

Secondary Schools

Program of Studies

2022-2023



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www.poquoson.k12.va.us

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Dear Parents & Guardians,

The Poquoson City Public Schools Secondary Program of Studies for grades 6-12 provides the framework for students to plan their middle and high school schedules and anticipate requirements for post-high school options. As more and more courses taken at the middle school level are available for high school credit, it becomes increasingly important for students and parents to see the “big picture” when selecting courses at both the middle school and the high school levels.

At the middle school level, students will select electives to explore a variety of interests so that by high school they can select courses that provide effective career pathways. At the high school level, the focus is on meeting graduation requirements, providing career and technical training, and preparing the student for further education beyond high school. Take some time to investigate opportunities at New Horizons Regional Education Career and Technical Center or Governor’s School for Science & Technology. Many career and technical programs offer credentialing and licensure for selected occupations. Encourage your students to select elective courses that provide them with experiences in the arts, introduce them to career fields, develop life skills, foster leadership, or enhance their potential for college admission.

It is important for college-bound students to maintain a rigorous schedule throughout all four years of high school. Students will have opportunities to earn college credits through Advanced Placement courses, dual enrollment in New Horizons Governor’s School courses, and dual enrollment in selected PHS courses. Students are also encouraged to register for The Governor’s Early College Scholars Program.

Please take time to review this document with your student prior to course registration. Feel free to contact your student’s school counselor if you have questions. Working together, we can prepare all of our students to be contributing members of society and lifelong learners.

Sincerely,

Poquoson City Public Schools’ Counselors

Poquoson Middle School:

Mrs. Stacy Tuttle	(All 8 th Grade Students)	stacy.tuttle@poquoson.k12.va.us
Mrs. Amanda Goyne	(All 6 th & 7 th Grade Students)	amanda.goyne@poquoson.k12.va.us

Poquoson High School:

Dr. George Cunningham	(last names A-Fi)	george.cunningham@poquoson.k12.va.us
Mrs. Katherine Banton	(last names Fl-Mo)	katherine.banton@poquoson.k12.va.us
Mrs. Lynn Neenan	(last names Mu-Z)	lynn.neenan@poquoson.k12.va.us

Poquoson City Public Schools reserves the right to revise the Program of Studies in accordance with state or federal requirements. The online version will be the official document and can be accessed

<https://www.poquoson.k12.va.us/Page/12275>

Poquoson City Public Schools Nondiscrimination Policy

Poquoson City Public Schools does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Ms. Mary Ardolino, 500 City Hall Avenue, Poquoson, VA 23662, telephone: 757-868-3050. For further information on notice of non-discrimination, see the list of OCR Enforcement Offices for the address and phone number of the office that serves your area or call 1-800-421-3481.

Poquoson City Public Schools Mission Statement

Poquoson City Public Schools educate and prepare all students for success in college and career and for responsible citizenship.

Each of the four Poquoson City schools has attained full accreditation status by the Virginia Department of Education and the Southern Association of Colleges and Schools, a regional accrediting agency encompassing twelve southern states.

The overall responsibility for the direction of the Poquoson school system rests with a seven member School Board. Members of the Board are appointed by City Council for three-year terms with each member serving no more than two consecutive terms. Two members are appointed from each electoral precinct and one member is an at-large representative. There is also a student representative to the School Board. This representative presents student issues and keeps the student body informed of Board activities and decisions. The School Board meets at 6:00 p.m. on the third Tuesday of each month in the City Hall Council Chambers. Meetings are open to the public and televised locally on Cox channel 46 and FIOS channel 25.

Preparing Your Secondary School Plan

What You Need to Know

Each student should think about their career goals and, with their parents/guardians, draft a plan for their individual secondary program of study to prepare them for their future aspirations. The plan may change, of course, as a student progresses through middle and high school and learns more about their abilities, interests, and the opportunities available to them. School counselors will work with students and parents to update the plan each year and to assist students in the registration process for the next year's courses. When drafting this plan, students and parents should refer to the diploma requirements (pages 12-16), suggested course sequences (pages 18-21), and course descriptions (pages 28-67) in this Program of Studies. School counselors are always ready to assist with scheduling information, requirements, and planning strategies.

Getting Started

Pay close attention to the graduation requirements for your particular graduating class. There are many variations based on individual elective choices and student performance. This guide is designed to assist students and their parents with long-range program planning and selecting courses for next year. The school counselor, parent, and student will develop an Academic and Career Plan that will address the interests and aptitudes of the student. This plan will serve as a guide for yearly conferences and decisions to be made throughout middle and high school. A worksheet is available on pages 3 and 4 to assist with these plans. Please use this form to begin to design a program that meets your students' individual academic and career objectives. Students should choose courses that contribute toward the accomplishment of their educational, personal, and career goals.

Keep in mind that these are tentative plans and that students and parents will need to review plans annually with a school counselor to make adjustments as necessary. Information in this booklet should generate helpful discussions about career opportunities, diploma types, and educational plans. Please assist school personnel as they work to help your student realize that the educational choices made today greatly affect the opportunities available to them in the future.



**Poquoson City Public Schools
Academic and Career Plan**



Name:	Graduation Year:
1 st Career Cluster:	2 nd Career Cluster:
Specific Career/Occupational Goals:	
Educational Goal:	Diploma:
Target Post-Secondary Schools or Training:	
Extra-Curricular Interests/Community Engagement:	
Workplace Readiness Skills:	

High School Credits Taken in Middle School

Course	Year Taken	Final Grade	Omit/Retain	Comments

Students have until July 1 prior to 9th Grade Year to return forms to the Middle School Counseling Office

COURSE SELECTION PLANNING TOOL

Discipline Area	9 th	10 th	11 th	12 th	Required Credits	
					Advanced	Standard
English					4	4
Math					4	3
Science					4	3
Social Studies/History					4	3
Health & PE					2	2
Economics/ Personal Finance					1	1
World Language					3	2
Fine Arts					1	
Career & Tech Electives Other Electives						
					3	4
Total Credits					26	22

Verified Credits required and/or to be earned (SOL Tests Required and/or Passed) see pages 12- 17 for more information

Writing (11 th grade)	Algebra I	Earth Science	World Geography
Reading (11 th grade)	Geometry	Biology	World History
	Algebra II	Chemistry	US & VA History

Student Signature _____

Date _____

Parent Signature _____

Date _____

Plan Updates:

For more information on graduation requirements, please visit the Virginia Department of Education
<http://www.doe.virginia.gov/instruction/graduation/index.shtml>


Career Clusters are broad groupings of career fields. Each Cluster is further divided into Career Pathways. Pathways are sub-groupings of occupations based on a set of common knowledge and skills needed for career success.


Example: **Career Cluster** – Information Technology; **Career Pathway** – Web & Digital Communications


Each Career Pathway has been developed to provide students with a coherent, articulated sequence of rigorous academic and career-related courses that will prepare students to graduate and compete in a global economy. These programs of study are designed to help students make informed decisions about course selection and to draft a plan for their individual pathway to success.


The Virginia Department of Education has adopted 16 Career Clusters. To learn more about Career Clusters visit <https://www.vawizard.org/vccs/CareerSearch.action> or contact your student's school counselor.


Note: The PCPS Experiential Learning, Senior Seminar, and the Leadership course may be taken as an elective within any of the following pathways.


 Agriculture, Food & Natural Resources The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.	Pathways	Sample Careers	Suggested Elective Courses
	Agribusiness Systems Animal Systems Environmental Service Systems Food Products & Processing Systems Natural Resources Systems Plant Systems Power, Structural & Technical Systems	Florist Landscaper/Groundskeeper Pest Control Veterinary Assistant Biological Technician Environmental Technician Veterinarian Technician Fish/Game Warden Botanist Ecologist Environmental Engineer Veterinarian	PMS: Financial Literacy PHS: Environmental Science Biology Chemistry Geography NHREC: Veterinary Science


 Architecture & Construction Careers in designing, planning, managing, building and maintaining the built environment.	Pathways	Sample Careers	Suggested Elective Courses
	Design/Pre-Construction Construction Maintenance/Operations	Architectural Drafter Construction Worker Roofer Carpenter Electrician HVAC Mechanic Plumber Architect Construction Manager Civil Engineer	PMS: Digital Applications Technology Education 6 Inventions & Innovations Technology Systems PHS: Technical Drawing & Design Architectural Drawing & Design Geometry Calculus Physics NHREC: Electricity & Renewable Energy Carpentry HVAC


 <p>Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.</p>	Pathways	Sample Careers	Suggested Elective Courses
	A/V Technology & Film Printing Technology Visual Arts Performing Arts Journalism & Broadcasting Telecommunications	Printing Equipment Operator Actor, Dancer, Musician Broadcast Technician, Desktop Publisher, Stylist Photographer/Videographer Computer Animator Graphic Artist Journalist	PMS: Digital Applications Art/Drama/Band/Chorus PHS: Intro to Fashion Careers Art/Drama/Band/Chorus Yearbook Creative Writing Digital and Social Media Marketing


 <p>Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.</p>	Pathways	Sample Careers	Suggested Elective Courses
	General Management Business Info Management Human Resources Management Operations Management Administrative Support	Administrative Assistant Customer Service Rep Receptionist Legal Assistant Office Manager Claims Adjuster Certified Public Accountant Finance Director Human Resources Manager	PMS: Digital Applications Financial Literacy PHS: Accounting Business Law Computer Information Systems Entrepreneurship Education Psychology


 <p>Planning, managing and providing education and training services, and related learning support services such as administration, teaching/training, administrative support, and professional support services.</p>	Pathways	Sample Careers	Suggested Elective Courses
	Administration & Administrative Support Professional Support Services Teaching	Childcare Worker Coach Library Assistant Paraeducator Pre-School Teacher Teacher School Counselor Principal Speech-Language Pathologist	PMS: Digital Applications Financial Literacy PHS: Intro to Early Childhood Education Teacher Cadet Psychology NHREC: Early Childhood Education


 <p>Planning and related services for financial and investment planning, banking, insurance, and business financial management.</p>	Pathways	Sample Careers	Suggested Elective Courses
	Securities & Investments Business Finance Accounting Insurance Banking Services	Bank Teller Insurance Clerk Claims Agent Tax Preparer Accountant Economist Financial Planner	PMS: Financial Literacy Digital Applications PHS: Accounting Business Law Economics & Personal Finance Math courses


 Government & Public Administration Planning and executing government functions at the local, state and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.	Pathways	Sample Careers	Suggested Elective Courses
	Governance National Security Foreign Service Planning Revenue & Taxation Regulation Public Management & Administration	Cargo Inspector Postal Clerk Census Clerk Legislative Assistant City Manager Internal Revenue Investigator Lobbyist	PMS: Financial Literacy Digital Applications Technology Education 6 PHS: Geography World History Psychology Accounting Business Law World Languages Aviation Academy


 Health Science Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.	Pathways	Sample Careers	Suggested Elective Courses
	Therapeutic Services Diagnostic Services Health Informatics Support Services Biotechnology Research & Development	Dental Assistant Home Health Aide Nursing Assistant Dental Hygienist Licensed Practical Nurse (LPN) Emergency Medical Technician Dentist Registered Nurse (RN) Physician	PMS: Intro to Forensic Science PHS: Intro to Health-Medical Sciences Sports Medicine Biology Biology II – Anatomy & Genetics Chemistry Forensic Science Physics Calculus Psychology NHREC: Dental Assistant Medical Assistant Nursing Assistant Pharmacy Tech Veterinary Science


 Hospitality & Tourism Preparing individuals for employment in career pathways that relate to families and human needs such as restaurant and food/beverage services, lodging, travel and tourism, recreation, amusement and attractions.	Pathways	Sample Careers	Suggested Elective Courses
	Restaurants & Food/Beverage Services Lodging Travel & Tourism Recreation, Amusements & Attractions	Tour Guide Guest Service Representative Cook Travel Agent Hotel Manager Food Service Manager/Chef Director of Tourism Event Planner Marketing Manager	PMS: Digital Applications Financial Literacy PHS: Entrepreneurial Education Intro to Marketing Intro to Culinary Arts Sports & Entertainment Marketing Advanced Sports & Entertainment Marketing Psychology NHREC: Culinary Arts


 <p>Preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care, and consumer services.</p>	Pathways	Sample Careers	Suggested Elective Courses
	Early Childhood Development & Services Counseling & Mental Health Services Family & Community Services Personal Care Services Consumer Services	Hair Stylist Personal Fitness Trainer Cosmetologist Grief Counselor Massage Therapist Licensed Professional Counselor Social Worker Volunteer Coordinator	PMS: Digital Applications Financial Literacy PHS: Independent Living Nutrition & Wellness Teacher Cadet Psychology NHREC: Barbering Cosmetology


 <p>Building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia and systems integration services.</p>	Pathways	Sample Careers	Suggested Elective Courses
	Network Systems Information Support & Services Web & Digital Communications Programming & Software Development	Computer Repair Technician Data Entry Help Desk Technician Database Administrator Web Designer Computer Programmer Network Administrator Software Engineer	PMS: Digital Applications Intro to Programming and Coding PHS: Computer Applications Computer Information Systems Desktop Publishing/Multimedia Presentations IT Fundamentals Programming NHREC: Computer Systems Technology Cybersecurity Aviation Academy

 <p>Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.</p>	Pathways	Sample Careers	Suggested Elective Courses
	Correction Services Emergency & Fire Management Services Security & Protective Services Law Enforcement Services Legal Services	Emergency Dispatcher Firefighter/Police Officer Security Guard Court Reporter Paralegal Attorney Emergency Management Director Probation Officer	PMS: Intro to Forensic Science PHS: Business Law Criminal Justice World Languages Psychology NHREC: Criminal Justice Emergency Medical Technician Firefighter Aviation Academy

 <p>Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.</p>	Pathways	Sample Careers	Suggested Elective Courses
	Production Manufacturing Production & Process Development Maintenance, Installation & Repair Quality Assurance Logistics & Inventory Control Health, Safety & Environmental Assurance	Dispatcher Forklift Operator Welder Industrial Engineering Tech Safety Coordinator Quality Engineer Safety Engineer	PMS: Technology Education 6 Inventions & Innovations Technology Systems PHS: Technical Drawing Engineering Drawing & Design Advanced Technical Drawing NHREC: Electronics/Industrial Robotics Technology Advanced Industrial Robotics Technology Mechatronics Welding Aviation Academy

 <p>Planning, managing, and performing marketing activities to reach organizational objectives such as brand management, professional sales, merchandising, marketing communications and market research.</p>	Pathways	Sample Careers	Suggested Elective Courses
	Marketing Management Professional Sales Merchandising Marketing Communications Marketing Research	Shipping/Receiving Clerk Telemarketer Real Estate Sales Agent Sales Representative Market Research Analyst Public Relations Manager	PMS: Digital Applications Financial Literacy PHS: Intro to Marketing Marketing Intro to Fashion Careers Digital & Social Media Marketing Fashion Marketing Entrepreneurial Education Advanced Marketing Sports & Entertainment Marketing Advanced Sports & Entertainment Marketing Computer Information Systems Psychology

 <p>Planning, managing, and providing scientific research, providing professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.</p>	Pathways	Sample Careers	Suggested Elective Courses
	Engineering & Technology Science & Math	Drafter Field Crew Surveyor CAD Technician Electronics Technician Survey Technician Aerospace Engineer Chemist Statistician	PMS: Technology Education 6 Inventions & Innovations Technology Systems PHS: Technical Drawing & Design Engineering Drawing & Design Advanced Drawing & Design Electronic Systems Earth Science, Environmental Science, Biology, Chemistry, Physics Forensic Science Algebra, Geometry, Trigonometry, Calculus NHREC: Electronics/Industrial Robotics Technology Advanced Industrial Robotics Technology Mechatronics Aviation Academy

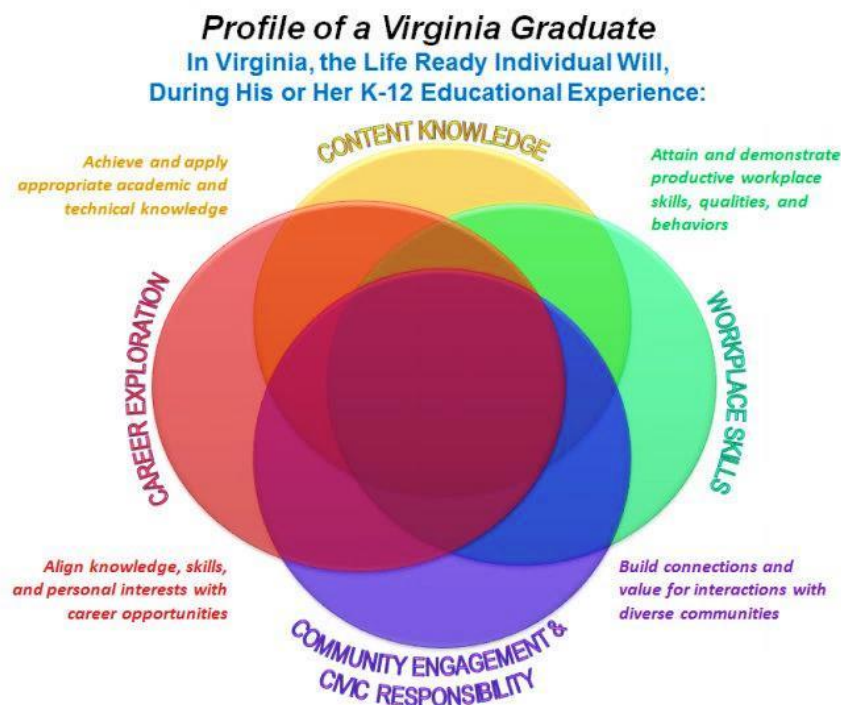
 <p>The planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.</p>	Pathways	Sample Careers	Suggested Elective Courses
	Transportation Operations Logistics Planning & Management Services Warehousing & Distribution Center Operations Facility & Mobile Equipment Maintenance Transportation Systems/Infrastructure Planning Management & Regulation Health, Safety & Environmental Management Sales & Service	Dispatcher Mechanic Truck Driver Avionics Technician Customs Inspector Flight Attendant Air Traffic Controller Pilot Port Manager	PMS: Technology Education 6 Inventions & Innovations Technology PHS: Technical Drawing & Design Engineering Drawing & Design Accounting Computer Information Systems Marketing Physics NHREC: Auto Body Technology Automotive Technology Aviation Academy

PROFILE OF A GRADUATE

The Virginia Board of Education's Profile of a Graduate describes the knowledge, skills, competencies and experiences that students must attain to be successful in college and/or the work force and be "life-ready" in an economy and a world characterized by rapid change. The board has determined that a life-ready Virginia graduate must:

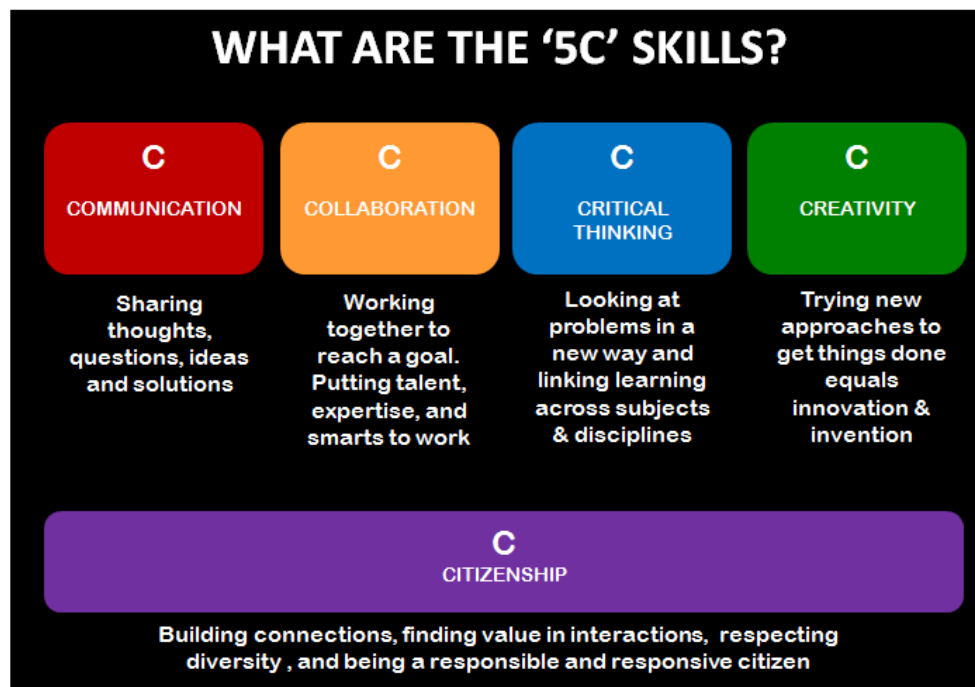
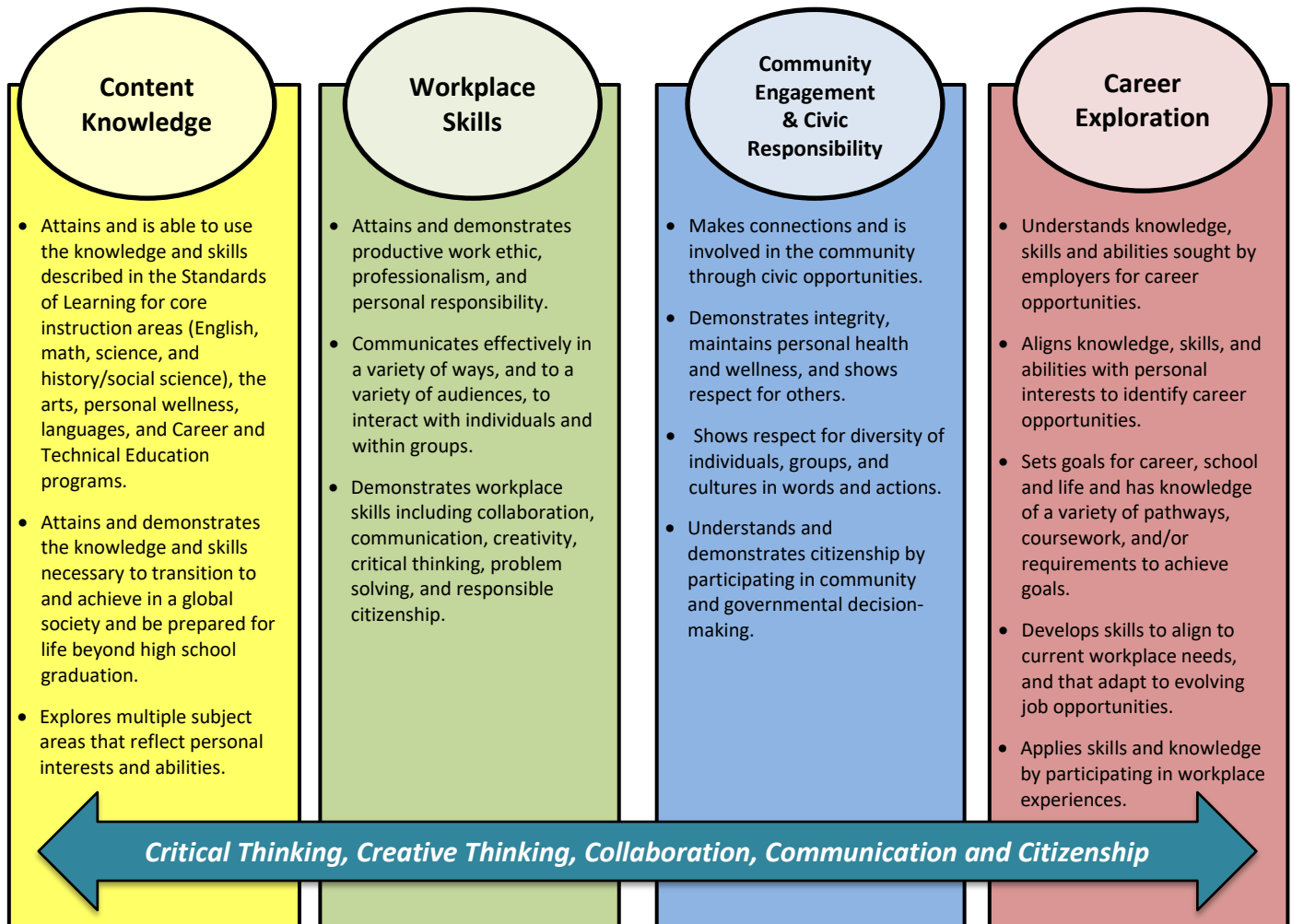
- Achieve and apply appropriate academic and technical knowledge (content knowledge);
- Demonstrate productive workplace skills, qualities, and behaviors (workplace skills);
- Build connections and value interactions with others as a responsible and responsive citizen (community engagement and civic responsibility); and
- Align knowledge, skills and personal interests with career opportunities (career exploration).

The Profile of a Graduate presents and describes four overlapping areas for student learning and achievement considered essential to success beyond high school. These are knowledge of subject areas based on statewide standards and their application (content knowledge); demonstration of personal skills and behaviors required for productivity, effective relationships, and problem-solving within one's workplace (workplace skills); understanding of the opportunities within the civic organizations for service and decision-making and responsibility for respectful interactions with others (community engagement and civic responsibility); and individual participation in career exploration, planning and preparation, based on understanding of personal interests, skills, and abilities and the needs of the economy (career exploration). Imbedded in these overlapping areas are the 5 Cs of the 21st Century learner - Critical Thinking, Creativity, Collaboration, Communication, and Citizenship. The graphics below outline four Profile of Graduate domains and the 5 Cs.



PROFILE OF A VIRGINIA GRADUATE

In Virginia, the Life Ready Individual:



DIPLOMA REQUIREMENTS

STANDARD DIPLOMA REQUIREMENTS

FOR FIRST TIME NINTH GRADERS IN 2018-2019 (Class of 2022) BEYOND

To graduate with a Standard Diploma, students:

- Must earn at least 22 standard units of credit by passing required courses and electives.
- Must earn at least five (5) verified credits by passing end-of-course SOL tests or other assessments approved by the Board of Education.
- Must earn a board-approved career and technical education credential.
- Must successfully complete one virtual course, which may be a non-credit bearing course or a required or elective credit-bearing course that is offered online.
- Shall be trained in emergency first aid, CPR, and the use of AED, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in 8VAC20-131-420 B.
- Must complete a Capstone Experience Requirement: Students entering high school as a 9th grader for the first time in 2020-2021, must complete a capstone experience to earn a diploma from Poquoson City Public Schools. Specific details can be found under General Secondary Information (p.24).

Minimum Course and Credit Requirements Required for a Standard Diploma		
Discipline Area	Standard Units of Credit Required	Verified Credits Required
English (reading and writing)	4	2
Mathematics ¹	3	1
Laboratory Science ^{2, 6, 5}	3	1
History and Social Sciences ^{3, 6, 5}	3	1
Health and Physical Education	2	
World Language, Fine Arts or Career & Technical Education ^{7, 6}	2	
Economics and Personal Finance	1	
Electives ⁴	4	
Total ^{7, 8}	22	5

¹Courses completed to satisfy this requirement shall be at or above the level of algebra and shall include at least two course selections from among: Algebra I, Geometry, Algebra Functions and Data Analysis, Algebra II, or other mathematics courses approved by the board to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by a student may be considered a mathematics course credit.

²Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines: Earth sciences, biology, chemistry, or physics. The board shall approve additional courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by a student may be considered a science course credit. ³Courses completed to satisfy this requirement shall include Virginia & U.S. History, Virginia & U.S. Government and one course in either world history or geography or both. The board shall approve additional courses to satisfy this requirement.

⁴Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality. 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 fine arts or career and technical education may be used to partially satisfy the sequential electives requirement. An exploratory course followed by an introductory course may not be used to satisfy the requirement; however, 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. ⁵Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for either a laboratory science or history or 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. ⁶Per the Standards of Quality, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education. Per the Standards of Quality, a computer science credit earned by students may be considered a career and technical education course credit. ⁷Advanced Placement, Honors, or International Baccalaureate Course or Career and Technical Education Credential: In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, honors, or International Baccalaureate course, or (ii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the standard diploma

requirements. This 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.⁸ Demonstration of the five Cs: Students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate approved by the Board.

ADVANCED STUDIES DIPLOMA REQUIREMENTS **FOR FIRST TIME NINTH GRADERS IN 2018-2019 (Class of 2022) AND BEYOND**

To graduate with an Advanced Studies Diploma, students:

- Must earn at least 26 standard units of credit by passing required courses and electives.
- Must earn at least five (5) verified credits by passing end-of-course SOL tests or other assessments approved by the Board of Education.
- Must earn a board-approved career and technical education credential.
- Must successfully complete one virtual course, which may be a non-credit bearing course or a required or elective credit-bearing course that is offered online.
- Shall be trained in emergency first aid, CPR, and the use of AED, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in 8VAC20-131-420 B.
- Must complete a Capstone Experience Requirement: Students entering high school as a 9th grader for the first time in 2020-2021, must complete a capstone experience to earn a diploma from Poquoson City Public Schools. Specific details can be found under General Secondary Information (p.23).

Minimum Course and Credit Requirements Required for an Advanced Diploma		
Discipline Area	Standard Units of Credit Required	Verified Credits Required
English	4	2
Mathematics ¹	4	1
Laboratory Science ²	4	1
History and Social Sciences ³	4	1
World Language ⁴	3	
Health and Physical Education ⁵	2	
Fine Arts or Career & Technical Education	1	
Economics and Personal Finance	1	
Electives ⁶	3	
Total ^{7,8}	26	5

¹Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board shall approve courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.

²Courses 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 and shall include interdisciplinary courses that incorporate Standards of Learning content from multiple academic areas. The Board shall approve additional courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.

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

⁴Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

⁵Per the Standards of Quality, a computer science course credit earned by a student may be considered a career and technical credit.

⁶Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

⁷Advanced Placement, Honors, or International Baccalaureate Course or Career and Technical Education Credential: In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, honors, or International Baccalaureate course, or (ii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the advanced diploma requirements. This 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.

⁸ Demonstration of the five Cs: Students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate approved by the Board

CREDIT ACCOMMODATION ELIGIBILITY REQUIREMENTS FOR STUDENTS WITH DISABILITIES (IDEA/Section 504)

The 2012 General Assembly amended the *Code of Virginia* and eliminated the Modified Standard Diploma beginning with students entering the 9th grade in 2013-2014. On March 28, 2013, the State Board of Education approved the proposed credit accommodations available to students with disabilities earning a standard diploma who meet the required participation criteria. Credit accommodations may not be used to award verified credits for the Advanced Diploma. Students and/or parents of students with disabilities may contact the student's counseling department or the Office of Student Services for information regarding substitute assessments, locally awarded verified credits and course offerings for students with disabilities who are pursuing a standard diploma.

OTHER DIPLOMAS AND CERTIFICATES

Special Diplomas – Students with disabilities who complete the requirement of their Individual Education Program (IEP) and do not meet the requirements for other diplomas shall be awarded an Applied Studies Diploma.

Certificates of Program Completion – Students who complete prescribed programs of studies defined by the local school board but do not qualify for diplomas shall be awarded Certificates of Program Completion.

General Education Development Certificates – In accordance with the provisions of the compulsory attendance law and 8 VAC 20-360-10, et. seq., Regulations Governing General Education Development Certificates, students who do not qualify for diplomas may earn a high school equivalency credential.

ALTERNATIVE EDUCATION OPTIONS

The Individual Student Alternative Education Plan (ISAEP)

Prepares students for the GED (General Education Development) Tests

- Students need to complete the Economics and Personal Finance Course
- Students who are 16-18 years old and are at risk of dropping out of school
- Students not earning the required number of credits to graduate
- Students must meet academic entrance requirements
- Students spend a minimum of 10 hours/week on work-based or career transition education
- Students must be at least one full year behind in credits
- The student will also have an opportunity to re-enroll in a regular classroom environment at any time
- Students must be enrolled in a CTE Course

Alternative Education Program – Diploma Path

- Initial committee meeting for entrance into the program
- May include students with chronic discipline or truancy problems or those students who do not fit into the regular education setting
- The main goal is to get the student back into the regular education setting or meet graduation requirements
- No set time that the student will be enrolled in the program; determination is on an individualized basis

Student services components of both programs include:

- Group and individual counseling
- Guest Speakers
- Drug/alcohol awareness
- Outside agencies – Colonial Services Board

TRANSFER STUDENT CREDIT INFORMATION

FIRST-TIME TRANSFERS TO A VIRGINIA PUBLIC SCHOOL

In compliance with [8VAC 20-131-60](#) – for a student transferring into a Virginia public school for the first time in grades 9-12, depends on the grade the student is transferring into and when in the school year the student is transferring.

A student is considered to have transferred:

- at the beginning of the school year if 20 or fewer hours of instruction have been completed.
- during the school year if more than 20 hours of instruction has been completed.

Federal law requires each student to be tested in mathematics at least once during high school, therefore some students will be required to complete a mathematics end-of-course test in high school if one was not completed prior to enrolling in a Virginia public high school. Students entering a Virginia high school during the tenth grade or later may benefit by having to earn a reduced number of verified credits, as stated in 8VAC20-131-60.G..

Please go to http://www.doe.virginia.gov/instruction/graduation/student_transfers.shtml for detailed transfer student information.

STANDARDS OF LEARNING (SOL) TEST INFORMATION

MIDDLE SCHOOL SOL TESTS

Students enrolled in the following courses will take an SOL test in the following:

Math	English	Social Studies	Science
<ul style="list-style-type: none"> • Pre-Algebra 6 • Math 6 • Pre-Algebra 7 • Math 7 • Pre-Algebra 8 • Algebra I* • Geometry* 	<ul style="list-style-type: none"> • English Reading (Administered in Grades 6, 7 & 8) • English Writing (Administered in Grade 8) 	<ul style="list-style-type: none"> • Civics & Economics (Administered in Grade 8) 	<ul style="list-style-type: none"> • Physical Science (Administered in Grade 8)

Students may earn a “verified credit” for any high school credit-bearing course taken in middle school. A “verified credit” is earned by passing the course and passing the end-of-course SOL test. High school credit courses are denoted in the chart above with an *.

HIGH SCHOOL SOL TESTS AND VERIFIED CREDITS

Students enrolled in the following courses may take an end-of-the-course SOL test

Math	English	Social Studies	Science
<ul style="list-style-type: none"> • Algebra I • Geometry or Geometry Honors • Algebra II or Algebra II/Trig Honors 	<ul style="list-style-type: none"> • English Reading (Administered in Grade 11) • English Writing (Administered in Grade 11) 	<ul style="list-style-type: none"> • World Geography • World History • US & VA History or AP US History 	<ul style="list-style-type: none"> • Earth Science • Biology • Chemistry

A “verified credit” is earned by passing the course and passing the end-of-course SOL test. Please refer to pages 12-17 to determine the total number of standard and verified credits needed to fulfill diploma requirements.

Beginning with first time ninth graders in 2018-2019 (Class of 2022), students may only take an EOC SOL if they need the test to earn a verified credit or the school needs the test to meet federal accountability requirements.

Poquoson requires students to engage in remediation before re-taking any failed SOL end-of-course test.

Re-testing is offered multiple times during the school year. Students who need to re-test will be contacted by school staff when remediation and tests are scheduled.

SAMPLE STUDENT COURSE SELECTIONS & SEQUENCES

SAMPLE 1		STANDARD DIPLOMA (22 CREDITS)					
Class	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
1	English 6	English 7	English 8	English 9	English 10	English 11	English 12
2	US History to 1865	US History from 1865	Civics/ Economics	World Geography	World History (or elective)	VA & US History	VA & US Government
3	Math 6	Math 7	Pre-Algebra 8	Algebra I	Geometry	Algebra II or Algebra Functions & Data Analysis	Econ. & Personal Fin.
4	Science 6	Life Science	Physical Science	Environmental Science	Biology	Chemistry	Science Elective
5	Elective	Elective	Elective	Math Lab	Elective	Elective	Elective
6	PE 6/Health	PE 7/Health	PE 8/Health	PE 9/Health	PE 10/Dr. Ed.	Elective	Elective
7	Elective	Elective	Elective	Elective World Lang., Fine Art, or Career & Tech. Education	Elective World Lang., Fine Art, or Career & Tech. Educ.	Elective	Elective

SAMPLE 2		ADVANCED STUDIES DIPLOMA (26 CREDITS)					
Class	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
1	English 6 H	English 7 H	English 8 H	English 9 H	English 10 H	English 11 H	English 12 H
2	US History to 1865	US History from 1865	Civics/ Economics	World Geography	World History	VA & US History	VA & US Government
3	Math 6	Pre-Algebra 7	Algebra I	Geometry	Algebra II	Advanced Math/Pre-Calc	Calculus
4	Science 6 H	Life Science H	Physical Science H	Biology	Chemistry	Science Elective	Physics
5	Elective	Elective or World Language	Elective or WL	World Language	World Language	World Language	Econ. & Personal Finance
6	PE 6/Health	PE 7/Health	PE 8/Health	PE 9/Health	PE 10/Dr. Ed.	Elective	Elective
7	Elective	Elective	Elective	Elective	Elective	Elective	Elective

SAMPLE 3		ADVANCED STUDIES DIPLOMA (26 CREDITS)					
Class	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
1	English 6 H	English 7 H	English 8 H	English 9 H	English 10 H	AP English 11	AP English 12
2	US History to 1865	US History from 1865	Civics/ Economics	World Geography H	World History	AP VA & US History	AP VA & US Government
3	Pre-Algebra 6	Algebra I	Geometry H	Algebra II/Trig H	Math Analysis/ Pre-Calculus H	AP Calculus AB	AP Calculus BC
4	Science 6 H	Life Science H	Physical Science H	Biology H	Chemistry H	Physics	Science Elective
5	Elective	Elective	Elective	World Language	World Language	World Language	Econ. & Personal Fin.
6	PE 6/Health	PE 7/Health	PE 8/Health	PE 9/Health	PE 10/Dr. Ed.	Elective	Elective
7	Elective	Elective	Elective	Elective	Elective	Elective	Elective

English Suggested Course Sequences

Your school counselor will work with you to design the course of study that best meets your needs.

Grade 6	English 6 Honors	English 6	English Elective Options (Grades 9-12)	
Grade 7	English 7 Honors	English 7	<ul style="list-style-type: none">Journalism I – IVBeginning & Advanced Drama	<ul style="list-style-type: none">Developmental ReadingYearbook I, II, IIICreative Writing
Grade 8	English 8 Honors	English 8	STANDARD DILPOMA	ADVANCED STUDIES DIPLOMA
Grade 9	English 9 (Honors)	English 9		
Grade 10	English 10 (Honors)	English 10	Students must earn four credits in English and two verified credits by passing the Reading and Writing Standards of Learning Assessments.	Students must earn four credits in English and two verified credits by passing the Reading and Writing Standards of Learning Assessments.
Grade 11	English 11 (Honors) or AP English 11*	English 11		
Grade 12	English 12 (Honors) or AP English 12*	English 12	A “verified credit” is earned by <u>passing</u> the course and <u>passing</u> the end of course SOL test in: English 11 Reading English 11 Writing	

English Elective Options (Grades 9-12)	
<ul style="list-style-type: none"> Journalism I – IV Beginning & Advanced Drama 	<ul style="list-style-type: none"> Developmental Reading Yearbook I, II, III Creative Writing
STANDARD DIPLOMA	ADVANCED STUDIES DIPLOMA
Students must earn four credits in English and two verified credits by passing the Reading and Writing Standards of Learning Assessments.	Students must earn four credits in English and two verified credits by passing the Reading and Writing Standards of Learning Assessments.
A “verified credit” is earned by <u>passing</u> the course and <u>passing</u> the end of course SOL test in: English 11 Reading English 11 Writing	

History/Social Science Suggested Course Sequences

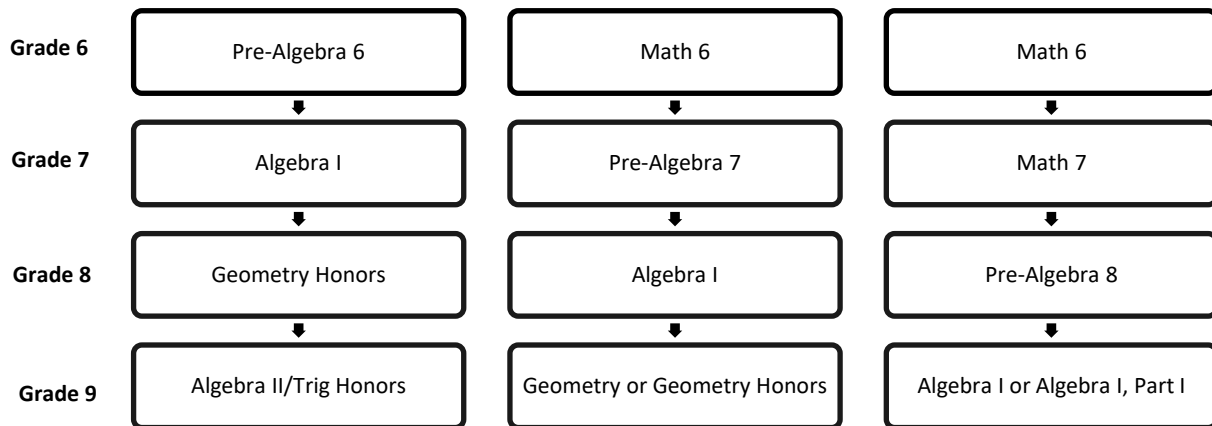
Your school counselor will work with you to design the course of study that best meets your needs.

Grade 6	U.S. History to 1865	U.S. History to 1865	Social Studies Elective Options (Grades 10 -12) <ul style="list-style-type: none">• Psychology• African American Studies• AP Psychology• AP European History• AP Human Geography• AP World History• AP U.S. History• AP Comparative Government & Politics	
Grade 7	U.S. History: 1865 to Present	U.S. History: 1865 to Present		
Grade 8	Civics & Economics	Civics & Economics		
Grade 9	World Geography (Honors)	World Geography		
Grade 10	AP European History	World History II	STANDARD DIPLOMA Students must earn a minimum of three credits, with one verified credit in History.	ADVANCED STUDIES DIPLOMA Students must earn a minimum of four credits, with one verified credit in History.
Grade 11	AP U.S. History	U.S. & VA History		
Grade 12	AP Government & Politics	U.S & VA Government		
			A “verified credit” is earned by <u>passing</u> the course and <u>passing</u> the end of course SOL test.	

Social Studies Elective Options (Grades 10 -12)	
<ul style="list-style-type: none"> Psychology African American Studies AP Psychology AP European History AP Human Geography AP World History AP U.S. History AP Comparative Government & Politics 	
STANDARD DIPLOMA	ADVANCED STUDIES DIPLOMA
Students must earn a minimum of three credits, with one verified credit in History.	Students must earn a minimum of four credits, with one verified credit in History.
A “verified credit” is earned by <u>passing</u> the course and <u>passing</u> the end of course SOL test.	

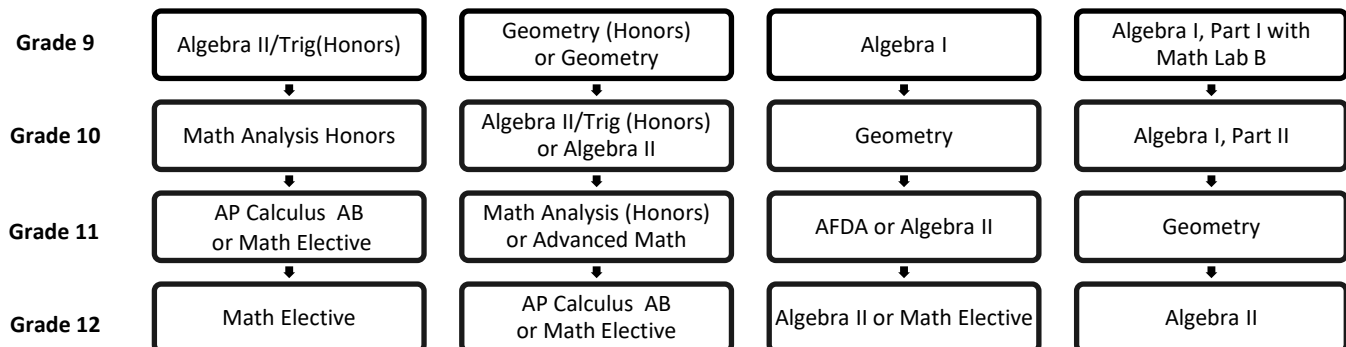
Middle School Mathematics Suggested Course Sequences

Your school counselor will work with you to design the course of study that best meets your needs.



High School Mathematics Suggested Course Offerings

Your school counselor will work with you to design the course of study that best meets your needs.



Mathematics Elective Options - Grades 9-12

- Math Lab
- Advanced Math/Pre-Calculus
- Algebra Functions & Data Analysis (AFDA)
- Calculus
- Probability & Statistics
- Computer Math

- AP Statistics
- AP Calculus AB
- AP Calculus BC
- AP Computer Science
- Governors' School for Science & Technology Math Courses

STANDARD DIPLOMA

Students must earn a minimum of three credits in math, with one verified credit in math.

ADVANCED STUDIES DIPLOMA

Students must earn a minimum of four credits in math, with one verified credit in math.

A "verified credit" is earned by passing the course and passing the end of course SOL test.

SCIENCE

Science Suggested Course Sequences

Your school counselor will work with you to design the course of study that best meets your needs.

Grade 6	Science 6 (Honors)	Science 6	Science Elective Options <ul style="list-style-type: none"> • Earth Science • Earth Science II: Astronomy • Earth Science II: Oceanography (DE) • Environmental Science (Honors) • Forensic Science • Biology II: Human Anatomy & Physiology • Biology II: Topics in Biology (Aquatic and Terrestrial Biology) • AP Biology (two credits) • AP Chemistry (two credits) • AP Physics • AP Environmental Science • New Horizons GSST Courses (two-year sequence) 	
Grade 7	Life Science 7 (Honors)	Life Science 7		
Grade 8	Physical Science 8 (Honors)	Physical Science 8		
Grade 9	Biology(Honors)	Environmental Science		
Grade 10	Chemistry (Honors)	Biology		
Grade 11	Physics, Science Elective, AP Science or NH GSST	Chemistry		
Grade 12	Science Elective, AP Science or NH GSST	Science Elective		
			STANDARD DIPLOMA Students must earn a minimum of three credits in science, with one verified credit in science.	ADVANCED STUDIES DIPLOMA Class of 2022 and beyond: Students must earn a minimum of four credits, with one verified credit in science.
A "verified credit" is earned by <u>passing</u> the course and <u>passing</u> the end of course SOL test.				

DIPLOMA SEALS

Special seals may be adhered to the diploma if one or more of the following conditions are met: (Please note that requirements for some of these seals are under review by the Virginia Department of Education and are subject to change.)

Governor's Seal – For students completing the Advanced Studies Program who have maintained a cumulative GPA of 3.0 or better (includes any grade earned for courses taken in the 8th grade for high school credit, and all grades earned in grades 9-12). Students who complete the requirements for an Advanced Studies Diploma with an average grade of “B” or better, and successfully complete college-level coursework that will earn the student at least nine transferable college credits in Advanced Placement (AP), International Baccalaureate (IB), Cambridge, or dual enrollment courses shall receive the Governor's Seal on the diploma.

Board of Education Seal – Awarded to students who complete the requirements for a Standard or Advanced Diploma with an average grade of “A” beginning with the class of 2006-2007 and beyond.

Advanced Studies Seal – For students who have completed the Advanced Studies Program requirements.

Governor's School Seal – For students who have completed at least three credits at the New Horizons Governor's School for Science and Technology.

Poquoson Service Learning Seal – For students who complete 200 hours of documented volunteer service during their four years in high school. Accumulation of hours will begin in July following 8th grade. Documentation will be collected each school year. All documentation for seniors will be due by the third Wednesday in April of the senior year.

The Board of Education's Career and Technical Education Seal – For students who earn a Standard or Advanced Studies diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain a “B” or better average in those courses; or (1) pass an examination in a career and technical education concentration or specialization that confers certification from a recognized industry, trade, or professional association or (2) acquire a Virginia professional license in that career and technical education field.

The Board of Education's Seal of Advanced Mathematics and Technology – For students who earn either a Standard or Advanced Studies diploma and (1) 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 better; and (2) (a) pass an examination in a career and technical education field that confers certification from a recognized industry, or trade or professional association; (b) acquire a professional license in a career and technical education field from the Commonwealth of Virginia; or (c) pass an examination approved by the Board that confers college-level credit in a technology or computer science area.

The Board of Education's Seal for Excellence in Civics Education – To earn a Board of Education Diploma Seal for Excellence in Civics Education, a student must satisfy each of the following four criteria:

1. Satisfy the requirement to earn a Standard Diploma or an Advanced Studies Diploma; AND
2. Complete Virginia and United States History (or AP History) and Virginia and United States Government (or AP Government) courses with a grade of “B” or higher; AND
3. Complete 50 hours of voluntary participation in community service- or civic-focused extracurricular activities. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement; AND
4. Have good attendance and no disciplinary infractions as determined by local school board policies.

Board of Education's Seal of Biliteracy – Awarded to students who earn a Board of Education approved diploma and

- Pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level.
- Demonstrate a proficiency at the intermediate-mid level or higher in one or more languages other than English as demonstrated through an assessment from the list approved by the Superintendent of Public Instruction.

Seals may also be provided for students in the following honorary societies:

French Honor Society
German Honor Society (cord)
Mu Alpha Theta
National Honor Society

Quill & Scroll Honor Society
Spanish Honor Society
Thespians
TRI-M Music Honor Society

GENERAL SECONDARY SCHOOL INFORMATION

Availability of Courses

The Program of Studies lists all of the courses approved by the PCPS School Board. The availability of these courses is based on student enrollment and available staff. Parents and students are asked to make their selections carefully as it will impact the development of the master schedule and the decisions made related to staffing. Please work with the school counselor to make the best academic and career plan for your student. While high school students may apply for Virtual Virginia online courses, the school division reserves the right to offer certain middle school courses online as deemed necessary by the school division and principals to meet unique student needs.

Course Selection and Assignment

School counselors will work with students and their families to develop an Academic and Career Plan that meets the needs and goals of each student. There are several sample course sequences in the preceding pages to assist in planning. Once student course selections are obtained for the next school year, final decisions about appropriate placement in courses will be based on a variety of factors to include careful consideration of a student's current performance, standardized test scores, work and study habits, and mastery of the Standards of Learning objectives. Placement decisions are also based on student enrollment, courses offered, and availability of staff. Questions concerning recommendations and/or placement should be directed to the teacher who made the recommendation.

Unit of Credit

The standard unit of credit for graduation shall be based on satisfactory completion of a designated course based on a minimum of 140 clock hours of instruction.

A verified unit of credit for graduation shall be based on satisfactory completion of a course based on a minimum of 140 clock hours of instruction and the achievement by the student of a passing score on the end-of-the-course Standards of Learning test for that course.

Special Education Services

A complete range of services is available for special education students. Depending on individual needs and the IEP (Individual Education Plan), students may be on a monitored status, included in the mainstream classroom with a special education support, or may be given direct instruction in a Resource classroom.

Alternative placements and additional services including speech, occupational therapy, physical therapy, and

psychological services are available when indicated. The special needs of students and SOL goals are addressed in the least restrictive environment, at the student's present level of performance, and in accordance with the IEP.

Middle School Credits/Course Omissions

When students below the 9th grade complete courses offered for high school credit, these credits shall be counted toward meeting the units required for graduation. The grades and credits of these students shall be recorded in the student's record and reflected on his/her transcript. Grades for high school credits earned below grade 9 are included in the student's grade point average and class rank. In any high school credit-bearing course taken in middle school, parents may request in writing that grades be omitted from the student's transcript and the student may not earn high school credit for the course. The student must repeat the course before taking any additional courses that may require the omitted course as a prerequisite. This request must be made in writing using the Credit-Bearing Course Omission form available from the Middle School Counseling Office by July 1st of the school year in which the student took the course. Once the request to expunge the grade is made, the course credit, the course grade, and the verified credit, if earned will be permanently deleted from the student's academic record. Once removed from the record, the course cannot be used as a prerequisite for other courses. The deletion of the course is final and may not be rescinded. If a signed form letter is not received by July 1st of the school year in which the student took the course, the grade, high school credit, and verified credit (if earned by passing the SOL test) will remain on the student's academic record and will appear on the student's high school transcript. (Standards and Regulations for Public Schools in Virginia, 2018).

Transfer of Credit

Students transferring into a Virginia school division shall be required to earn a minimum of 22 standard credits for graduation. Each student's prior record shall be evaluated to determine the number of credits previously earned and the number of additional credits required for graduation.

Transfer students will be provided the opportunity to take the associated SOL end-of-course tests for courses they have passed and have not yet taken an eligible end of course test from their previous school. Specified courses normally taken at lower grade levels shall not be

required, provided the student has completed the courses required at those grade levels by the school division or state from which he or she transferred. Students transferring from states not giving credit for health and physical education shall not be required to repeat these courses.

Students transferring after the beginning of their senior or 12th grade year shall be given every opportunity to earn a standard or advanced studies diploma. If it is not possible for the student to meet the requirements for a diploma, PHS will attempt to arrange for the student's previous school to award the diploma. If this arrangement cannot be made, a waiver of the verified credit requirements may be available to the student. The Department of Education may grant such waivers upon request by the local school board.

Grade Point Average

- For college admission purposes, grade point average (GPA) is computed at the end of the eleventh grade (June) and a preliminary calculation will be made at the end of the first semester of the twelfth grade.
- A computation at the end of the senior year will determine honor graduate status and final GPA.
- In computing the cumulative grade point average (GPA), all courses taken in grades 9-12 and courses taken in middle school for high school credit will be counted and used to calculate the student's GPA, with the exception of courses that are expunged in middle school, courses taken with a pass/fail option, courses assigned for no credit, and courses that are repeated.
- When a course is repeated, all attempts will be shown on the transcript with the corresponding grade; however, only the highest grade will be used in the student's GPA calculation and for the assignment of credit.
- All students in the senior class who are working toward a Standard or Advanced Studies diploma are included.
- Transfer grades will be recorded as whole letter grades based on the previous school's grading scale (i.e., a 92 "B" from another system will be recorded as a "B"). Honors courses weighted by the previous school will be weighted.
- Activity credits earned at other schools for such courses as library aide, office assistant, football, and cheerleading will not be included in the GPA calculation.

Weighted Courses

The following point system is used to calculate GPA:

A=4 B=3 C=2 D=1 F=0

Students who take an Honors level course or a World Language course at level 4 or 5 will earn an additional 0.5 weight added to the GPA calculation for each course.

Students who take an Advanced Placement (AP), Governor's School (math, science or computer science) or transferred International Baccalaureate (IB) (not sub-level) course will earn an additional 1.0 weight added to the GPA calculation for each course.

Beginning with students who enter 9th grade for the first time in 2020-2021 (Class of 2024), students who take a dual enrollment course will earn an additional 1.0 weight added to the GPA calculation for each course.

A weighted GPA is calculated by summing the total quality points earned and dividing them by the total credits attempted. Averages are carried four places beyond the decimal.

$$\text{Weighted GPA} = \frac{\text{Total Quality Points}}{\text{Total Credits Earned}}$$

The GPA caps are as follows:

End of 3 years of HS (6 semesters) 4.4000

End of 4 years of HS (8 semesters) 4.5000

Academic Honors

Students will be designated as **Honor Graduates** if they maintain a cumulative 3.4 GPA (including all courses taken for high school credit) through the second semester of the senior year.

Students will be designated as **Graduates with High Honors** if they maintain a cumulative 4.0000 GPA through the second semester of senior year.

Students who graduate with a GPA of 4.5000 shall be designated **Graduates with Highest Honors**.

Summer School

Poquoson High School will offer a limited summer school program (if enrollment is justified) for students needing new or repeat credit in the following courses such as: Algebra I, Geometry, Economics and Personal Finance, PE 9/Health, PE 10/Drivers Ed. An SOL remediation program will be offered for students who pass SOL courses but fail the SOL test.

Opportunities for middle school students to participate in summer school are limited to those students who need it for promotion to the next grade level or for students who are identified as needing summer school for remediation.

However, rising ninth grade students may be eligible to take some high school credit courses in the summer preceding the 9th grade year. Enrollment for summer school high school courses begins in **March** and continues until classes are filled or until classes begin, whichever comes first. Enrollment applications are available in the middle and high school counseling offices on the first day enrollment opens.

Students must receive **written** approval from the principal prior to enrolling in any other school division's accredited summer program.

Virginia High School League (VHSL)

Eligibility

All extracurricular activities covered under the rules and regulations for the VHSL require students to pass five new credits in the semester prior to participation in order to be eligible. Ninth graders who have been promoted from the middle school are automatically eligible during the first semester of 9th grade. Students must also be currently earning at least five full credits for participation during the semester (not to include repeat credits).

CAPSTONE EXPERIENCE

The Capstone Experience is a graduation requirement for all students of Poquoson High School beginning with students who enter the 9th grade for the first time in the 2020-2021 (Class of 2024) school year. It is intended to be an independent, culminating experience for high school students, allowing students to demonstrate their readiness for college and career, and highlights the 5 C's (creativity, critical thinking, collaboration, communication, and citizenship).

Students can meet the Capstone Experience graduation requirement by

- Completing the Junior & Senior Exploratory Project course
- Completing the Experiential Learning course
- Completing certain Career & Technical Education courses which have experience or certification requirements
- Completing a program through the Governor's School for Math, Science and Technology.
- Completing a course or program through the New Horizons Career and Technical Education Program or the Aviation Academy which have experience or certification requirement

GENERAL MIDDLE SCHOOL INFORMATION

The Middle School Schedule

Students at the middle school have a combination of core and elective courses to complete a seven period day. All students are scheduled for core courses in English, mathematics, science, and history/social sciences. In addition, all middle school students are required to take year-long PE/Health as one of their three elective courses.

The remaining periods of the day come from student selections of year-long and/or semester elective choices. Semester courses last one half of the school year (18 weeks).

2 semester courses = 1 period

Elective choices at the middle school provide students with an opportunity to explore a variety of interests in world languages, the arts, and technological sciences.

Governor's School for Science and Technology Pre-Admission Series Program

In the late fall, the middle school will recommend 8th grade students to the Governor's School Pre-Admission Series program. The recommendations are based on a student's advanced placement in the mathematics sequence. The Governor's School will personally contact these students to invite them to informational meetings and to apply to the program. Pre-Admission Series applications are available on the web site: www.nhrec.org.

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-Admission Series for their 9th and 10th grade years. Designated Pre-Admission Series students will take pre-requisite courses offered in their high schools and will participate in a variety of specific outside-of-school-day activities offered at the school that will acquaint and prepare students for the two-year program during the 11th and 12th grade years. Admission to the Pre-Admission Series Program is highly competitive.

Remediation and Reinforcement

Some students may be recommended for additional math or reading while others may be *required* to be remediated. Information for placement in remediation is provided after the end of the year when final grades and SOL results are available.

Recommendations for placements are based on performance on the SOL test in math and/or reading,

and teacher recommendation. Students who do not pass a math or reading SOL test are *required* to participate in remediation. Instructional staff reviewing students' test scores and academic records will determine the amount of time in remediation.

Homework Expectations for Middle School Students

Poquoson Middle School students should expect homework daily. Approximately 90 minutes a night may be devoted to completion of assignments and studying. Homework is assigned to reinforce new material and prepare students for upcoming assessments. Students are responsible for completing assignments on time. In addition, students should apply their best efforts on assignments and seek teacher assistance if uncertain on specific assignments.

Parents can assist students in learning and practicing good study habits at home. Parents can help by doing one or all of the following:

- Provide a good environment, free of interruptions, and by establishing a designated study time
- Show interest, give support, suggest techniques, but encourage your child to complete assignments independently
- Demonstrate behavior that stresses the importance of education and the expectation that your child is a student who is capable of learning
- Check the school's website as needed

By recording homework assignments in a student agenda and checking the school's website, students develop not only good organizational skills but also attentiveness to their homework responsibilities. When students begin the year with good structure and organization for completing homework, they typically have less trouble adjusting to the work requirements.

Middle School Promotion/Retention Policy

In making a determination for placement, such factors as reading and math achievement along with ability and social maturation, and other requisites necessary to predict success in placement will be considered.

It is the belief of the middle school staff that failure in any of the core academic classes, (i.e., science, history/social science, mathematics, and English) significantly impacts a student's ability to be successful in the next level of the same subject curriculum. Teachers will recommend retention of students to the principal and inform parents of the possibility of retention in early spring. Principals will inform parents of students who will be retained for the following school year.

The State Board of Education charges school principals with the ultimate responsibility of assigning pupils to classes, programs, and activities that are designed to promote maximum learning. In accordance with this provision, the school Principal is the final authority in all matters of promotion and retention.

Promotion to the next grade will require students to successfully complete English, math, science and history/social science. In addition, students must attain passing final grades in two elective/PE courses.

Frequently Asked Questions about the World Language Program at the Middle School

Q: Are Spanish and French courses taught at the middle school considered high school credit courses?

A: If your child elects to take Spanish I, or Spanish II, or French I or French II, it will carry a high school credit. A year-long course of Spanish I, Part 1 would be followed by Spanish I, Part 2 the following year. The two courses together will carry one high school credit. Spanish I, Part 1 and Spanish I, Part 2 over the course of two years is an option that offers Spanish instruction for credit.

Q: May my child continue to study or begin the study of Spanish or French in Grades 7 and 8?

A: Yes, Spanish I is offered to students in grades 7 and 8, and Spanish II is offered in grade 8. Students in grade 6 may take Spanish 1 Part 1. In addition, students in Spanish I, Part 1 may continue with Part 2 in grades 7 or 8. A student cannot begin Part I in 8th grade as Part 2 is not offered at the high school. French I is offered in grades 7 or 8 and French II is offered in grade 8.

Q: What about students transferring into Poquoson City Schools?

A: They will have the same options. If they decide to begin the study of Spanish or French in the middle school, we will talk with the student and parent to determine the best placement for the student.

COURSE DESCRIPTIONS

MIDDLE SCHOOL

ELECTIVE OPTIONS

Elective Course Options by Grade Level

(Course Descriptions Listed Alphabetically Below This Chart)

Grade 6	Grade 7	Grade 8
<ul style="list-style-type: none"> • Chorus 6 • Band – Beginning • Elective Wheel Rotation • Reading Enrichment • Intro to World Cultures • Spanish I, Part I • Academic Workshop 	<ul style="list-style-type: none"> • Chorus 7 • Band Intermediate • Art 7 • Digital Applications • Drama • Financial Literacy • Geography • Forensic Science • Intro to Photography • Inventions & innovations • Creative Writing • Newspaper • Academic Workshop • Intro to World Cultures • Spanish I, Part I • Spanish I, Part II • Spanish I • French I 	<ul style="list-style-type: none"> • Chorus 8 • Band – Concert 8 • Art 8 • Digital Applications • Drama • Geography • Intro to Computer Coding & Programming • Intro to Photography • Tech Systems • Newspaper • Spanish I, Part II • Spanish I • Spanish II • French I • French II

ACADEMIC WORKSHOP (1179)

Grade Level: 6, 7

1 Semester

Students in this course will be provided with the opportunity to improve their academic success by further developing their skills in reading, writing, mathematics and other middle school course work. Students will be supported by teachers who will help them enhance their decision making, organization and time-on-task skills, develop a growth mind-set, and expand their study skills. This course may be repeated if necessary.

ART 7 (9105)

Grade Level: 7

1 Semester

This course integrates the four art disciplines: art history, criticism, aesthetics and production. Students develop criticism and aesthetic skills when looking at artwork from various historical time periods and cultures. Focus is on comprehending and applying the Elements of Art and Principles of Design into projects. Students are taught techniques to use with fine art (drawing, printing and painting), craft (sculpture and ceramics) and graphic design (digital drawing/painting and animation).

ART 8 (9115)

Grade Level: 8

1 Year

This course is designed as an extension of ART 7; however, students are not required to take ART 7 prior to ART 8. Students will continue to build skills in fine art, craft and graphic design productions while studying art history. Greater art appreciation will be attained as students continue to critique artwork. Students will be expected to work more independently on problem-based projects.

BAND - BEGINNING (9230)

Grade Level: 6

1 Year

This course begins with the selection of an appropriate instrument for each student. Students learn proper instrument assembly, playing position, tone production, and basic music notation and theory. In addition, students begin to learn to play at the beginning level and perform several times during the school year.

BAND - INTERMEDIATE (9233)

Grade Level: 7

1 Year

This course is for any student who successfully completes one year of Beginning Band. Students continue to learn proper care of the instrument and demonstrate basic positions and fingerings and tone production skills. Students read and perform the beginning levels of music. Several performances are given during the school year.

BAND - CONCERT (9234)

Grade Level: 8

1 Year

This course is for any student who has successfully completed two full years of band instruction. Students use more articulations, rudiments, and perform scales and music in more difficult key signatures. Students have several opportunities for small ensemble performance in addition to the performances of the entire band throughout the year. Attention is given to preparing students to make the transition to the high school band.

CHORUS 6 (9200)

Grade Level: 6

1 Year

Any sixth grade student may elect to be in sixth grade chorus (beginning level). Students obtain musical knowledge and skills in the choral setting. Students begin to develop choral skills, including singing in unison and two-part harmony, with emphasis on vocal production and technique. Students learn to read, write, and compose music, using basic music theory. They explore and perform music in a variety of music styles. In addition, students develop an understanding of acceptable performance and audience etiquette. Students perform three concerts, to include a musical theatre unit.

CHORUS 7 (9270)**Grade Level: 7****1 Year**

Any seventh grade student may elect to be in seventh grade chorus (intermediate level). Students build upon the skills and knowledge acquired at the beginning level (harmony, music theory, performance/audience etiquette). Students continue the development of vocal production techniques and ensemble participation. Opportunities are provided for students to explore choral music as a means of expression and communication. Through the collaborative environment of the choral setting, students develop an understanding of teamwork and leadership skills. Students perform three concerts, to include a musical theatre unit. Students are also provided with opportunities to participate in local, district, regional, and state events.

CHORUS 8 (9271)**Grade Level: 8****1 Year**

Any eighth grade student may elect to be in eighth grade chorus (advanced level). Students build upon the skills and knowledge acquired at the beginning or intermediate levels (harmony, music theory, performance/audience etiquette, vocal production/technique, team work/leadership). As students perform choral works and sight-read materials, they expand their performance abilities and creativity. Through the collaborative environment of the choral setting, students demonstrate teamwork and display leadership skills. They develop an understanding of and appreciation for vocal/choral music and its relationship to other disciplines. Students perform three concerts, to include a musical theatre unit. Students are provided with opportunities to participate in local, district, regional, and state events.

INTRO TO COMPUTER CODING & PROGRAMMING (6640)**Grade: 8****1****Year**

Students in this course will explore programming concepts and coding at an introductory level. This course offers students the opportunity to expand their technology skills through analysis and development of various applications, games, and robotics, as well as enhance problem solving and critical thinking skills. Students will engage with a visual coding language such as Scratch and develop their own interactive stories, games and animations.

CREATIVE WRITING (9730)**Grade: 7****1 Semester**

This course will serve as an introductory exploration into creative writing based on a variety of genres such as different forms of fiction, poetry, drama and personal reflections. Each student will maintain his or her own writing portfolio and at the conclusion of the semester, selections from each student will be compiled to create a literary magazine.

COMPUTER SOLUTIONS (6611)**Grade Level: 8****Credit: 1****Year-long high school credit course**

This course is designed for secondary school students to develop real-life, outcome-driven approach for digital citizenship, basic computer operations, keyboarding, application software (word processing, spreadsheets, multimedia applications, databases), and career exploration. This course promotes skills that can be applied across the curriculum and offers preparation relevant to 21st century skills and postsecondary education.

DRAMA (1390)**Grade Level: 8****1 Year**

This course provides an introduction to drama and requires no prior acting experience. Students have the opportunity to experience acting, improvisation, drama games, scenery, costuming, lighting, and more. The class performs one production each semester.

ELECTIVE ROTATION WHEEL**Grade Level: 6****1 Year**

These electives consist of four 9-week rotations of the courses listed below.

- ❑ **Art 6 (9103)** This course gives students an introduction to art processes such as drawing, painting, printmaking, and sculpture.
- ❑ **Exploring Performing Arts (2315)** This course introduces students to drama, music, and dance. Students create screenplays, learn dance steps, work on costume and set design, sing, read music, develop acting skills, and much more.
- ❑ **Technology Education 6 (8481)** This course introduces students to the concepts of the design process and technology while exploring the fields of VFX, astronomical technology, 3D design, flight, engines, and robotics through creative problem-based prompts, group discussions, and projects like designing and printing personal emblems, creating and programming robots to complete a task, and crafting vehicles.
- ❑ **Foundations of Communication (6150)** This course provides basic keyboarding and desktop publishing instruction with additional emphasis on 21st Century communication including internet safety, cyber-bullying, public speaking, print media and social media.

FINANCIAL LITERACY 101 (9828)**Grade Level: 7****1 Semester**

Students learn about the role of consumers, investing strategies, banking services, and consumer credit. Students develop and manage budgets, as well as participate in the Stock Market Game. Activities including the development of a resume, mock interviews and workplace role-playing develop each student's readiness for the global community.

FORENSIC SCIENCE (9826)**Grade Level: 7****1 Year**

Students learn the basic components of Forensic Science including anthropology, toxicology, and basic crime scene investigation techniques. Several laboratory experiences are conducted including fingerprinting, spatter analysis, physical evidence collection and documentation. Forensic careers are also explored. As a crime scene investigator, students will observe and assess the crime scene, collect and examine evidence, conduct evidence specific analysis, and use deductive reasoning to propose solutions to the crime. Evidence collection and analysis will include: Hair and fiber analysis, ink chromatography, cast impressions, anatomy (bones), fingerprints, blood, teeth, blood spatter patterns, and glass fracture patterns.

GEOGRAPHY: The Land, Economy & People of the World (2359)**Grade Level: 7, 8****1 Semester**

This course explores the Western and Eastern Hemispheres through interactive discussions and projects. Students utilize maps and other geographic representations, tools and technologies to acquire, process, and report information pertaining to the relationships between people, places and environments.

INTRODUCTION TO PHOTOGRAPHY (9190)**Grade Level: 7, 8****1 Semester**

This course offers students the opportunity to mix both visual art and technology. Students will explore various aspects of manual and digital photography as well as the history of photography. Students will acquire and demonstrate knowledge of photography basics to include f-stops, apertures, focal length, pixels, image resolution, brightness, contrast, composition, center of interest and other introductory topics.

INVENTIONS AND INNOVATIONS (8464)**Grade Level: 7****1 Semester**

This course introduces students to the relationship between an idea and a product, the impact of innovations, and the engineering process. Students will explore significant inventions through time, discuss modern problems and the inventions that solve the problems, and build problem-solving skills through collaborative and individual projects.

NEWSPAPER (1220)**Grade Level: 7, 8****1 Semester**

Students in grades 7 and 8 are introduced to the methods and procedures necessary to successfully publish a newspaper. Students write features, editorials, and sports stories in addition to completing various photojournalism activities. The class is responsible for publishing the school newspaper.

READING ENRICHMENT (1006)**Grade Level: 6****1 Year**

This course focuses 6th grade students on reading and analyzing a variety of literature, both fiction and non-fiction, including novels, poetry, and historical fiction. Students may read books about Greek myths, Shakespeare, pyramids, biographies, or mysteries.

TECHNOLOGICAL SYSTEMS (8463)**Grade Level: 8****1 Year**

This course introduces students to concepts of how time, energy, people, tools, materials, capital, and information play a role in open and closed technological systems while exploring the fields of flight, meteorology, energy, and computers through projects and presentations.

ENGLISH**ENGLISH 6 (1109)****Grade Level: 6**

This course continues the study of reading, writing, speaking, and listening. Literature study involves the elements of plot, characters, theme, forms of fiction, biography, poetry, and literary devices. Students practice the writing process through a variety of planning strategies to establish central idea, organization, and elaboration of ideas. Correct grammar, capitalization, punctuation, spelling, and sentence structure are studied. **A summer reading assignment is required for this course.**

ENGLISH 6 HONORS (1109H)**Grade Level: 6**

Students enrolled in the honors course are exposed to a more rigorous approach to writing and literature while covering all of the objectives of the English 6 course. Emphasis is placed on literature, composition, vocabulary development, spelling, listening, speaking, and critical thinking skills. This course's curriculum is designed to challenge and develop the advanced students' critical thinking and literary analysis skills. **A summer reading assignment is required for this course.** *Placement into this course is based on factors that may include one or more of the following: Previous English performance, previous English SOL performance, and teacher recommendation.*

ENGLISH 7 (1110)**Grade Level: 7**

This course is designed to provide the students with a firm foundation in the basics of literacy elements including reading comprehension, oral, and written language. Students study the various genres to include informational texts, fiction, and poetry. Narrative, expository, and

persuasive writing is incorporated. Students practice speaking and listening skills for assessment. **A summer reading assignment is required for this course.**

ENGLISH 7 HONORS (1110H)

Grade Level: 7

This course is designed to provide students with a more rigorous approach to literature while covering all of the objectives of the English 7 course. The emphasis is on the application and synthesis of basic skills in reading comprehension, oral, and written language. Students incorporate expository, narrative, and persuasive writing with the study of literary genre. The elements of informational texts, fiction, and poetry are emphasized with the addition of narrative, expository, and persuasive writing. This course's curriculum is designed to challenge and develop the advanced students' critical thinking and literary analysis skills. **A summer reading assignment is required for this course.** *Placement into this course is based on factors that may include one or more of the following: Previous English performance, previous English SOL performance, and teacher recommendation.*

ENGLISH 8 (1120)

Grade Level: 8

This course focuses on developing reading, comprehension, vocabulary acquisition, and writing skills. The student concentrates on using effective research-based strategies for developing understanding of various genres in literature including short stories, poetry, drama, the novel, and non-fiction. Various types of expository, narrative, and persuasive writing are practiced in conjunction with the literature. Students complete a research report on an assigned topic. **A summer reading assignment is required for this course.**

ENGLISH 8 HONORS (1120H)

Grade Level: 8

This course is designed to provide students with a more rigorous approach to literature while covering all of the objectives of the English 8 course. In the advanced program, the reading and discussion are more analytical, and the writing and vocabulary instruction are applied to various types of expository, narrative, and persuasive writing. This course's curriculum is designed to challenge and develop the advanced students' critical thinking and literary analysis skills. **A summer reading assignment is required for this course.** *Placement into this course is based on factors that may include one or more of the following: Previous English performance, previous English SOL performance, and teacher recommendation.*

READING WORKSHOP (0054-6; 0056-7; 0058-8)

Grade Level: 6, 7, 8

This course is provided to those students in Grades 6, 7, and 8 who either did not pass the previous year's English/Reading/Research SOL or who need review and

reinforcement in the areas of reading and English skills. Using small group instruction and individualized reading lab activities, the instructor reviews the English standards of learning using reading materials that match the student's current level of reading. As the year progresses and as the student's skills improve, grade level materials are introduced.

HEALTH & PHYSICAL EDUCATION

HEALTH AND PHYSICAL EDUCATION

Grade Level: 6 (7110)

Grade Level: 7 (7120)

Grade Level: 8 (7200)

The Health and Physical Education program is geared to the development of the student in three capacities: Mental, social, and physical. Students are provided instruction in fitness activities, sport skills such as softball, football, volleyball, basketball, and soccer, and they learn to participate in cooperative games. In addition, students participate in the Fitnessgram, which emphasizes the overall health and wellness of the student, rather than the physical prowess of a student. In addition to health skills and strategies to improve or maintain personal and family health, the health curriculum includes Family Life Education and Drug Education curriculum. Both units cover important issues facing modern teens and provide reinforcement to enable students to make good life-affirming decisions.

HISTORY/SOCIAL SCIENCE

US HISTORY TO 1865 (2353)

Grade Level: 6

This required course for 6th grade students explores the early history of the United States and covers the ideas and events that strengthened the union. Students learn about the history of the United States from pre-Columbian times until 1865. Maps, globes, photographs, pictures, and primary and secondary documents are essential resources for this course.

US HISTORY: 1865 TO THE PRESENT (2354)

Grade Level: 7

Through this course, all 7th grade students examine United States history from the Reconstruction era to the present. Students are exposed to important concepts in civics, economics, and geography. In addition, the political, economic, and social challenges facing the nation after the Civil War are examined as students develop an understanding of how the American experience shaped the world's political and economic landscapes.

CIVICS AND ECONOMICS (2357)

Grade Level: 8

This course, required of all 8th grade students, focuses on gaining essential knowledge of the U.S. and Virginia constitutions and the structure and functions of government institutions at national, state, and local levels. Students also learn the basic principles, structure, and operation of the American economy. In addition, students identify personal character traits, such as patriotism, respect for the law, willingness to perform public service, and a sense of civic duty, that facilitate thoughtful and effective active participation in the civic life of an increasingly diverse democratic society.

MATHEMATICS

Math 6 (3110)

Grade Level: 6

This course is designed to strengthen students' skills in problem solving and mathematical concepts and builds a foundation for Algebra I. The course addresses the 6th grade math Standards of Learning in the areas of number sense, computation, estimation, measurement, geometry, probability, statistics, patterns, functions, and algebra. Students in this course will take the sixth grade SOL test.

PRE-ALGEBRA 6 (3110H)

Grade Level: 6

As a preparatory course to Algebra I, a high school credit course, this class will move at an accelerated pace to cover the math Standards of Learning in grades six through eight. An emphasis is placed on applying skills to abstract concepts through the discovery of algebraic relationships. Students in this course will take the eighth grade SOL test. *Placement into this course is based on factors that may include one or more of the following: TAG designation, previous mathematics performance, previous mathematics SOL performance, and teacher recommendation.*

Math 7 (3111)

Grade Level: 7

Prerequisite: Math 6

This course is designed to strengthen students' skills in problem solving and mathematical concepts and build a foundation for Algebra I. The course addresses the 7th grade math Standards of Learning in the areas of number sense, computation, estimation, measurement, geometry, probability, statistics, patterns, functions, and algebra. Students in this course will take the seventh grade SOL test.

Pre-Algebra 7 (3111H)

Grade Level: 7

Prerequisite: Math 6

This course is designed to strengthen students' skills in problem solving and mathematical concepts to provide a foundation for the student to move directly into Algebra I. The course addresses the seventh and eighth-grade math Standards of Learning in the areas of number sense, computation, estimation, measurement, geometry, probability, statistics, patterns, functions, and algebra. Students in this course will take the eighth grade SOL test. *Placement into this course is based on factors that may include one or more of the following: Previous mathematics performance, previous mathematics SOL performance, and teacher recommendation.*

Pre-Algebra 8 (3112)

Grade Level: 8

Prerequisite: Math 7

This course is designed to provide a preliminary study of the concepts of algebra and to strengthen students' skills in problem solving and mathematical concepts in preparation for Algebra I in high school. The course addresses the eighth grade math Standards of Learning for middle school in the areas of number sense, computation, estimation, measurement, geometry, probability, statistics, patterns, functions, and algebra. Students in this course will take the eighth grade SOL test.

ALGEBRA I (3130)

Grade Level: 7, 8

Credit: 1

Prerequisite: Pre-Algebra 6 or Pre-Algebra 7

Year-long high school credit course

Students must complete Pre-Algebra 6 or Pre-Algebra 7 before taking this high school credit course. This class covers the study of the algebraic concepts needed to solve algebraic equations. Students will use algebra as a tool for representing and solving a variety of practical problems. Tables and graphs are used to interpret algebraic expressions, equations, and inequities and to analyze functions. Students make connections and build relationships among algebra and arithmetic, geometry and probability and statistics. All students taking this course will take the end-of-course Algebra I SOL Test. *Placement into this course is based on factors that may include one or more of the following: Previous mathematics performance, previous mathematics SOL performance, and teacher recommendation.*

GEOMETRY HONORS (3143H)**Grade Level: 8****Credit: 1****Prerequisite: Algebra I****Year-long high school credit course**

Students must complete Algebra I before taking this high school credit course. This course covers plane, solid, and analytical geometries using Euclid's postulates. Logical reasoning with emphasis on deductive proofs, algebra applications and constructions are included. This is a fast-paced course covering the topics in Geometry at a more in-depth level. All students taking this course will take the end-of-course Geometry SOL Test. *Placement into this course is based on factors that may include one or more of the following: Previous mathematics performance, previous mathematics SOL performance, and teacher recommendation.*

MATH WORKSHOP (0064-6; 0066-7; 0068-8)**Grade Level: 6, 7, 8**

This is a math remediation course provided in Grades 6, 7, and 8 to those students who did not master the previous year's math standards of learning. Students receive small group instruction and computerized lab activities to strengthen skills in mathematical concepts. The course supplements the instruction provided in the core math class. Students are identified for the course based on performance on the SOL math test and other standardized tests.

SCIENCE**SCIENCE 6 (4105)****Grade Level: 6**

This introductory course is designed to provide a thematic approach to areas of scientific studies. Specific topics include the Scientific Method, types of energy, matter, basic chemistry concepts, the role of the sun's energy on Earth systems, and natural resource management and its implications both globally and locally.

SCIENCE 6 HONORS (4105H)**Grade Level: 6**

The honors science class follows the same curricula areas, but students delve deeper into the concepts, utilizing different critical thinking skills to solve problems and create solutions. Students will investigate the scientific method by completing a group science fair project. Students who have a strong interest in science and have been recommended by their teachers are enrolled in this course. *Placement into this course is based on factors that may include one or more of the following: Previous science performance, previous science SOL performance, and teacher recommendation.*

LIFE SCIENCE 7 (4115)**Grade Level: 7**

This introductory biology course helps students develop an understanding of change, cycles, patterns, and relationships in the living world. Students build on principles related to these concepts by exploring cellular organization and the classification of organisms; the dynamic relationships among organisms, populations, communities and ecosystems; and change as a result of the transmission of genetic information from generation to generation.

LIFE SCIENCE 7 HONORS (4115H)**Grade Level: 7**

The honors Life Science course encompasses the same curricula area as the life science class, but students delve deeper into the concepts, utilizing different critical thinking skills to solve problems and create solutions. Students will investigate the scientific method by completing an individual science fair project. Students who have a strong interest in science and have been recommended by their teachers are enrolled in this course. *Placement into this course is based on factors that may include one or more of the following: Previous science performance, previous science SOL performance, and teacher recommendation.*

PHYSICAL SCIENCE 8 (4125)**Grade Level: 8**

Eighth grade science is the study of physical science. Students are provided an introduction to physics and chemistry, with many hands-on experiences. Major topics include: Matter, energy, motion, and chemical change.

PHYSICAL SCIENCE 8 HONORS (4125H)**Grade Level: 8**

The science course includes all of the objectives stated above. Students in the course have additional experiences and complete more independent work, using higher order and critical thinking skills. *Placement into this course is based on factors that may include one or more of the following: Previous science performance, previous science SOL performance, and teacher recommendation.*

SPECIAL EDUCATION SERVICES

A complete range of services is available for students with special needs. Depending on the identified needs, a student may be placed on a monitored status, included in the collaborative classroom with a special education teacher or a paraeducator, or given direct instruction in the Resource classroom or in other small group courses. The special needs of students and SOL goals are addressed in the least restrictive environment, at the student's present level of performance, and in accordance with the Individual Education Plan (IEP).

LIFE SKILLS (7896)

Grade Level: 6, 7, 8

This is a course designed for identified students to work on basic life skills. Students are exposed to topics including safety, cooking, personal care, money use, and leisure activities. Placement is determined by the IEP.

RESOURCE (7865)

Grade Level: 6, 7, 8

Placement in this course is determined by the IEP. Students are provided opportunities to address identified learning needs to assist with academic success. In addition, students may receive social and emotional support in a small group setting. Only those students who have been through an evaluation and eligibility may be placed in this class.

ADAPTIVE ENGLISH (1100)

ADAPTIVE MATH (3100)

ADAPTIVE HISTORY/SOCIAL STUDIES (2350)

ADAPTIVE SCIENCE (4100)

Grade Level: 6, 7, 8

Placement in these core courses in English, math, science and history/social sciences are provided as a small group class in a self-contained environment for those students who qualify per their IEP.

WORLD LANGUAGES

INTRODUCTION TO WORLD CULTURES (5999)

Grade Level: 6, 7

Students develop an awareness of and appreciation for other people's cultures, the patterns of behavior that order their world, and the ideas and perspectives that guide their behaviors. Students explore the contributions of world cultures and how they shape international perspectives as they learn introductory French and German and build upon the Spanish learned in previous years.

FRENCH I (5110)

Grade Level: 7, 8

Credit: 1

Year-long high school credit course

This is a high school credit course that uses the same material as the first year class at the high school. Emphasis is placed on listening and speaking skills in the French language. Reading and writing are introduced. Students learn conversational dialogue based on everyday situations. These basic speech patterns are further reinforced with grammar drills.

FRENCH II (5120)

Grade Level: 8

Credit: 1

Prerequisite: French I

Year-long high school credit course

This is a high school credit course that follows the successful completion of French I. Greater emphasis is placed on the reading and writing of the language. Cultural material is presented, and there is more freedom of expression, both oral and written. *Placement into this course is based on factors that may include one or more of the following: Previous French performance and teacher recommendation.*

SPANISH I, PART I (5513)

Grade Level: 6, 7

1-Year

This is a year-long course that covers the first semester of the Spanish I curriculum. The Spanish I, Part I option provides students the opportunity to begin the study of a world language and earn a high school credit but at an instructional pace slower than that of the Spanish I course. Students must complete Spanish I, Part I and Spanish I, Part II to receive one high school world language credit.

SPANISH I, PART II (5515)

Grade Level: 7, 8

1-Year

Credit: 1

Prerequisite: Spanish I, Part I

This is a year-long course that covers the second semester of the Spanish I curriculum. Students must complete Spanish I, Part I and Spanish I, Part II to receive one high school world language credit. *Placement into this course is based on factors that may include one or more of the following: Previous Spanish performance and teacher recommendation.*

SPANISH I (5510)

Grade Level: 7, 8

Credit: 1

Year-long high school credit course

This is a high school credit course that uses the same material as the first year classes at the high school. Emphasis is placed on listening and speaking skills in the Spanish language. Reading and writing are introduced. Students learn conversational dialogue based on everyday situations. These basic speech patterns are further reinforced with grammar drills.

SPANISH II (5520)**Grade Level: 8****Credit: 1****Prerequisite: Spanish I****Year-long high school credit course**

This is a high school credit course that follows the successful completion of Spanish I. Greater emphasis is placed on the reading and writing of the language. Cultural material is presented, and there is more freedom of expression, both oral and written. *Placement into this course is based on factors that may include one or more of the following: Previous Spanish performance and teacher recommendation.*

GENERAL HIGH SCHOOL INFORMATION

Promotion Requirements

Directly related to graduation requirements are the promotion requirements for each grade level. In the Poquoson school system, the following minimum credit requirements must be met to be classified at each grade level:

- 9th Grade Freshman: 8th Grade Promotion
- 10th Grade Sophomore: 5 Credits (including Eng 9)
- 11th Grade Junior: 10 Credits (including English 10)
- 12th Grade Senior: 15 Credits (including English 11)
- High School Graduation: 22 or 26 Credits (to include students entering 9th grade in 2010-2011 and beyond)

Post-Secondary Education Prior to Graduation

Beginning in the middle school years, students shall be counseled as to opportunities for beginning post-secondary education prior to high school graduation. The school division partners with VDOE, colleges and universities to provide rigorous academic courses for all students which enable them to earn high school and college credits simultaneously. Dual enrollment credit for college courses beyond those described in this Program of Studies will only be considered if they are necessary to meet diploma requirements. The following guidelines apply:

- Prior written approval from the high school principal for the cross registration must be obtained.
- The college must accept the student for admission to the course(s).
- The course(s) must be given by the college for degree credit (hence, no remedial courses will be accepted).
- High school credit shall be awarded to the participating student upon successful completion of the course(s) based on the college credit hour with one high school unit equivalent to three or four semester hours of college credit.
- Dual credit is offered for Governor's School and many career and technical programs at New Horizons Regional Education Center. Students receive high school credit as well as college credit. Students taking the courses at New Horizons do not pay a fee.
- Dual enrollment is offered to students taking certain courses at Poquoson High School and pay a reduced fee in order to receive the college credit. In order to receive the dual enrollment credit, students must apply to the college and take the placement test prior to beginning the course.

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.

For more information on this program, go to:

http://www.doe.virginia.gov/instruction/virtual_learning/index.shtml

Virtual Virginia

Virtual Virginia provides a variety of college-level and world language courses using distance-learning technologies. Individual attention is emphasized in all courses and instruction is personalized as much as possible. Online teachers are available to students via telephone, e-mail, and fax for consultations and one-on-one instruction. Students enrolled in any of the AP courses must apply to the Governor's Early College Scholars Program. All Virtual Virginia courses require a separate application. This application includes a student self-evaluation, a teacher recommendation and a parent signature. Enrollment in a Virtual Virginia Course is not guaranteed. Some preliminary summer study may be required. Students administratively withdrawn from Virtual Virginia courses due to not logging in regularly, are inactive, or fail to complete coursework over a consecutive 8-day period would receive a grade of "F" on their transcript. For more information, go to: www.doe.virginia.gov/instruction/graduation/early_college_scholars/index.shtml. See your school counselor for more information. A listing of specific Virtual Virginia courses can be found on page 57.

Advanced Placement Program

Poquoson High School currently offers Advanced Placement (College Entrance Examination Board) classes in English 11/Language & Composition, English 12/Literature & Composition, Calculus AB, Calculus BC, Statistics, Spanish, Government & Politics, U.S. History, Psychology, European History, Biology, Chemistry, Physics, and Environmental Science. These courses are part of a national program for high school students who exhibit superior reading, writing, math, and science skills. The culminating activity for all these courses will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of the examination affords the student the opportunity to apply advanced credits toward colleges where AP credits are accepted. (Additional AP courses are offered through Virtual Virginia.) The following are generally considered when recommending students for AP courses:

- Grades in specific courses (English, history/social sciences, world language, math, science)
- Recommendation from a previous same-subject teacher
- Self-motivation and willingness to work beyond general course requirements
- Excellent attendance record
- Standardized test scores (PSAT, SAT, and Stanford scores)
- Parental support

Full-Day Requirement

Regardless of the program, Standards for Accrediting Secondary Schools in Virginia state that, "all students in grades 9-12 shall maintain a full-day schedule of classes unless a waiver is granted by the local superintendent of schools." Junior and senior students in a time-release program (Marketing Co-op) must be enrolled in enough courses to earn a minimum of four credits. Students

who participate in VHSL activities must be enrolled in enough courses to earn a minimum of five new credits.

All students in grades 9, 10 and 11 will take seven courses. Students in grade 12 have the option of taking six courses rather than seven. If a student elects to take six courses, those six courses may be scheduled either in periods 1-6 or 2-7.

Transportation will be provided only for the beginning of the school day (period 1) and at the final dismissal of school (end of period 7).

Schedule Changes

To provide for schedule flexibility, changes will be allowed, subject to the following conditions:

- DROP/ADD requests should be submitted during the **first 6 – 10 days** of school. Forms are available in the Counseling Office.
- All requests will be reviewed by a counselor and/or the principal. When a change request is approved, written notification will be given to the student and appropriate teachers.
- As a general rule, a student may not change into a classroom which is more crowded than the one to which he is assigned.

National Collegiate Athletic Association (NCAA) Eligibility

NCAA Eligibility Guidelines are available from the Counseling Office. Students who plan to participate in Division I or Division II athletics must be certified by the NCAA Initial Eligibility Clearinghouse by providing a signed student release form, SAT or ACT scores sent directly to NCAA Clearinghouse by the testing agency, and an official high school transcript from every high school attended. There is a fee for this procedure. Students should begin the process at the end of their junior year in high school. Interested students should register online at www.ncaaclearinghouse.net.

COURSE DESCRIPTIONS

HIGH SCHOOL

ART

STUDIO ART - I (9120)

Grade Level: 9, 10, 11, 12

Credit: 1

This course introduces the beginning art student to basic design elements and a variety of media. Properties and uses of design are studied and applied as students develop skills in drawing, painting, sculpture, and printmaking. Students will work to comprehend and utilize visual vocabulary and communication, to emphasize creative ideas and expression, and to recognize and appreciate connections between the arts and daily lives.

STUDIO ART - II (9130)

Grade Level: 10, 11, 12

Credit: 1

Prerequisites: Studio Art I

This course is an exploration of the problems and possibilities of drawing and painting as a vehicle for serious creative expression. The fundamentals of composition and painting techniques will be presented through a series of studio projects. This course is designed to place emphasis on involving the student in more complicated and involved processes and ideas.

THREE DIMENSIONAL ART (9196)

Grade Level: 10, 11, 12

Credit: 1

Prerequisites: Studio Art I

This course is designed for students interested in developing skills in working with three-dimensional media. The elements of shape, form and space are explored through a variety of projects that involve a hands-on approach as well as problem solving experiences using a variety of materials. Students will gain a more in-depth knowledge in the following areas: Elements & principles of art design, and printmaking. This course emphasizes artistic experience, art history, and a higher level of development.

GRAPHIC ARTS (9153)

Grade Level: 10, 11, 12

Credit: 1

Prerequisites: Studio Art I

This course will enhance the student's art skills through the use of the computer as a tool to create personally expressive original art. Emphasis will be placed on creative thinking and visual problem solving. Curriculum will focus on developing expertise in the use of computers, scanners, and digital cameras. A historical perspective of

commercial design is studied along with contemporary career possibilities. An introduction to electronic imaging will be explored through the use of the software Adobe Photoshop Suite CS2.

DESIGN (9161)

Grade Level: 10, 11, 12

Credit: 1

Prerequisites: None

This course will explore the basic elements and principles of design. They will be combined to create individual compositions in 2 and 3 dimensional forms. Students will work with a wide variety of materials in a studio setting. This course emphasizes expressive, communicative, and technical qualities of production design. Major objectives of this course are to understand historical development, to explore and develop ideas using a range of materials and media, and to demonstrate the ability to analyze and evaluate visual communications.

POTTERY AND CRAFTS (9160)

Grade Level: 11, 12

Credit: 1

This course is designed to be a survey and introduction to pottery. Through a combination of hands-on experience and a study of historical and contemporary ceramics, participants will learn a variety of pottery techniques. Hand-building skills will be primarily covered, allowing students to make pottery and sculpture inspired by their studies of ceramic history.

STUDIO ART – III (9140)

Grade Level: 11, 12

Credit: 1

Prerequisites: Studio Art I or Design; one of the following: Graphic Arts, Studio Art II, or Three Dimensional Art.

This course is designed for highly motivated, self-directed students and will serve to develop creativity through use of new materials and techniques. Emphasis is placed on students becoming more self-directed. This level of art offers the serious and successful art student an opportunity to work and to develop an interest in the area of: Drawing/Painting, Graphic Design, or Sculpture. Emphasis is placed on the development of the AP portfolio.

STUDIO ART - IV (9145)

Grade Level: 12

Credit: 1

Prerequisites: Studio Art III, Fundamentals of Drawing/Painting

This level of art offers the serious and successful art student an opportunity to work independently and develop artistic and personal potential. Emphasis is on portfolio development.

STUDIO ART - AP DRAWING (9150)

STUDIO ART - AP 2D Design (9148)

STUDIO ART - AP 3D Design (9149)

Grade Level: 12

Credit: 1

Prerequisites: Studio Art I; One of the following: Graphic Arts, Studio Art II or Three-Dimensional Art, Studio Art III
Portfolio Review is mandatory

Studio Art-Advanced Placement is a course based on the content established by the College Board. Portfolios are designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on a written examination; instead, students submit portfolios for evaluation at the end of the school year. The AP program is a cooperative endeavor that helps high school students complete college-level courses and permits colleges to evaluate, acknowledge, and encourage that accomplishment through the granting of appropriate credit and placement. *Placement into this course is based on factors that may include one or more of the following: Previous Art performance and teacher recommendation.* **Summer assignment.**

Drawing Portfolio

The Drawing Portfolio is designed to address a very broad interpretation of drawing issues and media. Any work that makes use of photographs, published images, and/or other artists' works must show substantial and significant development beyond duplication.

Design Portfolio

This portfolio is intended to address a very broad interpretation of two-dimensional (2-D) design issues. This type of design involves purposeful decision-making about how to use the elements and principles of art in an integrative way. For this portfolio, students are asked to demonstrate proficiency in 2-D design using a variety of art forms. Any work that makes use of photographs, published images, and/or other artists' works must show substantial and significant development beyond duplication.

3-D Design Portfolio

This portfolio is intended to address a broad interpretation of sculptural issues in depth and space. A variety of approaches to representation, abstraction, and expression may be part of the student's portfolio. Any work that is derived from photographs, published images, and/or other artists' works must show substantial and significant development beyond duplication.

AP ART HISTORY (9151)

Grade Level: 10, 11, 12

Credit: 1

Teacher Recommendation

NOTE: This is an online course taken through the Virginia Department of Education Virtual School; special application is required.

The Advanced Placement offering in Art History is designed to provide the student with an understanding

and knowledge of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. Students examine and critically analyze major forms of artistic expression from the past and the present from a variety of cultures. While visual analysis is the fundamental tool of the art historian, art history also emphasizes understanding works in context, considering such issues as patronage, gender, and the functions of and effects of works of art. Student work will be required outside of class time. *Placement into this course is based on factors that may include one or more of the following: Previous Art performance and teacher recommendation.*

BUSINESS & INFORMATION TECHNOLOGY

ECONOMICS AND PERSONAL FINANCE (6120)

Grade Level: 10, 11, 12

Credit: 1

Prerequisite: Algebra 1

Students will gain a strong foundation in economics and personal finance in order to participate effectively as consumers, workers, savers, investors, entrepreneurs, and active citizens. The Standards of Learning for Economics and Personal Finance present economic concepts that help students interpret the daily news, understand how interdependent the world's economics are, and anticipate how events will impact their lives. The understanding of how economies and markets operate and how the United States' economy is interconnected with the global economy, prepares the student to be more effective in the workplace. This course is taught partially through online modules. Priority enrollment will be given to juniors and seniors. (This course helps prepare students to take the WISE Financial A+ exam.) **Note:** As enacted by the General Assembly of 2011 and prescribed by the Board of Education, beginning with students who enter the ninth-grade class of 2011-2012 and beyond, students shall earn one (1) standard credit in Economics and Personal Finance in fulfillment of the graduation requirement for the Standard and Advanced Studies diplomas.

BUSINESS LAW (6131)

Grade level: 10-12

Credit: 1

Students examine the foundations of the American legal system and learn the rights and responsibilities of citizens. Students gain practical knowledge and legal skills by exploring economic and social concepts related to laws governing business and individuals. Focus areas include contracts, consumer protection, criminal law, tort law, international law, family/domestic law, employment law, cyber law, and careers in the legal profession. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

COMPUTER INFORMATION SYSTEMS (6612)**Grade Level: 10, 11, 12****Credit: 1**

Students apply problem-solving skills to real-life situations through (a) database, spreadsheet and word processing software, (b) charting, and (c) integrated activities. They work individually and in groups to explore data-communications, operating systems, and basic networking principles. This course helps prepare students to take the industrial certification exam to become a Microsoft Office User Specialist (MOUS).

DESKTOP PUBLISHING/MULTIMEDIA PRESENTATIONS (6630)**Grade Level: 10, 11, 12****Credit: 1**

Students develop proficiency in using desktop publishing software to create a variety of printed and electronic publications. Students will incorporate journalistic principles in design and layout of publications. Students work with sophisticated hardware and software to develop websites and multimedia presentations.

INFORMATION TECHNOLOGY (IT) FUNDAMENTALS (6670)**Grade Level: 9, 10, 11, 12****Credit: 1**

Information Technology (IT) Fundamentals introduces the essential technical and professional skills required for students to pursue programs leading to professional careers and IT certifications. This course focuses on skills related to information technology basics: Internet fundamentals, network systems, computer maintenance, upgrading, and troubleshooting; computer applications, programming graphics, web page design, and interactive media. Students explore ethical issues related to computers and internet technology and develop teamwork and communications skills that will enhance their employability. This course prepares students to take the IC3 certification exam.

INTRODUCTION TO PROGRAMMING (6640)**Grade Level: 11, 12****Credit: 1**

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. Certifications: MCP, CIW, MCP, WRS for VA

A+ COMPUTER HARDWARE & OPERATING SYSTEMS (6650)**Grade Level: 11, 12****Credit: 1**

Prerequisite: Keyboarding course(s) or teacher-approved demonstration of touch keyboarding skills

Dual Enrollment: Course is taught online by instructors from ECPI University

This course is designed to teach many aspects of computer support and network administration. Students learn networking concepts, from usage to components, and set up peer-to-peer network systems and client server networks. Students install and configure network cards and connect them to networks. Students learn how to install the operating systems, set up and manage accounts, load software, and set up and implement security plans.

OFFICE SPECIALIST I (6740)**Grade Level: 9, 10, 11, 12****Credit: 1****Prerequisite:** IEP Identification

This is a collaborative class taught between the business and special education departments. Students will develop keyboarding and computer skills, communication and telecommunications skills. The goal is to prepare students with the tools necessary for employment in a variety of fields.

OFFICE SPECIALIST II (6741)**Grade Level: 10, 11, 12****Credit: 1**

Prerequisite: IEP Identification; completion of Office Specialist I

This course is a continuation of Office Specialist I. Students will become more proficient in keyboarding, document production, filing and research. Students will enhance keyboarding and computer skills, process numeric data, keep financial records, manage records, enhance communication skills, use telecommunication and prepare for employment.

ACCOUNTING (6320)**Grade Level: 10, 11, 12****Credit: 1**

Prerequisite: Keyboarding course(s) or teacher-approved demonstration of touch keyboarding skills

Students study the basic principles, concepts, and practices of an accounting cycle. Students learn accounting procedures using a manual system. Electronic systems may be introduced if appropriate technology is available and sufficient time is available after basic principles, concepts, and practices have been mastered.

ADVANCED ACCOUNTING (6321)**Grade Level: 11, 12****Credit: 1****Prerequisite:** Accounting (6320)

Advanced Accounting is designed for students who may wish to pursue an accounting career and/or plan to major in accounting in college. The computer will be utilized to automate, analyze, and interpret business transactions including payroll, inventory, and accounts payable and receivable. Transactions will be recorded, journalized, and posted using accounting software.

ELECTIVE OPTIONS

ACADEMIC AND CAREER READINESS SEMINAR (1178)

Grade level: 9-12

Credit: 1

Students in this course are provided with additional assistance and remediation in all academic areas during the school day and to assist with college and/or career investigation and preparation. The content of this course is designed to increase the academic success of students in their regular high school course work and, specifically, in the areas of reading, writing, and mathematics. Students will be supported by teachers who will help them enhance their decision making, communication, organization and time-on-task skills, develop a growth mind-set, and expand their study and test taking skills. This course includes whole and small group instruction, computer-based practice and independent work. Students are recommended for this course based on performance in prior academic classes, SOL scores, and teacher recommendation. This course can be repeated for credit.

BEGINNING DRAMA (1410)

ADVANCED DRAMA (1440)

Grade Level: 9, 10, 11, 12

Credit: 1

This course is designed for the student actor who will be introduced to various acting techniques to include pantomime, characterization, and ensemble acting. Dramatic literature and period acting will also be covered. Students will learn the practical application of costuming and make-up techniques, lighting, and set design within the confines of the facilities at PHS. The basic elements of production and directing will also be covered. Students must take Beginning Drama prior to Advanced Drama.

COUNSELING/TEACHER'S AIDE (for the class of 2019, 2020 and 2021 only)

Grade Level: 11, 12

No Credit

Students will assist a classroom teacher or office with non-confidential clerical tasks such as distributing passes, hanging bulletin boards, making photocopies, typing, filing, etc. Students are expected to attend their aide position daily and on time. Students may earn community service hours. An application is required, and spaces are limited.

DAYTIME SPECIAL FRIENDS (9995)

Grade Level: 11, 12

No Credit

Students will work under the direction of a primary school teacher or counselor and can serve as a teacher's assistant, student mentor or tutor. Students must have a desire to work with young children. Students will be assigned one period during the school day at the primary school. An application is required.

EXPERIENTIAL LEARNING (9072)

Grade Level: 11, 12

Credit: 1

Experiential Learning is an elective course that requires the student to perform 140 documented hours of volunteer service in one professional office, agency, or institution. The service is performed from October to May. The class meets at specified times designated by the instructor. Students are required to maintain a journal, a log of completed hours and complete an exit project on the experience. Topics covered during class meetings will include journal writing, professionalism, understanding group dynamics and problem solving. In this course, students will acquire knowledge and skills to (1) connect curricular knowledge and skills to their own lives and the lives of others; (2) demonstrate active and responsible citizenship through participating as a productive member of a professional community; and (3) think, talk and write about their experiences in a professional setting.

LEADERSHIP (9097)

Grade Level: 11, 12

Credit: 1

Students will participate in a self-directed study of effective Leadership Strategies, to include such topics as guest speakers on leadership, book studies on The DNA of Leadership (Anderson) and The Seven Habits of Highly Effective People (Covey), etc., and practical applications of student participation in school and community improvement initiatives. This class will work closely with the Principal's Advisory Committee and the SCA in planning and implementing student government proposals, school improvement initiatives and community service activities. Students will be required to keep a log of hours (140) spent working on this class, and they will work with a faculty mentor who will schedule meetings and track student progress. This class will require a culminating activity that will summarize personal leadership growth and document its application.

MILITARY SCIENCE & LEADERSHIP (7920)

Grade Level: 9, 10, 11, 12

Credit: 1

Through this elective course, students will gain a general level of understanding of the five branches of the United States military, as well as learn about military history, procedures, customs, courtesies, organizational leadership, citizenship, and government. Students tour local military bases, meet military personnel and explore careers at both the officer and enlisted level. Students who take this course are not required to enter into any military program. This course will be taught at Poquoson High School.

JUNIOR & SENIOR EXPLORATORY PROJECT (1176)

Grade Level: 11, 12

Credit: 1

The Junior and Senior Exploratory Project (JSEP) is an independently researched and prepared product completed by each student on a topic of his/her choice. The JSEP is an opportunity for the student to demonstrate his/her ability to select, research, write and produce a significant product which is presented to an assessment panel including a faculty member, a peer, an expert consultant and another adult. The JSEP includes a proposal, an authentic journal of progress over time, an expository essay and an oral presentation with visual aids. Each student works under the guidance of a faculty advisor and a consultant in the preparation and presentation of the project. The product can serve as a piece for review by future employers, as well as for review by college and university personnel, and may also serve as a basis for continued research beyond high school.

TECHNICAL THEATRE (1435)

Grade Level: 11, 12

Credit: 1

Prerequisite: Beginning Drama & Advanced Drama

This course is an exploration of the duties of stage technicians and their contribution to the total aesthetic effect of a dramatic production. Topics covered will include design research and principles; scene shop organization; painting and construction techniques; equipment use and maintenance; principles and application of sound, lighting, and computer technology; the use of special effects; costume and makeup considerations and selection; publicity and business management; theatre safety; and the function of technical stage personnel in production work. Technical theatre will incorporate academic study and hands-on application of knowledge and skills.

YEARBOOK I (1215)

Grade Level: 9, 10, 11, 12

Credit: 1

This class teaches the student the basic fundamentals of yearbook production. It focuses on copywriting, caption and headline writing and design, layout design, desktop publishing, photography, and ad sales. All students in the class are responsible for creating pages of the yearbook using the skills taught. Students will also be expected to work after the regular school hours as part of the course requirements. Acceptance into the class is based on application and teacher recommendation.

YEARBOOK II/III/IV (1216/1217/1218)

Grade Level: 10, 11, 12

Credit: 1

Prerequisite: Yearbook I

The students in the class are expected to be knowledgeable of all the fundamentals of creating the yearbook. The section editors and the editor-in-chief should be advanced students. Yearbook II/III students are accepted on the basis of satisfactory completion of Yearbook I and the yearbook advisor's approval. Yearbook

II/III students are expected to provide leadership roles to the Yearbook I students. They are also expected to perform all the course requirements of Yearbook I.

ENGLISH

ENGLISH 9 (1130)

Credit: 1

This course is designed to provide the student with a working knowledge of the eight parts of speech and their function within the sentence. Other grammar units will include parts of the sentence and agreement. The student will concentrate on writing effective paragraphs with emphasis on topic sentences, clincher sentences, and unity and coherence in the paragraph. Various types of expository, narrative, and persuasive writing will be practiced in conjunction with the literature studied. Emphasis in the literature will be on high interest units such as non-fiction, mythology, science fiction, plays, and the short story. Students will complete research projects on teacher-selected topics. Media and its influence will also be studied. Using the Vocabulary Workshop program, students will enhance vocabulary skills.

ENGLISH 9 HONORS (1130H)

Credit: 1

This course is designed to provide the student with a working knowledge of the eight parts of speech and their function within the sentence. The student will concentrate on writing effective paragraphs with emphasis on topic sentences, clincher sentences, and unity and coherence in the paragraph. Various types of expository, narrative, and persuasive writing will be practiced in conjunction with the literature studied. Emphasis in the literature will be on short literary genres and high interest literature such as non-fiction mythology, poetry, plays, and the short story. In the advanced program, the reading is more analytical, and the writing and vocabulary instruction stresses the application of those skills necessary to succeed on the college level. Students will complete research projects on an author or a teacher-assigned topic. Media and its influence will also be studied. Using the Vocabulary Workshop program, students will enhance vocabulary skills. **A summer assignment is required.** *Placement into this course is based on factors that may include one or more of the following: Previous English performance, previous English SOL performance, and teacher recommendation.*

PREP READING ENGLISH LAB (1133)

Grade Level: 9

Credit: 1

This course is designed for students who are preparing for the standard diploma but are weak in prerequisite skills. The small class size and low student/teacher ratio allows for more individualized instruction with a focus on improving reading, writing, and grammar skills, as well as developing better study skills, fostering a productive work ethic, and meeting SOL requirements. This course works in

tandem with English 9 to reinforce language skills and the English 9 curriculum. Using the Vocabulary Workshop program, students will enhance vocabulary skills.

ENGLISH 10 (1140)

Credit: 1

A concentrated study of the standards of usage will be the subject of the tenth grade English. Included will be units on punctuation, capitalization, sentence structure, parallel structure, verbs, and pronoun usage with emphasis on the application of these mechanics to written English. Students will write narrative, descriptive, expository, and persuasive argumentative essays, as well as complete business forms and applications. In writing various types of essays, the students will learn to organize, arrange, and clearly express their thoughts. World literature will serve as the basis for writing assignments. Students will complete research projects on careers. Using the Vocabulary Workshop program, students will enhance vocabulary skills.

ENGLISH 10 HONORS (1140H)

Credit: 1

A concentrated study of the standards of usage will be the subject of English 10H. Included will be units on punctuation, sentence structure, verbal, capitalization, and pronoun usage with emphasis on the application of these mechanics to written English. The course also focuses on development of students' analytical skills through reading selections, writing, and vocabulary study. Students will write narrative, descriptive, expository, and persuasive essays. World literature will serve as the basis for written assignments during the sophomore year. Students will read a variety of literary selections-novels, plays, poetry, and non-fiction. Students will prepare a research project on a topic selected by the teacher. Using the Vocabulary Workshop program, students will enhance vocabulary skills. A **summer assignment is required**. *Placement into this course is based on factors that may include one or more of the following: Previous English performance, previous English SOL performance, and teacher recommendation.*

ENGLISH 11 (1150)

Credit: 1

This course will focus on chronological study of American Literature and a comprehensive review of selected principles of grammar, mechanics, and usage that will prepare students for effective communication in either post high school studies or the working world. Students will write persuasive/argumentative research papers on a contemporary issue. All students taking this course will take the reading and writing SOL tests. Students will write a series of persuasive compositions in order to prepare for the writing SOL test. Using the Vocabulary Workshop program, students will enhance vocabulary skills.

ENGLISH 11 HONORS (1150H)

Credit: 1

This course is designed for students who wish to enroll in English 12H or AP English 12 and to prepare for post high school studies. Juniors will concentrate on reviewing and

refining selected grammatical, mechanical, and usage skills which will prepare them for effective communication in the academic realm or working world. The course will emphasize writing compositions related to major American literary works, which will be studied in chronological order. Students will write persuasive research papers on a contemporary issue. All students taking this course will take the reading and writing SOL tests. Focus will be on critical reading, writing, and thinking. Using the Vocabulary Workshop program, students will enhance vocabulary skills. *Placement into this course is based on factors that may include one or more of the following: Previous English performance, previous English SOL performance, and teacher recommendation.*

ENGLISH 12 DUAL ENROLLMENT (1160DE)

Grade Level: 12

Credit: 1

Prerequisite(s): English 111 if enrolling in English 112

This course is offered at Poquoson High School and in conjunction with Thomas Nelson Community College. Students are enrolled in English 12 Honors, English 111 - English Composition I and English 112 - English Composition II. Students who successfully complete the courses will earn three college credits for English 111 and English 112.

English 111 and English 112 must be taken in sequence. Prerequisite: "C" average or better for four units of high school English and ENF 1 or ENF 2 as demonstrated through the TNCC placement and diagnostic test. This course will develop writing ability for study, work and other areas of writing based on experience, observation, research and reading of selected literature. Supports writing by integrating experiences in thinking, reading, listening, and speaking.

Students will be involved in a comprehensive review of grammar, mechanics, and composition skills as needed for success in post-high school writing endeavors. Seniors will survey major British writers, their ideas and their styles in a chronological study. Emphasis will be placed on critical thinking, speaking and writing skills. Students will be required to write a research paper on a literary topic. All DE classes will use the PCPS grading scale. *Placement into this course is based on factors that may include one or more of the following: Previous English performance, previous English SOL performance, teacher recommendation, completion of the Virginia placement test through TNCC, and acceptance into the TNCC program.*

AP ENGLISH 11/LANGUAGE AND COMPOSITION (1196AP)

Grade Level: 11

Credit: 1

This is a national program for high school students who exhibit superior reading and composition skills. It is an accelerated program in both effective writing and critical reading. The course emphasizes the study of nonfiction and American literary classics, along with a variety of writing tasks which emphasize diction, syntax, tone, structure, and meaning. Students will write persuasive

research papers on a contemporary issue. All juniors taking this course will take the reading and writing SOL tests. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman English in college where AP credits are accepted. [Requirements for admission to this program, refer to page 36.] Using the Vocabulary Workshop program, students will enhance vocabulary skills. **A summer assignment is required.** *Placement into this course is based on factors that may include one or more of the following: Previous English performance, previous English SOL performance, and teacher recommendation.*

ENGLISH 12 (1160)

Credit: 1

Seniors will be involved in a review of grammar, mechanics, and composition skills necessary for success in post-high school writing endeavors. Students will also concentrate on communication tools that will give them confidence in the world they will be entering. Seniors will survey major British and world writers, their ideas and their styles in a chronological study. Emphasis will be placed on speaking and writing. Students will be required to write a research paper. Using the Vocabulary Workshop program, students will enhance vocabulary skills.

ENGLISH 12 HONORS (1160H)

Credit: 1

Seniors will be involved in a comprehensive review of grammar, mechanics, and composition skills as needed for success in post-high school writing endeavors. Seniors will survey major British writers, their ideas and their styles in a chronological study. Emphasis will be placed on critical thinking, speaking and writing skills. Students will be required to write a research paper on a literary topic. Using the Vocabulary Workshop program, students will enhance vocabulary skills. *Placement into this course is based on factors that may include one or more of the following: Previous English performance, previous English SOL performance, and teacher recommendation.*

AP ENGLISH 12/LITERATURE & COMPOSITION (1195AP)

Grade Level: 12

Credit: 1

This is a national program for high school students who exhibit superior reading and composition skills. It is an accelerated program of literary analysis, and composition. The culminating activity of this course will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman English in college where AP credits are accepted. For requirements for admission to this program, refer to page 36. Using the

Vocabulary Workshop program, students will enhance vocabulary skills. **A summer assignment is required.** *Placement into this course is based on factors that may include one or more of the following: Previous English performance, previous English SOL performance, and teacher recommendation.*

CREATIVE WRITING (1171)

Grade Level: 10, 11, 12

Credit: 1

This course is an introduction to the major genres of creative (imaginative) writing, including fiction, poetry, drama and personal essay (creative nonfiction). The class will examine the creative process through experimentation with a variety of creative exercises. The types of experimental writing will examine the format, technical elements of fiction, poetry, and drama. In addition, the course will feature reading, analyzing, and critiquing a variety of literary examples, including the student's writing. The course members will compose stories, poems, and dramatic scenes. Finally, this course will prepare the student for more advanced work in creative writing, including fiction and poetry writing.

JOURNALISM I (1200)

Grade Level: 9, 10, 11, 12

Credit: 1

Stressed in this course will be the basic skills needed to publish a newspaper. The writing of a simple news story, lead paragraphs, news product history, editorial and feature writing, design and layout, and the media as a molder of public opinion will be studied. The newspaper as a good public relations tool will be stressed, as well as the influence of the press as an advertising medium. Second semester, the journalism class publishes one edition of the school newspaper, *The Island Echo*. Students will learn the Adobe InDesign computer program and will be introduced to digital photography.

JOURNALISM II (1210)

Grade Level: 10, 11, 12

Credit: 1

Prerequisite: Journalism I

In the second course, the student will continue the study of communication through print media. Areas of study will include in-depth news writing, research-based features, effective editorials, and columns. The student in this course has the opportunity to provide leadership for the newspaper staff and will publish the school newspaper, *The Island Echo*. **A summer assignment is required.**

JOURNALISM III/IV (1211/1213)

Grade Level: 11, 12

Credit: 1

Prerequisite: Journalism II

This course is designed to allow serious journalism students to further develop their individual talents in the area of communication. Emphasis will be placed on in-depth writing and newspaper production while publishing *The Island Echo*. News analysis, research-based features, improved interview skills, and original newspaper design will be required. **A summer assignment is required.**

FAMILY & CONSUMER SCIENCE

INDEPENDENT LIVING (8219)

Grade Level: 9, 10, 11, 12

Credit: 1

(Priority Given to 9th and 10th Graders)

This course allows students to explore successful strategies for living independent by actively participating in practical problem solving, focusing on: Relating to others (relationships); applying financial literacy; managing resources in the areas of apparel, nutrition and wellness, and housing; using leadership skills to reach individual goals, planning for careers, and making consumer choices in a global environment.

INTRODUCTION TO EARLY CHILDHOOD EDUCATION AND SERVICES (8234)

Grade Level: 9, 10, 11, 12

Credit: 1

Students will focus on the principals of child growth and development; development of self-concepts and building self-esteem; appreciation of diversity; learning experiences for children; principles of guiding children in a positive manner; healthy and safe environments; career development; and careers related to early childhood professionals through hands-on exploration, projects, and group learning.

INTRODUCTION TO FASHION CAREERS (8248)

Grade Level: 9, 10, 11, 12

Credit: 1

The design and merchandising competencies for this course focus on identifying and exploring the individual careers within the apparel, accessory, and textile design, manufacturing, and merchandising industry. Units of study include the relationships that exist among all areas of the clothing industry; related global and economic issues; apparel, accessory, and textile technology; exploration of careers, including entrepreneurial opportunities in related areas; and the skills and personal characteristics necessary for successful careers in the apparel, accessory, and textile design, manufacturing, and marketing industry.

NUTRITION AND WELLNESS (8229)

Grade Level: 9, 10, 11, 12

Credit: 1

(Priority given to 11th and 12th Grade Students)

Students enrolled in Nutrition and Wellness focus on understanding wellness, investigating principles of nutrition, using science and technology in food management, ensuring food safety, planning menus and preparing food, and exploring careers in the field of nutrition and wellness. Critical thinking and practical problem solving are emphasized.

INTRODUCTION TO CULINARY ARTS (8250)

Grade level: 10, 11, 12

Credit: 1

Prerequisite: Nutrition and Wellness 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. The curriculum places a strong emphasis on science and mathematics knowledge and skills.

TEACHER CADET I (9062)

Grade Level: 11, 12

Credit: 1

Prerequisite: 2.8 GPA and application required

The Teacher Cadet course introduces juniors and seniors to a career in teaching and education. The primary elements of the curriculum components are the learner, the school, the teacher and teaching. The components are intentionally broad in scope and provide a great deal of flexibility based on the career interest of the student. In addition to the fundamental curriculum components, all students are required to observe and participate in an internship outside the teacher cadet classroom. The internship may be done from the pre-school level through 12th grade.

TEACHER CADET II (9072)

Grade Level: 12

Prerequisite: Teacher Cadet I

Credit: 1

Students continue to explore careers in the education and training cluster and pathways. This course provides the opportunity for students to prepare for careers in education as they research postsecondary options, learn about the process of teacher certification in Virginia, and participate in a practicum experience.

HEALTH & MEDICAL SCIENCES

INTRODUCTION TO HEALTH & MEDICAL SCIENCES (8302)

Grade Level: 9, 10, 11, 12

Credit: 1

This course introduces the student to a variety of healthcare 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. healthcare system and to learn basic healthcare 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

healthcare 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.

SPORTS MEDICINE I (7660A)

Grade Level: 11, 12

Credit: 1

Prerequisite: Intro to Health and Medical Sciences

This course provides students with the basic concepts and skill set required for an entry-level position as a sports medicine assistant. It introduces students to topics such as injury prevention, nutrition, first aid/CPR/AED, exercise physiology, and biomechanics. Students study basic human anatomy and physiology, medical terminology, legal and ethical issues in sports medicine, and career preparation. Course competencies have been constructed so as not to go beyond the professional scope of aide/assistant level. Mastery of the material in this course would provide students with a strong background should they wish to pursue certification in areas such as first aid, CPR, AED, and/or personal trainer.

SPORTS MEDICINE II (7660B)

Grade Level: 12

Credit: 1

Prerequisite: Sports Medicine I

This course provides students with the additional study in the concepts and skill set required for an entry-level position as a sports medicine assistant. Students study topics such as injury prevention, nutrition, first aid/CPR/AED, exercise physiology, and biomechanics. Students continue the study of human anatomy and physiology, medical terminology, legal and ethical issues in sports medicine, and career preparation. Course competencies have been constructed so as not to go beyond the professional scope of aide/assistant level. Mastery of the material in this course would provide students with a strong background should they wish to pursue certification in areas such as first aid, CPR, AED, and/or personal trainer.

HEALTH & PHYSICAL EDUCATION

PE 9/HEALTH (7300)

Grade Level: 9 or 10

Credit: 1

This course is designed to foster the knowledge of physical, emotional and social growth, and to further develop an understanding of one's individual needs and to enhance the ability to make responsible decisions. The physical education unit is one semester in length and includes instruction in individual sports, team activities, conditioning, and involves physical fitness testing. The

health unit is one semester in length and includes topics on personal development, roles and relationships, self-concept, personality development, decision making skills, mental health and disorders, family roles and responsibilities, and family life education. **Note:** As enacted by the General Assembly and prescribed by the Board of Education, beginning with first-time ninth grade students in the 2016-2017 school year, requirements for the standard and advanced diplomas shall include a requirement to be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. This requirement shall be fulfilled through the PE9/Health course beginning in the fall of 2016.

PE 10/DRIVER EDUCATION (7405)

Grade Level: 9 or 10

Credit: 1

This course includes one semester of classroom Driver Education and one semester of physical activity. The activity portion includes team sports and individual sports. The classroom portion includes a semester of classroom Driver Education, resulting in state certification for students who successfully complete the course. Driver Education is a required course that includes a state mandated section on aggressive/emotional driving, alcohol/drugs and driving, motorcycle awareness, buying/insuring an automobile and planning/mapping a trip. Requirements for obtaining a learner's permit/driver's license and laws that apply to use of public roadways are also covered. The overall concentration is the safe and responsible operation of a motor vehicle.

Classroom driver's education is a part of the PE/10 Driver's Education course. Students are scheduled into this portion of the program in their sophomore year or in the school year that they turn 16 years of age. Students must pass both courses to meet graduation requirements. **Behind-the-Wheel Driver Education is not offered through Poquoson City Public Schools.**

RECREATIONAL FITNESS AND CARDIO ENDURANCE (7635)

Grade Level: 11, 12

Credit: 1

Prerequisite: H/PE 9 & 10

This course is offered as an elective beyond the required two years. This course will not substitute for the required 9th or 10th grade H/PE programs. This course includes weightlifting, aerobic exercise/advanced conditioning (including running, jump ropes, and step aerobics), and safety. Students will learn all aspects of weightlifting; identify and exhibit correct lifting and spotting techniques; identify and exhibit appropriate exercises used to increase strength and endurance in all major muscle groups; develop, practice and access a personalized program to enhance neuromuscular efficiency, muscle tone, and body composition; identify, describe and discuss the advantages, disadvantages, and dangers of ergogenic aids (steroids, blood doping, carbohydrate loading, human growth hormones, amphetamines, etc.). Students will also

identify and discuss the advantages of a balanced, nutritionally complete diet and identify appropriate strategies and methods for gaining, losing or maintaining weight. Students will also participate in individual and team games.

HISTORY/SOCIAL SCIENCE

WORLD GEOGRAPHY (2210)

Grade Level: 9, 10, 11, 12

Credit: 1

This course is designed to enable students to better live in a global society by increasing their understanding of the world's peoples, places, and environments, with an emphasis on world regions. It will include the study of landforms, climates, economic development, and migration and settlement patterns. It will also focus on the interactions between humans and their environments. Students will learn to apply geographic skills and knowledge to decision-making in their everyday lives and will understand the connection between geography and current world events. All students taking this course may take the end-of-course World Geography SOL test if it is needed for a verified credit or for federal accountability purposes.

WORLD GEOGRAPHY HONORS (2210H)

Grade Level: 9, 10, 11, 12

Credit: 1

This course is designed to enable students to better live in a global society by increasing their understanding of the world's peoples, places, and environments, with an emphasis on world regions. It will include the study of landforms, climates, economic development, and migration and settlement patterns. It will also focus on the interactions between humans and their environments. Students will learn to apply geographic skills and knowledge to decision-making in their everyday lives and will understand the connection between geography and current world events. The Honors section of World Geography will serve as the basis for students who plan to complete the Advanced Studies Diploma by completing either World History or AP European History in 10th grade. All students taking this course may take the end-of-course World Geography SOL test if it is needed for a verified credit or for federal accountability purposes. *Placement into this course is based on factors that may include one or more of the following: Previous history/social science performance, history/social science SOL performance, and teacher recommendation.*

WORLD HISTORY & GEOGRAPHY 1500-PRESENT (2342)

Grade Level: 10, 11, 12

Credit: 1

Prerequisite: World Geography

This course presents a general overview of the history of the world from the year 1500 AD to the present with special emphasis on the geographical influences on

history. Topics will include lifestyle religion, culture, cultural and political conflicts, the development of governments, and the effect of past history on today's world. In addition, there will be a study of current events in light of the geography and the impact of past events. All students taking this course may take the end-of-course World History from 1500 AD to the Present if it is needed for a verified credit or for federal accountability purposes.

AP EUROPEAN HISTORY (2399)

Grade Level: 10, 11, 12

Credit: 1

Prerequisite: World Geography Honors

The goals for the Advanced Placement course in European History are for the students to understand the basic narrative of the events and movements in European history. Students will learn the basic chronology of the major events and trends from approximately 1450 to the present and develop (a) an understanding of some of the principal themes in modern European history, (b) an ability to analyze historical evidence, and (c) an ability to analyze and express historical understanding in writing. This course counts as one of the World History credits required for graduation with an Advanced Studies diploma. Successful completion of this course will afford the student an opportunity to score well on the Advanced Placement Examination which may entitle him/her to receive college credit for European History. A **summer assignment is required**. *Placement into this course is based on factors that may include one or more of the following: Previous history/social science performance, history/social science SOL performance, and teacher recommendation.*

US AND VA HISTORY (2360)

Credit: 1

Grade Level: 11

This course presents a general overview of the historical development of the United States and Virginia. Emphasis will be placed on the twentieth century and the evolution of the democratic process. All students taking this course may take the end-of-course U.S. History SOL test if it is needed for a verified credit or for federal accountability purposes.

AP UNITED STATES HISTORY (2319)

Credit: 1

Grade Level: 11

Prerequisite: Two History/Social Sciences Electives

A general overview of the historical development of the United States will be presented. The advanced placement program will provide students with the opportunity to use analytical skills and factual knowledge necessary to deal critically with problems and materials in American history. Due to the nature of the course, students will be required to do extensive reading and research. Successful completion of this course will afford the student an opportunity to score well on the Advanced Placement Examination which may entitle him/her to receive college credit for US history. All students taking this course will

take the end-of-course U.S. History SOL test. *Placement into this course is based on factors that may include one or more of the following: Previous history/social science performance, history/social science SOL performance, and teacher recommendation.*

US AND VA GOVERNMENT (2440)

Credit: 1

Grade Level: 12

The student learns about America's political system through a study of the structure, function, and organization of the three levels of government. Emphasis is on the role of the individual in the democratic process and the impact of politics on his/her daily life. Key documents are studied to understand America's political roots and democratic principles that shape contemporary issues.

AP US GOVERNMENT & POLITICS (2445)

Grade Level: 12

Credit: 1

This course is designed to provide students with an analytical study of the foundations of American government and the politics of U.S. democracy. Students will examine national, state, and local government levels and explore constitutional fundamentals. Major concepts of the American political process will be compared with the diverse political systems in the world. Students will be required to do extensive reading and research, to apply content and critical thinking skills to political problem-solving, and to develop political action skills by becoming involved in the political process. Successful completion of the course will offer the student an opportunity to score well on the Advanced Placement Exam and may entitle him/her to receive college credit for U.S. Government. *Placement into this course is based on factors that may include one or more of the following: Previous history/social science performance, history/social science SOL performance, and teacher recommendation.*

AFRICAN-AMERICAN STUDIES (2371)

Grade Level: 11, 12

Credit: 1

The African-American Studies course focuses on the contributions people of African descent have made to American society. Through the study of the Atlantic slave trade, the abolitionist movement, and the civil rights movement, students will gain a better understanding of the role African-Americans have played in building the character and institutions of the United States and the world. Beginning with a historical, geographical, social, political, economic, and cultural understanding of the African continent, the course will provide a descriptive overview which will introduce the student to the study of the African and African-American experiences.

PSYCHOLOGY (2900)

Credit: 1

Grade Level: 10, 11, 12

Prerequisite: Biology

This course is designed to enable one to better understand one's behavior and the relationship of the individual to peer groups and the cultural environment. It will emphasize the science, research, and theory of psychology while challenging students to think critically about the subject matter, to question it, and then apply it to their personal lives. The course will include: biological factors affecting behavior, sensations and perception, sleep and consciousness, human memory, language and intelligence, abnormal behavior and therapy, social psychology, and applied psychology.

AP PSYCHOLOGY (2902)

Grade Level: 11, 12

Credit: 1

Prerequisite: Biology

This course is an introductory college level course designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. There is a focus on psychological facts and principles associated with each of the major subfields within psychology. Students will also learn about the methods psychologists use in research and practice. Successful completion of this course will afford the student an opportunity to score well on the Advanced Placement Examination which may entitle him/her to receive college credit for Psychology. *Placement into this course is based on factors that may include one or more of the following: Previous history/social science performance, history/social science SOL performance, and teacher recommendation.*

AP HUMAN GEOGRAPHY (2212)

Grade Level: 10, 11, 12

Credit: 1

Prerequisite: World Geography; World History, or AP European History

NOTE: Online Course – Virtual VA

AP Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students will study diverse people and areas organized around concepts that include location and place, scale, pattern, spatial organization, and regionalization. They will also learn about the methods and tools geographers use in their science and practice. *Placement into this course is based on factors that may include one or more of the following: Previous history/social science performance, history/social science SOL performance, and teacher recommendation.*

AP WORLD HISTORY (2380)

Grade Level: 10, 11, 12

Credit: 1

NOTE: Online Course – Virtual VA

The purpose of the AP World History course is to develop greater understanding of the evolution of global processes

and contacts in interaction with different types of human societies. There are six course themes to be covered.

- The impact of interaction among major societies and regions
- The relationship of change and continuity across the world history periods
- The effects of technology, economics, and demography on people and the environment
- Systems of social structure and gender structure
- Cultural, intellectual and religious developments and interactions among and within societies
- Changes in functions and structures of states and attitudes toward states and political identities including the emergence of the nation-state

Placement into this course is based on factors that may include one or more of the following: Previous history/social science performance, history/social science SOL performance, and teacher recommendation.

AP GOVERNMENT & POLITICS: COMPARATIVE (2450)

Grade Level: 11, 12

Credit: 1

Prerequisite: US History or World History

NOTE: Online Course – Virtual VA

Students are introduced to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of settings. The course aims to illustrate the rich diversity of political life, to show available institutional alternatives, to explain differences in processes and policy outcomes, and to communicate the importance of global political and economic changes. Five countries form the core of the AP Comparative Government and Politics course: China, Great Britain, Mexico, Nigeria, and Russia. In addition, Iran will be included as time allows. **This course does NOT substitute for U.S. Government under the Virginia Standards of Learning.** *Placement into this course is based on factors that may include one or more of the following: Previous history/social science performance, history/social science SOL performance, and teacher recommendation.*

MARKETING EDUCATION

INTRODUCTION TO MARKETING (8110)

Grade Level: 9, 10, 11

Credit: 1

Students gain an understanding of the importance of marketing in today's society. Skills in interpersonal communication, self-presentation, economics, marketing, sales, employability, career discovery and ethical decision-making are developed.

FASHION MARKETING (8140)

Grade level: 10-12

Credit: 1

Prerequisite: Introduction to Fashion Careers

In this specialized course, students gain basic knowledge of the apparel and accessories industry and skills necessary for successful employment in apparel businesses. Students develop general marketing skills

necessary for successful employment in fashion marketing, general marketing skills applicable to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, market planning, and product/service technology as well as academic skills (math, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied.

SPORTS & ENTERTAINMENT MARKETING (8175)

Grade Level: 10, 11, 12

Credit: 1

Students develop a thorough understanding of marketing concepts and theories as they relate to sports, entertainment and recreation industries. Students will investigate branding, sponsorships, and endorsements, and will develop promotion plans.

ADVANCED SPORTS & ENTERTAINMENT MARKETING (8177)

Grade Level 11, 12

Credit: 1

Prerequisite: Sports and Entertainment. Marketing

Students will build on prior knowledge of sports, entertainment, and recreational marketing. This course focuses on the principles of management and planning supported by research, financial, and legal concepts. Students will be able to plan and execute an event, develop a career plan, and establish a sports, entertainment, or recreation marketing product/business. Academic skills (mathematics, science, English, and history) related to the content are a part of this course. Computer/technology applications supporting the course are studied.

DIGITAL & SOCIAL MEDIA MARKETING (8125)

Grade: 11, 12

Credit: 1

Prerequisite: Introduction to Marketing

Students explore marketing functions and the business plan, as well as study Internet marketing's role in the global economy. Students gain knowledge of the tools and techniques used in Internet marketing and learn how to design a Website. They explore ethical, legal, and security aspects and prepare for a career in Internet marketing. Units of study include the relationships that exist among all areas of the digital marketing industry; related global and economic issues; social media branding; Web technologies; Internet safety; exploration of careers, including entrepreneurial opportunities in related areas; and the skills and personal characteristics necessary for successful careers in the digital marketing field, telecommunications, and marketing research industry.

MARKETING (CO-OP) (8120)

Grade Level: 11, 12

Credits: 2 or 3

Marketing provides students with instruction that enables them to obtain and succeed in their chosen marketing

occupation. Students combine classroom instruction with continuous, supervised on-the-job training during the school year in a local marketing business. Students work an average of 15 hours per week for 36 weeks, all of which is planned, supervised and documented by the coordinator through the use of a training plan. Students concentrate on developing competencies needed in marketing, including communications, human relations, economics, sales promotion, and marketing mathematics.

ADVANCED MARKETING (8130)

Grade Level: 12

Credits: 2 or 3

Prerequisite: Marketing or 12th grade with work experience (based upon teacher availability)

Advanced Marketing enables students to develop competencies needed to advance in full-time employment in marketing, distribution, and management. Students develop supervisory competencies in several of the same areas studied in Marketing and, in addition, develop basic competencies in areas of sales promotion, merchandising, marketing research, and management. Students combine classroom instruction with continuous, supervised on-the-job training during the school year in a local marketing business. Students average 15 hours of work per week for 36 weeks, all of which is planned, supervised, and documented by the coordinator through the use of a training plan.

ENTREPRENEURSHIP EDUCATION (9093)

Grade level: 9-12

Credit: 1

This course introduces students to the exciting world of creating, owning and launching their own business. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle. This course is designed for students who plan to attend college with a concentration in marketing, business, or management and/or who have tentative plans to manage or own a business. Academic knowledge and skills (math, science, English, and social science) related to the content are a part of this course. Computer technology applications supporting this course are studied.

MATHEMATICS

ALGEBRA I (3130)

Grade Level: 9, 10, 11, 12

Credit: 1

This class covers the study of the algebraic concepts needed to solve algebraic equations. Students will use algebra as a tool for representing and solving a variety of practical problems. Tables and graphs are used to interpret algebraic expressions, equations, and inequalities and to analyze functions. Students make connections and

build relationships among algebra and arithmetic, geometry and probability and statistics. All students taking this course will take the end-of-course Algebra I SOL Test.

ALGEBRA I, PART I (3131)

Grade Level: 9, 10, 11

Credit: 1

This course thoroughly covers the study of algebraic concepts needed to solve algebraic equations over two years. The course is designed for the student who would benefit from additional time to master the algebraic concepts required in Algebra I. Students identified under Special Education or Section 504 will receive one full math credit upon successful completion of the course, entitled Algebra I, Part I. Students who are not identified under Special Education or Section 504 will receive one elective credit upon successful completion of the course, entitled Math Lab B.

ALGEBRA I, PART II (3132)

Grade Level: 10, 11, 12

Credit: 1

Prerequisite: Algebra I, Part I

This course thoroughly covers the study of algebraic concepts needed to solve algebraic equations over two years. This course is designed for the student who would benefit from additional time to master the algebraic concepts required in Algebra I. All students will receive one math credit upon successful completion of the course. All students will take the end-of-course Algebra I SOL test.

MATH LAB (3199)

Corequisite: Algebra I

Credit: 1

This course may be a required co-requisite for Algebra 1, based on Student performance in middle school math, prior SOL scores, teacher recommendation, and performance in other math courses.

COMPUTER MATH (3184)

Prerequisite: Algebra I

Credit: 1

This course provides opportunities to explore mathematical problem solving through computer programming that utilizes the graphing calculator. Students apply programming techniques and skills to solve practical mathematics problems in areas that may include: Business, personal finance, leisure, activities, sports, and probability and statistics. Problems focus on analysis of data in charts, graphs, and tables and the use of knowledge of equations, formulas and functions to solve problems.

GEOMETRY (3143)

Prerequisite: Algebra I

Credit: 1

This course covers plane, solid, and analytical geometries using Euclid's postulates. Logical reasoning with emphasis on deductive proofs, algebra applications and constructions are included. All students taking this course may take the end-of-course Geometry SOL test if it is needed for a verified credit or for federal accountability purposes.

GEOMETRY HONORS (3143H)**Prerequisite:** Algebra I**Credit:** 1

This is a fast-paced course covering the topics in Geometry at a more in-depth level. All students taking this course may take the end-of-course Geometry SOL test if it is needed for a verified credit or for federal accountability purposes. *Placement into this course is based on factors that may include one or more of the following: Previous mathematics performance, mathematics SOL performance, and teacher recommendation.*

ALGEBRA, FUNCTIONS, AND DATA ANALYSIS (3134)**Grade Level:** 10, 11, 12**Credit:** 1**Prerequisite:** Algebra I

This course is designed for a student pursuing a standard diploma. 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.

ALGEBRA II (3135)**Prerequisite:** Algebra I and Geometry**Credit:** 1

This course provides a thorough treatment of advanced algebraic concepts through the study of functions, polynomials, expressions, complex numbers, matrices, sequences, and series. Emphasis is placed on practical applications and modeling. All students taking this course may take the end-of-course Algebra II SOL test if it is needed for a verified credit or for federal accountability purposes.

ALGEBRA II/TRIGONOMETRY HONORS (3137)**Grade Level:** 9, 10, 11, 12**Credit:** 1**Prerequisite:** Algebra I and Geometry

This is a fast-paced course covering the concepts of Algebra II at a more in-depth level plus the concepts of the Trigonometry course. It is meant to provide the foundation for students to pursue Math Analysis and AP Calculus. All students taking this course take the end-of-course Algebra II SOL test if it is needed for a verified credit or for federal accountability purposes. *Placement into this course is based on factors that may include one or more of the following: Previous mathematics performance, mathematics SOL performance, and teacher recommendation.*

PROBABILITY & STATISTICS (3190)**Credit:** 1**Prerequisite:** Geometry/Geometry Honors and Algebra II/Algebra II/Trig Honors

This course provides a general introduction to probability and statistics. Topics include: Descriptive statistics, probability, and a study of the methods used to analyze data and make predictions. A variety of application exercises and statistical software are utilized.

ADVANCED MATH/PRE-CALCULUS (3160)**Grade Level:** 11, 12**Credit:** 1**Prerequisite:** Algebra II or Algebra II/Trig Honors

This course is for the student wanting further instruction to enhance mathematical or algebraic skills. Several algebraic concepts will be taught at a higher level and concepts reinforced that are needed for more complex mathematics curriculum at PHS.

MATH ANALYSIS / PRE-CALCULUS HONORS (3162)**Grade Level:** 10, 11, 12**Credit:** 1**Prerequisite:** Algebra II/Trigonometry Honors

This fast-paced course develops students' understanding of algebraic, transcendental and trigonometric functions, parametric and polar equations, sequences and series, vectors and limits. *Placement into this course is based on factors that may include one or more of the following: Previous mathematics performance, mathematics SOL performance, and teacher recommendation.*

AP STATISTICS (3191)**Credit:** 1**Prerequisite:** Algebra II/Trigonometry Honors, Math Analysis/Pre-Calculus Honors, or Advanced Math/Pre-Calculus

This course is designed to prepare the student for the Advanced Placement Statistics Exam. The students are introduced to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman mathematics in college where AP credits are accepted. *Placement into this course is based on factors that may include one or more of the following: Previous mathematics performance, mathematics SOL performance, and teacher recommendation.*

CALCULUS (3170)**Credit:** 1**Prerequisite:** Math Analysis/Pre-Calculus Honors or Advanced Math/Pre-Calculus

This course is designed for the college bound student to learn elementary functions, limits, and differential calculus, with integration as time allows. The curriculum is not intended to prepare students for the AP Calculus AB test. *Placement into this course is based on factors that may include one or more of the following: Previous mathematics performance, mathematics SOL performance, and teacher recommendation.*

AP CALCULUS AB (3177AB)**Credit:** 1**Prerequisite:** Math Analysis/Pre-Calculus Honors or Advanced Math/Pre-Calculus

This is a fast-paced and in-depth course. This course is designed to prepare the student for the Advanced Placement Calculus AB Exam. The course covers the properties of elementary functions, limits, and integral and differential calculus. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of

this examination affords the student the opportunity to apply advanced credits toward freshman mathematics in college where AP credits are accepted. A **summer assignment is required**. *Placement into this course is based on factors that may include one or more of the following: Previous mathematics performance, mathematics SOL performance, and teacher recommendation.*

AP CALCULUS BC (3177BC) Credit: 1

Prerequisite: Math Analysis/Pre-Calculus Honors or

Advanced Math/Pre-Calculus

This accelerated college-level calculus course covers material typically taught in a two-semester, engineering curriculum. Topics include functions, graphs, limits, asymptotic and unbounded behavior, derivatives and associated applications. Additionally, interpretations and properties of integrals, applications, polynomial approximations and series are studied. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman mathematics in college where AP credits are accepted. *Placement into this course is based on factors that may include one or more of the following: Previous mathematics performance, mathematics SOL performance, and teacher recommendation.*

AP COMPUTER SCIENCE A (3185)

Grade Level: 10, 11, 12

Credit: 1

Note: Online Course – Virtual VA

The purpose of AP Computer Science A is to lay the foundation for object-oriented programming. Java is used as the vehicle to teach computer science concepts. The focus is more on the concepts and abstract ideas rather than on the syntax. The course is about the design of classes, algorithms, programming techniques and introduction to data structures like arrays and array lists. Students will spend two to three days a week studying the textbook and the rest of the week working on labs. It is expected that the student will have to work outside the classroom-provided-time to master the learning. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman mathematics in college where AP credits are accepted. *Placement into this course is based on factors that may include one or more of the following: Previous mathematics performance, mathematics SOL performance, and teacher recommendation.*

MUSIC

CONCERT BAND (Brass/Woodwinds) (9296B/9296W)

Grade Level: 9, 10, 11, 12

Credit: 1

PREREQUISITE: 8th grade band

This course is designed to help students develop performance techniques of the student's primary instrument. This course is designed for students who demonstrate an average level of technical proficiency on their instrument. The course curriculum is based on the Advanced Level of the Music Standards of Learning published by the Board of Education of the Commonwealth of VA. The student will experience preparation for public performances and will be exposed to all facets of music, both historically and stylistically. All students are expected to attend and participate in public performances unless otherwise directed by the instructor. Students in this class are members of the Concert Band and Marching Band.

SYMPHONIC BAND (BRASS/WOODWINDS) (9232B/9232W)

Grade Level: 9, 10, 11, 12

Credit: 1

Prerequisite: Audition Required

This course is designed to help students develop performance techniques of the student's primary instrument. This course is designed for students who demonstrate an average level of technical proficiency on their instrument. The course curriculum is based on the Artist Level of the Music Standards of Learning published by the Board of Education of the Commonwealth of VA. Students will experience preparation for public performances and will be exposed to all facets of music, both historically and stylistically. All students are expected to attend and participate in public performances unless otherwise directed by the instructor. Students in this class are members of the Concert Band, Symphonic Band and Marching Band.

PERCUSSION (9244)

Grade Level: 9, 10, 11, 12

Credit: 1

Prerequisite: 8th grade band

This course is designed to help each student develop performance techniques on his/her primary instrument. The course curriculum is based on the Intermediate and Advanced Levels of the Music Standards of Learning as published by the State Board of Education of the Commonwealth of Virginia. The student will experience preparation for public performances and will be exposed to all types of music, both historically and stylistically. All students are expected to attend and participate in public performances unless otherwise directed by the instructor. The percussion section participates in the Concert Band, Symphonic Band and the Marching Band.

MUSIC THEORY (9225)

Grade Level: 11, 12

Credit: 1

Prerequisite: Student should have already completed formal performance training in either vocal or instrumental music. This would include any of the vocal and instrumental programs at PHS or the equivalent in private instruction. A pre-test in music theory is required. This course is designed to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score in preparation for a major in music at the college level.

CONCERT CHOIR (9282)

Grade Level: 9, 10, 11, 12

Credit: 1

Correct choral techniques and fundamental music theory will be studied through the singing of classical and traditional choral music. Folk and popular music styles will also be included. Attendance at all performances is expected unless otherwise directed by the instructor.

SHOW CHOIR (EVOLUTION) (9285)

Grade Level: 9, 10, 11, 12

Credit: 1

Prerequisite: Audition with the Director

This class is for a select number of students who have a desire to learn more about pop and modern styles of singing. The execution of choreography is necessary in this course. The class is limited to specific numbers in each voice range; therefore, an audition is necessary. Local and out-of-town performances and competitions are part of the curriculum. All performances and rehearsals are compulsory for each student.

A CAPPELLA CHOIR (9289A)

Grade Level: 9, 10, 11, 12

Credit: 1

Prerequisite: Audition with the Director

This class is for a select number of students who have a desire to learn more about jazz and blues styles of singing. The class is limited to specific numbers in each voice range; therefore, an audition is necessary. Local and out-of-town performances and competitions are part of the curriculum. All performances and rehearsals are compulsory for each student.

SWING CHOIR (HARMONETTES) (9280)

Grade Level: 9, 10, 11, 12

Credit: 1

Prerequisite: Audition with the Director

This class is for a select number of female students. The repertoire includes all types of choral literature. The class is limited to specific numbers in each voice range; therefore, an audition is necessary. Local and out-of-town performances and competitions are part of the curriculum. All performances and rehearsals are compulsory for each student.

SCIENCE

ENVIRONMENTAL SCIENCE (4270EV)

Grade level(s): 9, 10

Credit: 1

This course is designed to provide students the opportunity to synthesize information and knowledge of ecological concepts including air, water, soil, biological diversity, human impacts, global climate change, and civic responsibility. Independent reading and laboratory assignments will be required. Inquiry skills are developed through field work and collaborative investigation while using appropriate technology.

ENVIRONMENTAL SCIENCE HONORS (4270EVH)

Grade level(s): 9, 10, 11, 12

Credit: 1

This course is a rigorous first year science course designed to provide students the opportunity to synthesize information and knowledge of ecological concepts including air, water, soil, biological diversity, human impacts, global climate change, and civic responsibility. Students will focus on scientific inquiry, the physical world, the living environment, resource conservation, understanding the interrelationship of the natural world, identifying and analyzing environmental problems both natural and man-made, and evaluating the risks associated with these problems and examining alternate solutions for resolving and/or preventing them. Independent reading and laboratory assignments will be required. Inquiry skills are developed through field work and collaborative investigation while using appropriate technology. *Placement into this course is based on factors that may include one or more of the following: Previous science performance, science SOL performance and teacher recommendation.*

EARTH SCIENCE (4210)

Grade Level: 10, 11, 12

Credit: 1

Subject content includes in-depth study of the areas of geology, meteorology, astronomy, and oceanography. Independent reading and laboratory assignments will be required. All students taking this course may take the end-of-course SOL test if it is needed for a verified credit or for federal accountability purposes.

EARTH SCIENCE (HONORS) (4210H)

Grade Level: 10, 11, 12

Credit: 1

Honors Earth Science is a rigorous level high school earth science course designed for the academically motivated student planning to take one or more of the following: Biology (Honors), Chemistry (Honors), AP Biology, AP Chemistry or Physics. Subject content includes in-depth study of the areas of geology, meteorology, astronomy, and oceanography. The focus will be on independent learning and both the pace and the depth of study will be

greater than that of the standard earth science course. All students taking this course may take the end-of-course Earth Science SOL test if it is needed for a verified credit or for federal accountability purposes. *Placement into this course is based on factors that may include one or more of the following: Previous science performance, science SOL performance, and teacher recommendation.*

EARTH SCIENCE II - ASTRONOMY (4260)

Grade Level: 10, 11, 12

Credit: 1

Prerequisite: Earth Science, Biology or Chemistry

The Astronomy course is an in-depth study of the solar system, its sun, stars, the structure and development of the universe, and the dynamic nature of the cosmos. The course includes investigations of the physical universe, studies of new astronomical discoveries, hypotheses and conclusions regarding new and evolving ideas, and key scientific principles of a vast universe. By emphasizing conceptual learning, investigation of historical and new discoveries and by utilizing technology, the student will gain powerful tools to assist in unlocking the secrets of the universe.

EARTH SCIENCE II – OCEANOGRAPHY – DUAL ENROLLMENT (4250H/DE)

Grade Level: 11, 12

Credit: 1

Pre-requisite: Environmental Science or Biology; GOL 111 if enrolling in GOL 112

This course is offered at Poquoson High School and in conjunction with Thomas Nelson Community College. Students are enrolled in GOL 111, GOL 112 and Oceanography Honors. Students who successfully complete the courses will earn four college credits for GOL 111 and GOL 112. GOL 111 and GOL 112 must be taken in sequence. Prerequisite of a “C” or better in two science courses at Poquoson High School. Students are required to take and pass the Virginia Placement Test through TNCC.

Oceanography is a laboratory-oriented course in which students are involved in an in-depth study of the physical, chemical, geological and biological aspects of the oceans. Students take a journey through the ocean world. Field studies and investigations of local, regional, and national issues and concerns are components of the course. Students will explore the relationships of oceanography to their interests, to career opportunities, and to the historical contributions of science. Topics include oceanographic instruments; the chemistry of sea water; ocean sediments; weather and climate; waves, tides and currents; life in the oceans; habitats; maritime hermitage; and current issues created by the interaction of science and technology.

Placement into this course is based on factors that may include one or more of the following: Previous science performance, previous science SOL performance, teacher recommendation, completion of the Virginia placement

test through TNCC, and acceptance into the TNCC program.

BIOLOGY (4310)

Grade Level: 9, 10, 11, 12

Credit: 1

Topics include the study of the cell and cell processes, reproduction, taxonomy, and ecology. Independent reading and laboratory assignments will be required. All students taking this course may take the end-of-course Biology SOL test if it is needed for a verified credit or for federal accountability purposes.

BIOLOGY (HONORS) (4310H)

Grade Level: 9, 10, 11, 12

Credit: 1

Corequisite: Algebra I

Honors Biology is a rigorous level of first year high school biology designed for the academically motivated student planning to take one or more of the following: Chemistry (Honors), AP Biology, AP Chemistry, or science courses at New Horizons Governor’s School for Science and Technology. The focus will be on independent learning and both the pace and the depth of study will be greater than that of the standard biology course. Topics of study include biology as a science, living conditions, chemistry of life, cellular structure and function, photosynthesis and respiration, cellular respiration, cellular reproduction, genetics and genetic engineering, evolution and the history of life, classification and kingdom studies, the human body, and ecology. All students taking this course take the end-of-course Biology SOL test if it is needed for a verified credit or for federal accountability purposes. *Placement into this course is based on factors that may include one or more of the following: Previous science performance, science SOL performance, and teacher recommendation.*

BIOLOGY II – TOPICS IN BIOLOGY (AQUATIC AND TERRESTRIAL BIOLOGY) (4320)

Grade Level: 11, 12

Credit: 1

Prerequisites: Biology

This year-long, laboratory-based science course introduces students to topics of aquatic and terrestrial biology. The course will address water chemistry and physics as a basis for exploring the animal and plant life of our water planet during the first semester and will focus on the characteristics and life cycles of plants during the second semester.

BIOLOGY II - HUMAN ANATOMY & PHYSIOLOGY (4330)

Grade Level: 11, 12

Credit: 1

Prerequisites: Biology and Chemistry

Co-requisite: Algebra II

Anatomy and Physiology is a study of the structure and function of the human body, from the cellular to the system level. The course is preparation for advanced biological

studies, pre-medical studies, biomedical nursing, and other science-based careers. Areas of study include development and use of human body classification skills, physiological study of all major human body systems, exposure to pathological examples which demonstrate homeostatic disruption, bodily functions in a healthy or diseased states, blood typing, and laboratory exercises to enhance anatomical classification techniques, and review of related terminology. Dissections of various preserved animals and organs are an integral part of this course.

CHEMISTRY (4410)

Grade Level: 10, 11, 12

Credit: 1

Prerequisite: Biology

Co-requisite: Algebra II or Algebra II/Trig. Honors

Chemistry is the study of matter and how it changes with other matter. It is a challenging course designed for the college-bound student with above average ability and interest in science. Concepts include data analysis, properties of matter, atomic structure, electron configuration, nuclear chemistry, chemical binding, the mole and related calculations, chemical reactions and equations, stoichiometry, gas laws, energy and pressure changes, solutions, equilibrium, acid and base chemistry, oxidation and reduction reactions, and an overview of organic chemistry. There is a heavy emphasis on problem solving and analytical thinking. Students taking this course may take the end-of-course Chemistry SOL test if it is needed for a verified credit or for federal accountability purposes.

CHEMISTRY (HONORS) (4410H)

Grade Level: 10, 11, 12

Credit: 1

Prerequisites: Algebra II/Trig. Honors and Biology

Honors Chemistry is a comprehensive course recommended for the college bound student planning to take Advanced Placement science courses in high school or attend New Horizons Governor's School for Science and Technology. In addition to the topics covered in the standard chemistry course, Honors Chemistry will also provide a more in-depth look at molecular structures, limiting factors in chemical reactions, equilibrium and electrochemistry. Students taking the course will take the end-of-course Chemistry SOL test if it is needed for a verified credit or for federal accountability purposes. A **summer assignment is required**. *Placement into this course is based on factors that may include one or more of the following: Previous science and math performance, science SOL performance, and teacher recommendation.*

FORENSIC SCIENCE (4420)

Grade Level: 11, 12

Credit: 1

Prerequisite: Biology, Chemistry

This course is a multidisciplinary laboratory course and will include concepts in chemistry, anatomy, physics, biology, mathematics, statistics, psychology, communications and law. Students will gain an appreciation of scientific concepts that are applied to real world situations. An

emphasis will be placed on the role of chemical reactions and techniques used to analyze evidence. There will be a strong focus on problem solving and synthesizing evidence-based conclusions. After learning basic concepts, students will use critical thinking to explore scientific principles through the forensic investigation of crime scenes.

PHYSICS (4510)

Grade Level: 11, 12

Credit: 1

Corequisite: Advanced Math/Pre-Calculus, Math

Analysis/Pre-Calculus Honors or other higher level math.

This course is designed to explain the interaction of matter and energy. The topics covered in this course include the mechanics of solids, wave mechanics, and nuclear physics. This course is oriented to laboratory experiences and problem solving with much independent work. It provides educational preparation for college or university study in science, medicine, or engineering.

AP ENVIRONMENTAL SCIENCE (4270)

Grade Level: 11, 12

Credit: 1

Prerequisites: Two years of high school laboratory science; at least one year of Algebra

AP Environmental Science is designed to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman science courses in college where AP credits are accepted. *Placement into this course is based on factors that may include one or more of the following: Previous science performance, science SOL performance, and teacher recommendation.*

AP BIOLOGY (4370)

Grade Level: 11, 12

Credits: 2

Prerequisites: Biology and Chemistry (Honors Courses Recommended)

This course is designed to be the equivalent of a college introductory biology course. Primary emphasis is on developing an understanding of concepts rather than on memorizing terms and technical details. Essential to this conceptual understanding are the following: A grasp of science as a process rather than as an accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking

to environmental and social concerns. Topics covered will include the following: Chemistry of life, cells, cellular energetics, heredity, molecular genetics, evolutionary biology, diversity of organisms, structure and function of plants and animals, and ecology. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman science courses in college where AP credits are accepted. **A summer assignment is required.** *Placement into this course is based on factors that may include one or more of the following: Previous science performance, science SOL performance, and teacher recommendation.*

AP CHEMISTRY (4470)

Grade Level: 11, 12

Credit: 2

Prerequisites: Chemistry and Algebra II (Honors Courses Recommended)

AP Chemistry is designed to be the equivalent of the general Chemistry course and lab. Topics include the structure of matter, chemical reactions, thermochemistry, kinetics, advanced equilibrium, oxidation reduction, and descriptive chemistry. Emphasis is placed on mathematical relationships and its application to Chemistry concepts. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman science courses in college where AP credits are accepted. **A summer assignment is required.** *Placement into this course is based on factors that may include one or more of the following: Previous science and math performance, science SOL performance, and teacher recommendation.*

AP PHYSICS I (4570)

Grade Level: 11, 12

Credit: 1

Prerequisite:

Advanced Math/Pre-Calculus, Math Analysis/Pre-Calculus Honors or other higher level math

This one-period, non-calculus-based college level physics course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It also introduces electric circuits. Labs are placed throughout the instructional year and students will use TI83's and CBL™ (Calculator-Based Laboratory™) in the lab program materials. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman science courses in college where AP credits are accepted. **A summer assignment is required.** *Placement into this course is based on factors that may include one or more of the following: Previous science performance, science SOL performance, and teacher recommendation.*

AP PHYSICS II (4574)

Grade Level: 11, 12

Credit: 1

Prerequisite: AP Physics 1

NOTE: Online Course – Virtual VA

This one-period, non-calculus-based college level physics course covers thermodynamics: laws of thermodynamics, ideal gases, and kinetic theory; fluid statics and dynamics; electrostatics: electric force, electric field and electric potential; DC circuits and RC circuits (steady-state only); magnetism and electromagnetic induction; geometric and physical optics; and quantum physics, atomic, and nuclear physics. Labs are placed throughout the instructional year and students will use TI83's and CBL™ (Calculator-Based Laboratory™) in the lab program materials. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman science courses in college where AP credits are accepted. **A summer assignment is required.** *Placement into this course is based on factors that may include one or more of the following: Previous science performance, science SOL performance, and teacher recommendation.*

SPECIAL EDUCATION SERVICES

RESOURCE (7860)

Credit: 1

Grade Level: 9, 10, 11, 12

Credit: As defined by IEP placement

The resource program for identified adolescents provides environmental structure and opportunities for individual prescriptive learning. Emphasis is placed on diagnosis and remediation in areas that include sensory-motor integration, perceptual motor skill, language development, and conceptual and social skills. A tutorial approach is used in remediation of deficit areas in conjunction with a multi-sensory approach to learning. This program also provides an opportunity for students to receive emotional support while being taught constructive ways of expressing feelings, venting frustrations, and negotiating with adults and peers in an effective way. Social skills are taught in a structured, yet supportive, classroom setting. This course may be repeated if dictated by the IEP.

JOB COACH (7887)

Credit: 1

Grade Level: 9, 10, 11, 12

Students will develop the ability to complete job applications accurately, develop resumes, enhance job interviewing skills, and complete a job search. Students will participate in community-based work experience to develop vocational job-keeping skills such as following given instructions, requesting assistance, working independently, completing job duty responsibilities, and acquiring social skills. Students will explore their career

interests by understanding the skills and abilities required for specific jobs. The goals of the program are for students to gain employment readiness skills and to be successful in future competitive employment opportunities. The course meets for two periods.

CONSUMER MATH (3128) Credit: 1
CONSUMER MATH II (3129) Credit: 1

Grade Level: 10, 11, 12

Prerequisite: Two math credits, Teacher Recommend.

This course is designed for the student with an IEP. Topics included will be 8th grade math SOL objectives, personal finance and practical math skills.

ADAPTIVE MATH (7864) Credit: 1
ADAPTIVE MATH II (7866) Credit: 1
Grade Level: 9, 10, 11, 12

This course is designed for the student with an IEP who is working toward meeting the requirements for the Standard Diploma. Topics include measurement, money, and other skills necessary for practical living and job success. The course may be repeated if dictated by the IEP. **Teacher Recommendation**

ADAPTIVE ENGLISH (7862)
Grade Level: 9, 10, 11, 12 Credit: 1

This course is designed for the student with an IEP who is working toward meeting the requirements for the Standard Diploma. Topics include reading, writing, and speaking skills for practical living and job success. The course may be repeated if dictated by the IEP. **Teacher Recommendation**

ADAPTIVE SCIENCE/HISTORY SOCIAL SCIENCES (7867)
Grade Level: 9, 10, 11, 12 Credit: 1

This course is designed for the student with an IEP who is working toward meeting the requirements for the Standard Diploma. Topics include plant studies, earth science, geography, government, and history skills. This course may be repeated if dictated by the IEP.

LIFE SKILLS (7868) Credit: 1
Grade Level: 9, 10, 11, 12

Credit: As defined by IEP Placement

This is a course designed for identified students to work on basic life skills. Students are exposed to topics including safety, cooking, personal care, money use, and leisure activities. Placement is determined by the IEP.

Poquoson High School Transition Services

Poquoson High School offers an array of Transition Services to meet the needs of students who will be transitioning into the workforce or into community agencies after high school. These services are mostly intended for special education students and are designed to assist students in developing appropriate career goals, work habits and on-the-job skills. These services may include vocational evaluations, work adjustment training, and/or job coach training within the community, through NHREC, or in collaboration with private providers. Participating students must meet eligibility criteria. Placement is determined by the IEP.

TECHNOLOGY EDUCATION

TECHNICAL DRAWING/DESIGN (8435)

Grade Level: 9, 10, 11, 12 Credit: 1

This course is recommended for students interested in engineering, architecture, or other technical careers. Students solve problems using sketching, basic drafting techniques, dimensioning, geometry, multi-view and pictorial drawing and models or prototypes. Students will learn to use CAD (Computer Aided Design) software programs in this course.

ENGINEERING/DRAWING (8436)

Grade Level: 10, 11, 12 Credit: 1

Prerequisite: Technical Drawing/Design (8435)

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

ARCHITECTURAL DESIGN (8437)

Grade Level: 10, 11, 12 Credit: 1

Prerequisite: Technical Drawing/Design (8435)

Students explore architectural design foundations and increase understanding of working drawings, construction techniques, and codes regulating building design. They learn the design process and apply the elements and principles of design to architectural projects. Through producing models and illustrations of all aspects of a building, students create architectural design solutions using CADD (computer aided drafting and design).

ADVANCED TECHNICAL DRAWING (8438)

Grade Level: 10, 11, 12 Credit: 1

Prerequisite: Engineering Drawing/Design (8436) or Architectural Drawing/Design (8437)

Students use a graphic language for product design and technical illustration. They increase their understanding of drawing techniques learned in the prerequisite course. They research design-related fields while identifying the role of advanced drawing and design in manufacturing and construction industry processes. They apply the design process, analyze solutions, reverse engineer products, create 3-D solid models using CAD, construct physical models, and create multimedia presentations of finished designs. They complete a work portfolio based on a chosen graphic project.

ELECTRONIC SYSTEMS I (8416)**Grade Level:** 9, 10, 11, 12**Credit:** 1**Prerequisite:** Algebra I**Dual Enrollment:** Course is taught online by instructors from ECPI University

This course engages students in electricity and electronic experiments that focus on the applications of scientific theories and mathematics principles. Students solve problems using simple electrical devices and circuits and build electronic projects using DC and AC devices and circuits.

ELECTRONIC SYSTEMS II (8412)**Grade Level:** 10, 11, 12**Credit:** 1**Prerequisite:** Electronic Systems I (8416)

Students work with electronic devices, instruments, and circuits, building projects to apply theories and laws with electronic components such as resistors, capacitors and transistors. They also study integrated circuits used in computers, amplifiers, television, and other equipment.

TRADE & INDUSTRIAL EDUCATION

CRIMINAL JUSTICE I (8702)**Grade level:** 10-12**Credit:** 1

Students are introduced to the legal foundations and processes, and the principals, techniques and practices for exploring careers within the criminal justice system such a police officer, firefighter, emergency dispatcher, crime scene investigator, forensic technician, security guard, court reporter, paralegal, attorney, emergency management director, or probation officer.

CRIMINAL JUSTICE II (8703)**Grade level:** 11-12**Credit:** 1**Pre-requisite:** Criminal Justice I

The is the follow-up course to Criminal Justice I. Students explore the occupations, activities and procedures involved in the criminal justice system at a deeper level. Major units of study include crime prevention; search and seizure; juvenile justice system; court proceedings; criminal investigations; crime science investigations; patrol procedures; security from public and private agencies; laws of arrest; criminology; and criminal law and forensic science. Careers are also explored at a deeper level within in the criminal justice system such as criminal justice system such a police officer, firefighter, emergency dispatcher, crime scene investigator, forensic technician, security guard, court reporter, paralegal, attorney, emergency management director, probation officer, private investigator, or paramedic.

VIRTUAL VIRGINIA

Virtual Virginia courses offered to Poquoson students:

High School Courses**CTE**

- 3185 AP Computer Science A
- 6640 Introduction to Computer Science
- 6641 Intro to Game Design & Development

Fine Arts

- 9151 AP Art History
- 9226 AP Music Theory

Economics

- 2801 Economics*
- 2802 AP Microeconomics*
- 2803 AP Macroeconomics*
- 2804 AP Economics (Combines AP Micro and Macro)
- 6120 Economics & Personal Finance
- 6121 Personal Finance NEW*

English

- 1130 English 9
- 1140 English 10
- 1150 English 11
- 1160 English 12
- 1165 World Mythology
- 1171 Creative Writing
- 1195 AP English Literature & Composition
- 1196 AP English Language & Composition

Government

- 2440 Virginia & US Government
- 2445 AP Government & Politics: US
- 2450 AP Government & Politics: Comparative

Health & Physical Education

- 7300 Health and PE 9 (not Driver Education)
- 7400 Health and PE 10 (not Driver Education)

History & Geography

- 2212 AP Human Geography
- 2215 World History & Geography to 1500 A.D.
- 2216 World History & Geography 1500 A.D. to present
- 2319 AP US History
- 2360 Virginia & US History
- 2380 AP World History
- 2399 AP European History

Mathematics

- 3130 Algebra I
- 3134 Algebra Functions & Data Analysis
- 3135 Algebra II
- 3143 Geometry
- 3150 Trigonometry* NEW
- 3162 Pre-Calculus/Math Analysis
- 3177 AP Calculus AB
- 3178 AP Calculus BC
- 3192 AP Statistics

Science

- 4210 Earth Science I

4250	Earth Science II – Oceanography
4260	Earth Science II – Astronomy
4270	AP Environmental Science
4310	Biology I
4340	Biology II - Ecology
4370	AP Biology
4410	Chemistry I
4470	Chemistry II
4510	Physics I
4570	AP Physics I
4574	AP Physics II
Psychology	
2900	Psychology
2902	AP Psychology
World Language	
5990	American Sign Language
5700	Survey of World Language & Culture
5010	Arabic I
5020	Arabic II
5030	Arabic III
5110	French I
5120	French II
5130	French III
5140	French IV
5170	AP French Language and Culture
5310	Latin I
5320	Latin II
5330	Latin III
5340	Latin IV
5370	AP Latin
5510	Spanish I
5520	Spanish II
5530	Spanish III
5540	Spanish IV
5570	AP Spanish Language and Culture
5580	AP Spanish Literature and Culture
5810	Chinese I
5820	Chinese II
5830	Chinese III
5840	Chinese IV
5860	AP Chinese Language and Culture

Middle School Courses

World Language

5010	Arabic I
5020	Arabic II
5030	Arabic III
5110	French I
5120	French II
5310	Latin I
5320	Latin II
5510	Spanish I
5520	Spanish II
5700	Survey of World Language & Culture
5810	Chinese I
5820	Chinese II

* These semester courses are awarded .5 credit only

WORLD LANGUAGE

FRENCH I (5110)	Grades 9-12	Credit: 1
GERMAN I (5210)	Grades 9-12	Credit: 1
SPANISH I (5510)	Grades 9-12	Credit: 1

Emphasis is placed on listening and speaking skills in the target language. Reading and writing are introduced. Students learn conversational dialogue based on everyday situations. These basic speech patterns are further reinforced with grammar drills.

FRENCH II (5120)	Grades 9-12	Credit: 1
GERMAN II (5220)	Grades 10-12	Credit: 1
SPANISH II (5520)	Grades 9-12	Credit: 1

Prerequisite: Level I

Greater emphasis is placed on the reading and writing of the target language. Cultural material is presented, and there is more freedom of expression, both oral and written.

FRENCH III (5130)	Grades 10-12	Credit: 1
GERMAN III (5230)	Grades 11-12	Credit: 1
SPANISH III (5530)	Grades 9-12	Credit: 1

Prerequisite: Level II

Short stories are introduced. Oral presentations are expected and reading and writing in the world language become more varied. The target language will be used the majority of the time. Students must be willing to speak in class, as a participation grade is given.

FRENCH IV HONORS (5140)	Grades 10-12	Credit: 1
GERMAN IV HONORS (5240)	Grades 10-12	Credit: 1
SPANISH IV HONORS (5540)	Grades 10-12	Credit: 1

Prerequisite: Level III

A student who has successfully completed three years of formal study is encouraged to take this additional year in order to further strengthen skills in the four strands of listening, speaking, reading, and writing before taking the Advanced Placement course. Students will also seek to better understand the people of the French/German/Spanish speaking world and their ways of life. There will be a variety of activities used to develop listening, speaking, reading, and writing skills.

AP FRENCH LANGUAGE (5170)	Grades 11-12	Credit: 1
Prerequisite: Level IV		

AP SPANISH LANGUAGE (5570)	Grades 11-12	Credit: 1
Prerequisite: Level IV May be offered online.		

Advanced Placement – Oral skills and composition are stressed. Emphasis is placed on using the target language for active communication and includes the following objectives:

- The ability to comprehend formal and informal spoken language

- The acquisition of vocabulary and a grasp of structure to allow the easy, accurate reading of newspaper and magazine articles as well as modern language literature
- The ability to compose expository passages
- The ability to express ideas orally with accuracy and fluency

This course seeks to develop language skills that are useful in themselves and that can be applied to various activities and disciplines rather than to the mastery of any specific subject matter. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman language courses in college where AP credits are accepted. **A summer assignment may be required.**

**AP SPANISH LITERATURE & CULTURE (5580) Credit: 1
Grades 11-12**

Prerequisite: AP Spanish Language or a passing score on the AP Spanish Language Exam

Students who have advanced language skills will be introduced to the formal study of a representative body of literary texts in Spanish. They will participate actively in discussions on literary topics, as well as formulate and express critical opinions and judgments while using correct oral and written language. In addition, emphasis will be placed on the critical analysis of the form and content of selected literary works. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman language courses in college where AP credits are accepted. **A summer assignment may be required.**

**SPANISH V DUAL ENROLLMENT (5550DE) Credit: 1
Grades 11-12**

Prerequisite: Spanish IV

This course is offered at Poquoson High School and in conjunction with Thomas Nelson Community College. Students are enrolled in Spanish V Honors, Spanish 201 – Intermediate Spanish I and Spanish 202 – Intermediate Spanish II. Students who successfully complete the courses will earn three college credits for Spanish 201 and Spanish 202. Spanish 201 and Spanish 202 must be taken in sequence to earn the dual enrollment credit. Students will continue to focus on the four skill areas of listening, speaking, reading, and writing. Students will hone specific skills such as argumentation and debate, as well as appreciation and analysis of a variety of media. The course will have a focus on how proficient students are when applying the language to the real world. Students will work with movies, music, literary texts, and internet sources to accomplish these goals. *Placement into this course is based on factors that may include one or more of the following: Previous English performance, previous English SOL performance, teacher recommendation, completion of the*

Virginia placement test through TNCC, and acceptance into the TNCC program.

**AMERICAN SIGN LANGUAGE I (5990) Credit: 1
Grades: 9 – 12**

This course introduces ASL grammar and vocabulary. Students will also learn the ASL fingerspelling system. Emphasis is placed on communicating in American Sign Language and the cultural context in which American Sign Language occurs.

LATIN I (5310)	Grades 9-12	Credit: 1
CHINESE I (5810)	Grades 9-12	Credit: 1
ARABIC I (5010)	Grades 9-12	Credit: 1

NOTE: Online Course – Virtual VA

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills – listening, speaking, reading and writing – with emphasis on the ability to communicate orally and in writing.

LATIN II (5320)	Grades 9-12	Credit: 1
CHINESE II (5820)	Grades 9-12	Credit: 1
ARABIC II (5020)	Grades 9-12	Credit: 1

Prerequisite: Level I

NOTE: Online Course – Virtual VA

Students continue to develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. At intermediate low-proficiency level, students begin to expand their study on new themes of Personal and Family Life, School Life, Social Life, and Community Life while some familiar themes and topics from level I may recur at the same time.

LATIN III (5330)	Grades 9-12	Credit: 1
CHINESE III (5830)	Grades 9-12	Credit: 1

Prerequisite: Level II

NOTE: Online Course – Virtual VA

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts.

LATIN IV HONORS (5340)	Grades 10-12	Credit: 1
CHINESE IV HONORS (5840)	Grades 10-12	Credit: 1

Prerequisite: Level III

NOTE: Online Course – Virtual VA

Continuing the exploration of language, students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to interact orally and in writing. The spiral character of the theme-based instruction requires students to demonstrate their communicative skills and sophistication at a new developmental level.

AP LATIN: VERGIL (5380)**Credit: 1****Grades 11-12****Prerequisite: Latin I, II, and III - required, Latin IV recommended****NOTE: Online Course – Virtual VA**

The Advanced Placement Latin Literature offering requires students to be able to translate accurately from Latin into English the poetry or prose they are reading and to demonstrate a grasp of grammatical structures and vocabulary. Stylistic analysis is an integral part of the advanced work in Advanced Placement Latin Literature. Students will study the poetry of Catullus paired with selections from Ovid. Students will be able to read and understand Latin poetry and prose at sight and will be able to understand and analyze passages from these authors. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman language courses in college where AP credits are accepted. **A summer assignment may be required.**

AP CHINESE LANGUAGE & CULTURE (5860)**Credit: 1****Grades 11-12****Prerequisite: Chinese I, II, III – required, Chinese IV recommended****NOTE: Online Course – Virtual VA**

This course is a rigorous college level course equivalent to a fourth semester college course in Mandarin Chinese. Students will demonstrate proficiency in presentational, interpersonal and interpretive communication through listening, speaking, reading and writing; explore contemporary and historical Chinese cultures; study a variety of themes related to the Chinese Language and Culture as outlined by the College Board; broaden their global perspectives and compare Chinese cultures with their own environment. The culminating activity will be a three-hour examination provided (at student cost) by the College Board Testing Service. Successful completion of this examination affords the student the opportunity to apply advanced credits toward freshman language courses in college where AP credits are accepted. **A summer assignment may be required.**

SPECIAL PROGRAMS

AVIATION ACADEMY



Poquoson City Public Schools, in partnership with Newport News Public Schools, is offering students the opportunity to take courses in the Aviation Academy program.

WHAT IS THE AVIATION ACADEMY?

The Aviation Academy (AA) is a magnet program offered to students in Newport News Public Schools (NNPS). Through a partnership with NNPS, Poquoson High School students will be able to participate in classes that are taught through the AA program. PHS students will remain PHS students and will travel to and from the AA for the AA classes and take the remainder of their classes at PHS.

The AA is a specialized program designed to prepare highly-motivated and successful high school students for a rewarding and well-paying career in and around the field of Aviation and STEM. The standards are high at the AA, and every effort is made to provide a caring, disciplined environment where students are given the opportunity to excel and reach their goals. Courses provide challenging subject material to enhance students' reading, writing, science and math skills through student-centered activities.

FOR MORE INFORMATION ON THE AVIATION ACADEMY, visit <https://www.poquoson.k12.va.us/Domain/2563>

AVIATION ACADEMY PATHWAYS AND COURSES					
Program Area	9	10	11	12	Possible Career
Aviation Technology	Aerospace Technology I	Aerospace Technology II	Aviation Maintenance Technology I*	Aviation Maintenance Technology II* (Honors)	<ul style="list-style-type: none"> Avionics Technician Aircraft Mechanic Airplane Inspector
Aerospace Engineering	Intro to Engineering Design-Aerospace	Digital Electronics (Honors)	Aerospace Engineering	Engineering Design & Development – Capstone (Honors)	<ul style="list-style-type: none"> Aerospace Engineer Electrical Engineer Mechanical Engineer
Flight Operations	Aircraft Pilot Training I	Aircraft Pilot Training II* (Honors)	Aviation Operations Management*	Air Traffic Control* (Honors)	<ul style="list-style-type: none"> Pilot, Copilot Aviation Program Manager Air Traffic Controller
Aviation Security & Safety	Criminal Justice in Aviation I	Criminal Justice in Aviation II* (Honors)	Public Safety in Aviation I	Public Safety in Aviation II* (Honors)	<ul style="list-style-type: none"> EMT Firefighter Lawyer Detective/Police Officer Compliance Officer

**indicates a double block class (students would travel to the AA program on both A and B days)*

SAMPLE COURSE SEQUENCE BY GRADE LEVEL

SAMPLE COURSE SEQUENCE			
9 th grade	10 th grade	11 th grade	12 th grade
Math	Math	Math	Math
Science	Science	Science	Science
English	English	English	English
Social Studies	Social Studies	Social Studies	Social Studies
PE/Health 9	PE/Driver's Ed 10	Elective*	Elective*
Elective*	Elective*	AA Course	AA Course
AA Course	AA Course	Elective* or AA Course	Elective* or AA Course

**World Language courses are considered elective options in this chart*

AEROSPACE ENGINEERING (AV1130)**Grade(s) 11, 12****Credit: 1**

This course propels students' learning in the fundamentals of atmospheric and space flight. AS they explore the physics of flight, students bring concepts to life by designing an airfoil, propulsion system, and rockets. They learn basic orbital mechanics using industry-standard software. They also explore robot systems through projects such as remotely operated vehicles.

AEROSPACE TECHNOLOGY I (AV1210)**Prerequisites: None****Grade: 9, 10, 11, 12****Credit: 1**

This course is designed to be an introduction with basic knowledge of the career field of aerospace. Students will learn about the history of aviation, principles of flight, careers in aviation and aerospace.

AEROSPACE TECHNOLOGY II (AV1220)**Prerequisites: None****Grade Level: 10, 11, 12****Credit: 1**

This course is designed to introduce students to aviation composites and materials for structure. Students will explore design features of aircraft through drawings and blueprints, aircraft materials and processes, weight and balance procedures, and fluid lines and fittings.

AVIATION MAINTENANCE TECHNOLOGY I (AV1230)**Prerequisites: Physics****Grade Level: 10, 11, 12****Credit: 1**

This Airframe and Power plant Technician General course is the first segment of training as an aviation maintenance technician. Students will learn the basic terms, concepts and procedures that serve as the foundation for the more complex lessons to come. Students will obtain an understanding and hands on experience in mathematics, basic physics, mechanic privileges and limitations, maintenance publication, maintenance forms and records, basic electricity and ground operations and servicing. AV1230 is required for General Maintenance Technician courses to be successfully completed before starting the Airframe and Powerplant courses for certification. Max enrollment: 20 students. *Double Blocked*

AVIATION MAINTENANCE TECHNICIAN TECHNOLOGY II WITH LAB HONORS (AV1250)**Prerequisites: Physics****Grade Level: 10, 11, 12****Credit: 1**

This Airframe and Powerplant Technician General Course is the other segment of training as an aviation maintenance technician. Students will learn the basic terms, concepts, and procedures that serve as the foundation and hands-on experience in aircraft drawings, weight and balance, fluid lines and fittings, materials and processes, and cleaning and corrosion. AV1240 is required for the General Maintenance Technician courses to be successfully completed before starting the Airframe and

Powerplant course for certification. Max enrollment: 20 students. *Double Blocked*

AIRCRAFT PILOT TRAINING I (AV1310)**Prerequisites: None****Grade Level: 10, 11, 12****Credit: 1**

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.

AIRCRAFT PILOT TRAINING II (HONORS) (AV1350)**Prerequisites: Aircraft Pilot Training I****Grade Level: 11, 12****Credit: 1**

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.

AIR TRAFFIC CONTROL (HONORS) (AV1360)**Prerequisites: Any aviation course****Grade Level: 10, 11, 12****Credit: 1**

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. *Double Blocked*

AIRPORT OPERATIONS/MANAGEMENT (AV1330)**Prerequisites: Previous aviation course****Grade Level: 10, 11, 12****Credit: 1**

This course is designed to provide students with an understanding of the role of the airport manager in the management, administration, financing, and operating of small, medium, and large airports. Instruction will introduce the students to the many careers involved in this field such as security, marketing and other business skills. This course is also designed to provide students with an understanding of the role of the airline's manager in

relation to management, administration, financing, and operation of an airline. Students will be introduced to flight scheduling, routes and hubs, crew scheduling, safety, customer service, fleet management and ground support operations, aircraft maintenance and engineering, accident investigations as well as other topics. *Double Blocked*

CRIMINAL JUSTICE IN AVIATION I (AV1410)

Prerequisites: None

Grade Level: 10, 11, 12 **Credit:** ½ Credit per semester
Students are introduced to the legal foundations and processes, and the principles, techniques, and practices for exploring careers within the criminal justice system. The course then introduces students into several Aviation related professions and organizations.

CRIMINAL JUSTICE IN AVIATION II HONORS (AV1450)

Prerequisites: Criminal Justice In Aviation I

Grade Level: 10, 11, 12 **Credit:** 1
Students learn the legal foundations and processes, principles, techniques, and practices for exploring careers within the criminal justice system and the history of terrorism in the United States. Students combine classroom instruction with supervised, practical experiences throughout the school year and relate to several aspects of Aviation and Aerospace. *Double Blocked*

DIGITAL ELECTRONICS (HONORS)

Prerequisites: Introduction to Engineering Design-Aviation

Grade Level: 10, 11, 12 **Credit:** 1
From smart phones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic, and are exposed to circuit design tools using in industry, including logic gates, integrated circuits, and programmable logic devices.

ENGINEERING DESIGN AND DEVELOPMENT - CAPSTONE (AV0330)

Prerequisites: Aerospace Engineering

Grade Level: 12 **Credit:** ½ Credit per semester
The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution. Ultimately students will present their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards. By completing the EDD, students will be ready to take on any post-secondary program or career.

INTRODUCTION TO ENGINEERING DESIGN – AEROSPACE (AV1110)

Prerequisites: None

Grade Level: 9, 10, 11, 12 **Credit:** ½ Credit per semester
Students dig deep into the engineering process, applying math, science and engineering standards to hands-on projects. They 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.

PUBLIC SAFETY IN AVIATION I (AV0000)

Prerequisites: None

Grade Level: 9, 10, 11, 12 **Credit:** ½ Credit per semester
Students perform procedures related to law enforcement and firefighting occupations including: learning the history of the criminal justice system; policing skills; the rule of law; crime scene investigation; the role of the courts; communication systems; first aid and CPR techniques; protective devices (i.e. sprinklers); the history and fundamentals of the fire service; rescue procedures; and procedures for using personal protective equipment (PPE), the self-contained breathing apparatus (SCBA), water supply, hoses, and nozzles as it pertains to aircraft, airports, and airfields.

PUBLIC SAFETY IN AVIATION II HONORS (AV0001)

Prerequisites: Public Safety in Aviation I

Grade Level: 9, 10, 11, 12 **Credit:** 1
Students must be at least 16 years of age by the first day of the course offering)

Students perform procedures related to law enforcement and firefighting occupations including: Learning policing; the rule of law; the role of the courts, including juvenile justice; the history and fundamentals of fire service; fire behavior; building construction; ventilation; salvage, overhaul, and cause of fire; the value of fire prevention and public fire education programs; fire suppression techniques; forcible entry methods; HazMat standards; and equipment related to firefighting and criminal justice as it pertains to aircraft, airports, and airfields.

GOVERNOR'S SCHOOL FOR SCIENCE AND TECHNOLOGY



The Governor's School for Science & Technology Mission Statement:

***Dedicated to Developing Academic and
Leadership Talent in Science and Technology***

The Governor's School for Science and Technology at New Horizons Regional Education Center is operated by Gloucester, Hampton, Newport News, Poquoson, Williamsburg-James City County, and York County Schools and has restructured its curriculum to provide a cohesive, innovative science and mathematics program which:

- 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 guidance.
- Provides leadership education and opportunities throughout the program.

Multifaceted, Rigorous Academics

The Governor's School is a two-year, half-day program for 11th and 12th graders. Students will select a strand as the focus for their Governor's School experience. 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:

- **Engineering Strand**
- **Biological Science Strand**
- **Scientific Programming Strand**

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 activity 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, as well as 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 9th and 10th grade. Designated students will take prerequisite courses offered in their high schools and will participate in a variety of after school activities offered at the school that will acquaint students with and prepare them for the two-year program. Final acceptance into the Governor's School is determined in the spring of the student's tenth grade year. Math and science GPA's, teacher recommendations, and PSAT scores are considered. For more information, visit our web site at www.nhgs.tec.va.us. Course descriptions follow:

ADVANCED CHEMICAL ANALYSIS (4471)

(2 weighted high school science credits) 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 (4371)

(2 weighted high school science credits) 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 study 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 and 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. Prerequisite Advanced Chemical Analysis.*

CALCULUS-BASED ENGINEERING PHYSICS I & II: MECHANICS TO ELECTROMAGNETISM (4571)

(2 weighted high school science credits) This is a mathematical 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, 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. *Co-requisite: Enrollment in GSST College Calculus Course.*

CALCULUS-BASED ENGINEERING PHYSICS III AND IV: MODERN PHYSICS AND APPLIED PHYSICS: ENGINEERING DESIGN PRINCIPLES (4580)

(2 weighted high school science credits) Learning fundamental knowledge of engineering and physics 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. 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. *Prerequisites: Engineering Physics I & II, Calculus.*

COMPUTATIONAL PHYSICS: 4525

(2 weighted high school science credits) 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 and 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. *Prerequisites Algebra II/Trig.*

COMPUTATION SCIENCE: ENGINEERING DESIGN, INNOVATION & ENTREPRENEURSHIP (4550)

(2 weighted high school science credits) 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. *Prerequisites: Computational Physics and Pre-Calculus.*

COLLEGE MODERN PRE-CALCULUS (3162)

(1 weighted high school math credit) 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 CALCULUS (3177)

(1 weighted high school math credit) 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.*

MULTIVARIABLE CALCULUS/LINEAR ALGEBRA (3178)

(1 weighted high school math credit) 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 of 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. *Prerequisite 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.*

DIFFERENTIAL EQUATIONS (3179): (1 weighted high school math credit). The year-long course introduces the methods, theory, and applications of differential equations. The course introduces first-order, second and higher-order linear equations, series solutions, linear systems of first-order differential equations, and the associated matrix theory. *Prerequisite for Differential Equations is successful completion GSST College Calculus.*

RESEARCH METHODOLOGY & ETHICS (4610)

(1 weighted high school elective credit). 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 & MENTORSHIP (4612): (2 weighted high school elective credits). 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 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 like Excel for presentation and analysis of data. *This course provides students with an opportunity to integrate theory, knowledge and application through a research experience.*

Program Model for GSST 2022-2023

(College Credits Subject to Review)

Grade	Science	Research	Math	HS	TNCC
Engineering		Prerequisites: Biology, Chemistry, and Math minimum of PreCalculus			
11	Calculus-based Engineering Physics I & II 2 HS Science, 8 TNCC	Research Methodology & Ethics 1 HS Elective	Calculus 1 HS Math, 8 TNCC	4	16
			MultiVariable & Linear Algebra 1 HS Math, 7 TNCC	4	15
12	Calculus-based Engineering Physics III & IV 2 HS Science, 4 TNCC	Honors Research & Mentorship 2 HS Elective, 3 TNCC	Calculus 1 HS Math, 8 TNCC	5	15
			Differential Equations 1 HS Math, 6 TNCC	5	13
			MultiVariable & Linear Algebra 1 HS Math, 7 TNCC	5	14
Biological Science		Prerequisites: Biology, Chemistry, and Math minimum of Algebra II / Trig Recommended students take Physics at their home school division			
11	Advanced Chemical Analysis 2 HS Science, 8 TNCC	Research Methodology & Ethics 1 HS Elective	PreCalculus 1 HS Math, 6 TNCC	4	14
			Calculus 1 HS Math, 8 TNCC	4	16
			MultiVariable & Linear Algebra 1 HS Math, 7 TNCC	4	15
12	Advanced Biological Analysis 2 HS Science, 8 TNCC	Honors Research & Mentorship 2 HS Elective, 3 TNCC	Calculus 1 HS Math, 8 TNCC	5	19
			Differential Equations 1 HS Math, 6 TNCC	5	17
			MultiVariable & Linear Algebra 1 HS Math, 7 TNCC	5	18

* It is imperative that students meet with their school counselor to ensure requirements for Advanced Diploma are met

** Dual enrollment credits and fees (determined by VCCS & TNCC) are not guaranteed and are subject to change

Grade	Science	Research	Math	HS	TNCC
Computational Science		Prerequisites: Biology, Chemistry, and Math minimum of Algebra II / Trig			
11	Computational Physics <i>2 HS Science, 8 TNCC</i>	Research Methodology & Ethics <i>1 HS Elective</i>	PreCalculus 1 HS Math, 6 TNCC	4	14
			Calculus 1 HS Math, 8 TNCC	4	16
			MultiVariable & Linear Algebra 1 HS Math, 7 TNCC	4	15
12	Engineering Design, Innovation & Entrepreneurship <i>2 HS Science, 4 TNCC</i>	Honors Research & Mentorship <i>2 HS Elective, 3 TNCC</i>	Calculus 1 HS Math, 8 TNCC	5	15
			Differential Equations 1 HS Math, 6 TNCC	5	13
			MultiVariable & Linear Algebra 1 HS Math, 7 TNCC	5	14

* It is imperative that students meet with their school counselor to ensure requirements for Advanced Diploma are met

** Dual enrollment credits and fees (determined by VCCS & TNCC) are not guaranteed and are subject to change

SPECIAL PROGRAMS



NEW HORIZONS REGIONAL EDUCATION CENTER Career & Technical Education Center

New Horizons Regional Education Center is a comprehensive, regional, educational institution serving the localities of Gloucester, Hampton, Newport News, Poquoson, Williamsburg, James City County and York County. The Center includes career and technical programs, the Governor's School for Science and Technology, and special education programs and services. The Center has three campuses – 520 Butler Farm Road in Hampton, 13400 Woodside Lane, Newport News, and 1501 Kiln Creek Parkway, Newport News.

Admission to New Horizons is competitive. Students apply to the program of their choice and receive notification of admission in late spring. Applications for vocational programs are available in the separate New Horizons Course Description Booklet and in the Counseling Office. Applications for Governor's School programs are available in the Poquoson High School Counseling Office. All applications should be submitted to the appropriate Poquoson High School Counselor.

Many different career and technical courses are available for regional high school students. Students who attend classes at New Horizons must be sixteen years of age. They spend three periods per day at New Horizons either in the morning or afternoon and the remainder of the school day at their home school. The following vocational courses are offered at New Horizons Regional Education Center. Complete course descriptions can be found in the New Horizons Course Description Booklet. All courses are offered at the Butler Farm campus unless otherwise indicated.

Note: All New Horizons Career and Technical courses will be awarded three credits at the end of the school year. A final course grade will be awarded.

For more information on the New Horizons Regional Education Center visit

<http://nhrec.org/ctec/>

New Horizons Career and Technical Education

Course Offerings SY 2022-2023

CAREER CLUSTERS	COURSES	CAMPUS (Woodside Lane/ Butler Farm)	AM/PM SESSION	COLLEGE CREDITS	INDUSTRY CREDENTIAL(S)	Course Numbers
Transportation, Distribution, & Logistics						
(1 yr program) (2 nd yr optional)	Auto Body Technology I, II Auto Body Technology III	Butler Farm	Both		ASE/Entry-Level	8676/8677 8678
(2 yr program)	Automotive Technology I, II	Butler Farm	Both	17 VPCC	ASE/Entry-Level	8506/8507
(1 yr program)	Marine Service Technology I, II	Butler Farm	Both		NOCTI/ABYC	8750/8751
Architecture & Construction						
(1 yr program) (2 nd yr optional)	Building Construction I, II Building Construction III	Woodside Lane	Both		NCCER	8601/8602 8603
(1 yr program)	Electricity and Renewable Energy	Woodside Lane	Both		NCCER	8533/8534
(1 yr program)	HVAC I, II	Woodside Lane	Both		EPA/H.E.A.T Assessment	8503/8504
(1 yr program)	Plumbing and Pipefitting	Woodside Lane	Both		NCCER	8551/8552
Manufacturing Technology						
(1yr program)	Virtual Machining & Design	Butler Farm	AM	22 VPCC	NIMS	8539/8540
(1 yr program)	Mechatronics	Butler Farm	Both	20 VPCC	Siemens Mechatronics Systems Cert./NOCTI	8554/8555/8556
(2 yr program)	Welding I, II	Both	Both		AWS SENSE/NOCTI	8672/8673
Health Sciences						
(2 yr program)	Dental Careers I, II	Butler Farm	I-AM; I&II-PM		X-Ray Cert., NOCTI	8328/8329
(1 yr program)	Medical Assistant	Butler Farm	Both		NOCTI/ NHA Certification	8345/8346
(1 yr program)	Nurse Aide	Butler Farm	Both		Cert. Nursing Assistant	8360/8362
(1 yr program)	Physical and Occupational Therapy I, II	Butler Farm	Both		Certified Physical Therapy Aide Exam	8365/8366
(1 yr program)	Pharmacy Technician*	Woodside Lane	Both		NHA ExCPT Examination	8305/8306
Agriculture, Food, & Natural Resources						
(1 yr program)	Veterinary Science	Woodside Lane	Both		iCEV Vet. Medical Applications Exam	8088/8089
Human Services						
(2 yr program)	Cosmetology I, II	Both	Both		State Licensure/NOCTI	8745/8746
(2 yr program)	Culinary Arts I & II	Woodside Lane	Both		ServSafe Manager	8275/8276
(1 yr program)	Early Childhood Education	Woodside Lane	Both	6 VPCC	AAFCS Exam	8234/8285
Information Technology						
(1 yr program)	Cybersecurity Technology	Butler Farm	Both		NOCTI/A+/Network+ Certifications	8628/8629
(2 yr program)	Cisco Networking	Woodside Lane	Both	7 VPCC credits per yr	CISCO CCNA/Certiport IT Specialist - Networking	8542/8543/8544/ 8545
(1 yr program)	Computer Programming & Advanced Programming	Woodside Lane	Both	14 VPCC	Certiport IT Specialist – Java	6640/6641
Public Service						
(1 yr program)	Criminal Justice	Both	Both	6 VPCC	NOCTI	8702/8703
(1 yr program)	Emergency Medical Technician	Butler Farm	Both		EMT/NOCTI	8333/8334
(1 yr program)	Fire Fighter	Butler Farm	Both		Fire Fighter I & II/NOCTI	8705/8706

Note: All course offerings listed above are contingent upon the necessary number of students enrolling in them. If a class does not attain minimum requirements then it may be cancelled. As such, students are strongly encouraged to choose more than one course when completing an enrollment application.

Dual enrollment credits are contingent upon employment of a qualified instructor and students passing entrance criteria.

@ Selected students may be invited to return for a second-year program. Very limited number of positions are available.

*Only seniors will be selected for this program due to NHA ExCPT age testing requirements

APPENDIX

The following terms are used in the course description section:

Prerequisite:

Some courses require successful completion of a prior course(s) before the next level may be taken. The prerequisite is identified by a course title where applicable.

Corequisite:

Some courses require enrollment in two courses in the same year. Corequisites are identified by a course title where applicable. If the corequisite course has been successfully completed in a prior year, it is not required to be retaken.

Performance-Based Assessment

Performance-Based Assessments assess student knowledge through real world, authentic assessments rather than through multiple choice assessments.

Locally Awarded Verified Credits

General Information

The Poquoson City School Board may award a verified credit in all content areas to students in accordance with this policy. This credit may be applied to an advanced studies diploma or a standard diploma. No student may earn more than one (1) locally awarded verified credit.

Eligibility

To be eligible to earn locally awarded verified credits, a student must:

1. Pass the high school course and not pass the related Standards of Learning test;
2. Take the Standards of Learning test at least twice; and
3. Score within a 375-399 scale score range on any administration of the Standards of Learning test.

Appeal Process

If the student wishes to apply for locally awarded verified credit, he/she must attend and successfully complete all remediation that is offered. The School Board shall appoint a review panel comprised of at least three educators (an administrator, a counselor, and a subject-matter teacher) to evaluate the student's evidence of achievement of adequate knowledge of the Standards of Learning. Based on the evidence it reviews, the review panel may:

1. Award the verified credit;
2. Deny the verified credit; or
3. Make additional academic assignments prior to determining whether to award the verified credit. The decision of the panel will be final.

Courses for the Fine Arts and/or Career & Technical Education Requirement

Fine Arts: Any course in the art or music department qualifies as a fine arts course. Also included are the following courses in the English Department: Beginning & Advanced Drama, Creative Writing, Yearbook I, II, or III, Journalism I-IV.

Career & Technical: Any course in the Business Education, Family and Consumer Sciences, Marketing Education, or Technology Education (including all New Horizons vocational courses) qualifies as a practical arts course.

Courses Meeting the Two Sequential Elective Requirement

Students in the Standard Diploma Program shall earn two sequential elective credits. Courses meeting this requirement include:

- Art – Any two art courses
- Business – Any two business courses
- English – Journalism I & II; Yearbook I & II; Beginning Drama and Advanced Drama; two developmental reading credits
- World Language - The first two years of any world language
- Family and Consumer Science – Any two courses
- Music – Two years in either vocal or instrumental music
- Technology Education - Technical Design and Engineering Design: Technical Design and Architectural Design; Technical Design and Introduction to Engineering
- Marketing - Any two courses
- New Horizons Courses – Both levels of any two-year sequence or completion of a full one year program.

SOL SUBSTITUTE TESTS FOR VERIFIED CREDIT

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http://www.doe.virginia.gov/testing/substitute_tests/subtests-verified-credit.pdf