to model workplace readiness by requiring students to work in teams throughout each hands-on PBL unit. By removing the constraints and boundaries of traditional curriculum pacing, this course allows for intentional curriculum mapping which enables the teacher to develop high-interest learning experiences based on the natural intersections between disciplines.

# **COLLEGE & CAREER PREP**

Course Number: MC0400

Prerequisites: None

Grade Level: 9-12

#### Credit: 1/2 credit per semester

This course is designed to empower students to succeed in rigorous academic curriculum while preparing them to be college, career and citizen ready. Strategies will be shared in study skills, organizational skills, communication skills, oral interpretation skills, writing, test-taking strategies, personal development and team building. Students will maintain a portfolio and will be provided skills to maintain and continue it through high school. Students will design and create power point presentations and use audio-visual equipment and visual aids to enhance the delivery of presentations. Students will prepare for verbal and math

portions of the PSAT, SAT and ACT by learning how to improve study skills, develop note-taking strategies, practice time management skills and utilizing current software and practice exercises. Students will have an opportunity to visit local colleges, businesses and participate in cultural field trips and explore career and college expectations through invited community guest speakers. Students will receive an elective credit and may sign up for this course through their school counselor.



# **FRESHMAN SEMINAR**

Course Number: MC0079

Prerequisites: Recommendation

Grade Level: 9

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

The Freshman Seminar will use the CollegeEd curriculum, which is designed to engage students in the college and career planning process. The course will focus on conveying important messages and practical information about colleges, careers, academic planning and relationship building. Students will visit colleges/universities and participate in cultural events.

#### SERVICE LEARNING INTERNSHIP

Course Number: MC0409

**Prerequisites:** Contract

Grade Level: 12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

Service Learning Internship is designed for students to connect their interests, skills, and abilities with school-based, businessbased, and community-based projects in an effort to improve communities, refine student employment skills, and provide students with real-life experiences for future careers. The service learning yearlong course will provide students with an opportunity to give time, energy, and service to local schools, community organizations, businesses, and governing agencies while building a portfolio of job-like experiences. This course requires a contract that provides guidelines and requirements for the service learning project. A total of 140 hours of service (70 hours per semester) will be documented for this credit. Each service learner will work with a school-based mentor or community mentor to coordinate the effort.

# **HONORS INTERNSHIP**

Course Number: MC1500

#### **Prerequisites:** Application

Grade Level: 12

## Credit: ½ credit per semester (+0.5 weighted credit)

The Honors Internship Program will provide students with an opportunity to practice and refine their career skills in a real work environment. Students work at least 250 hours in a supervised (125 hours per semester), school-approved job that is related to their career interests.

## STEMINAR

Course Number: MC0029

Prerequisites: None

Grade Level: 12

#### Credit: 1/2 credit per semester

#### OFFERED ONLY AT HERITAGE HIGH SCHOOL GOVERNOR'S STEM ACADEMY

This course is designed to advance student's preparation in critical reading, technical writing, college and workplace readiness and career-ready communication. Students enhance their skills in STEM by participating in STEM work-based learning experiences to include participation in job shadowing and internships; creation of electronic portfolios; and digital media portfolios.

# **TEACHING FOR TOMORROW**



**Course Number: MC1000** 

Prerequisites: Minimum 2.7 GPA or Teacher Recommendation

Grade Level: 11, 12

Credit: <sup>1</sup>/<sub>2</sub> credit per semester

This course will nurture and initiate training for students who may be interested in pursuing a teaching career. Students will receive insight into the nature of teaching, the problems of schooling and the critical issues in education. Students will study growth and development, the history of education, current trends in education, learning styles and teaching strategies. Students will have the opportunity to observe teachers at the elementary, middle or high school level.

# **MUSIC COURSES**



# CHORUS GRADE 6

Course Number: MU6009

Prerequisites: None

Grade Level: 6

Chorus Grade 6 introduces fundamental vocal development, traditional notation, and the introduction to ensemble singing. This course requires performance, creativity and investigation at a fundamental level.

# **CHORUS GRADE 7**

Course Number: MU7009, MU7010

#### Prerequisites: None

#### Grade Level: 7

Chorus Grade 7 emphasizes fundamental vocal development, traditional notation and the introduction to ensemble singing. This course requires performance, creativity and investigation at a fundamental level.

## **CHORUS GRADE 8**

Course Number: MU8009, MU8010

#### Prerequisites: None

#### Grade Level: 8

Chorus Grade 8 emphasizes developing good fundamental vocal tone quality, traditional notation, ensemble singing and introduction to discriminative listening. Students are required to participate in performances as part of the course.

## **BAND GRADE 6**

Course Number: MU6100

#### Prerequisites: None

#### Grade Level: 6

Students will begin instruction on a band instrument. Students will demonstrate proper care of the instrument and will be familiar with the technology of the instrument. They will demonstrate basic positions, tone production and fingerings, and will count, read and perform the beginning level of music being studied.

## **BAND GRADE 7**

#### Course Number: MU7100, MU7110

#### Prerequisites: None

#### Grade Level: 7

Students may begin or continue instruction on a band instrument. Students will demonstrate proper care of the instrument and will be familiar with the technology of the instrument. They will demonstrate basic positions, tone production and fingerings, and will count, read, and perform the intermediate level of music being studied.

# **BAND GRADE 8**

#### Course Number: MU8100, MU8110

#### Prerequisites: Band Grade 6 and/or 7 or with instructor approval

#### Grade Level: 8

being studied.

MUSIC

Students will continue instruction on a band instrument of their choice. Students will demonstrate proper care of the instrument and will be familiar with the technology of the instrument. They will demonstrate basic positions, tone production and fingerings, and will count, read, and perform the advanced level of music

**ORCHESTRA GRADE 6** 

Course Number: MU6210

**Prerequisites:** None

#### Grade Level: 6

Students will begin instruction on a string instrument. Students will demonstrate proper care of the instrument and will be familiar with the technology of the instrument. They will demonstrate basic positions, tone production and fingerings, and will count, read, and perform the beginning level of music being studied.

#### **ORCHESTRA GRADE 7**

Course Number: MU7210, MU7220

**Prerequisites:** None

#### Grade Level: 7

Students may begin or continue instruction on a string instrument. Students will demonstrate proper care of the instrument and will be familiar with the technology of the instrument. They will demonstrate basic positions, tone production and fingerings, and will count, read, and perform the intermediate level of music being studied.

#### **ORCHESTRA GRADE 8**

Course Number: MU8220, MU8230

#### Prerequisites: Orchestra Grade 6 and/or 7, or with instructor approval

#### Grade Level: 8

Students will continue instruction on a string instrument of their choice. Students will demonstrate proper care of the instrument and will be familiar with the technology of the instrument. They will demonstrate basic positions, tone production and fingerings, and will count, read, and perform the advanced level of music being studied.

## **GENERAL MUSIC GRADE 6**

#### Course Number: MU6300

Prerequisites: None

#### Grade Level: 6

General Music Grade 6 is a basic music appreciation course. Students develop an appreciation of music and of music skills through singing, playing instruments, moving and listening.

#### **GENERAL MUSIC GRADE 7**

Course Number: MU7300

#### Prerequisites: None

#### Grade Level: 7

General Music Grade 7 is a basic music appreciation course. Students develop an appreciation of music and of music skills through singing, playing instruments, moving and listening.



# **GENERAL MUSIC GRADE 8**

Course Number: MU8300

**Prerequisites:** None

Grade Level: 8

General Music Grade 8 is a music appreciation course. Students develop an appreciation of music and of music skills through singing, playing instruments, moving and listening. Students will explore the

creative and expressive aspects of music through composing and arranging.

# **MUSIC TECHNOLOGY**

Course Number: MU4400

Prerequisites: None

Grade Level: 9-12

Credit: 1/2 credit per semester

#### OFFERED ONLY AT WOODSIDE HIGH SCHOOL

Students will learn sound engineering through Music Technology using computers and sound reinforcement equipment, including mastering the beginning level of Garage Band and sound reinforcement equipment to run sound for and record Woodside events.

# **MIXED CHORUS**

Course Number: MU0100

Prerequisites: None

Grade Level: 9-12

#### Credit: 1/2 credit per semester

This course is the high school entry-level course to the vocal music program. Emphasis is placed on developing good vocal tone quality, introduction to reading musical scores, discriminative listening and the study of good choral literature. Students are required to participate in in-school and evening performances as part of the course. In addition, students may be required to audition for district and state music ensembles when appropriate.

## **TREBLE CHORUS: TENOR, BARITONE & BASS CHORUS**

#### Course Number: MU0200, MU0300

#### Prerequisites: Successful completion of middle school chorus or music teacher recommendation

Grade Level: 9-12

#### Credit: 1/2 credit per semester

Chorus instruction stresses the expression of music through the art of singing. The classes include vocal training, instruction in reading vocal music and the study and use of a broad range of music literature. Activities include public performances that will be required as part of each course. In addition, students must audition for district and state music ensembles when appropriate.

# A CAPPELLA CHOIR

#### Course Number: MU0450

#### Prerequisites: Successful completion of Mixed Chorus or music teacher recommendation (audition required)

#### Grade Level: 10-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (0.5 weighted credit)

A Cappella Choir is a select choir which stresses the expression of music through the art of singing in a large ensemble. Emphasis is placed on the development of tone quality in the voice, blend and balance, sight-reading proficiency, ear training, expansion of range, proper vocal production and the ability maintain three and four part music. Rehearsals and performances outside the regular school day will be scheduled and will be required. Students must participate in formal concerts, audition for district and state ensembles when appropriate, and participate in choral assessment performing level III-V music.

# **SHOW CHOIR**

# Course Number: MU0550 Prerequisites: Successful completion of Treble Chorus or A Cappella Choir, audition or choral teacher recommendation



#### Grade Level: 11, 12

#### Credit: ½ credit per semester (+0.5 weighted credit)

This course emphasizes musical communication through the use of voice and dance in a large ensemble. Emphasis is placed on vocal tone, blend and balance, the ability to maintain three and four part music while performing choreographed movement. Students will perform custom arranged contemporary music as well as choral literature graded III-VI. Rehearsals and performances outside the regular school day will be scheduled and will be required to fulfill the requirements of the course. Students are required to participate in formal concerts, audition for district and state ensembles when appropriate, and participate in competitions when available.

## HONORS VOCAL ENSEMBLE

#### Course Number: MU0650

#### Prerequisites: Successful completion of Treble Chorus, A Cappella Choir, audition or choral teacher

recommendation

Grade Level: 11, 12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Vocal Ensemble emphasizes musical communications through the use of the voice, individually and in small ensembles. Instruction includes ear training and sight singing in addition to advanced vocal techniques to include interpretation of the vocal score. Rehearsals and performances outside the regular school day will be scheduled and will be required. Students must participate in formal concerts, audition for district and state ensembles when appropriate, and participate in choral assessment performing level IV-VI music. Students will be required to create choral compositions based on learned music theory. In addition, students will develop a portfolio of their best work to include demonstration of different genres of music performance.

## INTERMEDIATE BAND: INTERMEDIATE WOODWIND, BRASS, & PERCUSSION

#### Course Number: MU1100, MU1110, MU1120, MU1130

# Prerequisites: Successful completion of two years of middle school band or completion of a high school band class

and teacher recommendation.

#### Grade Level: 9-12

#### Credit: 1/2 credit per semester

An active band program is available to high school students who wish to develop proficiency on an instrument through class instruction and performance in the school band. Students will develop artistic proficiency through performance of instrumental works at a minimum VBODA grade III that demand solo quality tone and sensitive interpretation with attention to the intricacies of their instrument. Rehearsals are considered as a lab to instructional periods and are scheduled each week during school and for a minimum of 2 weeks in August. The instructional and rehearsal sessions culminate in performances, including concert and marching activities, which are required to fulfill the requirements of the course. Students are required to audition for city, district, and state event ensembles when appropriate.

## **ADVANCED BAND: ADVANCED WOODWIND, BRASS, & PERCUSSION**

#### Course Number: MU1250

#### Prerequisites: Successful completion of high school intermediate level or director recommendation.

#### Grade Level: 9-12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Students will continue instruction on the instrument of their choice focusing on solo quality tone, intonation and technique. Student will develop artistic proficiency through performance of instrumental works at a minimum VBODA grade IV. Rehearsals are considered as a lab to instructional periods and are scheduled each week during school and for a minimum of two weeks in August. The instructional and rehearsal sessions culminate in performances, including concert and marching activities, which are required to fulfill the requirements of the course. Students are required to audition for city, district, and state ensembles.



## HONORS SYMPHONIC BAND

Course Number: MU1350 Prerequisites: Successful completion of high school advanced band class and band director recommendation Grade Level: 10-12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Symphonic Band is the most advanced class in instrumental music artistry. Advanced music literature, VBODA grade V and VI will be studied through performance in a symphonic wind and percussion ensemble of a professional caliber. Rehearsals are considered as a lab to instructional periods and are scheduled each week during the school and for a minimum of two weeks in August. Activities include concert and marching band, to include public performances that are required to fulfill the requirements of the course. In addition, students must audition for city, district, and state ensembles.

## HONORS JAZZ ENSEMBLE

#### Course Number: MU1450

Prerequisites: Successful completion of high school intermediate woodwind, brass or percussion classes, or

equivalent band course, or director recommendation.

#### Grade Level: 10-12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Jazz Ensemble is a course for advanced students interested in a thorough study and performance of modern contemporary music. Rehearsals and performances outside the regular school day will be scheduled and will be required to fulfill the requirements for the course. In addition, students must audition for district and state music ensembles when appropriate. Advanced music literature comparable to VBODA IV-VI will be studied through performance.

## **INTERMEDIATE ORCHESTRA**

Course Number: MU2100

#### Prerequisites: Successful completion of previous orchestra class or orchestra teacher recommendation

Grade Level: 9-12

#### Credit: 1/2 credit per semester

The orchestra program is designed to help the student develop the knowledge, skills and techniques necessary to express him/herself musically through the medium of a string instrument of the orchestra. Members of the class are expected to perform in the orchestra as a soloist and as a member of small or large ensembles. At least one after-school rehearsal is scheduled each week as a laboratory for the instructional periods. The instructional and rehearsal sessions culminate in concert performances that are required to fulfill the requirements of the course. Minimal performance level expected is VBODA grade III & IV. Students are expected to audition for city and regional events. Study will include music theory and history as appropriate for grade III literature. Students will be required to take a written and performance exam at the end of the semester.

## **ADVANCED ORCHESTRA**

#### Course Number: MU2250

#### Prerequisites: Intermediate Orchestra or teacher recommendation

Grade Level: 10-12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Members of the advanced class are expected to perform in the orchestra as a soloist and as a member of small or large ensembles. At least one after-school rehearsal is scheduled each week as a laboratory for the instructional periods. Instructional and rehearsal sessions culminate in concert performances that are required to fulfill the requirements of the course. Minimal performance level expected is VBODA grade V & VI. In addition, students must audition for city, regional, district and state events when eligible. Study will include music theory and history as appropriate for grade V & VI orchestra literature. Students will be required to take a written and performance exam at the end of the semester and are expected to develop a portfolio of performance material.

#### **BEGINNING & INTERMEDIATE GUITAR**

Course Number: MU3000, MU3100

Prerequisites: Provision of personal instrument requested

Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester



The guitar program teaches the fundamentals of music, note reading, and music theory, which are used as the basis of study while finger dexterity is being developed. The more advanced students extend their ability to read music for the guitar in a variety of musical styles. Various picking and strumming styles are developed in addition to different tunings, more difficult chords, and solo guitar selections. Rehearsals and performances outside the regular school day will be scheduled and will be required to fulfill requirements for the course. Beginning Guitar will perform Grade I-III level arrangements. Intermediate level requirement includes Grade II-V arrangements.

## **ADVANCED GUITAR**

Course Number: MU3250

#### Prerequisites: Completion of Intermediate or Guitar Teacher recommendation

Grade Level: 10-12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Advanced students will continue developing prior competencies in musicianship to demonstrate advanced proficiency. Rehearsals and performances outside the regular school day will be scheduled and will be required to fulfill the requirements for the course. Students will be required to perform chamber and solo music as well as personal compositions. Advanced level musical selections range from Grade V-VI level arrangements.

## **MUSICIANSHIP I**

Course Number: MU5100

**Prerequisites:** None

Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

Music theory I includes ear training, basic theory, and principles of musicianship and harmony in addition to basic keyboard skills. There are exercises in writing simple rhythmic, melodic and chord progressions and in acquiring proficiency on an instrument of the student's choice. In addition, students will be required to develop a portfolio of "best work" across all content areas.

## **MUSIC APPRECIATION**

Course Number: MU4109

#### Prerequisites: None

Grade Level: 9-12

#### Credit: 1/2 credit per semester

Music Appreciation is a semester course designed for students interested in learning to understand and enjoy music. Students will analyze and listen to recorded music and may be required to attend pre-approved live music performances. Students learn to recognize and describe music using appropriate vocabulary and to make value judgements regarding performances and style.

## **AP MUSIC THEORY**

Course Number: MU4200

#### Prerequisites: Music Theory I or teacher recommendation

Grade Level: 10-12

#### Credit: ½ credit per semester (+1.0 weighted credit)

AP Music Theory continues to emphasize ear training and principles of harmony. Students are expected to write and harmonize melodies in major and minor keys. Musical form is studied through the analysis of music scores and composition and the keyboard capability extends to performance of simple four-part harmony. Discriminate listening and aural analysis will be included. In addition, students will be required to develop a portfolio of "best work" across all content areas. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.



#### PIANO PERFORMANCE I, II & III

Course Number: MU5310, MU5320, MU5330

Prerequisites: Teacher recommendation

Grade Level: 9-12

Credit: ½ credit

#### PIANO PERFORMANCE III OFFERED ONLY AT WOODSIDE HS

Piano performance emphasizes accurate keyboard and technical skills, such as scales, arpeggios, and other techniques. This course incorporates concepts of technique, including music theory appropriate to the student. Rehearsals and performances outside of the regular school day will be scheduled and will be required to fulfill requirements of the course. Performance I students will learn and perform Grade I & II arrangements, Performance II students will learn and perform Grade III & IV arrangements, and Performance III students will learn and performance II students.

# HORIZONS



# NEW HORIZONS CAREER & TECHNICAL EDUCATION CENTER

# COURSES

The New Horizons Career and Technical Education Center is a regional training center, which has two campuses. **Students must be 16 years of age to attend the New Horizons** 

**Center and must make an application for acceptance.** The school division provides transportation to the two campuses.

## AUTO COLLISION AND REFINISHING I, II & III

Course Number: NH5000

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

Students in this program are preparing for careers in this field through the use of the latest technologies and state of the art equipment. Throughout the program, students gain daily practical experience by working on vehicles. Each student will become familiar with the latest finishes, from single-stage to multi-stage finishes. Selected students may be eligible for work experiences at local repair facilities. Also, ASE certifications will be available through this program. Students who successfully complete Collision and Repair I & II may be invited to return for Collision and Repair III.

## **AUTOMATION AND MECHANICAL PRODUCTION TECHNOLOGY**

Course Number: NH5189/ NH5199

Grade Level: 11, 12

Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

Automation and Mechanical Production Technology is a one year program that provides and overview and orientation to careers in various fields of manufacturing. Students will repair and maintain commercial or industrial equipment in buildings and program robots used in assembly and manufacturing systems.

## **AUTOMOTIVE TECHNOLOGY I, II**

Course Number: NH5020, NH5030

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

Auto Technology is a two-year program that prepares students to become entry-level auto technicians. Both years of the program are dual enrolled with Thomas Nelson Community College. Automotive manufacturers and local dealerships sponsor the Automotive Youth Education System at New Horizons. This program offers employment opportunities with dealerships for students who qualify and are selected during the spring semester of their first year. It also ensures that students have ASE master certified instructors, latest service equipment and current model cars so they receive top-quality instruction using the

latest technology. Students who are selected for Summer Mentorship opportunities receive hands-on training in service departments of sponsoring dealers under the supervision of experienced technicians.

# **COMPUTER NETWORKING / CYBERSECURITY**

Course Number: NH5529/NH5539

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS WOODSIDE LANE CAMPUS ONLY

This is a rigorous industry designed course taught by a CISCO certified instructor in a highly technical networking lab. The first semester qualifies the students to take the CISCO CCENT verification through training and technical labs in computer ethics, identifying security threats, and security defense. The second semester offers the potential for students to take the CISCO CCNA exam through training in configuring and troubleshooting routers, switches, and network devices. The class is dual enrolled for 6 college credits at Thomas Nelson Community College.

## **COMPUTER PROGRAMMING I AND ADVANCED COMPUTER PROGRAMMING**

Course Number: NH5549/NH5559

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS WOODSIDE LANE CAMPUS ONLY

This industry designed course will allow students to focus on computer science and apply key programming concepts, algorithmic procedures, programming languages, and web based applications. In the Advanced Programming course, students will use object-oriented programming to design and develop database and multimedia programs and applications. The class is dual enrolled for 6 college credits at Thomas Nelson Community College.

# **CONSTRUCTION I, II**

Course Number: NH5229/NH5239

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS WOODSIDE LANE CAMPUS ONLY

This is a one-year program that trains our future builders. Students develop the skills necessary for employment in the construction field. Throughout the program, students gain skills daily through practical experiences using hand and power tools. Students also participate in several building projects, and have partnerships with NASA and York/Poquoson Master Gardeners. Students who successfully complete Construction I & II may be invited to return for Construction III (#8603).

## **COSMETOLOGY I, II**

Course Number: NH5080, NH5090

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

#### OFFERED AT BOTH NEW HORIZONS CAMPUSES

Upon successful completion of this two-year program, students are expected to take the Commonwealth of Virginia State Cosmetology or Barbering examination in order to become licensed practitioners. Students gain daily practical experiences working on other students and during their second year have the opportunity to provide services to patrons in a clinical setting. Cosmetology/Barbering students can also earn SOL credit for use toward the elective credit upon successfully passing the NOCTI Credentialing Exam and/or the State Licensing exam.

## **CRIMINAL JUSTICE**

Course Number: NH5269, NH5279

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

#### OFFERED AT BOTH NEW HORIZONS CAMPUSES

Students in this one-year program are preparing for many of the exciting, challenging and rewarding careers in the criminal justice field. These opportunities require people who want to operate in both high energy and high-tech fluid environments filled with constant challenges and service commitments. Students will study the history of and types of law enforcement





requirements as they gain an understanding of local, state and federal law enforcement departments and jurisdictions. Students will learn about and use some of the newest technology in the criminal justice field as they undertake and engage in crime scene investigations. Some of the finest local state, federal and private sector industry professionals provide classroom presentations and hands on training opportunities. Students will also learn about the court system and corrections.

# CULINARY ARTS I, II

Course Number: NH5100, NH5110

Grade Level: 11, 12

Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS WOODSIDE LANE CAMPUS ONLY

Culinary Arts is a two-year program that prepares students to enter employment in food service occupations. Instruction focuses on sanitation, nutrition, food preparation, purchasing, and inventory control in addition to food presentation and service. Students plan menus, prepare food and use a variety of kitchen equipment such as ovens, grills, broilers, slicers, grinders, and blenders.

# **CYBERSECURITY SYSTEMS TECHNOLOGY I,II**

Course Number: NH5169/ NH5179

Grade Level: 11, 12

## Credit: 3 credit yearlong course

## OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

Cybersecurity Systems Technology is a one year program where students enter the world of computer technology and gain practical experience in assembling a computer system. Students will install, configure, and secure various operating systems and troubleshoot computers using system tools and diagnostic software. Students will gain a basic understanding of emerging technologies including unified communications, mobile, cloud, and virtualization technologies and explore basic network design and connectivity, network documentation, network limitations and weaknesses, and network security, standards, and protocols. This course prepares students for postsecondary education and training in a successful career in information technology.

# DENTAL CAREERS I, II

Course Number: NH5120, NH5130

Grade Level: 11, 12

## Credit: 3 credit yearlong course

## OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

This two-year program prepares students to perform all the tasks of a Dental Assistant. These tasks include exposing, processing and mounting x-rays, preparing materials for various procedures including impressions, removing sutures, placing topical anesthetics and making diagnostic study models for alginate impressions. This program also gives students a foundation to pursue the Dental Hygienist post-secondary degree through a two or four-year college.

# EARLY CHILDHOOD EDUCATION I, II

Course Number: NH5069, NH5079

Grade Level: 11, 12

## Credit: 3 credit yearlong course

## OFFERED AT NEW HORIZONS WOODSIDE LANE CAMPUS ONLY

Students who are interested in working professionally with young children (e.g., medical, social services, and education) may enroll in the Early Childhood Education (ECE) one-year program. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of early childhood education are emphasized. Practical experiences (ex: on-site lab, local daycare centers, elementary schools, other institutions) under the supervision of the instructor are required.

## **ELECTRICITY AND RENEWABLE ENERGY**

Course Number: NH5289/NH5299

**Prerequisites:** 

Grade Level: 11, 12

## Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS WOODSIDE LANE CAMPUS ONLY



Electricity and Renewable Energy is a 1-year program that teaches the basic concepts used by electricians to install, maintain and repair wiring, equipment and fixtures, and navigation of the National Electrical Code Book. Students in this program will also explore alternative renewable energy sources and will learn to install hydrogen fuel cells, solar panels and communication cable and wiring. As our electricity and alternative renewable energy resource needs continue to grow, so will the career opportunities in this field. Because we depend so much on electricity and other energy sources for the way we live and work, careers in this field will always be in high demand.

# **EMERGENCY MEDICAL TECHNICIAN**

Course Number: NH5309/ NH5319

Grade Level: 11, 12

Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

Emergency Medical Technicians are part of one of the three public safety divisions (EMS, Fire & Law Enforcement). Their job includes the daily routine of dealing with crisis, trauma, hazardous materials, illness, injuries and the training to handle mass causality situations, disaster management and terrorism awareness. The work they do often means the difference between life and death. Although the job can be stressful, EMT's and Paramedics enjoy the challenge and excitement of their jobs and view them as an opportunity to make a real difference. This one-year program meets the sequential elective requirement. Juniors who successfully complete EMT may be invited to return as a senior for EMT II. There are a very limited number of EMT II seats.

# **FIRE FIGHTER**

Course Number: NH5329/ NH5339

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

## OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

Firefighters are one of the three public safety divisions (EMS, Fire & Law Enforcement). The one-year Fire Fighter program introduces students to the exciting career field of Fire Fighting. This would also require the successful completion of EMT-B (see page 25). This course meets the sequential elective requirement. This new program includes the opportunity to earn both the Fire Fighter I and II certifications through the Virginia Department of Fire Programs. Due to this, students will be required to attend some training after school and on some weekends. Attendance at these sessions is mandatory for those pursuing the fire fighter certification.

# HVAC I, II

Course Number: NH5349/NH5359

Grade Level: 11, 12

Credit: 3 credit yearlong course

## OFFERED AT NEW HORIZONS WOODSIDE LANE CAMPUS ONLY

In this one-year program, students are taught the skills necessary for employment in the areas of heating and related climate control systems. Throughout the program, students gain daily practical experience in all aspects of air conditioning and also have the opportunity to receive refrigeration certification.

# MECHATRONICS

Course Number: NH5460/NH5470/NH5480

Grade Level: 11, 12

Credit: 3 credit yearlong course

## OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

This is a one-year program offered at Butler Farm Campus through a partnership with TNCC. This course will lead to industry certification and prepares students for manufacturing jobs as electrical/mechanical or mechatronics technicians who design,



install, maintain, repair, or troubleshoot manufacturing systems that include electrical and mechanical equipment, instrumentation, controls, and automation. This class is dual enrolled with TNCC for 22 college credits.

# MEDICAL ASSISTANT

Course Number: NH5369/NH5379

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

This program prepares students to assist physicians by performing functions related to both business administration and clinical duties of a medical office. Instruction in the business aspect includes: insurance reporting, office accounting, processing medical records, and medical transcription. Clinical instruction includes: preparation of the patient for examination and treatment, routine laboratory procedures, and use of the electrocardiograph machine. Medical Assistant is a one-year program but, it still meets the sequential elective requirement.

## **NURSING AIDE**

Course Number: NH5389/NH5399

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

This course prepares students for employment as a Nurse's Aide/Home Health Aide, and/or for entry into a practical nursing program as well as other health occupations. Students will receive clinical training in a local nursing home. This is a one-year program. Upon successful completion of the program, students meeting the standard established by the State Board of Nursing and New Horizons are eligible to take the National Nurse Aide Assessment Program examination to become a Certified Nurse Aide in Virginia.

# PHARMACY TECHNICIAN

#### Course Number: NH5409/NH5419

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

## OFFERED AT NEW HORIZONS WOODSIDE LANE CAMPUS ONLY

With our average population increasing in age, prescription medications are rapidly growing in their importance in the healthcare industry. Those in the industry on the Virginia Peninsula have identified Pharmacy Technician as their number one area of employment need. In the next several years, job growth for pharmacy technicians will be twice the average for all occupations in Virginia. The New Horizons program will provide students an in-depth exposure to the pharmaceutical industry. It will assist students in becoming skilled in preparing/dispensing prescriptions, compounding medications, preparing intravenous medications, stocking medications and repackaging medications. The Pharmacy Technician Program is a one-year (twosemester class) course. Students will be prepared to take the Virginia Pharmacy Technician Exam and be fully licensed within Virginia.

# PHYSICAL/OCCUPATIONAL THERAPY

Course Number: NH5449/NH5459

Grade Level: 11, 12

## Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

Physical/Occupational Therapy is a one year program designed to provide an introduction to the professions of physical and occupational therapy. Students explore the principles and practices of therapists in the health care industry and participate in clinical observation under the direct supervision of a licensed physical and/or occupational therapist. Clinical skills in the area of physical therapy and occupational therapy enable student to gain understanding of rehabilitative care, which is practices throughout the continuum of care and across the life span of individuals. After successful completion of this course, student may seek higher education for specific degrees/licensure in a variety of fields such as physical therapy, occupational therapy, speech therapy, sports medicine, athletic training, chiropractic medicine, biology, or exercise science.

## **PRECISION MACHINING**

Course Number:

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

OFFERED AT NEW HORIZONS BUTLER FARM CAMPUS ONLY

Precision Machining is a one year program that provides an introduction to students on using precision



tools and instruments to include operation and setup of various types of precision grinders, milling machines, and drill presses. There is also a focus on computer numerical control program writing, setup, and operation for lathe and milling machines. Students who successfully complete the Precision Machining program will be eligible for a TNCC Precision Machining Career Studies Certificate upon graduation.

# **VETERINARY SCIENCE**

Course Number: NH5429/NH5439

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

#### OFFERED AT NEW HORIZONS WOODSIDE LANE CAMPUS ONLY

Students in Veterinary Science learn how to respect, safely handle and treat classroom animals. The students come to understand the various breeds and species of animals and are able to identify basic requirements for veterinary care and general health maintenance. The students receive training in handling, grooming, feeding and properly medicating a variety of animals. In addition, animal nutrition, disease and basic first aid are explored. Students also perform the routine technical, maintenance and office duties associated with veterinary work. This one-year program meets the sequential elective requirement.

## WELDING I, II

Course Number: NH5160, NH5170

Grade Level: 11, 12

#### Credit: 3 credit yearlong course

#### OFFERED AT BOTH NEW HORIZONS CAMPUSES (WOODSIDE LANE- LEVEL II ONLY)

This is a two-year program in which students receive training along the lines of Huntington Ingalls Industries Newport News Shipbuilding and Liebherr Mining Equipment welding schools. Students learn to set up welding equipment and do minor repairs, participate in building a variety of projects, network with people in the welding field and compete in district and state welding competitions.

# **SCIENCE COURSES**

## **6<sup>TH</sup> GRADE SCIENCE**

Course Number: SC6000

Prerequisites: None

#### Grade Level: 6

Sixth Grade Science focuses on the study of force, energy, and matter: the role of the sun's energy on the Earth's systems, water in the environment, air and atmosphere, and basic chemistry concepts. Students will also explore the solar system and natural resource management.

# INTRODUCTION TO SCIENTIFIC INVESTIGATION AND STEM

Course Number: SC6500

Prerequisites: None

#### Grade Level: 6

#### OFFERED ONLY AT CRITTENDEN MIDDLE SCHOOL

Course is designed to introduce students to the scientific investigation process and help them to develop the necessary STEM and science investigation skills to successfully complete an independent science project.





# 7<sup>TH</sup> GRADE LIFE SCIENCE

Course Number: SC7000

Prerequisites: None

Grade Level: 7

Seventh Grade Life Science focuses on exploration of cellular organization and classification of organisms, the importance of basic physical and chemical processes of photosynthesis and its

importance to life, the relationships among members of an ecosystem, and genetics.

## **8<sup>TH</sup> GRADE PHYSICAL SCIENCE**

Course Number: SC8000

Prerequisites: None

#### Grade Level: 8

Eighth Grade Science focuses on understanding of the nature and structure of matter and the characteristics of energy. Major areas explored are physical and chemical changes, the periodic table, reactions, temperature and heat; sound; light; electricity and magnetism; and work, force, and motion.

## **HONORS EARTH SCIENCE I**

Course Number: SC1200

**Prerequisites:** None

Grade Level: 9-12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Earth Science is a study of the features and forces of the earth and its place in the solar system and the universe. This course introduces students to such topics as geology, oceanography, meteorology, and astronomy. An accelerated course, Honors Earth Science is also available.

#### **ENVIRONMENTAL SCIENCE**

Course Number: SC1330

Prerequisites: None

#### Grade level: 9

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

Environmental Science is designed for students to have the opportunity to increase their environmental literacy and graduate with the knowledge and skills to act responsibly to protect and restore their environment. The goal of this course is to provide students with the skills and content necessary for them to look at current and future environmental issues, both natural and man-made, through a critical lens and to provide a platform to make informed decisions. The course will focus on earth science for one semester and biology one semester and link the concepts of the two disciplines. This course counts as an earth science but not a verified credit.

## **BIOLOGY I**

Course Number: SC2100, SC2200

Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+0.5 weighted credit for Honors)

Biology provides a meaningful view of the whole living world and its interrelationships. Topics such as taxonomy, morphology, physiology, molecular biology, biochemistry, genetics, ecology and animal behavior are covered. This course will include dissections of various animals. In the Honors level of the course, environmental education will be emphasized. The students will be required to plan, develop, and complete an experimental science project and report the results in oral and written form. All students take the SOL test for Biology and must pass it to earn a verified credit toward graduation.

# **EARTH SCIENCE II – ASTRONOMY**

Course Number: SC2339

Prerequisites: Earth Science I and Algebra I

Grade Level: 11-12

#### Credit: ½ credit

Earth Science II provides an understanding of the components of the universe and their interactions focusing more specifically on the solar system. *This is a one semester course.* 

# EARTH SCIENCE II – OCEANOGRAPHY

Course Number: SC 2349

Prerequisites: Earth Science I

#### Grade Level: 11-12

#### Credit: ½ credit

Oceanography is a semester course that involves the study of the historical, physical and chemical aspects of the oceans. The course will use the Chesapeake Bay region for an intense study of the coastal ocean. This is a paired semester class and students may enter second semester. Either semester may be paired with any other Earth Science II semester course as scheduling permits. *This is a one semester course*.

## **BIOLOGY II – FORENSICS**

Course Number: SC 2319

#### **Prerequisites:** Biology I

#### Grade Level: 11-12

#### Credit: ½ credit

Biology II – Forensics is a semester course that combines the concepts of biology and chemistry to explore scientific applications of solving crimes in a comprehensive approach. Students will perform numerous laboratories that will focus on making the connections between science and technology and the impact these two disciplines have on the study of forensic science. Students will use multiple pathways of scientific reasoning to explore the analysis of a crime scene, fingerprints, hair, trace evidence, blood, DNA and case studies. *This is a one semester course.* 

## **BIOLOGY II – GENETICS**

#### Course Number: SC2359

#### **Prerequisites: Biology**

Grade Level: 11-12

#### Credit: ½ credit

Biology II - Genetics includes a study of the continuity of life and heredity, cell chemistry, Mendelian laws of heredity, probability, sex-inheritance, selection, chromosomal aberrations, mutations, cytoplasmic inheritance, bacterial and viral genetics, eugenics, genes in populations and genetics of species formation.

## **BIOLOGY II – MARINE BIOLOGY**

Course Number: SC2369

Prerequisites: Biology I

Grade Level: 11-12

#### Credit: ½ credit

Marine Biology is a semester course that involves the study of the oceans and life processes within and around it, and includes the study of plants and animals in the ocean, ecology, and the impact of humans on the ocean. This course will also include dissections of various preserved ocean animals. This is a paired semester class and students may enter second semester. Either semester may be paired with any other Biology II semester course as scheduling permits. *This is a one semester course*.



BIOLOGY II – ZOOLOGY Course Number: SC2379 Prerequisites: Biology I Grade Level: 11-12 Credit: ½ credit

Zoology is a semester course that provides the student with a survey of invertebrate and vertebrate animals. Zoology students will delve into the diversity of life by studying characteristics, taxonomic relationships, life processes, survival mechanisms, and economic importance among the organisms. This course will include dissections of various animals. This is a paired semester class and students may enter second semester. Either semester may be paired with any other Biology II semester course as scheduling permits. *This is a one semester course*.

# **BIOLOGY II – ECOLOGY**

Course Number: SC2389

Prerequisites: Biology I

Grade Level: 11-12

#### Credit: ½ credit

Ecology is a semester course that includes studies of the relationship between organisms and the environment, including physical and biological conditions. The course will include experimental studies in the laboratory and the field and data analysis. This is a paired semester class and students may enter second semester. Either semester may be paired with any other Biology II semester course as scheduling permits. *This is a one semester course*.

# **BIOLOGY II – FIELD BIOLOGY**

Course Number: SC2600

Prerequisites: Biology I

Grade Level: 11-12

Credit: 1/2 credit per semester

#### OFFERED ONLY AT POINT OPTION

This is an alternative to the typical science course in the classroom setting. It allows the use of "Discovery Science" which describes natural structures of processes as accurately as possible through careful observation and data collection. Student interest and participation is far above that of a typical classroom setting. The students arrive at class eager to go out and discover something new, and then follow that up with further research when they get back to class to answer all of their questions. As one of our biology textbooks expresses it, "Science is a quest to understand nature." Being outdoors brings that quest to life. Seeing the interactions firsthand brings excitement into learning.

## **BIOLOGY II – MOLECULAR AND CELL BIOLOGY**

Course Number: SC2419

Prerequisites: Biology I and Chemistry

Grade Level: 10-12

#### Credit: ½ credit

The semester-long elective course provides an in depth study of the molecular basis of cellular processes and the interrelationships in living systems through inquiry based experimentation and modeling. Students will cover topics including: biochemistry, cell structure and functions, cell membrane structure and transport across the membrane, cellular communication, energetics, molecular genetics, cell organization and movement, and cell cycle. Students will be taught the content, lab techniques and critical thinking skills to be successful in an introductory college biology course. *This is a one semester course*.

## **BIOLOGY II - RESEARCH & APPLICATION METHODS FOR CELLULAR PROCESSES**

Course Number: SC2429

Prerequisites: Biology I and Chemistry

Grade Level: 10-12

#### Credit: ½ credit

The semester-long elective course focuses on research design, applied math and statistics culminating in a student capstone research project with a molecular cell emphasis. Students develop research skills including science based literature research,

developing a research proposal, experimentation, data analysis, scientific writing and oral presentation skills. *This is a one semester course.* 

# HONORS BIOLOGY II – ANATOMY & PHYSIOLOGY

Course Number: SC2390

Prerequisites: Biology I

Prerequisite or Co-requisite: Chemistry I

Grade Level: 11-12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Anatomy and Physiology is a study of the structure and function of the human body. The course is preparation for advanced biological studies, biomedical nursing, and other science-based careers. Laboratory experiences provide student learning in the following topics: the major body systems; how the body systems work together to provide homeostasis; body functions in the healthy and diseased states; blood typing; muscle action; nerve functioning; and bioethics. Dissections of various preserved animals and organs are an integral part of this course.

# **AP BIOLOGY**

Course Number: SC2300

Prerequisites: Successful completion of Biology

Grade Level: 11-12

#### Credit: 1 credit per semester (+1.0 weighted credit)

Advanced Placement Biology students will closely follow the program suggested by the College Board. This course emphasizes the principal topics covered in Biology I, however, it is taught at a more intensive level of rigor. Laboratory work is an integral part of the course. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.

## **GENERAL CHEMISTRY**

Course Number: SC3100

Prerequisites: Algebra I

Grade Level: 10-12

#### Credit: 1/2 credit per semester

General Chemistry I is a course that explains the basic atomic and molecular processes. Other areas of study include the structure of matter and periodicity of elements, behavior of matter in terms of chemical equilibrium, oxidation-reduction and acid base theory. Students must have successfully completed Algebra I before taking this course.

## **HONORS CHEMISTRY**

Course Number: SC3200

Prerequisites: Algebra I

Grade Level: 10-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+0.5 weighted credit)

Honors Chemistry I is a course that explains the basic atomic and molecular processes. Other areas of study include the structure of matter and periodicity of elements, behavior of matter in terms of chemical equilibrium, oxidation-reduction and acid base theory. Honors Chemistry is offered with Algebra II as a co-requisite.

## **AP CHEMISTRY**

Course Number: SC3300

Prerequisites: Chemistry and Algebra

Grade Level: 11-12

#### Credit: 1 credit per semester (+1.0 weighted credit)

Advanced Placement Chemistry students will closely follow the program suggested by the College Board. Students will attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. Laboratory work will be required at least fifty percent of the time. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.







# **AP ENVIRONMENTAL SCIENCE**

Course Number: SC1300 Grade Level: 9-12

Credit: ½ credit per semester (+1.0 weighted credit)

Advanced Placement Environmental Science students will closely follow the program suggested by the College Board. Students will study scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, identify and analyze environmental problems both natural and human-made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. The course is taught at an intensive level of rigor. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.

# SCIENCE AND TECHNOLOGY COMMUNICATIONS

Course Number: SC4020

Grade Level: 10-12

#### Credit: 1/2 credit per semester

General Science and Technology Communications will enhance literacy skills in research in all science disciplines. Digital literacy will be developed through the engineering design process as student become problem finders to develop solutions that will be communicated through various multi-media platforms. This course will incorporate science, technology and communication in an innovative and project-based approach to develop literacy, career and life skills.

# **GENERAL PHYSICS I**

Course Number: SC4150

#### **Prerequisites:** Geometry

Grade Level: 10-12

#### Credit: 1/2 credit per semester

General Physics I is a two-semester course designed for students who have successfully completed Geometry and are interested in Physics but are not ready for the math requirement of Honors Physics. Students will develop a conceptual understanding of physical principles and how physics plays a role in their everyday lives. Topics covered will include kinematics, dynamics, energy, waves, geometric optics, electricity and magnetism.

## **HONORS PHYSICS**

#### Course Number: SC4200

#### Prerequisites: Completion of or current enrollment in Trigonometry or Algebra II/Trigonometry

#### Grade Level: 10-12

#### Credit: ½ credit per semester (+0.5 weighted credit)

Honors physics includes a discussion of mechanics, kinetic molecular theory, heat, wave motion, sound, light, electrical and magnetism, and atomic and nuclear physics.

## **AP PHYSICS I**

#### Course Number: SC4310

## Prerequisites: No prior coursework in physics is necessary. Completion of geometry and be concurrently taking

#### Algebra II or an equivalent course.

#### Grade Level: 9-12

#### Credit: ½ credit per semester (+1.0 weighted credit)

Advanced Placement Physics students closely follow the program suggested by the College Board. The curriculum is challenging, but broad in nature. The course is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power, and mechanical waves and sound. It will also introduce electric circuits. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.

## **AP PHYSICS II**

Course Number: SC4320 Prerequisites: Completed AP Physics I or a comparable introductory course in physics Grade Level: 10-12

#### Credit: ½ credit per semester (+1.0 weighted credit)

Advanced Placement Physics students closely follow the program suggested by the College Board. The curriculum is challenging, but broad in nature. The course is the equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.

# SOCIAL STUDIES COURSES

# **UNITED STATES HISTORY TO 1865**

Course Number: SS6000

Prerequisites: None

#### Grade Level: 6

Students will use skills for historical and geographical analysis to explore the early history of the United. The standards for this course relate to the history of the United States from pre-Columbian times until 1865. Students will continue to learn fundamental concepts in civics, economics, and geography as they study United States history in chronological sequence and learn about change and continuity in our history. They also will study documents and speeches that laid the foundation for American ideals and institutions and will examine the everyday life of people at different times in the country's history through the use of primary and secondary sources. The study of history must emphasize the intellectual skills required for responsible citizenship. Students will practice these skills as they extend their understanding of the essential knowledge defined by all of the standards for history and social science.

## **UNITED STATES HISTORY: 1865 TO THE PRESENT**

Course Number: SS7000

#### Prerequisites: None

#### Grade Level: 7

Students will use skills for historical and geographical analysis to explore American history since 1865. The standards for this course relate to the history of the United States from the Reconstruction era to the present. Students should continue to develop and build upon the fundamental concepts and skills in civics, economics, and geography within the context of United States history. Students will use investigation as a foundation to delve into the political, economic, and social challenges facing the nation once reunited after the Civil War. This foundation provides a pathway to develop an understanding of how the American experience shaped the world's political and economic landscapes. The study of history must emphasize the historical thinking skills required for geographic analysis, economic decision making, and responsible citizenship. Students will apply these skills as they extend their understanding of the essential knowledge defined by all of the standards for history and social science.







# SOCIAL

# **STUDIES** CIVICS & ECONOMICS



# Course Number: SS8000

**Prerequisites:** None

#### Grade Level: 8

This course focuses on the roles citizens play in the political, governmental and economic systems of the U.S. Students examine the constitutions of Virginia and the U.S.; identify the rights, duties, and responsibilities of citizens; and describe the structure and operation of government at the local, state,

and national levels. Students investigate the process by which decisions are made in the American market economy and explain the government's role in our economy. They also identify personal character traits such as patriotism, respect for the law, and a sense of civic duty that facilitate thoughtful and effective participation in the civic life of an increasingly diverse democratic society. The course helps students understand politics and government in order to be informed citizens and to participate in the public life of our community, state and nation. It also helps them understand the function of the economy in our society and the world; their role as an employer, worker, producer, or consumer; and their role in the global marketplace. Throughout the course, students practice the intellectual skills required for responsible citizenship. All students take the SOL test for Civics and Economics.

## **WORLD GEOGRAPHY**

Course Number: SS1100, SS1200

**Prerequisites:** None

Grade Level: 9

#### Credit: ½ credit per semester (+0.5 weighted credit for SS1200 only)

World Geography is the study of the world's peoples, places, and environments, with a focus on world regions. Particular emphasis is placed on students' understanding and applying geographic concepts and skills to their daily lives. In the Honors level of the course, students will use geographic resources, inquiry, research, and technology skills to ask and answer geographic questions for a more in-depth study of geography. All students take the SOL test for World Geography and must pass it to earn a verified credit toward graduation.

## **AP HUMAN GEOGRAPHY**

Course Number: SS1300

Prerequisites: None

Grade Level: 9

#### Credit: ½ credit per semester (+1.0 weighted credit)

AP Human Geography is a rigorous Advanced Placement course that focuses on theoretical and practical applications in the field of geographic inquiry. Students will have the opportunity for hands-on, in-depth study of human geography through classroom discussion, cooperative activities, technology activities, cartography, readings, lab work and outside research and fieldwork. All students take the SOL test for World Geography and must pass it to earn a verified credit toward graduation. Students also prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college. The course may be taken in place of World Geography or as an elective credit after taking World Geography.

## **WORLD HISTORY I**

Course Number: SS2100

#### Prerequisites: None

Grade Level: 10

#### Credit: 1/2 credit per semester

The focus of this course is the study of the historical development of people, places, and patterns of life from ancient times until 1500 AD. Students will use skills of historical and geographical analysis to explore the early history of the world. Students without a verified credit in social studies will take the SOL test for World History and Geography to 1500 AD and must pass it to earn a verified credit toward graduation.

## WORLD HISTORY II

Course Number: SS2120, SS2220

**Prerequisites:** None

Grade Level: 10

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+0.5 weighted credit for SS2220 only)

The focus of this course is the study of the historical development of people, places, and patterns of life

from 1500 AD to the present. In the Honors level course, students go beyond a general understanding of history and use historical and geographical analysis skills to explore events, people, and ideas in World history. Students without a verified credit in social studies will take the SOL test for World History and Geography from 1500 AD to the Present and must pass it to earn a verified credit towards graduation.

# **AP WORLD HISTORY: MODERN**

Course Number: SS2300

**Prerequisites:** None

Grade Level: 10

## Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+1.0 weighted credit)

At the Advanced Placement level, world history students go beyond a general understanding of world history. They use analytic skills and write extensively on the major themes of history from the foundations of civilization to the present day. Students are given the opportunity to "do history" by using the steps a historian would use in analyzing historical events and evidence worldwide. The study of Africa, the Americas, Asia and Europe offers a balanced coverage of world history. Students without a verified credit in social studies will take the SOL test for World History and Geography from 1500 to the present and must pass it to earn a verified credit toward graduation. Students also prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college. The course may be taken in place of Honors World History I and II or as an elective credit after taking World History.

# **UNITED STATES & VIRGINIA HISTORY**

Course Number: SS3100, SS3200

**Prerequisites:** None

## Grade Level: 11

# Credit: ½ credit per semester (+0.5 weighed credit for SS3200 only)

The focus of this course is the study of the historical development of American ideas and institutions from the Age of Exploration to the present. Students will learn fundamental concepts in civics, economics and geography. They will obtain a basic knowledge of American culture through a chronological survey of major issues, movements, people and events in United States and Virginia history. In the Honors level course, students go beyond a general understanding of history and use historical and geographical analysis skills to explore events, people and ideas in American history. Students without a verified credit in social studies will take the SOL test for VA & U.S. History and must pass it to earn a verified credit toward graduation.

# **AP UNITED STATES HISTORY**

Course Number: SS3300

Prerequisites: None

# Grade Level: 11

# Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+1.0 weighted credit)

This is a rigorous Advanced Placement course designed to provide students with the analytic skills and factual knowledge necessary to deal critically with problems in U.S. History. Students will learn how to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship. Students will write extensively to perfect their essay writing and critical thinking skills. Students without a verified credit in social studies will take the SOL test for Virginia and United States History and must pass it to earn a verified credit toward graduation. Students also prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college. This course will satisfy the U.S. and Virginia History credit requirement for the diploma. Dual enrollment college credit may be offered for this course at some school sites. Check with your counselor for availability.



SOCIAL

## STUDIES UNITED STATES & VIRGINIA GOVERNMENT



Course Number: SS4100, SS4200

**Prerequisites:** None

Grade Level: 12

Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+0.5 weighed credit for SS4200 only)

This course will provide students with knowledge of Virginia and United States Government that will enable them to participate effectively in civic life in America. Students will examine fundamental constitutional principles; the organization of government at the federal, state, and local level; the rights and responsibilities of citizenship; the policy-making process; political parties and elections; comparative government and foreign policy; and the American economic system. In the Honors level course, students write and think critically in order to obtain a deeper understanding government and economics.

# **AP UNITED STATES GOVERNMENT**

Course Number: SS4300

#### Prerequisites: None

Grade Level: 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

This rigorous Advanced Placement course focuses on the various institutions, groups, beliefs, and ideas that constitute United States politics. Students will gain an analytical perspective on government and politics in the United States both by studying the general concepts used to interpret U. S. politics and by analyzing specific examples. Students will learn how to analyze and interpret basic data relevant to U. S. government and politics and will write extensively to perfect their essay writing and critical thinking skills. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college. This course will satisfy the US Government credit requirement for the diploma. Dual enrollment college credit may be offered for this course at some school sites. Check with your counselor for availability.

## **AP COMPARATIVE GOVERNMENT**

Course Number: SS4310

**Prerequisites:** None

Grade Level: 12

#### Credit: ½ credit per semester (+1.0 weighted credit)

This is a rigorous Advanced Placement course designed to introduce students to the fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. Students will write extensively to perfect their writing and thinking skills. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college. *This is an elective course*.

## **INTRODUCTORY PSYCHOLOGY**

Course Number: SS5100

**Prerequisites:** None

Grade Level: 10-12

#### Credit: 1/2 credit per semester

Introductory Psychology is a beginning study of the subject of psychology. Students are introduced to the scientific method and the core ideas and theories of psychology. Students explore and gain an understanding of the complexities and diversity of human thought and behavior. *This is an elective course.* 

# **AP PSYCHOLOGY**

**Course Number: SS5300** 

**Prerequisites:** None

Grade Level: 11, 12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+1.0 weighted credit)

This is a rigorous Advanced Placement course designed to introduce students to the systematic and

scientific study of the behavior and mental processes of human beings and animals. Students are exposed to psychological facts, principles and phenomena associated with each of the major subfields of psychology. They also learn about the ethics and methods psychologists use in their science and practice. Students prepare for and take the College Board's Advanced Placement Test and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college. This is an elective course.

# SOCIOLOGY

**Course Number: SS5400** 

**Prerequisites:** None

Grade Level: 10-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

Sociology is the study of group behavior and interactions between people. Student engagement is emphasized through the examination of social problems, case studies, role-plays, cooperative learning activities, simulations, debates, online research, and a variety of activities that will help students develop the skills that they will need to become active citizens. Topics include social structure, deviance, race and ethnicity, gender and age, family, religion, and social change. This is an elective course.

## **HISTORY IN FILM**

Course Number: SS3400

#### **Prerequisites:** None

Grade Level: 10-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

This course focuses on selected topics in history using the medium of film. Students will use historical thinking skills and primary source analysis to understand how history impacts the film industry and how the film industry impacts history. This is an elective course.

#### **AFRICAN AMERICAN HISTORY**

Course Number: SS5680

#### Prerequisites: None

Grade Level: 10-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

This course is a survey of African American history from the origins of the Trans-Atlantic Slave Trade to modern day. Students will analyze the social, economic, and political effects of key persons and events, as well as refine skills in research, analysis, and historical interpretation. This is an elective course.

#### HONORS INTERNATIONAL RELATIONS

Course Number: SS5729

#### **Prerequisites:** None

Grade Level: 10-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit (+0.5 weighted credit)

International Relations includes the study of the nation, state, and international law. Areas studied include Asia, the Middle East, Africa and Latin America. Students also study the history and development of the United Nations, including its structure and problems. This is an elective course. This is a one semester course.



SOCIAL

# STUDIES HONORS AMERICAN FOREIGN POLICY



Course Number: SS5629

Prerequisites: None

Grade Level: 10-12

Credit: ½ credit (+0.5 weighted credit)

American Foreign Policy provides students with the opportunity to gain insight into the complexities of American foreign policy, the roles of various groups in formulating policy and the major developments in American foreign policy from the end of World War II to the present. *This is an elective course. This is a one semester course.* 

# **PRACTICAL LAW**

Course Number: SS5630

Prerequisites: None

Grade Level: 9-12

#### Credit: 1/2 credit per semester

Practical Law is designed to provide students with a basic knowledge of the law as it applies to citizens of the United States and Virginia. Student engagement is emphasized through the use of problems, case studies, role-plays, cooperative learning activities, simulations, debates, online research, and a variety of activities that will help students develop the knowledge and skills that they will need to make sound decisions and become active and law-abiding citizens in their schools and communities. Topics include criminal law, the legal system, juvenile justice, consumer law, family law, and individual rights and liberties. Students will also study contemporary issues in law related to immigration, intellectual property, terrorism, and the workplace. *This is an elective course.* 

#### EDUCATION



# SPECIAL EDUCATION COURSE ELIGIBILITY

The following courses offer elective credit and are weighted equal to modified ability grouped classes in determining student class rank and grade point average. See <u>Grade</u> <u>Point Average and Class Ranking of Secondary Students</u> for further information.

## STRATEGIES

Course Number: SP1000 Prerequisites: Geared to students with learning disabilities (LD) Grade Level: 9-12 (teacher recommendation)

#### Credit: 1/2 credit per semester

Strategies is designed to teach students techniques that assist them in organizing and processing information. Students learn alternative strategies for recalling details and main ideas, outlining, taking tests, expressive writing, spelling, vocabulary development and time management. These techniques are applied to all content area material so that success is measured by improved performance in all academic areas. This course is appropriate for students in the resource setting.

## **PERSONAL LIFE SKILLS**

Course Number: SP3000

Prerequisites: Geared to students with an emotional disability (ED)

Grade Level: 9-12

#### Credit: ½ credit per semester (elective)

Instruction in Personal Life Skills assists the student in developing appropriate behaviors for all educational settings. Specific skills essential for social adjustment and social interaction are stressed. Assistance in problem solving, age appropriate social adjustment and selecting realistic life goals is emphasized.

# **ENGLISH SUPPORT**

Course Number: SP1100

Prerequisites: Geared to students with learning disabilities (LD)

Grade Level: 9-12

#### Credit: ½ credit per semester (elective)

This course is designed for students who are also enrolled in a general education English class. The class reinforces language arts skills and supports deficit areas experienced in general education.

# **ENGLISH SKILLS**

Course Number: SP2100

#### Prerequisites: Geared to students with intellectual disabilities (ID)

Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (elective)

This course is designed for students who are not enrolled in a general education English class. The class reinforces language arts skills and supports deficit areas with specialized instruction and a modified curriculum as determined by the Individualized Education Program (IEP).

# **READING SKILLS**

#### Course Number: SP0100

Prerequisites: Geared to students with intellectual disabilities (ID); placement testing by special education teacher

# Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (elective)

Reading skills is a phonetic reading program for students who are non-readers through fourth grade ability. The program emphasizes decoding and comprehension skills.

# MATH SKILLS

Course Number: SP2210

#### Prerequisites: Geared to students with intellectual disabilities (ID)

Grade Level: 9-12

#### Credit: ½ credit per semester (elective)

This course is designed for students who are not enrolled in a general education math class. The class reinforces math skills and supports deficit areas with specialized instruction and a modified curriculum as determined by the Individualized Education Program (IEP).

## MATH SUPPORT – ALGEBRA I

Course Number: SP1200

Prerequisites: Geared to students with learning disabilities (LD)

Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (elective)

This course is designed for students who are also enrolled in a general education math class. The curricu-lum reinforces math skills and supports deficit areas experienced in general education Algebra I classes.

# **MATH SUPPORT**

Course Number: SP2200

# Prerequisites: Geared to students with learning disabilities (LD)

Grade Level: 9-12

# Credit: <sup>1</sup>/<sub>2</sub> credit per semester (elective)

This course is designed for students who are also enrolled in a general education math class. The curriculum reinforces math skills and supports deficit areas experienced in general education.



# EDUCATION SCIENCE SKILLS



Course Number: SP2310 Prerequisites: Geared to students with intellectual disabilities (ID) Grade Level: 9-12

Credit: <sup>1</sup>/<sub>2</sub> credit per semester (elective)

Science Skills is a course composed of the following three strands: Life Science, Earth Science and Physical Science. Course objectives are designed to ensure that students are exposed to critical information that will make them better informed and more productive citizens. Students in this course are not currently enrolled in general education science courses.

# SOCIAL STUDIES SKILLS

Course Number: SP1410

Prerequisites: Geared to students with intellectual disabilities (ID)

Grade Level: 9, 10

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (elective)

Social Studies Skills is a course composed of the following three strands: Geography, U.S. History and Government. The course is designed to ensure that students are exposed to critical information that will make them better informed and more productive citizens. Students in this course are not currently enrolled in general education social studies courses.

# **HEALTH & DAILY LIVING**

Course Number: SP0300

#### Prerequisites: Geared to students with intellectual disabilities (ID)

Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (elective)

Health and Daily Living is designed for students who are not enrolled in general education courses and read and write at or below fourth grade level. Students will learn information needed to lead a healthy life. Topics covered in the course are the systems of the human body, common safety precautions, first aid techniques, as well as prevention techniques. The course also covers appearance, peer pressure, nutrition and fitness. Drug and Family Life Education are included in this course. Additionally, students will learn about health resources in the community and how to access those resources.

# CAREERS

Course Number: SP0400

#### Prerequisites: Geared to students with intellectual disabilities (ID)

Grade Level: 9-12

#### Credit: ½ credit per semester (elective)

This course is designed for students who read and write at or below fourth grade level and are not enrolled in general education courses. Students will learn a career-planning process, assess their abilities, analyze those abilities and make realistic decisions regarding career options. Students will be exposed to a variety of career options. They will learn to set goals and follow through with goal attainment. Additionally, students will learn appropriate work behaviors and habits, understand the job application process and participate in the interview process.

# **FUNCTIONAL SKILLS**

Course Number: SP0600

#### Prerequisites: Geared to students with intellectual disabilities (ID)

Grade Level: 9-12

#### Credit: ½ credit per semester

Instruction is designed to incorporate functional skills, to promote transfer of skills and to foster the growth of appropriate social skills. Experiences in the prevocational and vocational area in addition to those that increase the students? abilities in independent living are emphasized daily.

# LIFE SKILLS

Course Number: SP0500

Prerequisites: Geared to students with intellectual disabilities (ID)

Grade Level: 9-12

#### Credit: ½ credit per semester

Instruction is designed to incorporate functional skills, to promote transfer of skills and to foster the

growth of appropriate social skills. Experiences in the prevocational and vocational area in addition to those that increase the students' abilities in independent living are emphasized daily.

# PRACTICAL ASSESSMENT EXPLORATION SYSTEM LAB

Course Number: SP3320

#### Prerequisites: Geared to all students with disabilities

Grade Level: 9-12

#### Credit: 1/2 credit per semester

Practical Assessment Exploration System (PAES®) provides work and life skill training, vocational work assessment, work exploration, appropriate work behavior development, data collection and student reporting, and an accurate description of student performance & employment potential.

# WORK EXPERIENCE PROGRAM (WE) II

#### Course Number: SP3330

# Prerequisites: Geared to students with mild to moderate disabilities; Work Awareness and Transition (School

based Enterprise) experience preferred; PAES Lab experience preferred

Grade Level: 10- 12+

#### Credit: 1/2 credit per semester

This program is designed to not only expose students to an unpaid work experience, but to give them the competencies necessary to work in the community. Site approval is done through the Transition Specialist, is done in the community, and is with or without a Job Coach.

## VERSABILITY RESOURCES, INC. (FORMALLY ARC SUPPORTED EMPLOYMENT)

#### Course Number: SP3390

Prerequisites: Geared to students with mild, moderate, or severe disabilities; SBE experience preferred; PAES Lab experience preferred; WE II experience preferred; Send completed application to Transition Specialist; Successful interview

#### Grade Level: 11, 12, 12+

#### Credit: 1/2 credit per semester

VersAbility Resources has work environments that are structured, supervised, and provides on-going employment training. Persons receiving services are persons with intellectual disabilities, developmental delays, and/or other physiological disabilities.

## **PROJECT SEARCH**

#### Course Number: SP4120

# Prerequisites: Geared to students with mild, moderate, or severe disabilities; Eligibility with DARS\*\*; Graduate with an Applied Studies Diploma; Eligible to Re-enroll; Application through Transition Specialist; Successful Interview

#### Grade Level: 12+

Project SEARCH High School Transition Program is a unique, business-led, one-year, school-to-work program that takes place entirely at the workplace. Total workplace immersion facilitates a seamless combination of classroom instruction, career exploration, and relevant job-skills training through strategically designed internships.





# THEATRE COURSES

# **THEATER ARTS GRADE 6**

Course Number: EE6009 Prerequisites: None

#### Grade Level: 6

Theater Arts Grade 6 is designed to provide students with an introduction to the study of theatre history, literature and production. This course prepares students for further theatrical study and nurtures an appreciation for the many forms of theatre.

# **THEATER ARTS GRADE 7**

Course Number: EE7009

#### Prerequisites: None

#### Grade Level: 7

Theater Arts Grade 7 is designed to provide students with an introduction to the study of theatre history, literature and production. Through research, planning, scripting, production, and performance experiences, students acquire skills in communicating ideas, critical thinking and collaborative problem solving.

## **THEATER ARTS GRADE 8**

Course Number: EE8009

#### Prerequisites: None

#### Grade Level: 8

Theater Arts Grade 8 is designed to provide students with an introduction to the study of theatre history, literature and production. Through research, planning, scripting, production, and performance experiences, students acquire skills in communicating ideas, critical thinking, and collaborative problem solving. This course prepares students for further theatrical study and nurtures an appreciation for the many forms of theatre.

## **THEATER ARTS I**

Course Number: EE0100

Prerequisites: None

Grade Level: 9-12

#### Credit: ½ credit per semester

Theater Arts I includes an overview of the structure of drama, the basic mechanics of acting, origins of storytelling, varieties of theatre, dramatic criticism, elements of play production and contemporary theatre awareness.

## **THEATER ARTS II**

Course Number: EE0200

Prerequisites: Successful completion of Theater Arts I

Grade Level: 10-12

#### Credit: 1/2 credit per semester

Theater Arts II includes a study of the history of theatre, the types and styles of theatre, dramatic criticism, stage and acting terms, intermediate acting techniques, play directing and technical and contemporary theatre awareness.

## THEATER ARTS III

Course Number: EE0300

Prerequisites: Successful completion of Theater Arts II

Grade Level: 11, 12

#### Credit: 1/2 credit per semester

Theater Arts III includes instruction in advanced acting, dramatic criticism, stage and acting terms, types and styles of dramas, play writing, directing, technical theatre and contemporary performing arts.

# **ADVANCED THEATER ARTS IV**

Course Number: EE5450

Prerequisites: Successful completion of Theater I-III

Grade Level: 12

#### Credit: ½ credit per semester (+0.5 weighted credit)

An intensive study of acting and theatre arts to challenge the advanced student. Students will increase acting skills through advanced exploration of modern acting theory. Will include preparation for college admission requirements and other professional opportunities including local and national theatre auditions. Students broaden their abilities in playwriting, directing, and stage management. Critical analysis skills will increase with viewing and participating in performances.

# **STAGECRAFT I**

Course Number: EE0400

Prerequisites: None

Grade Level: 10-12

## Credit: ½ credit per semester

Stagecraft I concentrates on the technical aspects of theatre and play production. The course content includes scenic design and set construction, lighting design and execution, costume and make-up design, properties and property design, special effects, sound techniques, stage terms, stage management, stage personnel duties, business management and types of stages.

# HONORS STAGECRAFT II

Course Number: EE0450

## Prerequisites: Successful completion of Theater III and Stagecraft I

## Grade Level: 12

## Credit: ½ credit per semester (+0.5 weighted credit)

Stagecraft II continues to concentrate on the technical aspects of theatre and play production including set design, costuming, lighting design, and sound design. Students will explore how these skills are used artistically and will make connection to how they are connected to playwrighting and directing.

# WORLD LANGUAGE COURSES

World Language courses are delivered in a specified sequence of study. The first year has no prerequisite. Each succeeding year, however, is dependent upon the previous year's learning. No two courses in the sequence may be taken concurrently.

# **INTRODUCTION TO WORLD LANGUAGES**

Course Number: 6th - RN6IWL, 7th - WL7409

## **Prerequisites:** None

Grade Level: 6, 7

This course will provide students with an introduction to French, German and Spanish languages and related cultures, and may be offered as a one quarter, one semester or full year course.

# **SPANISH IA & IB**

Course Number: IA – WL7010, IB – WL8020

**Prerequisites:** None

Grade Level: 7, 8

## Credit: ½ credit per year

Successful completion of both Spanish IA in 7th grade and Spanish IB in 8th grade is the equivalent of Spanish I taken as a oneyear course in 8th grade or high school. A sequence of five years of Spanish courses is available. The emphasis in these courses is on the development of listening, speaking, reading and writing skills in the target language. Students also gain an understanding of various Spanish-speaking cultures.







## LANGUAGE



#### **FRENCH IA & IB**

Course Number: IA – WL7110, IB – WL8120 Prerequisites: None Grade Level: 7, 8

#### Credit: ½ credit per year

Successful completion of both French IA in 7th grade and French IB in 8th grade is the equivalent of French I taken as a oneyear course in 8th grade or high school. A sequence of five years of French courses is available. The emphasis in these courses is on the development of listening, speaking, reading and writing skills in the target language. The courses also offer students a better understanding of the French-speaking world.

## **GERMAN IA & IB**

Course Number: IA - WL7210, IB - WL8220

**Prerequisites:** None

Grade Level: 7, 8

#### Credit: <sup>1</sup>/<sub>2</sub> credit per year

Successful completion of both German IA in 7th grade and German IB in 8th grade is the equivalent of German I taken as a oneyear course in 8th grade or high school. A sequence of five years of German courses is available. The emphasis in these courses is on the development of listening, speaking, reading and writing skills in the target language. The courses also provide students with an understanding of the cultures of German-speaking countries.

#### SPANISH LANGUAGE ARTS FOR DUAL LANGUAGE IMMERSION

Course Number: WL6009, WL7040, WL8040

Prerequisites: Previous participation in Elementary Dual Language Immersion Program

Grade Level: 6-8

#### Credit: .5 credit per year (7th and 8th grade only)

#### OFFERED ONLY AT GILDERSLEEVE MIDDLE SCHOOL

Students taking Spanish Language Arts for Dual Languages will take a sequence of three courses available in each middle school grade level, leading to Advanced Placement Spanish in high school. The emphasis in these courses is on refinement of the four skills of listening, speaking, reading, and writing, with a special focus on development of literacy skills. Spanish is used 100% of the class time for instruction and interaction between students. Using a literature-based approach, the goals of the courses are to develop all four language skills as well as expand students' study skills in the areas of critical thinking, summarizing, making inferences, analyzing, and collaboration.

#### **SPANISH I**

Course Number: WL8000

**Prerequisites:** None

Grade Level: 8

#### Credit: 1/2 credit per semester

Spanish I in the 8th grade is equivalent to Spanish I at the high school. A sequence of five years of Spanish courses is available. The emphasis in these courses is on the development of listening, speaking, reading and writing skills in the target language. Students also gain an understanding of various Spanish-speaking cultures.

#### **FRENCH** I

Course Number: WL8100

Prerequisites: None

Grade Level: 8

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester

French I in the 8th grade is equivalent to French I at the high school. A sequence of five years of French courses is available. The emphasis in these courses is on the development of listening, speaking, reading and writing skills in the target language. The courses also offer students a better understanding of the French-speaking world.

# **GERMAN I**

Course Number: WL8200

**Prerequisites:** None

Grade Level: 8

## Credit: <sup>1</sup>/<sub>2</sub> credit per semester

German I in the 8th grade is equivalent to German I at the high school. A sequence of five years of German courses is available. The emphasis in these courses is on the development of listening, speaking, reading and writing skills in the target language. The courses also provide students with an understanding of the cultures of German-speaking countries.

# **HONORS NATIVE SPANISH I & II**

# Course Number: I – WL0150, II – WL0250

Prerequisite: Level I -placement exam; Level II - Successful completion of previous level or equivalent Grade Level: 9-12

# Credit: ½ credit per semester (+.05 weighted credit for I & II)

# **OFFERED ONLY AT DENBIGH AND MENCHVILLE HIGH SCHOOLS**

A sequence of two years of Spanish courses is available to native and heritage speakers of Spanish, leading to Advanced Placement Spanish in the third year. The emphasis in these courses is on refinement of the four skills of listening, speaking, reading, and writing, with a special emphasis on development of literacy skills. These courses also offer students a better understanding of the Latin American and Spanish culture. Spanish is used 100% of the time in class for instruction and interaction between students.

# **SPANISH I, II, III, IV & AP**

# Course Number: I - WL0100, II - WL0200, III - WL0350, IV - WL0400, AP - WL0500

Prerequisites: Level I - none; Levels II-AP - Successful completion of previous levels or equivalent.

# Grade Level: 9-12

# Credit: ½ credit per semester (+0.5 weighted credit for III/IV; +1.0 weighted credit for AP)

A sequence of five years of Spanish courses is available. The emphasis in these courses is on the development of listening, speaking, reading, and writing skills in the target language. Students also gain an understanding of various Spanish-speaking cultures. Separate sections of Spanish for native speakers may be available. AP Spanish students prepare for and take the College Board's Advanced Placement Test, and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.

# **AP SPANISH LITERATURE AND CULTURE**

# Course Number: WL0510

# Prerequisites: Successful completion of AP Spanish Language & Culture course.

# Grade Level: 12

# Credit: ½ credit per semester ((+0.5 weighted credit for III & IV and +1.0 weighted credit for AP)

The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts from Peninsular Spanish, Latin American, and United States Hispanic literature. Students continue to develop proficiencies across the full range of the modes of communication, sharpening their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media. Students prepare for and take the College Board's Advanced Placement Test, and those who receive an acceptable score on the test may receive college credit/or advanced standing in college.



# LANGUAGE FRENCH I, II, III, IV & AP



Course Number: WL1100, WL1200, WL1350, WL1400, WL1500 Prerequisites: Level I – none; Levels II-AP – Successful completion of previous levels or equivalent. Grade Level: 9-12 Credit: ½ credit per semester (+0.5 weighted credit for III & IV & +1.0 weighted credit for AP)

A sequence of five years of French courses is available. The emphasis in these courses is on the development of listening, speaking, reading, and writing skills in the target language. The courses also offer students a better understanding of the French-Speaking world. AP French students prepare for and take the College Board's Advanced Placement Test, and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.

## GERMAN I, II, III, IV & AP

Course Number: WL2100, WL2200, WL2350, WL2400, WL2500

Prerequisites: Level I – none; Levels II-AP – Successful completion of previous levels or equivalent.

Grade Level: 9-12

#### Credit: <sup>1</sup>/<sub>2</sub> credit per semester (+0.5 weighted credit for III & IV and +1.0 weighted credit for AP)

A sequence of five years of German courses is available. The emphasis in these courses is on the development of listening, speaking, reading, and writing skills in the target language. The courses also provide students with an understanding of the cultures of German-speaking countries. AP German students prepare for and take the College Board's Advanced Placement Test, and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.

# LATIN I, II, III & AP

Course Number: WL3100, WL3200, WL3350, WL3500

Prerequisites: Level I – none; Levels II-AP – Successful completion of previous levels or equivalent.

Grade Level: 9-12

#### Credit: ½ credit per semester (+0.5 weighted credit for III and +1.0 weighted credit for AP) OFFERED ONLY AT MENCHVILLE HIGH SCHOOL

A sequence of four years of Latin courses is available. The beginning courses emphasize the fundamental principles of the language. Students are provided a working knowledge of the facts and terminology of both English and Latin. Students develop the ability to read and comprehend Latin. The works of Latin authors are read and, in the fourth year, students are introduced to the poetry and prose of Virgil and Cicero. AP Latin students prepare for and take the College Board's Advanced Placement Test, and those who receive an acceptable score on the test may receive college credit and/or advanced standing in college.

# Governor's Early College Scholars Agreement

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

The student agrees to:

- Earn an Advanced Studies Diploma with a Governor's Seal;
  - To receive a Governor's seal, students must
  - Complete the requirements for the Advanced Studies Diploma;
  - Earn a "b" average or higher; and
  - Successfully complete at least one Advanced Placement (AP), International Baccalaureate (IB), or one college-level course for credit
- Earn at least 15 transferable college credits while enrolled in high school. College credits toward completion of this Agreement will be considered earned by:
  - Completing dual enrollment/dual credit courses and earning a "C" or better in the courses
  - Completing advanced placement courses i.e., AP, IB or Cambridge and
  - Scoring a "3" or higher on the AP examinations or
  - Scoring a "4" or higher on any form of the IB examinations or
  - Scoring a "D" or better on the Cambridge examinations
  - Earning college credits by passing College Level Examination Program (CLEP) examinations
  - Completing college-level courses and document credit awarded
- Apply and be accepted to a college or university

Student Signature

Date

The parent/guardian agrees to:

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

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

Parent/Guardian Signature

Date

The high school agrees to:

- Provide the student opportunities to access college-level courses and/or advanced placement courses needed to fulfill this agreement.
- Provide the counseling services needed to fulfill the requirements of the Governor's *Early College Scholars* Agreement, including assisting students in developing a program of study.
- Provide the Virginia Department of Education with data regarding participation and completion of the Governor's *Early College Scholars* program.

High School Principal Signature

Date

High School Guidance Counselor Signature

Date
Student Number: \_\_\_\_\_

Newport News Scholars Program Application

Student's Name:	
Counselor's Name:	

Date:\_\_\_\_\_

The student agrees to:

- Earn an Advanced Studies Diploma
- Earn at least five Advanced Placement courses (at least one for each core content area English, social studies, science, and mathematics as well as a dual enrollment (college course) or an additional Advanced Placement course must be included in the student's program of study to qualify for a Scholar's Seal and take the Advanced Placement examination for all Advanced Placement courses taken.
- Complete a four-course sequence in at least one world language.
- Complete an individual Newport News Public Schools Scholars Project (see details on the attached document).
- Earn at least one hundred hours of elective community service which should be completed by the end of the eleventh grade (see details on the attached document).

Student Signature

Date

The parent/guardian agrees to:

• Support and monitor the student's academic work and progress in school, particularly as it relates to the fulfillment of the requirements for the Newport News Public Schools Scholars Agreement.

Parent/Guardian Signature

Date

## PROPOSED SCHOLARS RESEARCH PROJECT

On a separate double-spaced typed sheet of paper, please describe your proposed NNPS Scholars Project. The description should be clear and concise and not exceed 250 words. It should include what you plan to study/research, why this is important to study/research and your plan for the research/study. In addition, please describe the tangible product, i.e. advanced research paper/thesis, complex multi-media project, a specialized portfolio, etc.

## PROPOSED COMMUNITY SERVICE PROJECT

On a separate double-spaced typed sheet of paper, describe your community service project. Describe how the project will benefit the citizens of Newport News. Your description should not exceed 100 words.

PLEASE SUBMIT THE COMPLETED APPLICATION TO <u>YOUR SCHOOL COUNSELOR</u> by the last day of the first semester.

For Office Use Only

Research Project Approved

Research Project Not Approved

Community Service Project Approved

Community Service Project Not Approved

# NOTES

# NOTES

#### NEWPORT NEWS PUBLIC SCHOOLS ADMINISTRATION

#### 12465 Warwick Boulevard/Newport News, VA 23606-3041 757-591-4500

George Parker, III, Ph.D. Superintendent

> Rashard Wright Chief of Staff

Felicia Barnett, Ed.D. Executive Director, Secondary School Leadership

> Eleanor Blowe, Ed. D. Director, Secondary School Leadership

Achievable Dream Middle and High School 5720 Marshall Avenue, 23605-2420 Courtney Mompoint, Principal 757-283-7820 • Fax: 757-283-7844

#### **Denbigh High School**

259 Denbigh Boulevard, 23608-3399 Michelle Huffstetler, Principal Serethea D. Brown, School Counseling Director 757-886-7700 • Fax: 757-872-6542

#### Heritage High School

5800 Marshall Avenue, 23605-2420 Dr. Earling Hunter, Principal Robert Mompoint, School Counseling Director 757-928-6100 • Fax: 757-247-9058

#### **Menchville High School**

275 Menchville Road, 23602-6895 Robert Surry, Principal Christopher Dunlap, School Counseling Director 757-886-7722 • Fax: 757-875-0648

#### Warwick High School

51 Copeland Lane, 23601-2399 Dr. Kellie Mason, Principal Donzaleigh Douglas, School Counseling Director 757-591-4700 • Fax: 757-596-7415

#### Woodside High School

13450 Woodside Lane, 23608-1364 Dr. Windy Nichols, Principal Dr. Andrea Evans, School Counseling Director 757-886-7530 • Fax: 757-877-0480 Crittenden Middle School 6158 Jefferson Avenue, 23605 Natia Smith, Principal 757-591-4900 • Fax: 757-838-8261

Dozier Middle School 432 Industrial Park Drive, 23608 Dr. Micah Smith, Principal 757-888-3300 • Fax: 757-887-3662

Gildersleeve Middle School 1 Minton Drive, 23601 Janelle Spitz, Principal 757-591-4862 • Fax: 757-596-2059

Hines Middle School 561 McLawhorne Drive, 23601 Lisa Gatz-Daniel, Principal 757-591-4878 • Fax: 757-591-0119

Huntington Middle School 5800 Marshall Avenue, 23605 Ebony Griffin, Principal 757-928-6846 • Fax: 757-245-8451

Passage Middle School 400 Atkinson Way, 23608 Jametha Ruffin, Principal 757-886-7600 • Fax: 757-886-7661

B.T. Washington Middle School 3700 Chestnut Ave, 23607 Dr. Sean Callender, Principal 757-928-6860 • Fax: 757-247-1119

#### TEACHING AND LEARNING

# Dr. Tina Manglicmot Chief Academic Officer

Dr. Joanne Jones Executive Director, Curriculum & Development 757-283-7850, ext. 10208

Toinette Outland Supervisor, Career & Technical Education 757-283-7850, ext. 10226

> Kelly McCoig Mancil Supervisor, English 757-283-7850, ext. 10268

April Vazquez Supervisor, English as a Second Language 757-283-7850, ext. 10251

Amy Jones Supervisor, Health & Physical Education 757-283-7850, ext. 10241

> Mary Parrish Supervisor, Mathematics 6 – 12 757-283-7850, ext. 10261

Dr. Rodney Culverhouse Supervisor, Science 6 - 12 757-283-7850, ext. 10117

Jessica Mitchell Supervisor, Social Studies 6 – 12 757-283-7850, ext. 10242

Andrew Watson Supervisor, Visual and Performing Arts K – 12 757-283-7850, ext. 10200

> Susanna Bailey Supervisor, World Language K – 12 757-283-7850, ext. 10253

Dr. Michele Mitchell Executive Director, Student Advancement 757-283-7850, ext. 10427

> Dr. Caron Blizzard Director, School Counseling 757-591-4927, ext. 10447

Kimberly Beckerdite Supervisor, Gifted Services 757-591-4566

Dr. Aaron Smith Program Administrator, Aviation Academy 757-886-2745 - Denbigh High School

Lenise Cowling **Program Administrator, Governor's STEM Academy & University Magnet** 757-928-6100, ext. 17567 - Heritage High School

Dr. Maranda Hall Program Administrator, Governor's Health Sciences Academy & International Baccalaureate 757-591-4700, ext. 67521 - Warwick High School

Kathryn Sheehan Smith Program Administrator, Arts & Communication 757-886-7530, ext. 61566 - Woodside High School

Ray Price Program Administrator, Telecommunications 757-591-4687, ext. 57103 – Telecommunications Center

Dewey Ray Principal, New Horizons at Butler Farm Road Hampton 757-766-1100

Nicole Stephens Principal, New Horizons at Woodside Lane Newport News 757-874-444

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