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PROGRAM OF STUDIES

2023-24 Registration and Information Guide
for Future Ready Graduates



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INTRODUCTION

Purpose

The *2023-2024 Secondary Program of Studies Registration and Information Guide* is designed to provide students and their parents with information that will assist them in course selection and with long-range academic and career planning.

This guide includes information on graduation requirements, career planning, and instructional programs and courses offered in the middle and high schools of the York County School Division (YCSD). Additional information about courses and programs is also available in the school counseling office at each school.

It is important that students consider the course descriptions and prerequisites, keeping in mind their personal abilities and interests. Students should choose courses that contribute to the accomplishment of their educational, personal, and career goals.

Parents are asked to review this *Secondary Program of Studies Registration and Information Guide* with their student. The information provided 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 in the future.

Academic and Career Plan

A student's Academic and Career Plan is developed to support the student's academic success and prepare the student with the knowledge and skills necessary for higher education, multiple career paths and active citizenship.

The components of the Academic and Career Plan include the student's course selections through high school graduation. Identification of a postsecondary career pathway based on the student's academic and career interests and goal-setting are also part of the plan.

All schools begin the development of an Academic and Career plan for each seventh-grade student. A completed Academic and Career Plan will be in place by the spring of the student's eighth grade year. The process continues with the annual review of progress toward the student's established goals. Students, parents, school counselors and teachers work collaboratively to make appropriate course choices.

Using the Program of Studies

- 1) Familiarize Yourself with Graduation Requirements and Decide Which Diploma You Will Pursue
 - ☐ Advanced Studies
 - ☐ Standard
- 2) Select a Career Cluster/Path
 - ☐ Choose a career cluster/path that closely relates to your interests, skills, values and strengths.
 - ☐ Explore occupations that relate to your skills.
 - ☐ Learn what education, skills and knowledge are required.
- 3) Identify Courses that Relate to Your Diploma Choice and Career Path
- 4) Meet with Your School Counselor to Finalize Your Course Selections

*For additional information contact
the School Counseling Office at:*

Grafton Middle School
(757) 898-0560

Queens Lake Middle School
(757) 220-4070

Tabb Middle School
(757) 898-0319

Yorktown Middle School
(757) 898-0410

Bruton High School
(757) 220-4055

Grafton High School
(757) 898-0550

Tabb High School
(757) 867-5399

York High School
(757) 898-0424

York River Academy
(757) 898-0517

SCHEDULING

Students are encouraged to select rigorous courses that will provide an intellectual challenge and will also better prepare them for future courses and educational and/or career pursuits beyond high school.

Middle School Scheduling

Grade 6: Students take six (6) classes on an A/B rotation schedule including a double block for English, a double block for mathematics, a block for physical education, and a block for an encore course selection from the Exploratory Wheel, Beginning Band, or Introduction to Chorus. The Exploratory Wheel allows students to take four (4) nine-week electives during the school year.

Grades 7 & 8: Students take eight (8) classes on an A/B rotation schedule. Students may have double blocks for English and/or for mathematics. Students take both required and elective courses.

High School Scheduling

Bruton High, Grafton High, Tabb High and York High: Operate on a seven (7) course A/B rotation schedule, with one class scheduled daily and six block classes scheduled on alternating days. Courses can be semester-long or year-long.

York River Academy: Operates on a Hybrid 4x4 schedule. The Hybrid 4x4 schedule utilizes four (4) block classes scheduled daily for one term (approximately 18 weeks). At the end of the term, students earn a full credit. Some classes meet all year on an alternating-day A/B block rotation schedule.

Course Load: Students in grades 9 through 11 must take a full course load. A full course load is defined as:

- A/B schedule - seven credit-bearing courses
- Hybrid 4x4 schedule - eight credit-bearing courses

Seniors or term graduates lacking credits to meet the Standard Diploma graduation requirements may be approved to take more than eight credit bearing courses in order to attempt on time graduation during the student's cohort year. Ninth through eleventh grade students may be approved to take no more than eight credit bearing courses per year based on academic history and principal recommendation.

NOTE: *Students participating in Governor's School may take no more than 4 courses at their home school.*

Course Availability: Courses identified in the *Program of Studies* may not be offered at all schools. Factors affecting course offerings in a school can include staffing availability, low enrollment, the need for specialized equipment, and budgetary determinations.

Electives: Electives must be approved by a school counselor and must be in accordance with the academic and career plan of the student.

Non-YCSD Courses: High school students who wish to take courses at colleges or other institutions outside the York

County School Division must have those courses approved in advance by the principal for high school credit to be awarded. Such courses cannot be offered by the YCSD or the New Horizons Regional Education Center, except under limited circumstances, and must be compatible with local and state regulations. Written approval must be secured from the principal prior to enrollment in the course. With the exception of the methodology used to calculate transfer credits, weighted credit will not be awarded for coursework taken outside of the York County School Division.

Course Selection Changes

The York County School Division encourages students to give serious consideration to the selection of courses during the scheduled registration period. Course changes are discouraged except as recommended by teachers for placement reasons.

Course changes must occur by the tenth day (fifth class meeting for block courses). If changes occur within the allowed timeframe, the original course and the earned grade will not appear on the student's record. The only exception to this practice will be changes within the same academic discipline. Students may move to courses with similar content but not to higher level or weighted courses. If a student changes from one course to another course within the same academic discipline, the earned grade from the first course will be prorated and averaged with the earned grade from the new course to compute the final grade.

Virtual & Blended Learning Courses

The York County School Division, as part of its academic program, offers engaging and interactive online courses through the Virtual Learning Program. Students enrolled in virtual learning courses may access their coursework through any computer with an internet connection. Students are most successful in virtual courses if they are independent learners, have good time-management skills, and maintain a regular schedule of logging into courses and communicating with the online teacher.

Students must log in to these virtual courses daily and must be actively engaged in online discussion and activities. They will learn to submit documents electronically, navigate learning management systems and meet online with teachers and students through a virtual classroom. Students may make an appointment with their school counselor to learn more about available online courses. Specific virtual course information and requirements are listed within the Course Offerings section. Students are required to take one virtual or blended learning course prior to graduation. YCSD defines blended learning as a combination of face-to-face instruction with online instruction.

PROMOTION AND CREDIT INFORMATION

Course Credits

Standard Credit: A standard unit of credit is awarded for a course in which the student successfully completes 140 clock hours of instruction and the objectives of the course.

Verified Credit: A verified unit of credit is awarded when a student earns a standard unit of credit and achieves a passing score on a corresponding end-of-course SOL test or a substitute assessment approved by the Board of Education.

Weighted Credit: Advanced Placement, advanced or other courses are identified as “weighted credit,” for which credit is increased due to the rigor of the curriculum and quality of work accomplished.

Transfer Credit: Transfer grades and credits from other school divisions will be accepted by the York County School Division provided the courses are compatible with local and state regulations. Weighted credits will be awarded only to those transfer courses that are also weighted in the York County School Division and will be computed according to YCSD procedure. If a transfer student completed a weighted course in another school division prior to the academic year that the course was first offered for weighted credit by the York County School Division, the student will not receive weighted credit for the course. Additional information is available in school counseling offices.

Promotion

Middle school students are promoted to the next grade level based upon achievement in all subject areas and successful completion of English, history/social science, math, and science courses.

High school students are promoted based upon achievement reflected in the number of credits earned:

Grade 10	5 credits minimum
Grade 11	10 credits minimum
Grade 12	15 credits minimum

Grade Point Average and Class Rank

Grading Scale: High school courses taught in YCSD middle and high schools are assigned grade-point values as indicated below:

A	90-100	4 points
B	80-89	3 points
C	70-79	2 points
D	64-69	1 point
F	63 and Below	0 points

Class Rank: High school class rank is based upon the grades earned in courses for which high school credit is awarded. The Grade Point Average (GPA) for students earning non-weighted and/or weighted credit is calculated following a prescribed formula and established procedure (see *Student Handbook and Conduct Code*).

DIPLOMAS & GRADUATION REQUIREMENTS

The Commonwealth of Virginia’s Board of Education establishes graduation requirements for all students enrolled in public schools. Additional requirements may be prescribed by the local school board.

Students may be awarded a diploma or a certificate upon graduation from a Virginia high school. The requirements for a student to earn a diploma from a Virginia high school are the requirements that are in effect when that student enters the ninth grade for the first time.

The York County School Division provides several diploma options and certificates to meet the individual needs of students. School counseling services provide regular opportunities for students and parents/guardians to evaluate student progress toward diploma requirements and to make adjustments to the type of diploma selected when necessary. Specific requirements for the diplomas listed in this section are available on following pages.

NOTE: Graduation and course requirements listed within this Program of Studies are subject to change due to possible modifications in state requirements.

Advanced Studies Diploma: This is the recommended diploma for students seeking entrance into a competitive four-year college or university upon graduation.

Standard Diploma: This diploma signifies that the student has met proficiency standards established by the Virginia Board of Education in reading, writing, mathematics, science and history.

NOTE: Once a student with disabilities has earned a Standard or Advanced Studies Diploma, YCSD’s obligation to provide free appropriate public education is terminated.

Applied Diploma: In accordance with the requirements of the Standards of Quality, a student with disabilities who completes the requirements of his or her IEP and does not meet the requirements for other diplomas shall be awarded an Applied Diploma.

Special Certificate: A Certificate of Program Completion is an option for a senior who has met the standard units of credit requirements for a standard diploma but has not earned the verified credits required for graduation. The Certificate of Program Completion is not a diploma and should only be considered once all attempts to earn a standard or advanced studies diploma have been exhausted.

Advanced Studies Diplomas (26 Credits)

Discipline Area		
	Standard Credits Required	Verified Credits Required
English	4	2
Mathematics ¹	4	1
Laboratory Science ²	4	1
History & Social Sciences ³	4	1
World Languages ⁴	3	
Health & PE	2	
Fine Arts or Career/ Technical Education ⁵	1	
Economics & Personal Finance	1	
Electives ⁶	3	
Virtual Course ⁷	✓	
First Aid/CPR/AED ⁸	✓	
Total	26	5

Standard Diplomas (22 Credits)

Discipline Area		
	Standard Credits Required	Verified Credits Required
English	4	2
Mathematics ¹	3	1
Laboratory Science ²	3	1
History & Social Sciences ³	3	1
World Language, Fine Arts, or CTE ^{5,9}	2	
Health & PE	2	
Economics & Personal Finance	1	
Electives ⁶	4	
Virtual Course ⁷	✓	
First Aid/CPR/AED ⁸	✓	
Total	22	5

Explanations and Clarifications

1. Mathematics: For the Advanced Studies Diploma, the courses completed to satisfy this requirement shall include at least three different course selections from among Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit. For the Standard Diploma, the courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I, Geometry, Algebra Functions and Data Analysis, or Algebra II. Computer Mathematics may be used in conjunction with Algebra I and Geometry to satisfy mathematics graduation requirements if the student also completes a career & technical education concentration. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit. Standard Diploma credit accommodations for students with disabilities may include three standard credits in mathematics that include Algebra I (Part I and Part II each count as one math credit) and Geometry, and one verified credit in mathematics.

2. Science: For the Advanced Studies Diploma, credits must be from at least three different science disciplines: Earth science, biology, chemistry, or physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma. Per the Standards of Quality, a computer science course credit may be considered a science course credit. For the Standard Diploma, the courses completed to satisfy this requirement shall include course selection from at least two different science disciplines. Per the Standards of Quality, a computer science course credit may be considered a science course credit.

3. History/Social Science: For the Advanced Studies Diploma, credits must include Virginia and U.S. History, Virginia and U.S. Government, and two courses in either world history or geography or both. For the Standard Diploma, credits must include Virginia and U.S. History, Virginia and U.S. Government, and one course in either world history or geography. The board shall approve courses to satisfy this requirement.

4. World Languages: For the Advanced Studies Diploma, credits must include three (3) years of one language or two (2) years each of two languages.

5. World Languages, Fine Arts, or Career & Technical Education: For the Advanced Studies Diploma, students must earn a minimum of one (1) credit in the areas of fine arts or career and technical education. A computer science course may be considered a career & technical education credit. For the Standard Diploma, students must earn a minimum of two credits in the areas of world languages, fine arts, or career & technical education. At least one of the credits must be in fine arts or career & technical education. Per the Standards of Quality, a computer science course may be considered a career & technical education credit.

6. Electives: For the Advanced Studies Diploma students must earn three (3) electives. For the Standard Diploma students

must earn four (4) electives. Two of these electives must be sequential, as outlined in the Standards of Quality. For the Advanced Studies Diploma, the sequential electives may be in any discipline, as long as the courses are not specifically required for graduation as noted in the Regulations Establishing Standards for Accrediting Public Schools in Virginia (8VA20-131-51). *Additional information on sequential electives is available in the school counseling office.*

7. Virtual Learning: For the Standard and the Advanced Studies Diploma, students shall successfully complete one virtual course, which may be a noncredit-bearing course or a required elective credit-bearing course that is offered online.

8. First Aid/CPR/AED: Students will 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. Students with an Individualized Education Program (IEP) or 504 Plan which documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in the Regulations Establishing Standards for Accrediting Public Schools in Virginia (8VAC20-131-420 B).

9. AP, Honors, IB, Dual Enrollment, Work-Based Learning, or CTE Credential: Students shall (i) complete an Advanced Placement, honors, International Baccalaureate, or dual enrollment course; or (ii) complete a high-quality work-based learning experience, as established by board guidance on work-based learning; or (iii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the advanced studies diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.

10. Credit Accommodations: Credit accommodations provide alternatives for eligible students with disabilities to earn verified credits required to graduate. Credit accommodations for students with disabilities may include:

- Alternative courses to meet the standard credit requirements,
- Additional tests approved by the Virginia Board of Education for earning verified credits.

11. Locally Awarded Verified Credit: Eligible students may earn no more than one locally awarded verified credit in English, mathematics, science, and history/social science, if earning either a Standard or Advanced Studies Diploma.

NOTE: Once a student with disabilities has earned a Standard or Advanced Studies Diploma, YCSD's obligation to provide free appropriate public education is terminated.

12. Transfer Students: See your school counselor for all graduation requirements. Visit the High School Graduation link on the Virginia Department of Education's website at

<http://www.doe.virginia.gov> for more information on high school graduation requirements in the Commonwealth of Virginia.

Special Recognitions

The Standards for Accrediting Schools in Virginia, adopted by the Virginia Board of Education, establishes high school graduation requirements and certain diploma seal recognitions.

The York County School Division and the International Baccalaureate (IB) Programme offer additional academic recognitions. Students may earn multiple recognitions.

State Board of Education Seal: Awarded to students who earn the Standard or Advanced Studies Diploma with an average grade of “A” or better.

Governor’s Seal: Awarded to students who earn an Advanced Studies Diploma with a “B” average or better, and who successfully complete college-level coursework to earn nine (9) transferable college credits in Advanced Placement, International Baccalaureate, Cambridge, or dual enrollment courses, which are all opportunities to be an Early College Scholar.

State Board of Education Career & Technical Education Seal: Awarded to students who earn the Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a career & technical education concentration or specialization **and** maintain a “B” average in those courses; **or** pass a certification examination; **or** acquire a professional license from the Commonwealth of Virginia.

State Board of Education Diploma Seal for Science, Technology, Engineering, and Mathematics (STEM): The Board of Education’s STEM Seal shall be awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and satisfy all Math and Science requirements for the Advanced Studies Diploma with a “B” average or better in all course work, and

- successfully complete a 50 hour or more work-based learning opportunity in a STEM area, and
- satisfy all requirements for a career & technical education concentration. A concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the CTE Administrative Planning Guide, and
- pass one of the following:
 - a Board of Education CTE STEM-H credential examination, or
 - an examination approved by the Board that confers a college-level credit in a STEM field.

State Board of Education Seal of Biliteracy: Awarded to students who earn either a Board of Education-approved diploma and (i) pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level; and (ii) are proficient at the intermediate-mid level or higher in one or more languages other than English, as demonstrated through an assessment from a list to be approved by the superintendent of public instruction.

State Board of Education Seal for Excellence in Science and the Environment: The Board of Education’s Seal for Excellence in Science and the Environment is awarded to students who enter the ninth grade for the first time in the 2018-2019 year and thereafter, and meet each of the following criteria:

- Earn either a Standard or Advanced Studies Diploma
- Complete at least three different first-level board-approved laboratory science courses and at least one rigorous advanced-level or postsecondary-level laboratory science course, each with a grade of “B” or higher
- Complete laboratory or field-science research and present that research in a formal, juried setting
- Complete at least 50 hours of voluntary participation in community service or extracurricular activities that involve the application of science such as environmental monitoring, protection, management, or restoration.

State Board of Education Excellence in Civics Education Seal: Awarded to students who earn the Standard or Advanced Studies Diploma and complete Virginia & U.S. History and Virginia & U.S. Government with a grade of “B” or higher; and complete 50 hours of voluntary participation in community service or extracurricular activities (e.g., volunteering for an organization that provides services to the poor, sick, less fortunate; participating in: Boy Scouts, Girl Scouts, or similar organizations; in NJROTC; political campaigns or government internships, Boys State, Girls State, Model General Assembly; and/or in school-sponsored extracurricular activities that have a civic focus) or enlist in the United States military prior to graduation and have good attendance with no disciplinary infractions as determined by School Board Policy.

York County School Division Honors Seal: Awarded to students who complete the course of study for the York County School Division Honors program.

York County School Division Community Service Seal: Awarded to students who complete the requirements for York County School Division’s Community Service program.

International Baccalaureate Diploma: Awarded to students who complete the course of study and exams for the International Baccalaureate Programme.

Early College Scholars: Participants in the Early College Scholars program must have a “B” average or better, must be pursuing an Advanced Studies Diploma with a Governor’s Seal, and must complete 15 hours of college-level coursework (i.e., Advanced Placement, International Baccalaureate, or dual enrollment) that will earn at least 15 transferable college credits.

SPECIALTY PROGRAMS

Advanced Placement and Advanced Courses

Certain high school courses are designated as Advanced Placement (AP) or advanced. The requirements and expectations of these courses exceed those of regular grade-level courses in a particular content area. High school students who have completed prerequisite courses are eligible for AP courses as well as Virtual Virginia AP courses.

Students enrolled in an AP course are encouraged to take the AP exam for that course. Taking AP exams does not automatically enable a student to gain college credits. Credit award decisions are made by individual colleges.

Early College Program

Seniors that qualify to participate in this program are concurrently enrolled in their high school and a local community college allowing them the opportunity to remain involved in sports, clubs, and activities at their home school. Participation in VHSL activities requires the student to meet eligibility requirements. Students complete courses required for graduation during the fall of their senior year. In the spring, students begin a course load of at least 12 college credits. The courses offered in this program are part of the Commonwealth College Course Collaborative (CCCC). To be eligible, students must meet state dual enrollment eligibility criteria. Additionally, students must maintain a “C” average during their senior year and courses will follow the college schedule.

Dual Enrollment

Virginia Peninsula Community College and the York County School Division have an agreement in place that allows high school students to complete an Associates of Science in Social Science (A.S.) degree or a one-year General Education Certificate concurrently with a high school diploma.

Students who wish to enroll in other college courses where formal agreements do not exist should discuss options with their school counselor.

There may be additional courses approved for dual enrollment as VPCC requirements change frequently. Please check with school counselors for updated dual enrollment information.

Early College Scholars

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. Participants must have a “B” average or better, must be pursuing an Advanced Studies Diploma with a Governor’s Seal, and must complete 15 hours of college-level coursework (i.e., Advanced Placement, International Baccalaureate, or dual enrollment) that will earn at least 15 transferable college credits.

Governor’s Health Sciences Academy

The Governor’s Health Sciences Academy (GHSA) provides high school students with a rigorous course of study that will prepare them for high demand, high wage, and high skill health sciences careers. GHSA courses are offered in the therapeutic and diagnostic services pathways.

GHSA is located at Bruton High School and is open to all YCSD students in grades 9-12 in the York County School Division. GHSA students are required to meet the following criteria to complete the program successfully: take a mathematics and science course each year in high school, maintain a minimum of a 2.5 GPA, and earn an industry certification or at least nine (9) transferrable college credits. GHSA completers will earn the Governor’s Health Sciences Academy seal on their diploma.

Governor’s School for Science & Technology (GSST)

The Governor’s School for Science & Technology (GSST) is a two-year, half-day program, offered at the NHREC, for students in grades 11 and 12. 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, Biological Science, Computational Science.

Pre-Admissions Procedures

Admission to the program is highly competitive. Teacher recommendation 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 grades 9 and 10. Designated students will take prerequisite courses offered in their high school and will participate in a variety of activities that will acquaint and prepare them for the two-year program.

Admissions Procedures

Final acceptance into the Governor’s School is determined in the spring of students’ 10th grade year. Math and science GPAs, teacher recommendations, and PSAT scores are considered. **NOTE:** Participation in the Pre-Admissions Series does not guarantee admission to the Governor’s School.

Honors Program

The York County School Division Honors program is designed to provide students in grades 8–12 with the opportunity to complete a rigorous academic program.

Eligible students choosing to participate in this program are required to complete all program requirements listed below. For going beyond the state’s requirements for an Advanced Studies Diploma, students who successfully complete the Honors program will be recognized with the Honors Seal on their diplomas.

Additional information on this academic opportunity is available in the school counseling office of each middle and high school.

Program Requirements

Grade 8

- Students must complete the following courses: Advanced English 8; Civics and Economics; Algebra I or Advanced Geometry; Physical Science 8; World Language I/II (Chinese, French, German, Latin, Spanish), Physical Education & Lifetime Fitness 8; Elective.

NOTE: Virtual Virginia may not offer Arabic IV yearly. As such, this language will not fulfill the Honors program requirement.

- To remain in the Honors program 8th grade students may not have a final grade lower than a “C.”

Grades 9-12

- Students in the Honors program must maintain a cumulative GPA of 3.25 in the ninth grade, and 3.50 in grades 10 through 12.

Students must take a minimum of four (4) credits of the same world language. World language courses taken for high school credit and successfully completed in the seventh grade may count as one of the four consecutive years. **NOTE:** Virtual Virginia may not offer Arabic IV yearly. As such, this language will not fulfill the Honors Program requirement.

- Students must take a minimum of six (6) AP courses representing four (4) content areas. Literary Arts 11 and Literary Arts 12, Dual Enrollment courses for transferable college credit, and qualifying Governor’s School classes may be used to meet one or more Honors Program requirements:
 - College Calculus
 - Multivariable Calculus/Linear Algebra
 - Advanced Chemical Analysis
 - Advanced Biological Analysis
 - Calculus Based Engineering Physics I and II
 - Calculus Based Engineering Physics III and IV
 - Computational Physics
 - Engineering Design Innovation & Entrepreneurship
- To remain in the Honors program, high school students must remain enrolled in a full course load each year, may not repeat a course, may not drop/withdraw from a class after the drop/add period, and may not have a final grade lower than a “C.” In addition, eighth grade students may not expunge Algebra I or any World Language I course.
- Beginning in ninth grade, students must complete 20 hours of community service outside of school.

Additional information on this academic opportunity is available in the school counseling office of each middle and high school.

International Baccalaureate Diploma Programme

The International Baccalaureate (IB) Programme is a rigorous, two-year college preparatory course of study for academically talented students in grades 11 and 12. A Pre-Diploma program is available to eligible students in grades 9 and 10. Admission to the York High Pre-Diploma program and Diploma Programme is by application.

All IB courses are taught by instructors trained in IB instruction at workshops conducted by the International Baccalaureate Organization (IBO). The courses are designed to develop strong writing, time management, and critical/higher order thinking skills in students. In addition, through these courses, each student is exposed to the internationally minded, interdisciplinary nature of the IB liberal arts curriculum.

IB courses are identified as SL (Standard Level), requiring a minimum of 150 instruction hours, or HL (Higher Level), requiring 240 instructional hours. All IB courses carry weighted credit.

Students in grades 11 and 12 who are not participating in the full IB Diploma Programme may enroll in an IB course (either SL or HL) provided there is space available, there is no equivalent AP course available, the student receives two teacher recommendations, and all course-specific prerequisites have been met.

IB Diploma Programme course students are responsible for the costs associated with the IB examination as explained in the *Student Handbook*. Students with demonstrated financial need may request a waiver of the IB examination fees from the principal.

Specific course information and IB requirements are provided within the Course Offerings section of this *Program of Studies*.

Program Requirements

- Pre-Diploma/IB students are required to have a minimum GPA of 3.25 in the ninth grade, and 3.50 in grades 10 through 12.

NOTE: Students who do not maintain the minimum GPA will be withdrawn from the IB Diploma Programme.

- Students may not earn a final grade lower than a “C” in any course and remain in the Pre-Diploma/IB Diploma Programme. Students may not repeat a course or drop/withdraw from a class after the add/drop period. Eighth grade students accepted into the program may not expunge Algebra I, Advanced Geometry, or any World Language I or II course.
- Pre-Diploma students may opt to leave the program and re-enroll in the honors program at their home school if they meet honors requirements.

Pre-Admissions Procedures

Admission to the Pre-Diploma program for grades 9 and 10 is by application. The program prepares accepted students

for participation in the IB Diploma Programme in grades 11 and 12.

Applications and information regarding the IB Diploma Programme, which is housed at York High School, may be obtained from the school counseling department at each middle school or from the IB Diploma Programme Coordinator, (757) 890-5014.

Parents of students accepted into the IB Diploma Programme who are zoned for Bruton High, Grafton High, and Tabb High sign a waiver releasing the student from their home school zone and enrolling them in York High School. Pre-Diploma and York High IB students have the opportunity to participate in co-curricular, extra-curricular, and athletic activities sponsored by York High School. Students opting out of the Pre-Diploma or IB Diploma Programme will return to their home school unless they obtain approval from the School Board Office to remain at York High School.

Naval Sciences

The purpose of Naval Junior Reserve Officer Training Corps (NJROTC) at THS and YHS is to instill in students the value of citizenship, service to their community and the United States, personal responsibility, and a sense of accomplishment. A student must be attending a YCSD high school and be a United States citizen or admitted for permanent residence to enroll in this program.

Each Navy JROTC course is composed of three (3) hours of classroom work and two (2) hours of drill or physical activity each week. Frequent field trips and voluntary participation in NJROTC activities such as drill team and rifle team are additional features of the Naval Science Program.

All NJROTC cadets are eligible to participate in SAT and ACT online college preparatory programs at no cost. Participation in NJROTC offers students an advantage in competition for military academy and college ROTC scholarships. Students who complete two (2) or more years of the program are eligible to enter the military at an advanced pay grade and may be eligible to be a career & technical education completer.

School of the Arts: Middle School Arts Magnet

The Middle School Arts Magnet (mSAM) for students in grades 6 through 8 provides enrichment and instruction in literary arts, theatre arts, and dance arts. Learning experiences encourage students to work independently and collaboratively to develop writing skills, prepare performances, and create exhibitions that display their appreciation of the arts, develop critical thinking and problem-solving skills, and enhance self-esteem. Excellence in the arts is a natural extension of the middle school academic program.

Students participating in the mSAM program begin and end their day at Queens Lake Middle School (QLMS) for core courses, and are transported to the School of the Arts (SOA)

at Bruton High School for literary arts, theatre arts, and dance arts courses during the school day.

Interested middle school students may apply for this program, which is located at Queens Lake Middle School (QLMS). For additional information on the mSAM, contact the QLMS Principal at (757) 220-4083.

Admission Procedures

Admission to the program is based on a random lottery system, grouped by grade level.

School of the Arts

The York County School of the Arts (SOA) provides high school students with an enriched and challenging fine arts educational opportunity that emphasizes academic growth and artistic development, the multidisciplinary nature of the arts, standards to differentiate between the ordinary and the extraordinary in the arts, and fine arts career opportunities.

SOA is located at Bruton High School and is open to all students in grades 9 through 12 in the York County School Division who maintain a GPA of 2.5 or higher and a "C" average in their SOA course(s). Transportation from York County high schools to SOA is provided for students.

Admission Procedures

Admission to SOA is by application/audition (requires three letters of recommendation, demonstration of ability, reading comprehension on or above grade level, and a minimum GPA of 2.5). Information about the SOA program may be obtained from the SOA Coordinator at (757) 220-4095.

NOTE: Participation in the Middle School Arts Magnet program does not guarantee admission to the School of the Arts.

Virtual High School

The York County School Division provides part-time online courses through its Virtual High School (VHS) program. Secondary students may be allowed to enroll in VHS courses during the school year when courses are not offered in their school building. In addition, online courses are available for original or recovery credit during Summer Academy.

Core and elective courses may be requested based on the student's individual circumstances by submitting a request in writing to the student's school counselor. Pending principal approval, the request will be submitted to school board office staff for final approval. Courses that are available as Virtual Courses are noted within the Course Offerings section of this *Program of Studies*.

Some online courses require tuition payment. The amount of tuition is determined based on the enrollment and student's circumstances. Students may make an appointment with their school counselor and ask about available online courses.

Virtual Virginia

As a program of the Virginia Department of Education, Virtual Virginia (VVA) offers online Advanced Placement (AP), world language, core academic, and elective courses to students throughout the Commonwealth and nation. VVA is committed to providing high-quality, rigorous course content with the flexibility to meet schools' and students' varied schedules. The program strives to provide instruction that meets the individual needs of students. Virtual learning is the new frontier in today's educational institutions. The technology of the 21st century provides a unique opportunity for educators to reach students who want the experience of online courses.

York River Academy

York River Academy (YRA), a charter school operated by the York County School Division on the campus of Yorktown Middle School, is designed to provide selected students in grades 9 through 12 with an innovative academic and career-preparatory education in core subject areas with emphasis on computer technology while working toward a Standard Diploma.

At YRA, instructional activities are student-centered with teachers using collaborative approaches and blended instruction that prepare students for success in the classroom and the world of work. Applications for YRA are available in the school counseling office in each middle and high school. Contact the YRA Principal at (757) 898-0516 for additional information.

THE 17 CAREER CLUSTERS

A Career Cluster is a grouping of occupations and broad industries based on commonalities. Career Clusters help students investigate careers and design their courses of study to advance their career goals. For this reason, Virginia has adopted the nationally accepted structure of 17 Career Clusters, career pathways and sample career specialties or occupations.

Within each career cluster, there are multiple career pathways that represent a common set of skills and knowledge, both academic and technical, necessary to pursue a full range of career opportunities within that pathway – ranging from entry level to management, including technical and professional career specialties.

AGRICULTURE, FOOD & NATURAL RESOURCES

The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources include food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

ARCHITECTURE & CONSTRUCTION

Careers in designing, planning, managing, building and maintaining the built environment.

ARTS, A/V TECHNOLOGY & COMMUNICATIONS

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

BUSINESS MANAGEMENT & ADMINISTRATION

Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.

EDUCATION & TRAINING

Planning, managing and providing education and training services, and related learning support services.

ENERGY

Designing, planning, maintaining, generating, transmission, and distribution of traditional and alternative energy.

FINANCE

Planning, services for financial and investment planning, banking, insurance, and business financial management.

GOVERNMENT & PUBLIC ADMINISTRATION

Executing governmental functions to include governance, national security, Foreign Service, planning, revenue and taxation, regulation, and management and administration at the local, state, and federal levels.

HEALTH SCIENCE

Planning, managing, and providing therapeutic services, diagnostic services, health information, support services, and biotechnology research and development.

HOSPITALITY & TOURISM

Hospitality & Tourism encompasses the management, marketing, and operations of restaurants and other food services, lodging, attractions, recreation events, and travel related services.

HUMAN SERVICES

Preparing individuals for employment in career pathways that relate to families and human needs.

INFORMATION TECHNOLOGY

Building linkages in the IT occupation framework: for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multi-media, and systems integration services.

LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY

Planning, managing, and providing legal, public safety, protective services, and homeland security, including professional and technical support services.

MANUFACTURING

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.

MARKETING

Planning, managing, and performing marketing activities to reach organizational objectives.

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS


Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.


TRANSPORTATION, DISTRIBUTION AND LOGISTICS


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.





The Career Clusters® brand logo and its extensions are the property of the National Career Technical Education Foundation, as managed by NASDCTEc.


 CareerClusters® 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 in this Cluster		
Agribusiness Systems Animal Systems Environmental Service Systems Food Products & Processing Systems	Natural Resources Systems Plant Systems Power, Structural & Technical Systems	
Sample Career Options		
Diploma with Some Training	Certification or Associate’s Degree	Bachelor’s Degree or Above
Florist Landscaper/Groundskeeper Pest Control Veterinary Assistant	Biological Technician Environmental Technician Fish/Game Warden Veterinarian Technician	Botanist Ecologist Environmental Engineer Veterinarian
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Engineering Design and Problem Solving Family & Consumer Science Courses Introduction to Forensic Science Introduction to Technology Inventions and Innovations Make It Your Business Technological Systems	Career Internship Career Mentorship Credit for Work Experience Ecology Nutrition & Wellness	Veterinary Tech 1 & 2


 Architecture & Construction	Careers in designing, planning, managing, building and maintaining the built environment.	
Pathways in this Cluster		
Construction Design/Pre-Construction Maintenance/Operations		
Sample Career Options		
Diploma with Some Training	Certification or Associate's Degree	Bachelor's Degree or Above
Architectural Drafter Construction Worker Roofer	Carpenter Electrician HVAC Mechanic Plumber	Architect Construction Manager Civil Engineer
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Engineering Design and Problem Solving Family & Consumer Science Courses Introduction to Technology Inventions & Innovations Make It Your Business Technological Systems	Advanced Drawing/Design/ CAD Architectural Drawing/Design/CAD Basic Technical Drawing/Design/CAD Career Internship Career Mentorship Credit for Work Experience Technology Foundations	Building Construction I, II & III Electricity and Renewable Energy HVAC/ HVAC Mechanical I & II Plumbing and Pipefitting


 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div> <div>Arts, A/V Technology & Communications</div>	Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.	
Pathways in this Cluster		
A/V Technology & Film Printing Technology Visual Arts	Performing Arts Journalism & Broadcasting Telecommunications	
Sample Career Options		
Diploma with Some Training	Certification or Associate’s Degree	Bachelor’s Degree or Above
Actor, Dancer, Musician Printing Equipment Operator	Broadcast Technician Desktop Publisher Stylist Photographer/Videographer	Computer Animator Graphic Artist Journalist
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Art/Drama/Band/Chorus Career Investigations Intro to Programming & Game Design Introduction to Technology Inventions & Innovations Make It Your Business Technology Systems Writers’ Roundtable Yearbook/Public Speaking	Art/Drama/Band/Chorus Career Internship Career Mentorship Credit for Work Experience Design, Multimedia & Web Technologies Film Studies A & B Game Design & Development I & II Literary Magazine/Mass Media I & II Newspaper/Mass Media I & II Public Speaking: Presentation Yearbook/Mass Media I & II	


 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div> <div>Business Management & Administration</div>	Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.	
Pathways in this Cluster		
Business Information Management General Management Human Resources Management		Administrative Support Operations Management
Sample Career Options		
Diploma with Some Training	Certification or Associate's Degree	Bachelor's Degree or Above
Administrative Assistant Customer Service Representative Receptionist	Claims Adjuster Legal Assistant Office Manager	Certified Public Accountant Finance Director Human Resources Manager
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Criminal Justice Career Investigations Computer Solutions Make It Your Business Public Speaking	Career Internship Career Mentorship Credit for Work Experience Digital Applications Entrepreneurship Education I & II Marketing Exploration All Marketing I & II courses Marketing Management	


 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div> <div>Education & Training</div>	Planning, managing and providing education and training services, and related learning support services.	
Pathways in this Cluster		
Administration & Administrative Support Professional Support Services Teaching/Training		
Sample Career Options		
Diploma with Some Training	Certification or Associate’s Degree	Bachelor’s Degree or Above
Child Care Worker Coach Library Assistant	Para-Educator Preschool Teacher	Principal School Counselor Speech-Language Pathologist Teacher
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Art/Band/Drama/Chorus Career Investigations Computer Solutions Family & Consumer Science Courses Make It Your Business Public Speaking Writers’ Roundtable	Career Internship Career Mentorship Credit for Work Experience Psychology Sociology Virginia Teachers forTomorrow I & II	Early Childhood Education


 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div>	Designing, planning, maintaining, generating, transmission, and distribution of traditional and alternative energy.	
Pathways in this Cluster		
Fuel Production Power Generation	Energy Transmission, Distribution, Storage Energy Sustainability and Efficiency	
Sample Career Options		
Diploma with Some Training	Certification or Associate's Degree	Bachelor's Degree or Above
Gas Plant Operators Plumbers, Pipefitters Steamfitters	Electrical Power-line Installers and Repairers Electrical and Electronics Repairers Powerhouse, Substation	Electrical Engineer Mechanical Engineer
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Engineering Design and Problem Solving Introduction to Technology Inventions and Innovations Make It Your Business Technological Systems	Career Internship Career Mentorship Credit for Work Experience	Electricity and Renewable Energy


 CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS Finance	Planning, services for financial and investment planning, banking, insurance, and business financial management.	
Pathways in this Cluster		
Accounting Business Finance Securities & Investments	Banking Services Insurance	
Sample Career Options		
Diploma with Some Training	Certification or Associate's Degree	Bachelor's Degree or Above
Bank Teller Insurance Clerk	Claims Agent Tax Preparer	Accountant Economist Financial Planner
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Computer Solutions Family & Consumer Science Courses Make It Your Business Public Speaking	Accounting I & II Career Internship Career Mentorship Credit for Work Experience Economics & Personal Finance Entrepreneurship Education I & II Life Planning	


 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div> <div>Government & Public Administration</div>	Executing governmental functions to include: governance, national security, foreign service, planning, revenue and taxation, regulation, and management and administration at the local, state, and federal levels.	
Pathways in this Cluster		
Foreign Service Governance National Security Planning	Public Management & Administration Regulation Revenue & Taxation	
Sample Career Options		
Diploma with Some Training	Certification or Associate’s Degree	Bachelor’s Degree or Above
Air Crew Members Court, Municipal, and License Clerks Traffic Technicians	Construction and Building Inspectors Legislative Assistant	Financial Examiners Real Estate Appraisers and Assessors Urban and Regional Planners
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Criminal Justice Digital Journalism Computer Solutions Make It Your Business Public Speaking Writers Roundtable	Career Internship Career Mentorship Credit for Work Experience Navy JROTC I, II, III & IV	


 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div> <div>Health Science</div>	Planning, managing, and providing therapeutic services, diagnostic services, health information, support services, and biotechnology research and development.	
Pathways in this Cluster		
Therapeutic Services Diagnostic Services Health Informatics	Support Services Biotechnology Research & Development	
Sample Career Options		
Diploma with Some Training	Certification or Associate's Degree	Bachelor's Degree or Above
Dental Assistant Home Health Aide Nursing Assistant	Dental Hygienist Licensed Practical Nurse (LPN) EMT	Dentist Registered Nurse (RN) Physician
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Intro to Forensic Science Make It Your Business Health and Medical Sciences Exploratory	Career Internship Career Mentorship Credit for Work Experience Emergency Medical Technician I & II Intro to Health & Medical Sciences Leadership Development Medical Terminology Sports Medicine I & II	Dental Careers Emergency Medical Technician Medical Assistant Nurse Aide Pharmacy Tech Physical and Occupational Therapy I & II Veterinary Tech 1 & 2


 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div> <h2>Hospitality & Tourism</h2>	Hospitality & Tourism encompasses the management, marketing, and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services.	
Pathways in this Cluster		
Restaurants & Food/Beverage Services Lodging	Travel & Tourism Recreation, Amusements & Attractions	
Sample Career Options		
Diploma with Some Training	Certification or Associate’s Degree	Bachelor’s Degree or Above
Cook Guest Services Representative Tour Guide	Food Service Manager/Chef Hotel Manager Travel Agent	Director of Tourism Event Planner Marketing Manager
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Digital Journalism Computer Solutions Family & Consumer Science Courses Make It Your Business Public Speaking Writers’ Roundtable	Career Internship Career Mentorship Credit for Work Experience Nutrition & Wellness Sports and Entertainment Marketing I Sports and Entertainment Management II	Culinary Arts I & II


 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div> <div>Human Services</div>	Preparing individuals for employment in career pathways that relate to families and human needs.	
Pathways in this Cluster		
Early Childhood Development & Services Counseling & Mental Health Services Family & Community Services		Personal Care Services Consumer Services
Sample Career Options		
Diploma with Some Training	Certification or Associate's Degree	Bachelor's Degree or Above
Hair Stylist Personal Fitness Trainer	Cosmetologist Grief Counselor Massage Therapist	Licensed Professional Counselor Social Worker Volunteer Coordinator
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Criminal Justice Family & Consumer Science Courses Make It Your Business Public Speaking	Business Management Career Internship Career Mentorship Credit for Work Experience Life Planning Nutrition & Wellness	Cosmetology I & II Culinary Arts I & II Early Childhood Education


 <div>CareerClusters[®] PATHWAYS TO COLLEGE & CAREER READINESS Information Technology</div>	Building linkages in the IT occupation framework: for entry level, technical and professional careers related to the design, development, support and management of hardware, software, multi-media, and systems integration services.	
Pathways in this Cluster		
Information Support & Services Network Systems	Programming & Software Development Web & Digital Communications	
Sample Career Options		
Diploma with Some Training	Certification or Associate's Degree	Bachelor's Degree or Above
Computer Repair Technician Data Entry Help Desk Technician	Database Administrator Web Designer	Computer Programmer Network Administrator Software Engineer
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Computer Science Discoveries Computer Solutions Engineering Design and Problem Solving Intro to Programming & Game Design Inventions and Innovations Make It Your Business Technological Systems	AP Computer Science A AP Computer Science Principles Career Internship Career Mentorship Computer Information Systems I & II Computer Science Foundations Computer Science Principles Credit for Work Experience Cybersecurity Fundamentals Design, Multimedia & Web Technologies Digital Applications Game Design & Development I & II Information Technology Fundamentals Student Technology Internship	Cisco Networking I & II Computer Programming & Advanced Programming Cybersecurity Systems Technology Cybersecurity Operations

 CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS Law, Public Safety, Corrections & Security	Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.	
Pathways in this Cluster		
Correction Services Emergency & Fire Management Services Security & Protective Services	Law Enforcement Services Legal Services	
Sample Career Options		
Diploma with Some Training	Certification or Associate’s Degree	Bachelor’s Degree or Above
Emergency Dispatcher Firefighter/Police Officer Security Guard	Court Reporter Paralegal	Attorney Emergency Management Director Probation Officer
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Criminal Justice Introduction to Forensic Science Make It Your Business Public Speaking Writers’ Roundtable	Career Internship Career Mentorship Credit for Work Experience	Criminal Justice Emergency Medical Technician Fire Science

 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div> <div>Manufacturing</div>	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.	
Pathways in this Cluster		
Production Manufacturing Production & Process Development Maintenance, Installation & Repair		Quality Assurance Logistics & Inventory Control Health, Safety & Environmental Assurance
Sample Career Options		
Diploma with Some Training	Certification or Associate's Degree	Bachelor's Degree or Above
Dispatcher Forklift Operator Welder	Industrial Engineering Technician Safety Coordinator	Quality Engineer Safety Engineer
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Engineering Design and Problem Solving Intro to Technology Inventions and Innovations Make It Your Business Technological Systems	Career Internship Career Mentorship Credit for Work Experience Basic Technical Drawing/Design/CAD Engineering Drawing/Design/CAD Advanced Drawing/Design/CAD Marketing Management	Mechatronics Virtual Machining & Design Welding I & II

 CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS	Planning, managing, and performing marketing activities to reach organizational objectives.	
Pathways in this Cluster		
Marketing Management Professional Sales Merchandising	Marketing Communications Marketing Research	
Sample Career Options		
Diploma with Some Training	Certification or Associate’s Degree	Bachelor’s Degree or Above
Shipping/Receiving Clerk Telemarketer	Real Estate Sales Agent Sales Representative	Market Research Analyst Public Relations Manager
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Art/Drama/Chorus Career Investigations Digital Journalism Make It Your Business Public Speaking Writers’ Roundtable	Career Internship Career Mentorship Credit for Work Experience Marketing Exploration All Marketing I & II courses Fashion Marketing I & II Sports and Entertainment Marketing I Sports and Entertainment Management II	

 CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS Science, Technology, Engineering & Mathematics	Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.	
Pathways in this Cluster		
Engineering & Technology Science & Math		
Sample Career Options		
Diploma with Some Training	Certification or Associate’s Degree	Bachelor’s Degree or Above
Drafter Field Crew Surveyor	CAD Technician Electronics Technician Survey Technician	Aerospace Engineer Chemist Statistician
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Computer Solutions Engineering Design and Problem Solving Intro to Programming & Game Design Introduction to Technology Inventions and Innovations Make It Your Business Technological Systems	Advanced Drawing/Design/CAD Aerospace Technology Basic Technical Drawing/Design/CAD Career Internship Career Mentorship Credit for Work Experience Engineering Drawing/Design/CAD Technology Foundations Unmanned Aircraft Systems	Mechatronics

 CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS Transportation, Distribution & Logistics	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.	
Pathways in this Cluster		
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 and Service	
Sample Career Options		
Diploma with Some Training	Certification or Associate’s Degree	Bachelor’s Degree or Above
Dispatcher Mechanic Truck Driver	Avionics Technician Customs Inspector Flight Attendant	Air Traffic Controller Pilot Port Manager
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Career Investigations Engineering Design and Problem Solving Introduction to Technology Inventions and Innovations Make It Your Business Public Speaking Technological Systems	Aerospace Technology Career Internship Career Mentorship Credit for Work Experience Unmanned Aircraft Systems	Auto Body Technology I & II Automotive Technology I & II Marine Service Technology I & II

COURSE OFFERINGS

The following section provides information on courses offered by the York County School Division. Courses are listed within each academic discipline area in order of the earliest grade level availability. Grade-level designations represent the grade at which most students take the course described. Exceptions to the stated grade levels may be made to meet the educational needs of an individual student. Detailed information about courses and programs is available in the school counseling office at each school.

NOTE: *Courses in this Program of Studies may not be offered at all schools.*

Reading Lists

A variety of reading lists are provided for grades K-12. In-Class Reading Lists, Supplemental Reading Lists, and Summer Reading Lists offer educationally appropriate literature selections. These reading lists are maintained in each school and in the public libraries. They are also available online at yorkcountyschools.org. A parent/guardian who wishes their child to not read a particular reading list selection that has been assigned for study may request that the school principal provide an alternate literature selection for the student.

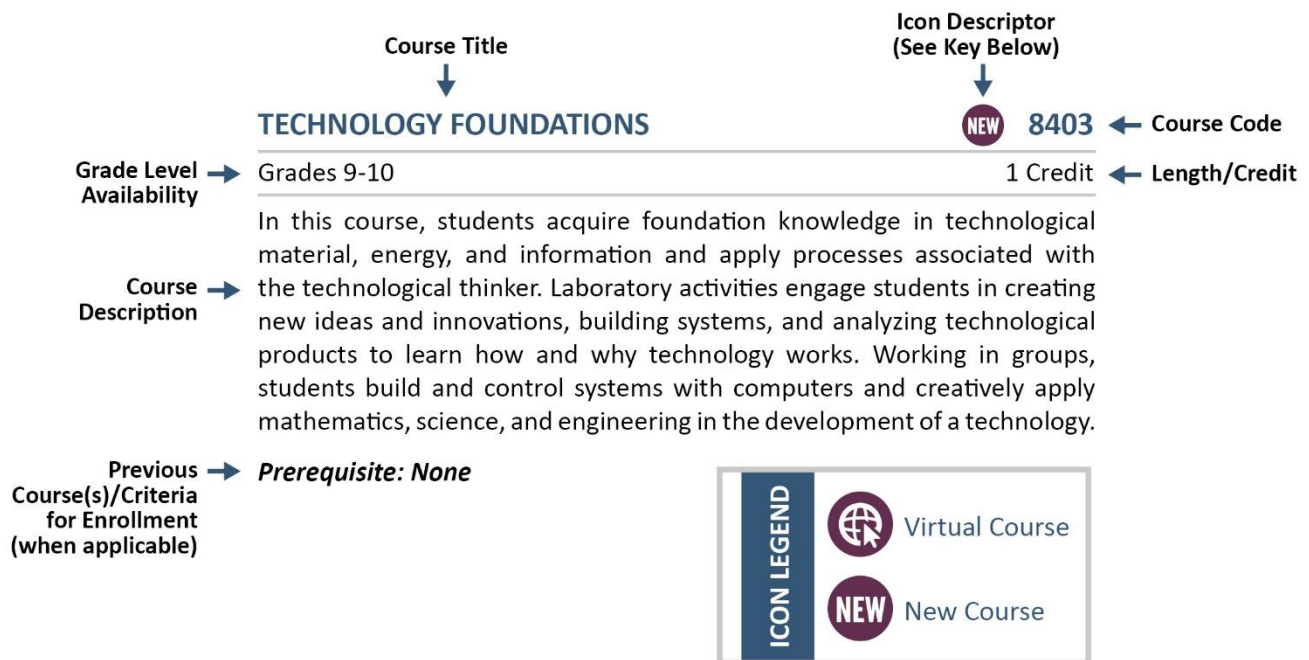
High School Courses Taken in Middle School

Course credit is awarded upon successful completion of identified course offerings. If a middle school student successfully completes a high school credit course, the credit earned is counted for the specified subject required for graduation, and for meeting the total number of units required for graduation. The grades earned are included when calculating the student's grade point average.

Course Fees

Please be aware that some courses may have fees attached to them. If these fees would prevent you from taking the course, please see your school counselor for assistance.

How to Read a Course Description



CAREER & TECHNICAL EDUCATION

Students must earn a minimum of one credit in fine arts or career & technical education to earn an Advanced Studies Diploma.

Students must earn a minimum of two credits in the areas of world languages, fine arts, or career & technical education to earn a Standard Diploma. At least one of the credits must be in fine arts or career & technical education.

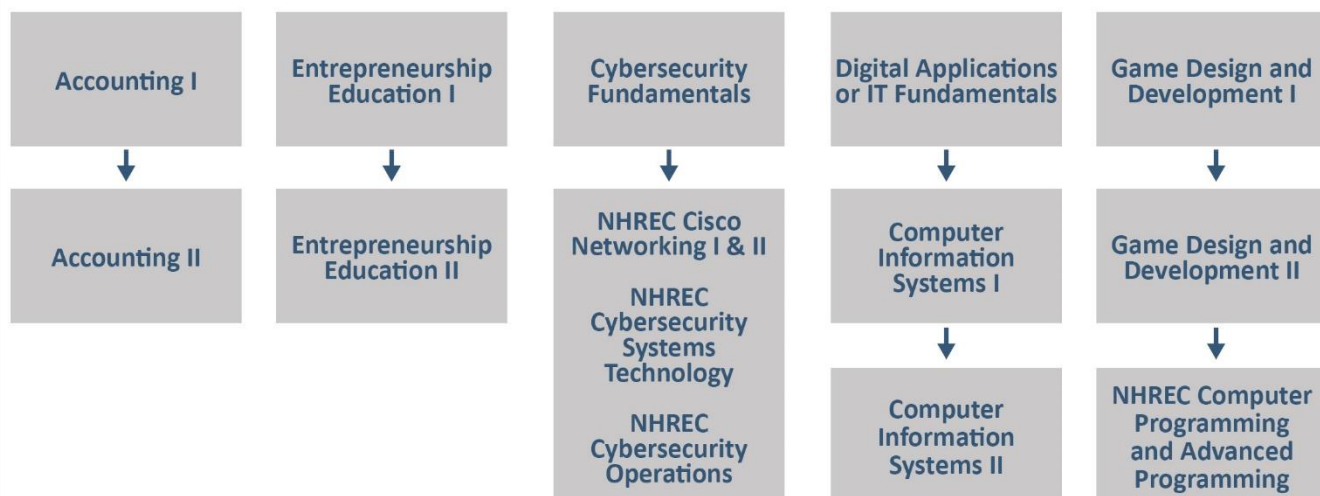
An approved computer science course credit earned by students may be considered a career and technical course credit.

Career & Technical Education (CTE) courses are designed to prepare young people for productive futures while meeting the commonwealth's need for well-trained and industry-certified technical workers. A sequence of courses can provide students with entry-level employment skills for internships, apprenticeships and preparation for industry certification. All CTE courses listed meet the Career & Technical Education credit requirements for graduation. CTE courses are offered in the following categories: Business & Information Technology, Family & Consumer Sciences, Health & Medical Sciences, Marketing Education, and Technology Education.

The New Horizons Regional Education Center (NHREC) provides additional opportunities for students throughout the region who have met prescribed prerequisites. Courses available at NHREC are detailed in the Specialty Programs Course Offerings section of this *Program of Studies*. For additional information about NHREC, call (757) 766-1100.

Business & Information Technology

Business & IT Course Offerings & Suggested Sequences



Related Electives (Grades 9-12)

- Career Internship
- Career Mentorship
- Service Learning
- Student Technology Internship
- Credit for Work Experience
- Business Management

Requirements for Career/Technical Program

Completer in Business & Information Technology:

- Two 36-week sequential Business and Information Technology courses (or semester equivalents that equal two 36-week courses)

NOTE: Career/Technical Education courses prepare students to take industry certification exams.

*Weighted Course

MIDDLE SCHOOL COURSE OFFERINGS

COMPUTER SOLUTIONS 6 **6607**

Grade 6

Quarter

Students are introduced to computing devices and software as problem-solving tools. Students complete a variety of projects incorporating word processing, database, presentation, and spreadsheet software. Basic Internet safety, coding, and device maintenance are components of this course.

COMPUTER SOLUTIONS I **66077**

Grades 7-8

Semester

Students learn skills to use computing devices and software as problem-solving tools. Students complete a variety of projects incorporating word processing, database, presentation, and spreadsheet software. Basic Internet safety, coding, and device maintenance are components of this course. Emphasis is placed on the application and analysis of technologies to solve problems.

COMPUTER SOLUTIONS II **66078**

Grade 7-8

Semester

Students expand their understanding of computers as problem-solving tools. Emphasis is placed on using software to evaluate and create products such as documents, multimedia presentations, databases, graphs, charts, and webpages. A review of Internet safety, coding, and device maintenance are components of this course.

Prerequisites: Computer Solutions I**MAKE IT YOUR BUSINESS****8114**

Grades 7-8

Semester

Students design, establish, and operate a small-group or class business, producing a service or product that meets an identified school or community need. Emphasis is placed on the introduction and application of business terminology, basic entrepreneurship concepts, and fundamental business principles. Basic academic skills (mathematics, science, English, and history/social science) are integrated into this course.

HIGH SCHOOL COURSE OFFERINGS

BUSINESS MANAGEMENT**6136**

Grades 9-12

1 Credit

In this course, students study basic management concepts and leadership styles as they explore business ownership, planning, economics, international business, and human relations issues. Students also explore the foundations of economic and social concepts as they relate to legal principles and to business laws.

NOTE: Students in this course have an opportunity to take an industry certification test.

CYBERSECURITY FUNDAMENTALS**6302**

Grades 9-12

1 Credit

Cybersecurity affects every individual, organization, and nation. This course focuses on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity.

DIGITAL APPLICATIONS**6611**

Grades 9-12

1 Credit

This course is designed for students to review correct keyboarding techniques while using software packages to gain a basic knowledge of word processing, spreadsheet, database, graphics, internet, and multimedia applications.

NOTE: Students in this course have an opportunity to take an industry certification test.

ECONOMICS AND PERSONAL FINANCE**B6120**

Grades 9-12

1 Credit

This blended-learning course is required for all students.

Students learn how to navigate the financial decisions they must face and to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. In addition to developing personal finance skills, students in this course may study concepts that prepare them for entry-level employment in the field of finance. While students may take this course in grades 9-12, it is recommended that students take this course in the 10th or 11th grade due to graduation requirements.

NOTE: Students in this course have an opportunity to take an industry certification test.

GAME DESIGN AND DEVELOPMENT I **V8400**

Grades 9-12

1 Credit

The game design industry is the fastest revenue-growing entertainment medium and has created many new job disciplines. In this project-based course, students will create innovative games through the application of graphic design, animation, audio, and writing skills. Students will work in teams while developing problem-solving, critical thinking, and effective communication skills. They will analyze, design, prototype, and critique interactive games within a project management environment. Career opportunities across multiple industries, including the entertainment and educational arenas, will be explored.

INFORMATION TECHNOLOGY (IT)**FUNDAMENTALS****6670**

Grades 9-12

1 Credit

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 communication skills. This course prepares students to take the IC3 certification exam.

NOTE: Students in this course have an opportunity to take an industry certification test.

ACCOUNTING I**6320**

Grades 10-12

1 Credit

In this course, students study the basic principles, concepts, and practices of the accounting cycle. Students use computers to complete projects and assignments.

NOTE: Students in this course have an opportunity to take an industry certification test.

COMPUTER INFORMATION SYSTEMS I**6612**

Grades 10-12

1 Credit

In this course, students apply problem-solving skills to real-life situations through database, spreadsheet, word processing, and presentation software with integrated activities. Various digital input technologies, including speech recognition, are covered. This course prepares students to take the industrial certification exam to become a Microsoft Office Specialist (MOS).

NOTE: Students in this course have an opportunity to take an industry certification test.

GAME DESIGN AND DEVELOPMENT II**V8401**

Grades 10-12

1 Credit

Students will work collaboratively in teams to refine their game design skills as they apply graphic design, animation, audio and writing skills to create innovative games for education and entertainment. This project-based course enhances problem solving, project management, and communication skills through the analysis, design, construction, and critique of interactive games. Students will learn about career opportunities in game design and development and investigate the training and certification requirements.

Prerequisite: Game Design and Development I V8400

ACCOUNTING II**6321**

Grades 11-12

1 Credit

This course provides students in-depth knowledge of accounting procedures and techniques utilized in solving business problems and in making financial decisions. Students use the calculator, computer, and accounting software, with emphasis on electronic spreadsheets, to analyze and interpret business applications.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Accounting I

COMPUTER INFORMATION SYSTEMS II**6613**

Grades 11-12

1 Credit

In this course, students expand upon the skills acquired in Computer Information Systems I by designing web pages and using integrated applications. Various digital input technologies, including speech recognition, are covered.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Computer Information Systems I

ENTREPRENEURSHIP EDUCATION I**9093**

Grades 11-12

1 Credit

This course introduces students to the exciting world of creating, owning, and launching their own businesses. Students will learn concepts and techniques for planning an entrepreneurial venture, using design thinking and business model development. Students will learn about financial statements, marketing principles, sales and customer service, and basic economic principles for successful operation.

NOTE: Students in this course have an opportunity to take an industry certification test.

ENTREPRENEURSHIP EDUCATION II**9094**

Grade 12

1 Credit

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

Prerequisites: Entrepreneurship Education I

Family & Consumer Science

MIDDLE SCHOOL COURSE OFFERINGS

FAMILY AND CONSUMER SCIENCES

EXPLORATORY I

8206

Grade 6

Quarter

Family and Consumer Sciences Exploratory I provides a foundation for managing individual, family, career, and community roles and responsibilities. In FACS Exploratory I, students focus on areas of individual growth such as personal goal achievement, responsibilities within the family, and accountability for personal safety and health. They also explore and practice financial management, clothing maintenance, food preparation, positive and caring relationships with others, and self-assessment as related to career exploration. Students apply problem-solving and leadership skills as they progress through the course. Mathematics, science, English, social sciences, fine arts, and technology are integrated throughout the course.

FAMILY AND CONSUMER SCIENCES

EXPLORATORY II

8263

Grades 7-8

Semester

Family and Consumer Sciences Exploratory II provides a foundation for managing individual, family, work, and community roles and responsibilities. Students focus on their individual development as well as their relationships and roles within the family unit. They learn how to maintain their living and personal environments and to use nutrition and wellness practices. Students apply consumer and family resources, develop textile, fashion, and apparel concepts, and explore careers related to family and consumer sciences. Time is provided for developing education and

early childhood concepts and leadership skills. In this course students will complete a career inventory, learn about career clusters and pathways, and demonstrate workplace readiness skills. In this course students will also complete a career inventory, learn about career clusters and pathways, and demonstrate workplace readiness skills.

FAMILY AND CONSUMER SCIENCES

EXPLORATORY III

8244

Grades 7-8

Semester

Family and Consumer Sciences Exploratory III provides a foundation for managing individual, family, career, and community roles and responsibilities. In FACS III, students focus on their individual roles in the community as well as how the community influences individual development. Students develop change-management and conflict-resolution skills and examine how global concerns affect communities. Students enhance their knowledge of nutrition and wellness practices and learn how to maximize consumer and family resources. This course helps students apply textile, fashion, and apparel concepts to their daily lives and provides background on the stages of early childhood development as related to childcare. Time is provided for exploring careers in the FACS career cluster and developing job-search skills. Students increase their leadership abilities and explore how volunteerism aids communities. Mathematics, science, language, social sciences, and technology are integrated throughout the course. Students will also complete a career inventory, learn about career clusters and pathways, and demonstrate workplace readiness skills.

HIGH SCHOOL COURSE OFFERINGS

LIFE PLANNING

8227

Grades 9-12

1 Credit

Life Planning equips students with life skills. Relevant life applications emphasize creating and maintaining healthy relationships, practicing personal nutrition, health and wellness, and developing a life-management plan.

NUTRITION AND WELLNESS

8229

Grades 9-12

1 Credit

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.

VIRGINIA TEACHERS FOR TOMORROW I

9062

Grades 11-12

1 Credit

Virginia Teachers for Tomorrow (VTfT) fosters student interest, understanding, and appreciation of the teaching profession, and allows secondary students to explore

careers in education. Students build a foundation for teaching, learn the history, structure and governance of teaching, apply professional teaching techniques in the VTfT classroom and field experience, and reflect on their teaching experiences.

NOTE: Dual Enrollment option available through Shenandoah University.

Prerequisite: Students must submit an application to be considered for enrollment in the program.

VIRGINIA TEACHERS FOR TOMORROW II

9072

Grade 12

1 Credit

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.

NOTE: Dual Enrollment option available through Shenandoah University. Students must have approval from Virginia Teachers for Tomorrow I teacher.

Prerequisites: Virginia Teachers for Tomorrow I (VTfT)

Governor's Health Sciences Academy

MIDDLE SCHOOL COURSE OFFERINGS

HEALTH AND MEDICAL SCIENCES EXPLORATORY

 **8370**

Grade 7-8 Semester

Students explore health and medical sciences careers and related clusters, participate in interactive activities, and receive an overview of the healthcare industry. Course

content includes the criteria for entering various healthcare careers. Students gain communication, problem solving, and critical thinking skills. This course will be offered at Queens Lake Middle School for the 2023-24 school year.

HIGH SCHOOL COURSE OFFERINGS

INTRODUCTION TO HEALTH AND MEDICAL SCIENCES **8302**

Grades 9-12 1 Credit

This course introduces students to a variety of health occupations. This survey course is appropriate for students interested in careers that require post-secondary education as well as careers that require an associate's degree or certification.

NOTE: Students in this course have an opportunity to take an industry certification test.

MEDICAL TERMINOLOGY **8383**

Grades 10-12 1 Credit

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

NOTE: Students in this course have an opportunity to take an industry certification test.

Recommended Prerequisite: Introduction to Health and Medical Sciences

EMERGENCY MEDICAL TECHNICIAN I **8333**

EMERGENCY MEDICAL TECHNICIAN II **8334**

Grades 11-12 2 Credits

Students explore and apply the fundamentals of EMS, anatomy, physiology, and medical terminology while demonstrating skills in assessing and managing patient care, including assessing the scene and understanding shock, resuscitation, and trauma. Students build their knowledge and skills for providing basic life support by focusing on the areas of EMS operations, medical emergencies, and management of special patient populations.

NOTE: This course is Dually Enrolled with Virginia Peninsula Community College (VPCC) and will take place at the VPCC Historic Triangle campus. This course prepares students for state and national certifications. Students must be at least 16 years old prior to the first day of EMT instruction. Students successfully completing the course will earn 8 VPCC credits. Students must meet admission and course placement requirements of the college. Requirements for admission

include the completion of an application for admission to the college and demonstration of readiness for college through Grade Point Average (GPA), placement testing or eligible assessments.

LEADERSHIP DEVELOPMENT **9097**

Grades 11-12 1 Credit

Students will develop competencies in identifying individual aptitudes in relation to effective leadership skills including understanding organizational behavior, using effective communication in the workplace, handling human resources and organizational problems, resolving conflict, and planning for the future. Continuing education in leadership is emphasized as well as practical leadership experiences in cooperation with school and community leaders. Students will complete a 40-hour externship in the health sciences field.

NOTE: Students in this course have an opportunity to take an industry certification test.

Recommended Prerequisite: Introduction to Health and Medical Sciences, and Medical Terminology

SPORTS MEDICINE I **8316**

Grades 11-12 1 Credit

This course of studies 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.

Prerequisite: Introduction to Health and Medical Sciences, and Medical Terminology

SPORTS MEDICINE II **8317**

Grade 12 1 Credit

Upon successful completion of this course, students will be eligible to take the National Academy of Sports Medicine-Certified Personal Trainer (NASM-CPT) exam. This course builds upon basic knowledge acquired in Sports Medicine I

on topics such as exercise physiology, biomechanics, exercise program design, and injury prevention, assessment, treatment, and management. Students prepare for a career in sports medicine, including completing an internship.

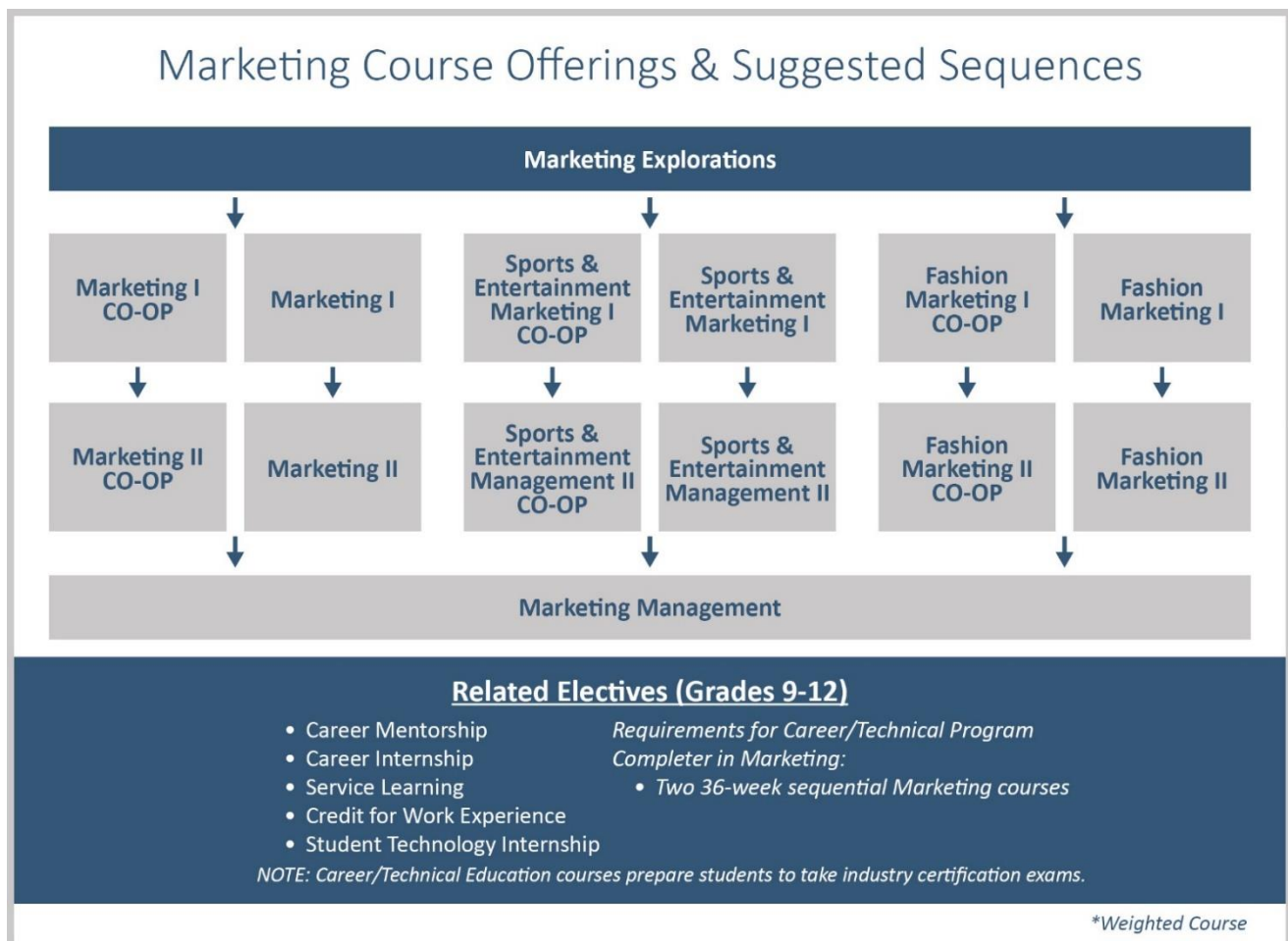
Prerequisite: *Introduction to Health and Medical Sciences, Medical Terminology, and Sports Medicine I*

Marketing Education

The Marketing Education program prepares students for full-time employment in retail, wholesale, and service businesses.

Cooperative Education (CO-OP) combines classroom instruction with a minimum of 280 hours of supervised on-the-job training. Training occurs in an approved local marketing business and is coordinated by the marketing teacher-coordinator during the school year. On-the-job training during summer months may be applied toward the 280 hours if documented by a training plan and supervised

by the teacher-coordinator, for Level II students. Students may earn one additional credit for completing an additional 280 hours of coordinated work experience (560). Contextual instruction and student participation in co-curricular career and technical student organization (DECA) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.



HIGH SCHOOL COURSE OFFERINGS

MARKETING EXPLORATION	8110
Grades 9-11	1 Credit

Explore the world of marketing to understand its importance in today's society. Students will develop skills related to interpersonal communication, self-presentation, economics,

marketing, sales, employability, career discovery, promotion, and ethical decision-making—all essential skills in any career. The course explores career options and develops workplace readiness skills.

NOTE: *Students in this course have an opportunity to take an industry certification test.*

FASHION MARKETING I/CO-OP	81401
FASHION MARKETING I	81402
Grades 10-12	CO-OP 2 Credits 1 Credit

This course leads students into the exciting and ever-changing world of fashion. Students gain knowledge of marketing as it relates to the fashion industry. From brick-and-mortar retail establishments to online retail and social media marketing, students will explore aspects such as trends, technology, the buying process, visual merchandising, the nature and history of fashion and fashion designers, and the global impact of the fashion industry on the economy. The course explores career options and develops workplace readiness skills. Academic skills related to the content are part of this course.

NOTE: Students in this course have an opportunity to take an industry certification test.

MARKETING I/CO-OP	81201
MARKETING I	81202
Grades 10-12	CO-OP 2 Credits 1 Credit

Students will learn how products are developed, branded, and sold. They will analyze industry trends and gain hands-on experience in the marketing of goods, services, and ideas and be prepared for success in postsecondary education and employment. Topics include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and changes in the marketplace. The course explores career options and develops workplace readiness skills.

NOTE: Students in this course have an opportunity to take an industry certification test.

SPORTS & ENTERTAINMENT MARKETING I/CO-OP	81751
SPORTS & ENTERTAINMENT MARKETING I	81752
Grades 10-12	CO-OP 2 Credits 1 Credit

This course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports and entertainment industries. Students will investigate the components of customer service, branding, product development, pricing and distribution, business structures, sales processes, digital media, sponsorships and endorsements, as well as promotion needed for sports and entertainment events. The course explores career options and develops workplace readiness skills.

NOTE: Students in this course have an opportunity to take an industry certification test.

FASHION MARKETING II/CO-OP	81451
FASHION MARKETING II	81452
Grades 11-12	CO-OP 2 Credits 1 Credit

This advanced-level course prepares students for a career in the global fashion industry. Students gain deeper knowledge of the field and apply skills in marketing. Students explore sustainability, social responsibility, entrepreneurship,

technology applications, buying, portfolio development, and careers. The course explores career options and develops workplace readiness skills. Academic skills related to the content are part of this course.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Marketing I or Marketing I/CO-OP, Fashion Marketing I or Fashion Marketing I/CO-OP

MARKETING II/CO-OP	81301
MARKETING II	81302
Grades 11-12	CO-OP 2 Credits 1 Credit

In this course, students learn to leverage marketing activities to best differentiate themselves and their businesses. They will participate in supervisory and management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing, distribution, selling, operations research, and promotion. Students will prepare for marketing careers and postsecondary education, continuing to enhance self-presentation, communication, and leadership skills. The course explores career options and develops workplace readiness skills.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Marketing I or Marketing I/CO-OP

SPORTS & ENTERTAINMENT MANAGEMENT II/CO-OP	81771
SPORTS & ENTERTAINMENT MANAGEMENT II	81772
Grades 11-12	CO-OP 2 Credits 1 Credit

Students will build on prior knowledge of sports and entertainment marketing. This course focuses on the principles of management and planning supported by research and by financial, economic, ethical, and legal concepts. Students will be able to plan and execute an event, establish a sports, entertainment, or recreation marketing product/business, and develop a career plan. The course explores career options and develops workplace readiness skills.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Marketing I or Marketing I/CO-OP, Sports and Entertainment Marketing I or Sports and Entertainment Marketing I/CO-OP

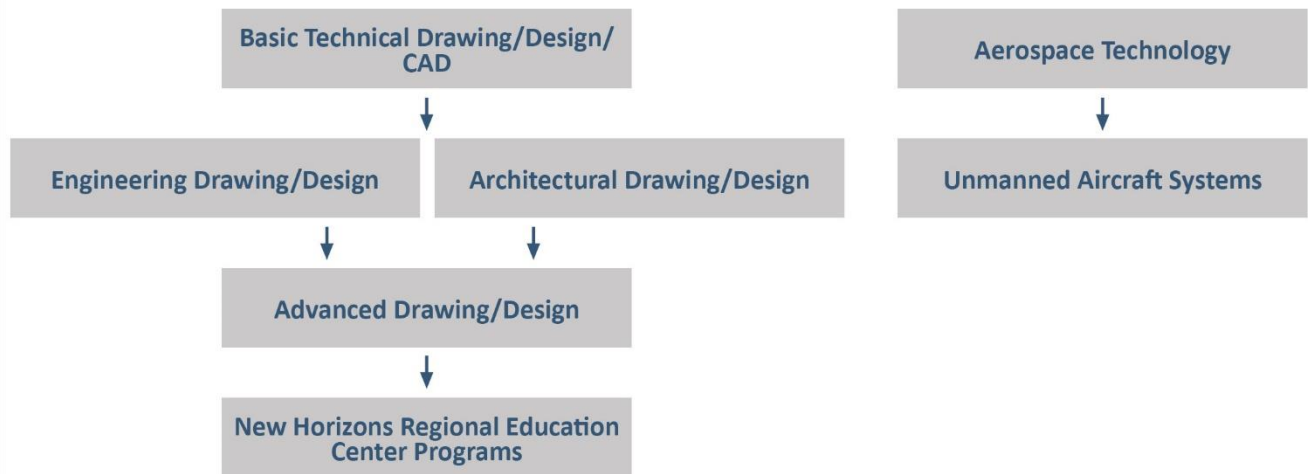
MARKETING MANAGEMENT	8132
Grade 12	1 Credit

This course is designed for high school students interested in a career in marketing, business, or management and/or who have plans to manage or own a business. Students will be exposed to all aspects of marketing and management, including branding, digital marketing, promotion, communication, and career opportunities in marketing. This course will prepare students for industry certifications. The course explores career options and develops workplace readiness skills.

NOTE: Students in this course have an opportunity to take an industry certification test.

Technology Education

Technology Education Course Offerings & Suggested Sequences



Related Electives (Grades 9-12)

- Career Internship
- Career Mentorship
- Service Learning
- Technology Foundations

- Credit for Work Experience
- Engineering Exploration

Requirements for Career/Technical Program Completer in Technology Education:

- Two 36-week Technology Education courses in a concentration sequence

NOTE: Career/Technical Education courses prepare students to take industry certification exams.

**Weighted Course*

MIDDLE SCHOOL COURSE OFFERINGS

INTRODUCTION TO TECHNOLOGY 8481

Grade 6 Quarter

This course offers introductory experiences in technology that encourage creative problem solving and hands-on activities. The course also provides experiences using microcomputers, design simulations, and mechanical models as technological tools.

INVENTIONS & INNOVATIONS 8464

Grades 7-8 Semester

The focus of this course is inventions and innovation technology. Students study tools and machines, power and energy, transportation, and communication. Students apply skills with individual creativity to create models and inventions. Students will also complete a career inventory, learn about career clusters and pathways, and demonstrate workplace readiness skills.

TECHNOLOGICAL SYSTEMS 8463

Grades 7-8 Semester

Students utilize hands-on activities to understand a systems approach to solving problems and understanding technology. Working in teams, students rotate through a number of activities including constructing models, producing items, and using computers to describe and control systems. The impact of technology on the students' world and future careers is addressed. Students will also complete a career inventory, learn about career clusters and pathways, and demonstrate workplace readiness skills.

HIGH SCHOOL COURSE OFFERINGS

TECHNOLOGY FOUNDATIONS**8403**

Grades 9-10

1 Credit

In this course, students acquire foundation knowledge in technological material, energy, and information, and apply processes associated with the technological thinker. Laboratory activities engage students in creating new ideas and innovations, building systems, and analyzing technological products to learn how and why technology works. Working in groups, students build and control systems with computers and creatively apply mathematics, science, and engineering in the development of a technology.

NOTE: Students in this course have an opportunity to take an industry certification test.

AEROSPACE TECHNOLOGY**8487**

Grades 9-11

1 Credit

Aerospace Technology offers an introduction to the aerospace industry through a hands-on approach and exploration of topics such as flight, space, and supporting technologies. Students explore the aviation and space industries by examining the history of aviation, aerodynamics and aircraft components, flight conditions, airport and flight operations, space systems, rocketry, and living and working in space.

BASIC TECHNICAL DRAWING/DESIGN/CAD**8435**

Grades 9-12

1 Credit

Basic Technical Drawing/Design is a foundation course. Students use traditional and CAD methods to design, sketch, and make technical drawings, models, or prototypes of real design problems. The course is especially recommended for future engineering and architectural students.

NOTE: Students in this course have an opportunity to take an industry certification test.

ARCHITECTURAL DRAWING/DESIGN/CAD**8437**

Grades 10-12

1 Credit

This course permits students to learn more about the principles of architecture and related drafting practices and techniques, building on the knowledge and skills mastered in Basic Technical Drawing/Design/CAD. The course provides information helpful for students wishing to pursue a career in architecture, interior design, or building construction.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Basic Technical Drawing/Design/CAD

ENGINEERING DRAWING/DESIGN/CAD**8436**

Grades 10-12

1 Credit

This course permits students to experience the graphic language of industry for engineers, manufacturers, and technicians. Students continue in greater depth the drawing problems, skills, and techniques presented in Basic Technical Drawing/Design/CAD. Emphasis is placed on interpretation of industrial prints, ability to use handbooks with other resource materials, and adherence to established standards for drafting. This course covers important aspects of the application of drafting principles to typical engineering drawing and design problems.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Basic Technical Drawing/Design/CAD

ADVANCED DRAWING/DESIGN/CAD**8438**

Grades 11-12

1 Credit

This course provides advanced computer applications in drawing and design with emphasis on isometric, oblique, perspective, and auxiliary views, revolutions, multi-view projection, and working drawings.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Basic Technical Drawing/Design/CAD, and Engineering Drawing/Design/CAD or Architectural Drawing/Design/CAD

UNMANNED AIRCRAFT SYSTEMS**DE-8910**

Grades 11-12

1 Weighted Credit

Unmanned Aircraft Systems prepares students to fly drones under the Federal Aviation Administration's (FAA) Part 107 guidelines. Students get an overview of the national airspace system, FAA regulations, and the design and operation of small drones. Students monitor weather, address loading and performance of drones, and coordinate flight operation logistics. They perform administrative tasks, train to fly, and, finally, fly small, unmanned aircraft systems (sUAS).

NOTE: This course is Dually Enrolled with Virginia Peninsula Community College (VPCC). Students must meet admission and course placement requirements of the college. Requirements for admission include the completion of an application for admission to the college and demonstration of readiness for college through Grade Point Average (GPA), placement testing or eligible assessments. Students must be 16 to take the certification test and receive the FAA Part 107 Remote Pilot Certificate.

ENGLISH

As graduation requirements vary based on graduation year and diploma type, please refer to page 4 for additional information.

Placement of students in specific middle school and high school English courses is based on factors that may include one or more of the following: previous English performance, English SOL performance, standardized test scores, and teacher/administrator recommendation.

English courses provide instruction in oral language, reading and literature, writing and grammar, research, and vocabulary. Students practice whole-class and independent reading, and teachers provide skills for reading fiction and nonfiction.

English Course Offerings & Suggested Sequences



English Electives (Grades 9-12)

- Creative Writing: Poetry
- Creative Writing: Prose
- Public Speaking: Communication
- Public Speaking: Presentation
- Literary Magazine/Mass Media I & II
- Digital Journalism I & II
- Yearbook Magazine/Mass Media I & II
- Directed Study English
- *Adv. Literary Arts Writing Practicum (SOA)

*Weighted Course

MIDDLE SCHOOL COURSE OFFERINGS

ADVANCED ENGLISH 6

11091

Grade 6

Year

This course provides an opportunity for students to independently read a variety of fiction, narrative nonfiction, nonfiction, and poetry for appreciation and comprehension. Students will compare literary elements, participate in shared inquiry discussions, formulate questions, build generalizations, and give academic responses to literature.

Students will also plan, draft, revise, and edit narrative, descriptive, expository, and persuasive writing with attention to composition and written expression, as well as sentence formation, usage, and mechanics. Students will begin the study of word origins and continue vocabulary development. Technology will be used as a tool to research, organize, and communicate information.

ENGLISH 6 **1109**

Grade 6 Year

In this course, students will independently read a variety of fiction, narrative nonfiction, nonfiction, and poetry for appreciation and comprehension. Students will plan, draft, revise, and edit narrative, descriptive, expository, and persuasive writing with attention to composition and written expression, as well as sentence formation, usage, and mechanics. Students will also begin the study of word origins and continue vocabulary development. Technology will be used as a tool to research, organize, and communicate information. Critical thinking will be stressed.

ADVANCED ENGLISH 7 **11101**

Grade 7 Year

This course provides an opportunity for students to read a wide variety of fiction, nonfiction, and poetry while becoming more independent and analytical. Students will compare literary elements, participate in shared inquiry discussions, formulate questions, build generalizations, and give academic responses to literature. Students will learn to analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Students will continue the study of word origins and continue vocabulary development. Technology will be used as a tool to research, organize, and communicate information.

ENGLISH 7 **1110**

Grade 7 Year

In this course, students will read a wide variety of fiction, nonfiction, and poetry while becoming more independent and analytical. Learning opportunities will enable students to strengthen their comprehension, retain important concepts and information, and develop public speaking, listening, and presentation skills. Students will use the writing process to develop narrative, expository, and persuasive writing and begin to read and write critically about literature. Students will continue the study of word origins and continue vocabulary development. Technology will be used as a tool to research, organize, and communicate information.

READING WORKS 7 (A & B)**00662****READING WORKS 8 (A & B)****00663**

Grades 7-8 Semester

These courses provide students with additional instruction in reading. Emphasis is placed on skill improvement in reading comprehension, vocabulary, and fluency.

ADVANCED ENGLISH 8 **11201**

Grade 8 Year

This course provides an opportunity for students to develop an appreciation for literary genres through a study of a wide variety of selections while becoming more independent and analytical. Students will compare literary elements, participate in shared inquiry discussions, formulate questions, build generalizations, and give academic responses to literature. Students will develop analytical and critical thinking skills through close reading, commentary, and literary critique. Students will analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills, and will continue the study of word origins and continue vocabulary development. Increased requirements for research and reporting in all subjects will be supported by the use of print, electronic databases, online resources, and other media.

ENGLISH 8 **1120**

Grade 8 Year

This course provides an opportunity for students to continue to develop an appreciation for literary genres through a study of a wide variety of selections while becoming more independent and analytical. Students will compare literary elements, participate in shared inquiry discussions, formulate questions, build generalizations, and give academic responses to literature. Students will analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Students will continue the study of word origins and continue vocabulary development. Technology will be used as a tool to research, organize, and communicate information.

HIGH SCHOOL COURSE OFFERINGS**ADVANCED ENGLISH 9** **11301**

Grade 9 1 Weighted Credit

This course is designed to develop students' critical and analytical language skills. Students will be introduced to significant literary texts and extensive nonfiction. Students will be provided multiple opportunities to develop higher-level analytical and critical thinking skills through close reading, commentary, and literary critique. Writing will encompass narrative, expository, and persuasive forms with attention to audience and purpose. Students will analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Increased requirements for critical reading, thinking, writing, and collaboration are expected. Students will continue the development of vocabulary with attention to connotations, idioms, and allusions.

ENGLISH 9 **1130**

Grade 9 1 Credit

This course is designed to develop students' critical and analytical language skills. Students will be introduced to significant literary texts and extensive nonfiction. Knowledge of the impact that informative and persuasive techniques in media messages make on public opinion will be introduced. Writing will encompass narrative, expository, and persuasive forms for a variety of purposes and audiences. Students will analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Students will continue the development of vocabulary with attention to connotations, idioms, and allusions.

ADVANCED ENGLISH 10**11401**

Grade 10

1 Weighted Credit

This course is designed for students who have demonstrated ability and interest in English, and helps students prepare for the Advanced Placement Exam. World literature and language through reading and the development of analytical oral and written expression are emphasized.

Prerequisite: English 9

ENGLISH 10**1140**

Grade 10

1 Credit

This course is designed to develop students' critical and analytical language skills. Students will read and analyze literary texts from a variety of eras and cultures, and will be provided multiple opportunities to develop analytical and critical thinking skills through close reading, commentary, and literary critique. Elements of syntax, usage, and mechanics are integrated with reading, writing, and discussion activities. Students will analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Students will continue the development of vocabulary with attention to connotations, idioms, allusions, and the evolution of language.

Prerequisite: English 9

AP ENGLISH 11: LANGUAGE & COMPOSITION**1196**

Grade 11

1 Weighted Credit

This introductory college-level course is designed to give students opportunities to deepen and expand their understanding of how written language functions rhetorically. As writers, students will learn how to communicate intentions and elicit readers' responses in particular situations. Students will read and analyze a broad range of challenging nonfiction and prose selections. Reading and writing activities in this course also deepen students' knowledge and control of formal conventions of written language. Students taking this course are encouraged to take the AP Exam.

Prerequisite: English 10

ENGLISH 11**1150**

Grade 11

1 Credit

This course is designed to enhance students' appreciation of literature through the study of both classical and contemporary American literature. Students will identify prevalent themes and characterization present in American literature which are reflective of history and culture. Students will use a variety of nonfiction texts to draw conclusions and make inferences citing textual support. Students will write clear and accurate personal, professional, and informational correspondence and reports for research and other application. Students will continue to analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Students will continue to expand and develop vocabulary.

Prerequisite: English 10

AP ENGLISH 12: LITERATURE & COMPOSITION**1195**

Grade 12

1 Weighted Credit

This college-level course is designed to engage students in the careful reading and critical analysis of imaginative literature. In this course, students will explore literary works from various genres and time periods. Students will practice close reading for selected texts in order to deepen their understanding of the ways writers use language and provide meaning and pleasure for their readers. As students read, they will consider the structure, style, and themes of the work to include the use of figurative language, imagery, symbolism, and tone. Students taking this course are encouraged to take the AP Exam.

Prerequisite: English 11

**DUAL ENROLLMENT ENGLISH 12
(ENG 111 & ENG 112)****DE-ENG111****DE-ENG112**

Grade 12

1 Weighted Credit

ENG 111 – Introduces students to critical thinking and the fundamentals of academic writing. Through the writing process, students refine topics; develop and support ideas; investigate, evaluate, and incorporate appropriate resources; edit for effective style and usage; and determine appropriate approaches for a variety of contexts, audiences, and purposes. Writing activities will include exposition and argumentation with at least one researched essay.

ENG 112 – Continues to develop college writing with increased emphasis on critical essays, argumentation, and research, developing these competencies through the examination of a range of texts about the human experience. Requires students to locate, evaluate, integrate, and document sources and effectively edit for style and usage.

ENGLISH 12**1160**

Grade 12

1 Credit

This course is designed to enhance students' organizational skills, audience awareness, appropriate vocabulary and grammar, and oral communication and presentation skills. Students apply historical and cultural context while reading and analyzing British literature and literature of other cultures. The course advances students' preparation for critical reading, college, and workplace writing. Increased expectations for critical thinking, academic writing, and reading are expected. Students will continue to analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Students will expand general and specialized vocabulary through speaking, listening, reading, and viewing.

Prerequisite: English 11

ENGLISH ELECTIVE COURSE OFFERINGS

LITERARY MAGAZINE/MASS MEDIA I 1200

Grades 9-12 1 Credit

This course provides students with the opportunity to work on the production/publication of a school literary magazine. Students in this course will read and analyze various literary works to include prose, poetry, and nonfiction. Students will practice skills such as building intrigue, scene development, establishing voice, and creating characters. Students will work on individual projects in which they apply the writing skills learned in this course. Advertisements may be sold for publications.

NOTE: This course is a Fine Arts elective.

NEWSPAPER/MASS MEDIA I 1210

Grades 9-12 1 Credit

This course introduces students to mass media and instructs the students on various steps of reporting and news writing. Course content includes techniques for gathering and writing a story, journalism ethics and law, newspaper design and production, and business management. Advertisements may be sold for publications.

NOTE: This course is a Fine Arts elective.

PUBLIC SPEAKING: COMMUNICATION 13001

Grades 9-12 .5 Credit

This course highlights basic speech communication theories. Topics of focus include interviews, group dynamics, delivery techniques, and informative and persuasive presentations.

PUBLIC SPEAKING: PRESENTATION 13002

Grades 9-12 .5 Credit

This course explores a variety of communication delivery models. Emphasis is placed on PowerPoint presentations, debate, prose and poetic interpretations, and radio and television delivery.

YEARBOOK/MASS MEDIA I 1220

Grades 9-12 1 Credit

This course provides students with the opportunity to work on the production/publication of a school yearbook. During this course, students will gain skills in gathering information, writing compelling stories, adhering to legal and ethical practices, and page design. Students will employ skills such as time management, project management, and problem solving. Students will use interpersonal skills in order to promote the school yearbook. Advertisements may be sold for publications.

NOTE: This course is a Fine Arts elective.

CREATIVE WRITING: POETRY 11711

Grades 10-12 .5 Credit

This course develops poetic writing techniques. Emphasis is placed on lyric and narrative style, traditional poetic form, tone, and allusion. Advertisements may be sold for school publications.

CREATIVE WRITING: PROSE 11712

Grades 10-12 .5 Credit

This course extends students' prose writing techniques. Emphasis is placed on a variety of prose models that include short stories, essays, and dramatic scripts. Advertisements may be sold for school publications.

GRAPHIC NOVELS AS LITERATURE 1165

Grades 10-12 1 Credit

This course offers students an exploration of a variety of literary genres through a graphic arts format that combines visual and verbal skills. Major literary themes and techniques will be explored. Students will participate in roundtable and small group literary research and analysis, as well as technical and creative writing.

LITERARY MAGAZINE/MASS MEDIA II 12001

Grades 10-12 1 Credit

This course provides students with the opportunity to focus on the editing and publication of a school literary magazine. Students will develop a "critical eye" in order to hone their editing and design skills. During this course, students will continue to work on independent projects. Advertisements may be sold for publications.

NOTE: This course is a Fine Arts elective.

Prerequisite: Literary Magazine/Mass Media I

NEWSPAPER/MASS MEDIA II 1211

Grades 10-12 1 Credit

This course is designed to develop a student's ability to write in a journalistic style. Students will apply their knowledge of journalism ethics and law, newspaper design and production, and business management for the publication of a school newspaper. Students may assume leadership roles in order to budget, design, edit, and supervise novice journalists. Advertisements may be sold for publications.

NOTE: This course is a Fine Arts elective.

Prerequisite: Newspaper/Mass Media I

YEARBOOK/MASS MEDIA II 12201

Grades 10-12 1 Credit

This course continues the focus on the production/publication of a school yearbook. Students continuing in the yearbook program hone leadership, time management, project management, and problem solving skills. Students will continue to employ interpersonal skills in order to promote the school yearbook. Students may assume leadership roles based on performance. Advertisements may be sold for publications.

NOTE: This course is a Fine Arts elective.

Prerequisite: Yearbook/Mass Media I

DIRECTED STUDY ENGLISH 15151

15152

Grades 11-12 .5 Credit

This is a writers' workshop or independent reading course.

FINE ARTS

As graduation requirements vary based on graduation year and diploma type, please refer to page 4 for additional information.

Fine Arts education is an integral part of the total instructional program. Knowledge and skills that students

acquire through instruction in the fine arts include the abilities to think critically, solve problems creatively, make informed judgments, work cooperatively within groups, appreciate different cultures, imagine and create. All courses listed within this section satisfy the Fine Arts credit towards graduation requirements.

Art

MIDDLE SCHOOL COURSE OFFERINGS

EXPLORATORY ART 6 9103

Grade 6 Quarter

This course contributes to the students' development of an aesthetic appreciation of the world around them through exploratory experiences in a variety of media including drawing, painting, and crafts.

DRAWING AND PAINTING 91061

Grades 7-8 Semester

This course is designed for students to study the principles and elements of design, and to participate in activities designed to develop skills in drawing and painting.

INTRODUCTION TO ART 9105

Grades 7-8 Semester

This course is designed to stimulate creativity and personal development through the exploration of a wide range of media including painting, drawing, and crafts.

SCULPTURE AND CRAFTS 91062

Grades 7-8 Semester

This course is designed for students to study the principles and elements of design with emphasis on printmaking, sculpture, and crafts.

HIGH SCHOOL COURSE OFFERINGS

ART I: ART FOUNDATIONS 9120

Grades 9-12 1 Credit

This course emphasizes the development of students' ability to recognize visual arts content, concepts, and skills to create, discuss, and understand original works of art. The course includes basic study of the components of art design and the creation of art products. Students develop understanding and appreciation for the visual arts through visual communication and production, cultural context and art history, judgment and criticism, and aesthetics. Students maintain a portfolio documenting their artistic accomplishments to take to the next level of art study.

CERAMICS A 91751

Grades 9-12 .5 Credit

This course is designed for students to identify basic pottery terms, utilize tools, and practice pottery hand-building and surface treatment techniques to create unique clay objects.

CERAMICS B 91752

Grades 9-12 .5 Credit

This course extends student understanding and practice with pottery hand-building techniques. Students use a variety of surface techniques to create culturally-inspired sculpture in clay. In addition, identification and practice of wheel-throwing techniques are included.

CRAFTS: CULTURAL ARTS 91612

Grades 9-12 .5 Credit

This course is designed for students to explore the history of art forms of a variety of selected cultures, and incorporate the knowledge of indigenous art forms and techniques into individual works of art. Students work with a diversity of materials, and the designs and surface embellishments of student work are intended to relate to and integrate various aspects (e.g., history, language, food, music) of the cultures being studied.

CRAFTS: DECORATIVE ARTS & DESIGN 91601

Grades 9-12 .5 Credit

This course provides the opportunity for students to examine and explore a variety of media and to develop pieces of art that are typical of work currently produced by professional artists. Art forms may include, but are not limited to: stained glass, batik, papier-mâché, woodcarving, metal embossing, tapestry, ceramics, printmaking, and weaving. Art forms may be both two-dimensional and three-dimensional.

ART II: INTERMEDIATE 9130

Grades 10-12 1 Credit

This course builds upon successful completion of Art Foundations. Emphasis is on content, concepts, and skills involved in the creation of original works of art. The course includes: the study of visual communication and production, cultural context and art history, judgment and criticism, and aesthetics. Students maintain a portfolio of selected works to take to the next level of study.

Prerequisite: Art I

COMPUTER GRAPHIC ART 9180

Grades 10-12 1 Credit

This course offers an opportunity to manipulate appropriate computer software to create still and animated images. Activities may include the investigation of design elements and design principles in commercial and aesthetic settings.

Prerequisite: *Art I*

PHOTOGRAPHY & COMMUNICATION DESIGN I 9190

Grades 10-12 1 Credit

This course provides instruction on one of the most effective communication forms with focus on digital cameras, black and white photography, and color photography. Topics include history of photography, theme, famous photographers, photo composition, photo manipulations, display, and Adobe Photoshop techniques.

THREE-DIMENSIONAL (3D) DESIGN 9197

Grades 10-12 1 Credit

This course provides the opportunity for students to develop perceptual, creative, technical, and problem-solving skills in a sculptural context. Students will learn basic world histories of 3D design and become aware of contemporary ideas. Students in this course will explore and learn the basic concepts of 3D design, the technical application of a variety of tools and materials, and develop perceptual skills through analyzing and identifying three-dimensional visual components. Activities will include both additive and subtractive methods in a diverse range of media.

Prerequisite: *Art I or any Ceramics/Crafts course offering*

AP ART HISTORY 9151

Grades 11-12 1 Weighted Credit

This course is designed to provide the same benefits to secondary school students that are provided by an introductory college course in art history: an understanding and enjoyment of architecture, sculpture, painting, and other art forms within an historical and cultural context. Students taking this course are encouraged to take the AP Exam.

Prerequisite: *English or Art Teacher Recommendation*

AP STUDIO ART: 2D 9148

Grades 11-12 1 Weighted Credit

This course is designed for the highly motivated student who is seriously interested in the study of art. Student will develop a portfolio that shows a fundamental competence and range of understanding in visual concerns. This portfolio will focus on the two-dimensional design issues through any two-dimensional medium, including digital art and photography. Students are encouraged to submit a portfolio to the College Board for evaluation.

Prerequisite: *Art II or Photography II, Art Teacher Recommendation*

AP STUDIO ART: 3D 9149

Grades 11-12 1 Weighted Credit

This course is designed for the highly motivated student who is seriously interested in the study of art. Student will develop a portfolio that shows a fundamental competence and range of understanding in visual concerns. This portfolio will focus on the three-dimensional design issues through

any three-dimensional medium. Students are encouraged to submit a portfolio to the College Board for evaluation.

Prerequisite: *Art I; Ceramics A and B or 3D Design; Art Teacher Recommendation*

AP STUDIO ART: DRAWING PORTFOLIO 9150

Grades 11-12 1 Weighted Credit

This course is designed for the highly motivated student who is seriously interested in the study of art. Student will develop a portfolio that shows a fundamental competence and range of understanding in visual concerns. This portfolio will address a broad interpretation of drawing issues and media, which could include painting, printmaking, mixed media, and other two-dimensional mediums. Students are encouraged to submit a portfolio to the College Board for evaluation.

Prerequisite: *Art II, Art Teacher Recommendation*

ART III: ADVANCED INTERMEDIATE 9140

Grades 11-12 1 Credit

This course continues the emphasis on the development of abilities to organize and analyze visual art content and concepts, and on skills in creating works of art. The focus on art history, evaluation, and aesthetics expands to include cultural and stylistic problem solving. Students begin to develop personal direction in the production of their works of art and continue to maintain a portfolio of selected works that is carried to the next level of art study.

Prerequisite: *Art II*

DIRECTED STUDY ART 91471

Grades 11-12 .5 Credit

This is an in-depth, independent study designed to explore a specific area of art with the consent and direction of the art teacher.

Prerequisite: *Art I*

PHOTOGRAPHY & COMMUNICATION DESIGN II 9191

Grades 11-12 1 Credit

This course expands instruction of the processes and design of black and white photography and/or digital photography. Topics include: artistic and practical techniques, equipment application, portfolio development, and job market awareness. Students focus on creative aspects of image manipulation and explore alternative results for digital images including, but not limited to, computer transfer and photo-xerography.

Prerequisite: *Photography & Communication Design I*

ART IV: ADVANCED 9145

Grade 12 1 Credit

This course reinforces competence and confidence in the skills of analysis, evaluation, and creation of works of art. The focus is a student-directed approach to art that includes: art criticism, aesthetics, refinement of skills, art history, cultural context, and personal expressive qualities. Completed portfolios at this level give evidence of quality, concentration, and breadth of work.

Prerequisite: *Art III*

Drama

MIDDLE SCHOOL COURSE OFFERINGS

DRAMA 6	1390
Grade 6	Quarter

This course provides opportunities for students to explore various aspects of informal drama and theatre through the basic skills of expression and communication.

DRAMA PRODUCTIONS	1395
Grades 7-8	Semester

This course provides opportunities for students to explore various aspects of drama including play reading and interpretation, basic acting techniques, and theatre history. Successful completion of Introduction to Drama is preferred prior to enrollment in this course.

INTRODUCTION TO DRAMA	13901
Grades 7-8	Semester

This course provides opportunities for students to explore various aspects of drama including forensic techniques, dramatic interpretation, audience etiquette, and theatre terminology.

SCENIC DESIGN AND SET BUILD	13905
Grades 7-8	Semester

This course provides students the opportunity to study scenic design. The course will cover essential elements needed to build sets for live performances. Students who sign up for this course will be required to paint, build and design sets. The goal of this course is to engage students to think critically and collaboratively.

HIGH SCHOOL COURSE OFFERINGS

DRAMA IA	14101
DRAMA IB	14102

Grades 9-12 .5 Credit Each

This course is an introduction to drama with an emphasis on collaboration, basic acting techniques, theatre history, play reading, and interpretation.

NOTE: A full year fulfills the fine arts requirement.

TECHNICAL THEATRE A	14351
TECHNICAL THEATRE B	14352

Grades 9-12 .5 Credit Each

Through this course, students explore the technical elements of theatre production. Students gain practical experience with set construction, scenery painting, lighting, sound, props, costumes, makeup, and stage management. Safety issues and practices as well as proper care and storage of equipment are emphasized. Students provide technical support for a variety of events. Some after school participation is necessary. These courses may be repeated for credit with approval from instructor.

DRAMA IIA	14201
DRAMA IIB	14202

Grades 10-12 .5 Credit Each

This course continues the study of drama with an emphasis on acting techniques, technical theatre (stagecraft), staff management, and one-act play production.

NOTE: A full year fulfills the fine arts requirement.

Prerequisite: Two semesters of Drama I

DRAMA IIIA	14301
DRAMA IIIB	14302

Grades 11-12 .5 Credit Each

This course expands the study of drama with an emphasis on advanced acting techniques, directing, theatre management, and one-act play production.

NOTE: A full year fulfills the fine arts requirement.

Prerequisite: Two semesters of Drama II

DRAMA IVA	14401
DRAMA IVB	14402

Grade 12 .5 Credit Each

In this course, students work intensely on a major project of their choosing in the field of drama. Students submit project proposals in areas that may include dramaturgy, writing or directing. Once the proposal is accepted, students meet with the teacher to establish the criteria for each step of the project from initial tasks through the evaluation process.

NOTE: A full year fulfills the fine arts requirement.

Prerequisite: Two semesters of Drama III

Music

MIDDLE SCHOOL COURSE OFFERINGS

VOCAL

BEGINNING CHORUS 6 **92692**

Grade 6 Full Year

This performance-based class helps students develop beginning vocal techniques, part-signing, music reading, and sight-reading. Public performances may serve as a culmination of specific instructional goals. Students will be required to attend and/or participate in performances outside the school day to support, extend, and assess learning in the classroom.

INTRODUCTION TO CHORUS **9269**

Grade 6 Semester

Introduction to Chorus is a mixed group of male and female vocalists. Emphasis is placed on the development of singing skills, music theory, and a repertoire of musical selections that can be utilized for school and community performances.

ADVANCED CHORUS **92708**

Grades 7-8 Year

Advanced Chorus is a mixed group of male and female vocalists. Emphasis is placed on the development of singing skills, music theory, and a repertoire of musical selections that can be utilized for school and community performances.

MUSICAL STAGE PRODUCTIONS **9270**

Grades 7-8 Semester

This course offers students an opportunity to study and to perform musical stage performances.

INSTRUMENTAL

BEGINNING BAND 6 **9230**

Grade 6 Year

This course provides a program of instruction for beginning students on woodwind, brass, or percussion instruments.

ADVANCED BAND **9234**

Grades 7-8 Year

This course provides the opportunity for students to refine their instrumental music skills.

Prerequisite: *Audition or one year of instrumental music experience*

BEGINNING BAND **9232**

Grades 7-8 Year

This course provides a program of instruction for first-year band students on woodwind, brass, or percussion instruments.

INTERMEDIATE BAND **9233**

Grades 7-8 Year

This course provides the opportunity for students to continue to develop their instrumental music skills.

Prerequisite: *Audition or one year of instrumental music experience*

MUSIC TECHNOLOGY **5124**

Grades 7-8 Semester

Students engage in the exploration of music production through writing, arranging, tracking, mixing and mastering music using technology. The course also includes lessons on the history of the music industry and the business behind it.

HIGH SCHOOL COURSE OFFERINGS

VOCAL

CHORUS I **9260**

Grades 9-12 1 Credit

This is a course for students wishing to develop sight-reading skills, vocal production, and rhythmic concepts through the study of music fundamentals and the performance of appealing music.

SMALL VOCAL ENSEMBLE I **9280**

Grades 9-12 1 Credit

This course is designed to develop vocalists for performance in a variety of ensemble groups (e.g., show choirs, madrigal singers, quartets). Theory, sight-reading, musical techniques, and various musical styles are emphasized. Students selecting this course should have previous choral experience.

Prerequisite: *Audition*

CHORUS II **9289**

Grades 10-12 1 Credit

This course is a performing mixed choir of ambitious, musically-advanced vocalists. Students continue to be exposed to sight-reading skills, vocal production, and rhythmic concepts through the study of music fundamentals and the performance of appealing music.

Prerequisite: *Chorus I or Small Vocal Ensemble I & Audition*

SMALL VOCAL ENSEMBLE II **92801**

Grades 10-12 1 Credit

This course continues to develop vocalists for performance in a variety of ensemble groups (e.g., show choirs, madrigal singers, quartets). Theory, sight-reading, musical techniques, and various musical styles are emphasized.

Prerequisite: *Small Vocal Ensemble I or Chorus I & Audition*

INSTRUMENTAL**BEGINNING GUITAR-ACOUSTIC 9245**

Grades 9-12 1 Credit

This course includes the basics of acoustic guitar playing and maintenance as well as the history of the instrument. Students will gain the skills needed to play in solo and ensemble settings. Students are responsible for providing their own acoustic guitar. Participation in concerts and other musical performances is a requirement of this course.

BRASS SECTIONALS I 92345

Grades 9-12 1 Credit

This course offers small group instruction in the brass family. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: Audition**CONCERT BAND I 9237**

Grades 9-12 1 Credit

This course offers the opportunity for students to learn the basic fundamentals of tone production, rhythmic concepts, proper articulation, and the performance of medium level band literature. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: Audition**MUSIC APPRECIATION A 92221****MUSIC APPRECIATION B 92222**

Grades 9-12 .5 Credit Each

These courses offer a study of the historical, social and cultural aspects of music, as well as the mechanics and fundamentals of music theory as needed for music reading. The scientific principles of acoustics and organology are also introduced along with certain aspects of the music industry.

MUSIC THEORY 92251**92252**

Grades 9-12 1 Credit

This course concentrates on development of a working knowledge of music fundamentals as applied to arranging and composition.

PERCUSSION SECTIONALS I 92343

Grades 9-12 1 Credit

This course offers small group instruction in the percussion family. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: Audition**STAGE BAND I 9250**

Grades 9-12 1 Credit

This performing organization represents the school in concerts, festivals, and dances in the contemporary jazz idiom. This course may be taken for credit concurrently with Symphonic Band. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: Audition**SYMPHONIC BAND I****9239**

Grades 9-12 1 Credit

In this course, advanced instruction in individual and group performance is stressed. The Symphonic Band represents the school in concerts, festivals, parades, football games, and other school-related activities. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: Audition**WOODWIND SECTIONALS I 92341**

Grades 9-12 1 Credit

This course offers small group instruction in the woodwind family. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: Audition**BRASS SECTIONALS II 92346**

Grades 10-12 1 Credit

This course continues small group instruction in the brass family. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: Brass Sectionals I & Audition**CONCERT BAND II 9238**

Grades 10-12 1 Credit

This course continues the refinement of skills learned in Concert Band I. Students apply the basic fundamentals of tone production, rhythmic concepts, proper articulation, and the performance of medium level band literature. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: Concert Band I or Sectionals I & Audition**GUITAR II 9247**

Grades 10-12 1 Elective Credit

Guitar II is a continuation of the Beginning Guitar-Acoustic curriculum. Students continue to learn new guitar skills including complex chords, melodic, and fingerstyle playing techniques. Guitar ensemble as well as accompaniment techniques are explored in depth to allow the student to become a proficient guitarist for real-world applications. Outcomes of this class include skills for life-long applications and advanced social and cultural awareness.

NOTE: Students provide their own guitar and textbook. Contact instructor for more information.

Prerequisite: Beginning Guitar-Acoustic or teacher recommendation**PERCUSSION SECTIONALS II 92344**

Grades 10-12 1 Credit

This course continues small group instruction in the percussion family. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: Percussion Sectionals I & Audition**STAGE BAND II 92501**

Grades 10-12 1 Credit

Students continue to represent the school in concerts, festivals, and dances in the contemporary jazz idiom. This

course may be taken concurrently with Symphonic Band. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: *Stage Band I & Audition*

SYMPHONIC BAND II **9240**

Grades 10-12 1 Credit

In this course, advanced instruction in individual and group performance is expanded. The Symphonic Band represents the school in concerts, festivals, parades, football games, and other school-related activities. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: *Symphonic Band I or Sectional I & Audition*

WOODWIND SECTIONALS II **92342**

Grades 10-12 1 Credit

This course continues small group instruction in the woodwind family. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

Prerequisite: *Woodwind Sectionals I & Audition*

AP MUSIC THEORY

9226

Grades 11-12 1 Weighted Credit

This course is designed to explore aspects of melody, harmony, rhythm, musical analysis, history, and style to develop a student's ability to recognize, describe and apply the concepts of music that are presented in a score. Students taking this course should have basic performance skills in voice or with an instrument and the ability to read and write musical notation. Students taking this course are encouraged to take the AP Exam.

Prerequisite: *Band II or Chorus II; Band or Chorus Teacher Recommendation*

DIRECTED STUDY MUSIC **92981**

92982

Grades 11-12 .5 Credit

This course requires approval by the department chair and a written project proposal submitted by the student at the time of registration.

GENERAL TOPICS

MIDDLE SCHOOL COURSE OFFERINGS

SET FOR SUCCESS **00668**

Grade 6 Quarter

In this exploratory wheel course, students will incorporate their own learning styles to help them develop effective study techniques, time management, communication skills, and academic work habits.

ACADEMIC SEMINAR **9828**

98286

98287

98288

Grades 6-8 Semester

This course provides an opportunity for students to improve note-taking skills, organizational skills, reading, writing, and mathematics. Content is designed to increase the academic success of the students in their regular middle school course work.

CAREER INVESTIGATIONS **9068**

9069

Grade 6 Quarter

Grades 7-8 Semester

This course allows students to explore career options and begin investigating career opportunities. Students assess their roles in society, identify their roles as workers, analyze their personal assets, complete a basic exploration of career clusters, select career pathways or occupations for further study, and create an Academic and Career Plan based on their academic and career interests. This course also helps students identify and demonstrate the workplace skills that employers desire in their future employees.

ADVANCED COURSE EXPERIENCE **982808**

Grades 7-8 Semester

This course is designed to motivate and prepare students for advanced course work in high school. Students are exposed to rigorous, advanced-level course work through project based learning experiences. The course goal is to develop foundational skills, key strategies, and content knowledge that students need to be successful in challenging courses such as AP and International Baccalaureate courses.

COMPUTER SCIENCE DISCOVERIES **982809**

Grades 7-8 Semester

Computer Science Discoveries, is an introductory computer science course that empowers students to create authentic artifacts and engage with computer science as a medium for creativity, communication, and problem solving. This course inspires students as they design and program websites, apps, and robots.

CRIMINAL JUSTICE **9826**

Grades 7-8 Semester

This course will provide hands-on learning in criminal investigation and legal proceedings. Students will apply scientific investigation and technology to analyze legal cases.

DIGITAL JOURNALISM **00669**

Grades 7-8 Year

This class provides students an opportunity to do real-life writing/reporting in a variety of formats (written, video, and audio). Students learn interviewing skills and conduct interviews with students, staff and members of the community.

**INTRODUCTION TO PROGRAMMING
& GAME DESIGN****982807**

Grades 7-8

Semester

This blended-learning course provides an introduction to programming and the theory and practice of game design. Students will focus on elements of programming and design to create interactive games to include robotics. This course offers students opportunities to expand technology skills through analysis and development of games, graphics, audio, animation, and robotics.

MIDDLE SCHOOL PUBLIC SPEAKING**982804**

Grades 7-8

Semester

This semester course provides students the opportunity to learn to communicate effectively and improve presentation skills while building self confidence in a variety of settings. The course will also focus on the development of leadership skills and team building. As part of this course, students will assist with the broadcasting of a morning middle school news program.

MIDDLE SCHOOL YEARBOOK**982803**

Grades 7-8

Year

This year-long course provides students the opportunity to work on the production of a school yearbook. Basic fundamentals include short and long-range planning, yearbook terminology, conducting an interview, and introduction to the Yearbook Avenue website. Students will also receive instruction in journalistic writing and photography.

READERS' ROUNDTABLE**00665**

Grades 7-8

Semester

This course provides opportunities for students to read and respond to multiple sources (novels, non-fiction, magazine, news, blogs, etc.). Analysis of content reading will include point of view, propaganda, authentic sources, and censorship.

WRITERS' ROUNDTABLE**00664**

Grades 7-8

Semester

This elective course introduces students to models of writing and emphasizes a variety of types of writing, including expository, narrative, and persuasive. Students in this course may produce school publications.

HIGH SCHOOL COURSE OFFERINGS**ACADEMIC TUTORIAL****982856****982857**

Grades 9-12

.5 Credit Each

This course assesses specific academic needs in the areas of reading, writing and mathematics, and provides structured remediation within the school day. Content is designed to increase the academic success of the students in their regular high school course work. In addition to basic academic fundamentals, this course also includes note-taking strategies, reading/writing across the curriculum, organizational skills, test-taking strategies, time management, and career preparation.

COLLEGE & CAREER PREPARATION**98262**

Grades 9-12

.5 Credit

This course is designed to provide students with experiences to help define and shape their post-secondary plans. Students will learn how to navigate the pathways that connect education and employment through presentations facilitated by community stakeholders. Topics will include, but are not limited to: the college application process, how to apply for scholarships, marketing oneself for employment, analyzing strengths and interest to determine the best career fit, and learn the necessary soft skills to be successful in one's chosen pathway. Students will have an opportunity to visit local colleges, businesses, and participate in cultural field trips.

COMPUTER SCIENCE FOUNDATIONS**10012**

Grades 9-12

1 Credit

This course provides an emphasis on computer programming within the context of broader concepts of computer science.

The course builds on the concepts of computer science developed in prior grade levels. The course provides a

transition from block-based programming to a text-based programming language and familiarizes the student with developing and executing computer programs. Programmable computing tools are used to facilitate design, analysis, and implementation of computer programs. Students will use these tools for exploring and creating computer programs, facilitating reasoning and problem solving, and verifying solutions.

COMPUTER SCIENCE PRINCIPLES**10011**

Grades 10-12

1 Credit

Computer Science Principles builds on the concepts introduced in the Computer Science Foundations course (10012). Students in this course will expand their programming skills and begin to think about and analyze their own problem-solving process. Students will continue to develop the ideas and practices of computational thinking and consider how computing impacts the world. Programmable computing tools are used to facilitate design, analysis, and implementation of computer programs. Students will use these tools for exploring and creating computer programs, facilitating reasoning and problem solving, and verifying solutions.

Prerequisite: Computer Science Foundations

LEADERSHIP SEMINAR A**982891****LEADERSHIP SEMINAR B****982892**

Grades 10-12

.5 Credit Each

This course offers a study of theories of leadership with an emphasis on four strands: developing knowledge of self and

others, defining leadership, developing leadership skills and practices, and practicing leadership through service projects.

SAT PREPARATION 98261

Grades 10-12 (Pass/Fail) .5 Credit

This course provides preparation for the critical reading, writing and language, and mathematics sections of the Scholastic Aptitude Test (SAT).

STUDENT TECHNOLOGY INTERSHIP B984010

Grades 10-12 1 Credit

This course provides students with the unique opportunity to advance their technological knowledge and skills by supporting staff and students with the productive use of technology. Students will perform basic troubleshooting of instructional technology devices, peripheral equipment, and software applications.

Prerequisite: *Application & Interview*

CAREER INTERSHIP 982610

Grades 11-12 1 Credit

Students apply academic and technical knowledge and skills through paid work experiences. The school and the employer plan, coordinate, and supervise on-the-job training activities to align with the student's career field of interest. Students will be required to work a minimum of 280 hours during the school year and complete all required documentation and reflection activities.

NOTE: *Students must complete an application from the employing agency.*

CAREER MENTORSHIP 982893

Grades 11-12 1 Credit

This course is a non-paid, work-based experience that allows students to apply knowledge, develop skills, and see a strong work ethic in practice. Students log 140 hours in a sponsoring work site and present a final project to earn one credit.

Prerequisite: *Application*

CREDIT FOR WORK EXPERIENCE 982620

Grades 11-12 .5 Credit

This is a pass/fail course offering students working at an after-school and/or summer job an opportunity to earn an additional .5 elective credit for every 70 hours worked. This is not to exceed a total of two (2) credits or 280 hours during their high school experience. Students must submit required documentation consisting of a Supervisor Evaluation Form indicating successful demonstration of Workplace Readiness Skills, as well as submission of a log of hours worked validated by the employer.

FILM STUDIES A 98406 **FILM STUDIES B 98407**

Grades 11-12 .5 Credit Each

These interdisciplinary courses focus on film appreciation, creation, and history. The courses introduce the technical aspects of film and expose students to classic movies from around the world. Films are analyzed and evaluated for artistic techniques and contributions to filmmaking, as well as historical contributions and social commentary. Students further develop their written and oral communication skills, and research skills.

STUDENT ASSISTANCE EXPERIENCE 98265 **98266**

Grades 11-12 No Credit

This elective offers students the opportunity to expand their knowledge by assisting in areas that may include the computer lab, library, science lab, school offices, or certain classes.

Prerequisite: *Application & recommendation of staff member being assisted*

SERVICE LEARNING 22104

Grade 11-12 1 Credit

Service learning goes beyond students participating in community service. Service learning enables students to learn and apply academic, social, and personal skills to improve their community. Students perform 140 hours of service as they identify a community need and plan, implement, and evaluate a solution. Service learning provides opportunities for students to apply their knowledge and skills within the setting of certain non-profit agencies and organizations in York County and the greater Hampton Roads area.

Prerequisite: *Application*

HEALTH & PHYSICAL EDUCATION

As graduation requirements vary based on graduation year and diploma type, please refer to page 4 for additional information.

The content of the Standards of Learning for physical education is organized around five strands: motor skill development, anatomical basis of movement, fitness planning, social development, and energy balance.

MIDDLE SCHOOL COURSE OFFERINGS

PHYSICAL EDUCATION/LIFETIME FITNESS 6 7111

Grade 6 Year

This course incorporates activities designed to develop lifetime physical fitness and conditioning through participation in selected team and individual activities.

PHYSICAL EDUCATION/LIFETIME FITNESS 7 7121

Grade 7 Year

This course incorporates activities designed to develop lifetime physical fitness and conditioning through participation in selected team and individual activities. Safety issues related to sports and recreation are included.

PHYSICAL EDUCATION/LIFETIME FITNESS 8 7210

Grade 8 Year

This course incorporates activities designed to develop lifetime physical fitness and conditioning through participation in selected team and individual activities. Safety issues related to sports and recreation are included.

HIGH SCHOOL COURSE OFFERINGS

HEALTH & PHYSICAL EDUCATION 7300

Grade 9 1 Credit

In this course, health units include the study of disease, consumer and environmental health issues, and Family Life Education. In addition, students will be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators. Physical education units include instruction in physical fitness and conditioning, individual and dual sports, and team sports.

NAVY JROTC I (NJROTC) 79132 79133

Grades 9-12 1 Credit

This course is a study of basic naval orientation, citizenship and government, leadership skills, and wellness, fitness, and first aid. The curriculum includes two areas of study: (1) the Cadet Field Manual with an introduction to military drill, uniforms, military customs and courtesies, and (2) the Introduction to NJROTC with the history of JROTC, citizenship, and laws-authority-responsibility. Cadets will study leadership skills, behavioral sciences, motivation and relationships. Cadets will have a balanced program of instruction in wellness including building health skills through exercise, nutrition, and lifetime planning.

NOTE: Enrollment in this course fulfills the Health & PE 9 requirement for NJROTC students.

HEALTH, DRIVER EDUCATION & PHYSICAL EDUCATION 7405

Grade 10 1 Credit

This course is divided among classroom health, classroom driver education, and physical education. The health curriculum includes Family Life Education. The physical education curriculum includes the study of physical fitness, individual and dual sports, and team sports. Driver education focuses on classroom instruction.

Prerequisite: Health & PE 9 or permission of the principal

PHYSICAL EDUCATION 11A 75101

PHYSICAL EDUCATION 11B 75102

Grade 11 .5 Credit Each

The content for this course, based on the Standards of Learning, is determined by classroom instructors as appropriate to the skill level of the students.

PHYSICAL EDUCATION 12A 76101

PHYSICAL EDUCATION 12B 76102

Grade 12 .5 Credit Each

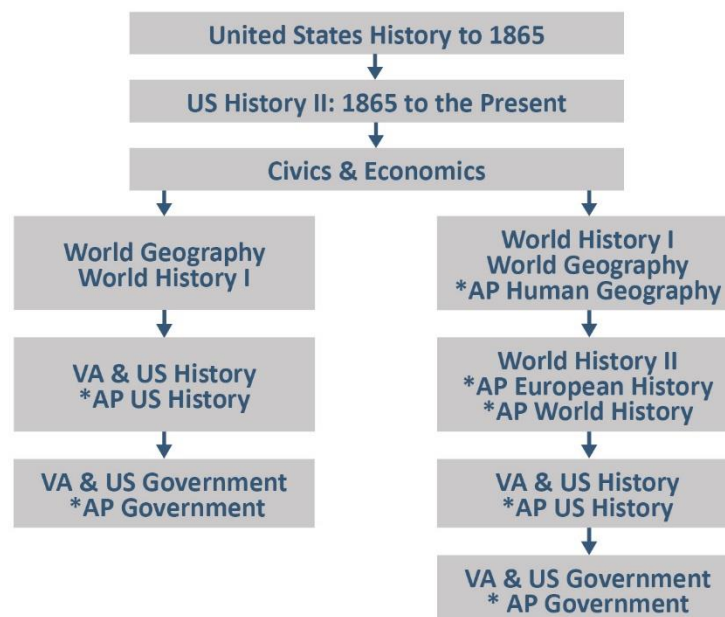
The content for this course, based on the Standards of Learning, is determined by classroom instructors as appropriate to the skill level of the students.

HISTORY & SOCIAL SCIENCES

As graduation requirements vary based on graduation year and diploma type, please refer to page 4 for additional information.

The history and social science academic disciplines develop students' knowledge and skills of history, geography, civics, and economics, and enable students to place the people, ideas and events that have shaped our state, our nation, and the world. Students will understand chronological thinking and the connections between causes and effects and between continuity and change.

History & Social Sciences Course Offerings & Suggested Sequences



History & Social Sciences Additional Course Offerings (Grades 9-12)

- Sociology: Aspects & Tools of Culture (10-12)
- Sociology: Institutions & Issues (10-12)
- Psychology
- *AP Human Geography
- *AP European History
- *AP Psychology
- Directed Study History/Social Science

**Weighted Course*

MIDDLE SCHOOL COURSE OFFERINGS

UNITED STATES HISTORY TO 1865

2353

Grade 6

Year

Students use skills in historical and geographical analysis to explore how early cultures developed in North America from pre-Columbian times until 1865.

UNITED STATES HISTORY II:

1865 TO THE PRESENT

2354

Grade 7

Year

Students will continue to use skills for historical and geographical analysis as they examine American history since 1865. Emphasis is placed on the fundamental concepts in civics, economics, and geography.

CIVICS AND ECONOMICS

2357

Grade 8

Year

Students study the roles of citizens in the political, governmental, and economic systems in the United States. Emphasis is placed on the understanding of public and personal economic and financial decisions.

HIGH SCHOOL COURSE OFFERINGS

WORLD HISTORY I**2215**

Grade 9

1 Credit

This course offers an historical and cultural study of world history and geography that enables students to explore the development of peoples, places, and patterns of life from ancient times until 1500 A.D. Emphasis is placed on geographic influences, with increased attention to the development and evolution of the nation-state. Attention is also focused on the connections between people and events prior to 1500 A.D. and those of contemporary times. Students have the opportunity to work with a variety of artifacts as well as primary and secondary sources.

WORLD GEOGRAPHY**2210**

Grades 9-10

1 Credit

Students study the world's people, places, and environments, with an emphasis on world regions. The course focuses on the world's population, cultural characteristics, landforms and climate, economic development, and migration and settlement patterns. Using geographic resources, students will employ inquiry, research, and technological skills to ask and answer geographic questions and to apply geographic concepts and skills to their daily lives.

AFRICAN AMERICAN HISTORY**2371**

Grades 9-12

1 Elective Credit

The purpose of the African American History course is to acknowledge and amplify the resistance, resilience, innovation, and sacrifices of African Americans and their continued contributions to American society. The course provides the opportunity for students to make connections between African American history and its relevance in contemporary communities. Students enrolled in this course will engage in critical thinking and academic discourse about race and other systems of differences that shape individual and group interactions, American identity, and culture. Students will complete a capstone project that requires them to conduct independent research on a question or problem of their choosing and to demonstrate a deeper understanding of African American history.

AP HUMAN GEOGRAPHY**2212**

Grades 9-12

1 Weighted Credit

This course 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 peoples and areas organized around concepts that include location, place, scale, pattern, spatial organization, and regionalization. They will also learn about the methods and tools geographers use in their science and practice. Students taking this course are encouraged to take the AP Exam.

NOTE: This course may be taken in place of World History I, or as an elective credit after taking World History I.

WORLD HISTORY II**2216**

Grade 10

1 Credit

This course offers an historical and cultural study of world history and geography to explore the development of peoples, places, and patterns of life from 1500 A.D. to the present. Emphasis is placed on geographic influences, with increased attention to the development and evolution of the nation-state. Attention is also focused on the connections between people and events of contemporary times. Students have the opportunity to work with a variety of artifacts as well as primary and secondary sources to uncover and understand specific historic events and issues.

AP EUROPEAN HISTORY**2399**

Grades 10-12

1 Weighted Credit

This course is a study of European history from the year 1450 A.D. to the present. Students will learn about economic, cultural, social and political developments that have forged the world they know today. Students taking this course are encouraged to take the AP Exam.

AP PSYCHOLOGY**2902**

Grades 10-12

1 Weighted Credit

This course introduces the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their science and practice. Students taking this course are encouraged to take the AP Exam.

AP WORLD HISTORY**2380**

Grades 10-12

1 Weighted Credit

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. Students taking this course are encouraged to take the AP Exam.

PSYCHOLOGY**2900**

Grades 10-12

1 Credit

This course includes a survey of the life and works of major contributors to psychology, an introduction to the various factors that influence behavior, and a description and explanation of changes in an individual's behavior and personality.

SOCIOLOGY: ASPECTS & TOOLS OF CULTURE**25001**

Grades 10-12

.5 Credit

This course provides a study of numerous sociological issues including social change, crime, aging, the environment, cities, and terrorism. Emphasis is placed on the methods society uses to control individual social groups and the total population. In addition, students will analyze the methods society uses in working with individuals, social groups, and the total population with an emphasis on the role of the media as a pacesetter for contemporary American life.

SOCIOLOGY: INSTITUTIONS & ISSUES 25002

Grades 10-12 .5 Credit

This course provides an analysis of the methods society uses in working with individuals, social groups, and the total population with an emphasis on the role of the media as a pacesetter for contemporary American life.

AP UNITED STATES HISTORY 2319

Grade 11 1 Weighted Credit

This course is designed to provide advanced studies in the history of the United States while preparing the student to take the AP Exam. Research writing and historical interpretive essay writing are incorporated. Extensive non-textbook reading is an integral part of the course. Students taking this course are encouraged to take the AP Exam.

DUAL ENROLLMENT VIRGINIA & UNITED STATES HISTORY (HIS 121 & HIS 122) DE-2360

Grade 11 1 Weighted Credit

HIS 121 - Introduces the history of the United States from its origins to 1877. Includes the European exploration, development of the American colonies and their institutions, the Revolution, major political, social and economic developments, geographical expansion, the Civil War, and Reconstruction. UCGS/Passport Course

Prerequisites: Student must be eligible for dual enrollment through VPCC.

HIS 122 - Introduces the history of the United States from 1865 to present. Includes major political, social and economic developments since 1865, overseas expansion, the two world wars, the Cold War and the post-Cold War era. Can be taken out of sequence. UCGS/Passport Course

Prerequisite(s): Student must be eligible for dual enrollment through VPCC.

VIRGINIA & UNITED STATES HISTORY 2360

Grade 11 1 Credit

This course provides a chronological study based upon an identification and analysis of the events, problems, issues, movements, and personalities that have affected the development of the United States from the Age of Exploration to the present. The student focuses on political, economic, cultural, and social history. Virginia's role in the history of the United States is emphasized.

AP GOVERNMENT & POLITICS: COMPARATIVE V2450

Grades 11-12 1 Credit

AP Comparative Government & Politics introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures, policies, and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students compare the effectiveness of approaches to many global issues by examining how different governments solve similar problems. They also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. Students in this course are encouraged to take the AP Exam.

NOTE: This course does NOT substitute for U.S. Government under the Virginia Standards of Learning.

Prerequisite: U.S. History or World History

AP MACROECONOMICS V2803

Grades 11-12 .5 Weighted Credit

AP Macroeconomics is a college-level course that focuses on how the whole economy behaves, including regional, national, and global markets. Much of what students will study in AP Macroeconomics is the theory of economics and the effects of economic decisions made in these markets. This course prepares students for the AP Exam and for further study in business, political science and history. Students in this course are encouraged to take the AP Exam.

AP MICROECONOMICS V2802

Grades 11-12 .5 Weighted Credit

AP Microeconomics is a fast-paced, college-level course that focuses on the decision making of individuals, households, firms, and the government. Students will study a variety of economic theories and analyze their practical applications in the real world. Course topics include the product market (including forces of supply and demand), factor/resource markets (including labor and capital), and competition/market structures. This course prepares students for the AP Exam and for further study in business, history, and political science. Students taking this course are encouraged to take the AP Exam.

DIRECTED STUDY HISTORY/SOCIAL SCIENCE 29962 29963

Grades 11-12 .5 Credit Each

This is a structured, guided independent study of history/social science.

AP UNITED STATES GOVERNMENT & POLITICS 2445

Grade 12 1 Weighted Credit

This course provides advanced studies in United States government while preparing students to take the AP Exam. Research writing and historical interpretive essay writing are incorporated into each unit of study. Extensive non-textbook reading is an integral part of the course. Students taking this course are encouraged to take the AP Exam.

VIRGINIA & UNITED STATES GOVERNMENT 2440

Grade 12 1 Credit

This course is designed to ensure that students have an understanding of the origins and workings of the Virginia and United States political systems. The objectives require that students have knowledge of the Virginia and United States governments; the process of policy-making, with emphasis on economics, foreign affairs, and civil rights issues; and the impact of the general public, political parties, interest groups, and the media on policy decisions. United States political and economic systems are compared to those of other nations, with emphasis on the relationships between economic and political freedoms. Economic content covers the United States market system, supply and demand, and the role of the government in the economy.

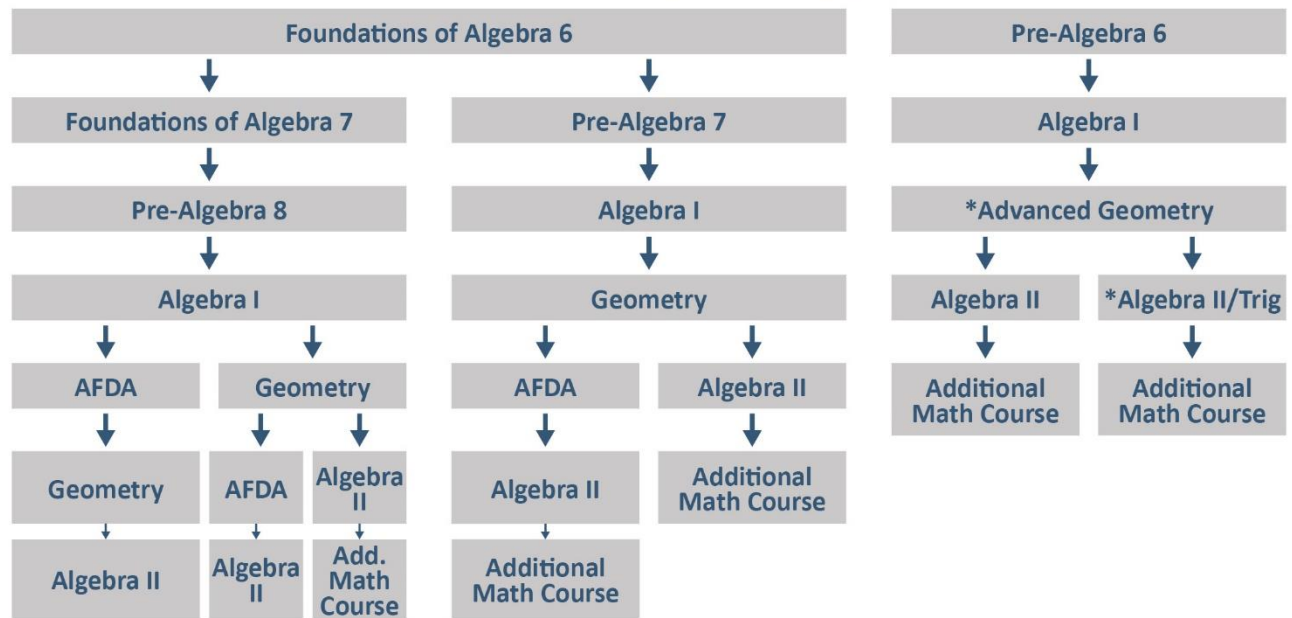
MATHEMATICS

As graduation requirements vary based on graduation year and diploma type, please refer to page 4 for additional information.

Placement of students in specific middle school and high school math courses is based on factors which may include one or more of the following: previous math performance, math SOL test performance, standardized test scores, and teacher/administrator recommendation.

Any two math courses for which prerequisites have been met may be taken concurrently only with teacher/administrator approval.

Mathematics Course Offerings & Suggested Sequences



Mathematics Additional Course Offerings (Grades 9-12)

- Computer Mathematics
- Algebra III
- Data Science
- Trigonometry
- Probability & Statistics
- Discrete Math
- Calculus
- *Math Analysis (Trigonometry prerequisite)
- *AP Calculus AB (Math Analysis prerequisite)
- *AP Calculus BC (Math Analysis prerequisite)
- *AP Statistics
- *AP Computer Science A
- Directed Study Mathematics
- Discrete Mathematics
- Governor's School for Science & Technology

**Weighted Course*

MIDDLE SCHOOL COURSE OFFERINGS

FOUNDATIONS OF ALGEBRA 6**3110**

Grade 6

Year

This course is designed to support the transition from elementary Standards of Learning to the study of Algebra with an emphasis in strengthening students' skills in problem solving and mathematical concepts. This course addresses the sixth grade math Standards of Learning. Students will be required to utilize the mathematical process goals of communication, collaboration, problem solving, reasoning, and representations. Students completing this course are required to take the sixth grade SOL test.

PRE-ALGEBRA 6**31106**

Grade 6

Year

As a preparatory course to Algebra I (high school credit-bearing 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 will be required to utilize the mathematical process goals of communication, collaboration, problem solving, reasoning, and representations in the exploration of number sense, computation, estimation, measurement, geometry, probability, statistics, patterns, functions, and algebra. Students completing the course are required to take the eighth grade SOL test.

Prerequisite: Recommendation from previous mathematics teacher with a suggested grade of "A" in fifth grade mathematics; a passing score on the fourth and fifth grade mathematics SOL assessments

FOUNDATIONS OF ALGEBRA 7**3111**

Grade 7

Year

This course continues the development of algebraic knowledge from Foundations of Algebra 6. The course addresses the seventh grade math Standards of Learning. Students will expand their understanding of Algebra concepts through the mathematical process goals of communication, collaboration, problem solving, reasoning, and representations. Students completing this course are required to take the seventh grade SOL test.

PRE-ALGEBRA 7**31117**

Grade 7

Year

This course supports the transition from Foundations of Algebra 6 to Algebra I (high school credit-bearing course) and addresses the math Standards of Learning for grades seven and eight. Students will be required to utilize the mathematical process goals of communication, collaboration, problem solving, reasoning, and representations in the exploration of number sense, computation, estimation, measurement, geometry, probability, statistics, patterns, functions, and algebra. Students completing the course are required to take the eighth grade SOL test.

Prerequisite: Recommendation from previous mathematics teacher with a suggested grade of "A/B" in Foundations of Algebra 6, and a minimum of a passing score on the sixth grade mathematics SOL assessment

ALGEBRA I**3130**

Grades 7-8

1 Credit

This course is a study of the algebraic concepts needed to solve algebraic equations. Students 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.

Prerequisite: Pre-Algebra 6 or Pre-Algebra 7

ADVANCED GEOMETRY**31433**

Grade 8

1 Weighted Credit

The content of this course offers a study of plane, three-dimensional, and coordinate geometry. Methods of justification of theorems include: paragraph proofs, flow charts, two-column proofs, indirect proofs, coordinate proofs, and verbal arguments. Emphasis is on two-dimensional and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. This course provides the foundation for students to pursue a sequence of advanced mathematical studies from Algebra II/Trigonometry to Mathematical Analysis to AP Calculus.

Prerequisite: Algebra I

PRE-ALGEBRA 8**3112**

Grade 8

Year

This course supports the transition from Foundations of Algebra 7 to Algebra I (high school credit-bearing course) and addresses the eighth grade math Standards of Learning. Students will be required to utilize the mathematical process goals of communication, collaboration, problem solving, reasoning, and representations in the exploration of number sense, computation, estimation, measurement, geometry, probability, statistics, patterns, functions, and algebra. Students completing the course are required to take the eighth grade SOL test.

HIGH SCHOOL COURSE OFFERINGS

ADVANCED GEOMETRY**31433**

Grades 9-10

1 Weighted Credit

The content of this course offers a study of plane, three-dimensional, and coordinate geometry. Methods of justification of theorems include: paragraph proofs, flow charts, two-column proofs, indirect proofs, coordinate proofs, and verbal arguments. Emphasis is on two-dimensional and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. This course provides the foundation for students to pursue a sequence of advanced mathematical studies from Algebra II/Trigonometry to Mathematical Analysis to AP Calculus.

Prerequisite: *Algebra I***ALGEBRA II/TRIGONOMETRY****3137**

Grades 9-10

1 Weighted Credit

This course combines the content of Algebra II and Trigonometry and is taught at an accelerated pace. It provides the foundation for students to pursue a sequence of advanced mathematical studies from Mathematical Analysis to AP Calculus.

Prerequisite: *Algebra I & Geometry or Advanced Geometry and recommendation from math teacher***ALGEBRA I****3130**

Grades 9-12

1 Credit

This course is a study of the algebraic concepts needed to solve algebraic equations. Students 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.

ALGEBRA I MATH LAB ELECTIVE**32003**

Grades 9-12

1 Elective Credit

Students who need additional time to master the algebraic concepts required in Algebra I are enrolled in this course upon enrollment in Algebra I (3130). This course counts as an elective credit but not as a math required credit.

Co-requisite: *Algebra I***ALGEBRA II****3135**

Grades 9-12

1 Credit

The content of this course provides a thorough treatment of advanced algebraic concepts through the study of functions, polynomials, rational expressions, complex numbers, matrices, sequences, and series. Emphasis is placed on practical applications and modeling. This course also includes graphing functions.

Prerequisite: *Algebra I***COMPUTER MATHEMATICS****3184**

Grades 9-12

1 Credit

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.

Prerequisite: *Algebra I***GEOMETRY****3143**

Grades 9-12

1 Credit

This course is a study of plane, three-dimensional, and coordinate geometry. Methods of justification of theorems include: paragraph proofs, flow charts, two-column proofs, indirect proofs, coordinate proofs, and verbal arguments. The courses emphasize two-dimensional and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems.

Prerequisite: *Algebra I***ALGEBRA III****31602**

Grades 10-12

.5 Credit

This course explores algebra topics that are not covered in the Algebra II curriculum. Topics studied include analytic geometry, functions, sequences and series, and probability. Successful completion of this course prepares students for Mathematical Analysis or college-level calculus courses. College entrance exams concepts are covered.

Prerequisite: *Geometry or Advanced Geometry & Algebra II or Algebra II/Trigonometry***ALGEBRA, FUNCTIONS****AND DATA ANALYSIS (AFDA)****3134**

Grades 10-12

1 Credit

Within the context of mathematical modeling and data analysis, students will study functions and their behaviors, systems of inequalities, probability, experimental design and implementations, and analysis of data. Data will be generated by practical applications arising from science, business, and finance. Students will solve problems that require the formulations of linear, quadratic, exponential, or logarithmic equations or a system of equations.

NOTE: *Course must be taken in sequence for math credit.***Prerequisite:** *Algebra I***AP CALCULUS AB****31771**

Grades 10-12

1 Weighted Credit

This course is designed to prepare students for the AP Calculus AB exam. Content is centered on properties of elementary functions, limits, and integral and differential calculus. A rigorous treatment of calculus theory and application is presented. Students taking this course are encouraged to take the AP Exam. This course may not be taken concurrently with AP Calculus BC.

Prerequisite: *Mathematical Analysis***AP CALCULUS BC****31772**

Grades 10-12

1 Weighted Credit

This course is designed to prepare students for the AP Calculus BC exam. Content includes topics in AP Calculus AB and explores in-depth additional calculus applications,

including analysis of derivatives, L'Hôpital's Rule, applications of integrals, techniques of anti-differentiation, and polynomial approximations and series. Students taking this course are encouraged to take the AP Exam. This course may not be taken concurrently with AP Calculus AB.

Prerequisite: Mathematical Analysis

AP STATISTICS 3192

Grades 10-12 1 Weighted Credit

This course is designed to prepare students for the AP Statistics exam. In the course, students are introduced to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include exploring data, planning a study, anticipating patterns, and utilizing statistical inference. Students taking this course are encouraged to take the AP Exam.

Prerequisite: Algebra II or Algebra II/Trigonometry

CALCULUS 31601

Grades 10-12 1 Credit

This course provides a thorough study of elementary functions, limits, and integral and differential calculus. Topics include: techniques and applications of the derivative, techniques and applications of the definite integral, and the Fundamental Theorem of Calculus.

Prerequisite: Mathematical Analysis

DATA SCIENCE 3139

Grades 10-12 1 Credit

This course is designed for students to identify and explore problems that involve the use of relational database concepts and data-intensive computing to find solutions and make generalizations. Students will engage in a data science problem-solving structure to interact with large data sets as a means to formulate problems, collect and clean data, visualize data, model using data, and communicate effectively about data formulated solutions.

Prerequisites: Geometry

DISCRETE MATHEMATICS 3154

Grades 10-12 .5 Credit

This course introduces contemporary mathematics with an emphasis on applications centered on the topics of probability, management science, social sciences, and measurement theory.

Prerequisite: Geometry or Advanced Geometry & Algebra II, or Algebra II/Trigonometry

MATHEMATICAL ANALYSIS 3162

Grades 10-12 1 Weighted Credit

This course extends students' knowledge of function characteristics and introduces them to another mode of mathematical reasoning. Students enrolled in Mathematical Analysis have mastered Algebra II concepts and have completed trigonometry. The content of this course serves as an appropriate preparation for a calculus course. Graphing calculators or computer graphing simulators are used.

Prerequisite: Geometry or Advanced Geometry, and Algebra II/Trigonometry or Algebra II and Trigonometry, and recommendation from math teacher with a suggested grade of "A" or "B" in Algebra II or Algebra II/Trigonometry

PERSONAL LIVING AND FINANCE 3120

Grades 10-12 1 Credit

In this course, students strengthen math skills and explore the basic concepts of mathematics, algebra, and personal finance. Components of this course include skills and applications in problem solving and mathematical concepts with emphasis on patterns, functions, and algebra, geometry, probability and statistics, and personal and financial planning.

Prerequisite: Algebra I

PROBABILITY & STATISTICS 31901

Grades 10-12 .5 Credit

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.

Prerequisite: Geometry or Advanced Geometry & Algebra II, or Algebra II/Trigonometry

TRIGONOMETRY 3150

Grades 10-12 .5 Credit

This course provides a thorough treatment of trigonometry through the study of trigonometric definitions, applications, graphing, and solving trigonometric equations and inequalities. Emphasis is placed on using connections between right triangle ratios, trigonometric functions, circular functions, the language of mathematics, logic of procedure, and interpretations of results. Applications and modeling are included.

Prerequisite: Geometry & Algebra II

AP COMPUTER SCIENCE A 3185

Grades 11-12 1 Weighted Credit

This course offers a further exploration of computer skills and applications using Java programming language. Students taking this course are encouraged to take the AP Exam.

Prerequisite: Algebra II or Algebra II/Trigonometry

AP COMPUTER SCIENCE PRINCIPLES 10160

Grades 11-12 1 Weighted Credit

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course introduces students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns and computing impacts. The course instructional materials are based on concepts outlined by the College Board and prepares students to take the Advanced Placement Computer Science Principles Examination.

Prerequisite: Algebra I

DIRECTED STUDY MATHEMATICS 31994 31995

Grades 11-12 .5 Credit

In this course, the student proposes and undertakes an independent exploration of a major area of interest in mathematics. This course requires the prior consent of the department chair and a written project proposal.

SENIOR MATHEMATICS**3136**

Grade 12

1 Credit

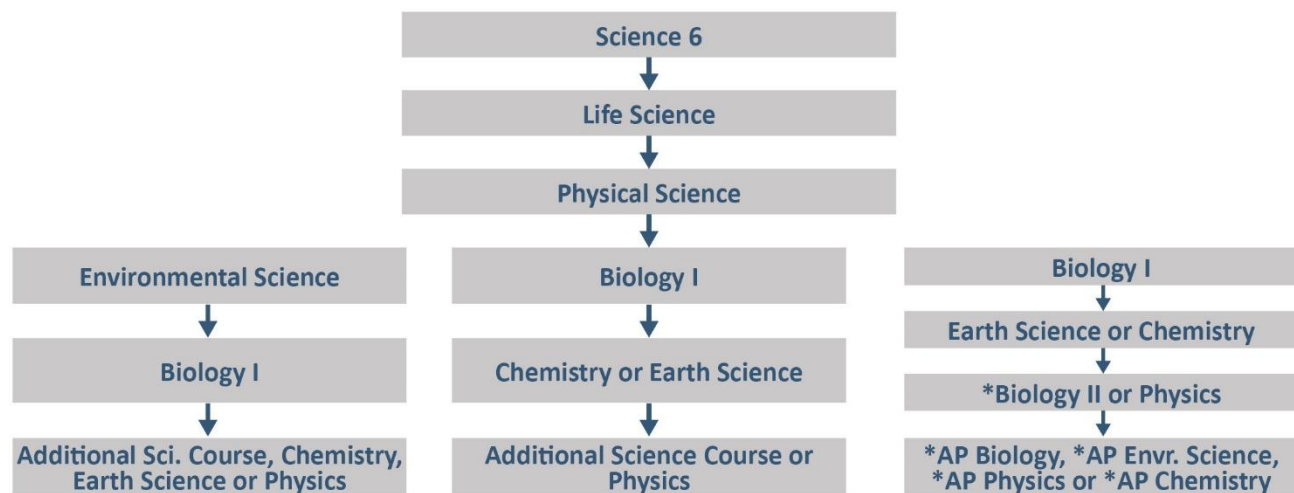
This course is designed for college-bound seniors to provide added mathematics instruction that supports success on

entrance exams and in freshman math courses. Topics studied include advanced algebra, analytic geometry, functions, sequences and series, and probability.

SCIENCE

As graduation requirements vary based on graduation year and diploma type, please refer to page 4 for additional information.

Secondary science courses play an important, unique, and essential role in today's ever-changing world. Student's knowledge of earth, space, life, and physical sciences is critical as they become scientifically literate citizens. All science courses are laboratory and activity-oriented to help develop important skills.

Science Course Offerings & Suggested Sequences**Science Additional Course Offerings (Grades 9-12)**

- Directed Study Science
- Atmospheric Science & Climatology
- Ecology
- *Biology II/Mammalian Anatomy & Physiology
- *Biology II/Marine Science
- Governor's School for Science & Technology

Science Discipline Areas**Biology**

- Environmental Science
- Biology
- Ecology
- *Biology II/Mammalian Anatomy & Physiology
- *Biology II/Marine Science
- *AP Biology
- *AP Environmental Science

Earth Science

- Environmental Science
- Earth Science
- Atmospheric Science & Climatology
- *AP Environmental Science

Chemistry

- Chemistry
- *AP Chemistry

Physics

- Physics
- *AP Physics I
- *AP Physics II

*Weighted Course

MIDDLE SCHOOL COURSE OFFERINGS**SCIENCE 6****4105**

Grade 6

Year

This introductory course is designed to provide a thematic approach to areas of scientific study with an emphasis on earth/space science and scientific inquiry.

LIFE SCIENCE 7**4115**

Grade 7

Year

This introductory biology course is designed to introduce students to the scientific method of inquiry. Hands-on experiences with microscopes and other laboratory equipment enable students to study single and multi-celled organisms and their interrelationships.

ENGINEERING DESIGN & PROBLEM SOLVING 982806

Grades 7-8

Semester

This class exposes students to engineering-related careers through hands-on science, technology, engineering, and math activities which emphasize the engineering design process and incorporate high demand and high paying skills. In this course students will complete a career inventory, learn about career clusters and pathways, and demonstrate workplace readiness skills.

INTRODUCTION TO FORENSIC SCIENCE 98269

Grades 7-8

Semester

This semester elective course is designed for students with an interest in future forensic science and law enforcement careers. Students apply scientific investigation and technology to legal situations and experience hands-on learning involving the methodologies of forensic science and criminal justice.

PHYSICAL SCIENCE 8 4125

Grade 8

Year

This introductory course to physics and chemistry explores concepts such as motion, light, sound, energy, and matter. Hands-on laboratory experiences are emphasized.

HIGH SCHOOL COURSE OFFERINGS**ENVIRONMENTAL SCIENCE****NEW 4200**

Grade 9

1 Credit

The *Environmental Science* course integrates the study of scientific inquiry, the physical world, the living environment, resource conservation, humans' impact on the environment, and legal and civic responsibility. Student experiences include data collection and analysis through laboratory experiences and field work.

BIOLOGY I 4310

Grades 9-12

1 Credit

This course is designed to provide a detailed understanding of living systems. Emphasis is placed on the skills necessary to examine alternative scientific explanations, actively conduct controlled experiments, analyze and communicate information, and acquire and use scientific literature. The history of biological thought and the evidence that supports it are explored and provide the foundation for investigating biochemical life processes, cellular organization, mechanisms of inheritance, dynamic relationships among organisms, and the change in organisms through time. The importance of scientific research that validates or challenges ideas is emphasized at this level. Selected organisms are dissected.

EARTH SCIENCE 4210

Grades 9-12

1 Credit

Major topics of study in this course include: plate tectonics, the rock cycle, earth history, the oceans, the atmosphere, weather and climate, the solar system, and the universe. Course objectives connect the study of the earth's composition, structure, processes, and history, its atmosphere, freshwater, and oceans, and its environment in space. Historical contributions in the development of scientific thought about the earth and space are emphasized. The interpretation of maps, charts, tables, and profiles, the use of technology to collect, analyze, and report data, and science skills in systematic investigation are stressed. Application, problem solving, and decision-making are an integral part of the science standards, especially as they relate to the costs and benefits of utilizing the Earth's resources.

ATMOSPHERIC SCIENCE & CLIMATOLOGY 4220

Grades 10-12

1 Credit

This course provides a study of atmospheric systems and global climate. Major topics include: changes in atmospheric composition over time, interaction between the oceans and the atmosphere, weather, climate and climate change, and current environmental issues such as global warming and ozone depletion. Learning experiences at (or in cooperation with) NASA Langley may be included.

CHEMISTRY I 4410

Grades 10-12

1 Credit

This course is designed to provide a detailed understanding of the interaction of matter and energy. This interaction is investigated through laboratory techniques, manipulation of chemical qualities, and problem-solving applications. Scientific methodology is employed in experimental and analytical investigations, and concepts are illustrated with practical applications. Technology, including probeware, graphing calculators and computers, is used where appropriate. Students understand and use safety precautions with chemicals and equipment. Course objectives emphasize qualitative and quantitative study of substances and the changes that occur in them. Students are encouraged to share their ideas, use the language of chemistry, discuss problem-solving techniques, and communicate effectively.

Prerequisite: *Algebra I and one year of another lab science*

ECOLOGY 4340

Grades 10-12

1 Credit

This applications lab science course teaches the relationship between people and their environment. The course stresses the significance of ecosystems, food, water, air, soil, mineral, and energy resources. Laboratory experiences provide a study of air, soil, and water pollution; food webs; endangered animals and habitats; energy sources; and recycling.

Prerequisite: *Biology I*

AP BIOLOGY 4370

Grades 11-12

1 Weighted Credit

This course is designed to prepare students for the AP Biology exam and to meet the objectives of general biology

courses at the college level. A series of a minimum of eight (8) required experiments for the AP Exam are conducted along with additional lab experiences. Students taking this course are encouraged to take the AP Exam.

Prerequisite: *Biology I & Chemistry I*

AP CHEMISTRY **4470**

Grades 11-12 1 Weighted Credit

This course is designed to acquaint the student who has successfully completed Chemistry I with additional concepts covered in general college chemistry courses. Sufficient laboratory experiences are offered to reinforce classroom material, familiarize the student with equipment and chemicals, develop laboratory skills and techniques, and to observe, interpret, and draw conclusions. Students taking this course are encouraged to take the AP Exam.

Prerequisite: *Chemistry I*

AP ENVIRONMENTAL SCIENCE **42701**

Grades 11-12 1 Weighted Credit

The goal of the course is 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. Students taking this course are encouraged to take the AP Exam.

Prerequisite: *Algebra I; Completion of two high school laboratory sciences – one credit of Life Science (Biology) and one credit of Physical Science (Earth Science or Chemistry) – is also recommended.*

AP PHYSICS I **4570**

Grades 11-12 1 Weighted Credit

This course provides a systematic introduction to Newtonian mechanics, work, energy and power; mechanical waves and sound. It emphasizes the development of conceptual understanding and problem-solving ability using algebra and trigonometry. The course content is equivalent to a first-semester college course in algebra-based physics. Students taking this course are encouraged to take the AP Exam.

Prerequisite: *Algebra II/Trigonometry or Trigonometry*

AP PHYSICS II **4571**

Grades 11-12 1 Weighted Credit

This course cultivates student understanding of physics through inquiry-based investigations as they explore the principles of fluids, thermodynamics, electricity, magnetism, optics, and topics in modern physics. It emphasizes the continued development of conceptual understanding and problem-solving ability using algebra and trigonometry. The course content is equivalent to a second-semester college course in algebra-based physics. Students taking this course are encouraged to take the AP Exam.

Prerequisite: *AP Physics I*

BIOLOGY II/MAMMALIAN ANATOMY & PHYSIOLOGY

4330

Grades 11-12 1 Weighted Credit

This course is designed to acquaint the student with the anatomy and physiology of the vertebrate, using the cat as a representative animal for dissection.

Prerequisite: *Biology I*

BIOLOGY II/MARINE SCIENCE **4320**

Grades 11-12 1 Weighted Credit

This course offers a study of the physical, geological, and chemical characteristics of the oceans of the world as well as a survey of the marine life of the mid-Atlantic region. Representative organisms are dissected.

Prerequisite: *Biology I*

DIRECTED STUDY SCIENCE **46104**

46105

Grades 11-12 .5 Credit

This course provides in-depth science study. Content is determined by staff.

PHYSICS I **45101**

Grades 11-12 1 Credit

Key areas covered in this course include: force and motion, kinetic molecular theory, energy transformations, wave phenomena and the electromagnetic spectrum, light, electricity, fields, and non-Newtonian physics. The course emphasizes a complex understanding of experimentation, the analysis of data, and the use of reasoning and logic to evaluate evidence. The use of mathematics, including algebra, inferential statistics, and trigonometry, is important, but conceptual understanding of physical systems remains a primary focus. Students build on basic physical science principles through in-depth exploration of the nature and characteristics of energy and its dynamic interaction with matter. Course objectives stress the practical application of physics in other areas of science and technology and how physics affects our world.

Co-requisite: *Algebra II/Trigonometry or Trigonometry or Mathematical Analysis*

SPECIAL EDUCATION

Courses listed within this section are available to all students who meet state eligibility criteria for special education services and are being served on an Individualized Education Program (IEP). This continuum includes specially designed instruction, accommodations, and related services in general education, special education and/or community environments.

Students receiving special education services who are enrolled in general education courses may require accommodations and/or modifications to fully access the curriculum. The modifications and appropriate designations are determined by the IEP team and documented on the student's IEP.

MIDDLE SCHOOL COURSE OFFERINGS

ACADEMIC LAB 7896
78961
78962

Grades 6-8 Semester

These courses are designed to provide specialized instruction in basic skill areas using innovative teaching strategies and an individualized approach as outlined on the student's IEP. In addition to academic skills, social and transition skills are addressed. (May be repeated)

APPLIED ENGLISH 00K810

Grades 6-8 Year

This individualized instructional course emphasizes basic reading, listening, speaking, spelling, vocabulary, grammar, and writing as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

APPLIED HISTORY/SOCIAL SCIENCE 00K850

Grades 6-8 Year

This individualized instructional course encompasses the major content components of history/social science and stresses citizenship and the awareness needed for adult functioning as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

APPLIED MATHEMATICS 00K830
31102
31112
31122

Grades 6-8 Year

This course is designed to continue mathematics reasoning and calculations skills introduced/mastered in elementary school as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

APPLIED SCIENCE 00K840
41052
41152
41252

Grades 6-8 Year

This individualized instructional course introduces/enhances practical science knowledge using a hands-on approach as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

**PRE-VOCATIONAL TRAINING
& INDEPENDENT LIVING** 7898

Grades 6-8 Year

This program is designed to prepare students for supported or competitive employment as well as community and independent living. Reading, math, social skills, and citizenship are integrated into pre-vocational skills training to make learning immediately relevant.

HIGH SCHOOL COURSE OFFERINGS

ACADEMIC LAB 78964
78965

Grades 9-12 .5 Credit

This individualized instructional course develops, strengthens, or reinforces the skills which have been shown to be areas of concern through curriculum-based assessment and which are outlined on the student's IEP. Academic, social and transition skills are addressed.

ALGEBRA I MATH LAB 31303

Grades 9-12 1 Math Credit

This course is offered to students enrolled in Algebra I who qualify and meet the requirements for Credit Accommodations.

**BUSINESS-INDIVIDUALIZED
EDUCATION PROGRAM** 7888

Grades 9-12 Varies

This course is designed to serve students with special needs who desire and can benefit from business studies. The course is developed cooperatively between business and special education personnel based on the student's IEP. Course length is determined by the student's needs and job requirements.

PRACTICAL ENGLISH 1516

Grades 9-12 Year

This individualized instructional course for identified students with disabilities is designed to teach and reinforce the basic oral and written communication skills needed for independent living as outlined on the IEP. This course may be offered in a pull-out setting or in a general education setting.

PRACTICAL HISTORY/SOCIAL SCIENCE 2998

Grades 9-12 Year

This individualized instructional course for identified students with disabilities is designed to develop attitudes, values, and history/social science knowledge that lead to responsible participation in the world of work and to productive citizenship as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

PRACTICAL LIFE SKILLS 78963

Grades 9-12 Year

This individualized instructional course is designed to develop, strengthen, or reinforce basic adaptive skill areas as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

PRACTICAL MATH 3201

Grades 9-12 Year

This is an individualized instructional course of basic mathematical concepts needed for independent living as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

NOTE: *Practical Math does not count as a mathematics credit for a Standard Diploma.*

PRACTICAL SCIENCE 4612

Grades 9-12 Year

This individualized instructional course for identified students with disabilities is designed to develop attitudes, values, and science knowledge that lead to responsible participation in the world of work and to productive citizenship as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

PRE-VOCATIONAL SKILLS 78981

Grades 9-12 Year

This individualized instructional course of work adjustment and other skills needed for career awareness and job placement for identified students with disabilities is designed to teach/reinforce work adjustment as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

PROJECT EXPLORE 78982

Grades 9-12 Year

This course is designed as an introductory course for students with disabilities to assist in understanding, changing and improving specific work behaviors that will aid in the fulfillment of postsecondary goals. Project EXPLORE is operated through school based enterprises in each of the four high schools. Related functional academic skills are taught in the classroom to support the jobs required for the business. This course is intended to prepare students for Project EXPERIENCE and may be repeated based on individual student needs.

PROJECT EXPERIENCE 78983

Grades 11-12 1 Credit

This program provides community-based employment skills for students with disabilities. Students submit applications to Coordinator of Student Services for Secondary Transition for approval to enroll in this course. The program is based on a supported employment model with adaptations being made for the needs of individual students. Students are supervised at the work site by a Para-educator Job Coach. Program emphasis is on IEP Transition goals, the development of work behaviors, as well as work skills. The Para-educator Job Coach works cooperatively with home school teachers and adult service providers to support each student's Individual Transition Plan, coordinate student programming, and address student needs. This training program has several objectives: job exploration, job preparation and first-hand knowledge of work requirements. The goal is to transition students from school to employment or adult services, according to their individual needs. This course may be repeated based on individual student needs.

PROJECT SEARCH 78984

Grade 12 Year

This individualized instruction post graduate program includes a full day of functional instruction and job coaching. Students rotate through internships with mentors and job coaches assisting in employment skill development. The goal of this program is competitive employment for student participants. Interested students must go through an application process, including an interview, and meet Business Liaison's employment requirements before being accepted to the program. Additionally, applicants should have completed their affiliation with the high school, yet remain eligible for services with an Applied Studies Diploma. Applications should be submitted to the Coordinator of Student Services for Secondary Transition. This course is for one year only and may not be repeated.

WORLD LANGUAGES

As graduation requirements vary based on graduation year and diploma type, please refer to page 4 for additional information.

The acquisition of other languages will enable students to communicate across cultures and gain knowledge of other cultures in order to interact effectively within the community and global marketplace.

NOTE: Arabic, Chinese, German I-IV and Latin I-IV will be offered virtually beginning in grade 7 for students who do not have Latin or German courses available in their schools.

MIDDLE SCHOOL COURSE OFFERINGS

EXPLORATORY WORLD LANGUAGES & WORLD CULTURES

57001

Grade 6 Quarter

This course introduces the languages, cultures, and customs of a variety of countries from around the world.

EXPLORATORY FRENCH & SPANISH 6

57002

Grade 6 Quarter

This course provides an introduction to French and Spanish culture and languages.

ESL RIGOR

11084

Grades 6-8 1 Credit

The course provides middle school English Learners with strategies and skills to build academic vocabulary, comprehension, and content knowledge through reading and analyzing a variety of non-fiction texts. This course may be repeated.

EXPLORATORY WORLD LANGUAGES

57003

Grade 7-8 Semester

This course introduces cultural heritage and beginning conversational skills in French and Spanish.

ARABIC I

 **V5010**

GERMAN I

 **V5210**

MANDARIN CHINESE I

 **V5810**

Grades 7-8 1 Credit

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. Students learn basic skills in listening, speaking, reading and writing with an emphasis on the ability to communicate orally and in writing in various social and academic settings.

NOTE: Virtual Virginia may not offer Arabic IV yearly. As such, this language will not fulfill the Honors program requirement.

FRENCH I

5110

SPANISH I

5510

Grades 7-8 1 Credit

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. Students learn basic skills in listening, speaking, reading and writing with an emphasis on the ability to communicate orally and in writing in various social and academic settings.

LATIN I

 **V5310**

Grades 7-8 1 Credit

Level I Latin is a study of grammatical patterns and vocabulary with introductory translation of Latin stories.

ARABIC II

 **V5020**

GERMAN II

 **V5220**

LATIN II

 **V5220**

MANDARIN CHINESE II

 **V5820**

Grades 7-8 1 Credit

Students continue to develop proficiency in all four language skills: listening, speaking, reading, and writing, with an emphasis on the ability to communicate orally and in various social and academic settings. Emphasis is placed on real-life situations, reading materials, and producing short writings using more complex sentences and language structures within the cultural context of home life, student life, leisure time, vacation, and travel.

NOTE: Virtual Virginia may not offer Arabic IV yearly. As such, this language will not fulfill the Honors program requirement.

Prerequisite: Level I of selected World Language

FRENCH II

5120

SPANISH II

5520

Grades 7-8 1 Credit

Students continue to develop proficiency in all four language skills: listening, speaking, reading, and writing, with emphasis on the ability to communicate orally and in various social and academic settings. Emphasis is placed on real-life situations, reading materials, and producing short writings using more complex sentences and language structures within the cultural context of home life, student life, leisure time, vacation, and travel.

Prerequisite: Level I of selected World Language

SURVEY OF WORLD LANGUAGES

 **V5700**

Grades 7-8 Year

This course is designed to take students on a journey around the world to discover the cultures of a number of countries and four different languages: Chinese, French, Latin, and Spanish. Designed for the middle school student, this course prepares beginner students to undertake the expectations of high school-level world language courses and provides them with a high school elective credit upon successful completion. Every seven weeks the students will "travel" to a new country with a different instructor.

HIGH SCHOOL COURSE OFFERINGS

AMERICAN SIGN LANGUAGE I**V5910**

Grades 9-12

1 Credit

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

AMERICAN SIGN LANGUAGE II**V5920**

Grades 9-12

1 Credit

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

Prerequisite: *American Sign Language I*

AMERICAN SIGN LANGUAGE III**V5930**

Grades 9-12

1 Credit

In this course, students will build upon the skills taught in ASL II and continue to increase their ability to comprehend and respond with increasing accuracy to expressive American Sign Language. ASL III provides advanced instruction in production and comprehension, vocabulary, and grammar, leading to increased communicative and cultural proficiency in ASL. Emphasis is placed on the progressive development of expressive and receptive skills. The culture, history, current events, and traditions of the Deaf community are expounded upon through selected readings, visual recordings, and other authentic materials. Visually attending, signing, individual feedback, interactive activities and group activities are designed to instruct, reinforce, connect language skills, and develop signacy. This course includes applications, problem solving, higher-order thinking skills, and performance-based and project-based assessments. Students will be able to converse with another student or individuals within the Deaf community with emphasis on appropriate language used in common communication settings. This course aligns with the Virginia Department of Education's Framework for Instruction in

American Sign Language in Virginia's Public Schools.

Prerequisite: *American Sign Language I and American Sign Language II (required)*

ENGLISH AS A WORLD LANGUAGE I**5710**

Grades 9-12

1 Credit

This course is designed to help English Learners with proficiency in vocabulary development, grammar, word order, and parts of speech. Students practice oral communication, and develop writing skills within the context of home life, student life, leisure time, and post-secondary endeavors.

ESL RIGOR**15153**

Grades 9-12

1 Credit

The course provides high school English Learners with strategies and skills to build academic vocabulary, comprehension, and content knowledge through reading and analyzing a variety of non-fiction texts. This course may be repeated.

GERMAN I**5210****FRENCH I****5110****SPANISH I****5510****ARABIC I****V5010****MANDARIN CHINESE I****V5810**

Grades 9-12

1 Credit

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. Students learn basic skills in listening, speaking, reading and writing with an emphasis on the ability to communicate orally and in writing in various social and academic settings.

NOTE: *Virtual Virginia may not offer Arabic IV yearly. As such, this language will not fulfill the Honors program requirement.*

GERMAN II**5220****FRENCH II****5120****SPANISH II****5520****ARABIC II****V5020****MANDARIN CHINESE II****V5820**

Grades 9-12

1 Credit

Students continue to develop proficiency in all four language skills: listening, speaking, reading, and writing, with an emphasis on the ability to communicate orally and in various social and academic settings. Emphasis is placed on real-life situations, reading materials, and producing short writings using more complex sentences and language structures within the cultural context of home life, student life, leisure time, vacation, and travel.

NOTE: *Virtual Virginia may not offer Arabic IV yearly. As such, this language will not fulfill the Honors program requirement.*

Prerequisite: *Level I of selected World Language*

GERMAN III**FRENCH III****SPANISH III**

Grades 9-12

**5230****5130****5530**

1 Credit

Students continue to develop proficiency in all four language skills: listening, speaking, reading, and writing, with an emphasis on the ability to communicate orally and in writing at a higher level with minimal use of English in the classroom. Emphasis is on communication using more complex sentences and language structures within the cultural context of home life, student life, leisure time, vacation and travel.

Prerequisite: *Level II of selected World Language*

LATIN I

Grades 9-12

**5310**

1 Credit

Level I Latin is a study of grammatical patterns and vocabulary with introductory translation of Latin stories.

LATIN II

Grades 9-12

**5320**

1 Credit

Level II Latin emphasizes grammatical patterns and vocabulary with the translation of Latin stories at an intermediate level of difficulty.

Prerequisite: *Latin I*

ARABIC III**MANDARIN CHINESE III**

Grades 10-12

**V5030****V5830**

1 Credit

Students continue to develop proficiency in all four language skills: listening, speaking, reading, and writing, with an emphasis on the ability to communicate orally and in writing at a higher level with minimal use of English in the classroom. Emphasis is on communication using more complex sentences and language structures within the cultural context of home life, student life, leisure time, vacation and travel.

NOTE: *Virtual Virginia may not offer Arabic IV yearly. As such, this language will not fulfill the Honors program requirement.*

Prerequisite: *Level II of selected World Language*

ENGLISH AS A WORLD LANGUAGE II**5720**

Grades 10-12

1 Credit

This course follows English as a World Language I, continuing to support English Learners with vocabulary development, grammar, speech, and oral communication. Emphasis is placed on real-life situations, reading materials, and production of written compositions using complex sentences and language structures within the context of home life, student life, leisure time, and post-secondary endeavors.

Prerequisite: *English as a World Language I*

GERMAN IV**FRENCH IV****SPANISH IV**

Grades 10-12

**5240****5140****5540**

1 Weighted Credit

Students continue to develop and refine their proficiency in all four language skills: listening, speaking, reading, and writing, with an emphasis on the ability to interact orally and in writing. They communicate on a variety of topics using more complex language structures. At this level, students comprehend the main ideas of authentic materials and are able to develop original written materials on familiar topics. Students gain a deeper understanding of cultural perspectives, practices, and products.

Prerequisite: *Level III of selected World Language*

LATIN III

Grades 10-12

**5330**

1 Credit

Level III Latin builds on grammatical forms and patterns and begins a study of selected Roman authors in prose and poetry.

Prerequisite: *Latin II*

AP CHINESE LANGUAGE AND CULTURE

Grades 11-12

**V5860**

1 Weighted Credit

Students will demonstrate proficiency in presentational, interpersonal and interpretive communication through listening, speaking, reading and writing. Emphasis is placed on exploration of contemporary and historical Chinese cultures and the study of a variety of themes related to the Chinese Language and culture. Students will broaden their global perspectives and compare Chinese cultures with their own cultures. The primary language spoken at this level is Chinese. Students who have enrolled in a Virtual Virginia World Language course will be required to take a nationally recognized examination in their language as part of this course. Students taking this course are encouraged to take the AP Exam.

Prerequisite: *Mandarin Chinese IV/Teacher Recommendation*

AP FRENCH LANGUAGE

Grades 11-12

**5170**

1 Weighted Credit

This course is designed to prepare students to take the AP exam for college credit. Students develop more advanced communication skills in all four areas: listening, speaking, reading and writing, with an emphasis on the ability to interact orally and in writing. At this level, students create and listen with understanding to reports, presentations, interpretive, and expressive composition. Emphasis is placed on listening to native speakers, reading periodicals with more advanced vocabulary and grammatical structures, writing compositions several paragraphs in length, and orally communicating facts and ideas using all tenses and moods with reasonable fluency. The primary language spoken at this level is French. Students taking this course are encouraged to take the AP Exam.

Prerequisite: *French IV/Teacher Recommendation*

AP GERMAN**5270**

Grades 11-12

1 Weighted Credit

AP German is designed to increase students' knowledge of German culture and language; it is also designed to prepare students for the AP German Language and Culture exam. This course will integrate all three communicative modes: interpersonal (oral and written), interpretive (oral and written), and presentational (oral and written); it will do this through the use of authentic materials. When communicating, students will demonstrate an understanding of the German culture, will incorporate interdisciplinary topics (Connections), will make comparisons between English and German and between German and American cultures (Comparisons), and will use German in real-life settings (Communities). Students will show an awareness of practices, perspectives, and cultural products, both tangible and intangible.

Prerequisite: *German IV. Native speakers are evaluated after level 3.*

AP LATIN LITERATURE**V5380**

Grades 11-12

1 Weighted Credit

This course is designed to prepare students to take the AP exam for college credit. Students will translate accurately from Latin into English the poetry or prose they are reading, and will demonstrate a grasp of grammatical structures and vocabulary. Stylistic analysis is an integral part of the advanced work in AP Latin Literature as students will read and interpret poetry and prose at sight. Students will study and analyze passages from the poetry of Catullus paired with selections from Ovid. Students taking this course are encouraged to take the AP Exam.

Prerequisite: *Latin III*

AP SPANISH LANGUAGE AND CULTURE**5570**

Grades 11-12

1 Weighted Credit

This course is designed to prepare students to take the AP exam for college credit. Students develop more advanced communication skills in all four areas: listening, speaking, reading and writing, with an emphasis on the ability to interact orally and in writing. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. At this level, students create and listen with understanding to reports, presentations, interpretive and expressive composition. Students gain greater insights into culture through literature and other advanced reading. Emphasis is placed on listening to native speakers, reading periodicals with more advanced vocabulary and grammatical structures, writing compositions several paragraphs in length, and orally communicating facts and ideas using all tenses and moods with reasonable fluency. The primary language spoken at this level is Spanish. Students taking this course are encouraged to take the AP Exam.

Prerequisite: *Spanish IV/Teacher Recommendation*

AP SPANISH LITERATURE AND CULTURE**5506**

Grades 11-12

1 Weighted Credit

AP Spanish Literature and Culture is equivalent to a college level introductory survey course of literature written in Spanish. Students continue to develop their interpretive, interpersonal, and presentational skills in Spanish language as well as critical reading and analytical writing as they explore short stories, novels, plays, essays, and poetry from Spain, Latin America, and U.S. Hispanic authors along with other non-required texts.

Prerequisites: *AP Spanish Language and Culture*

DIRECTED STUDY FRENCH**51051****51052****DIRECTED STUDY GERMAN****52051****52052****DIRECTED STUDY LATIN****53051****53052****DIRECTED STUDY SPANISH****55051****55052**

Grades 11-12

.5 Credit Each

World Language directed study is in-depth study designed to explore, with the consent and direction of the teacher, a specific topic or area in the selected World Language. These courses do not replace any upper level of World Language study.

LATIN IV**5340**

Grades 11-12

1 Weighted Credit

Level IV Latin continues the study of Roman prose and poetry within the context of Roman history and its contributions to our modern world.

Prerequisite: *Latin III*

MANDARIN CHINESE IV**V5840**

Grades 11-12

1 Weighted Credit

Students continue to develop and refine their proficiency in all four language skills: listening, speaking, reading, and writing, with an emphasis on the ability to interact orally and in writing. They communicate on a variety of topics using more complex language structures. At this level, students comprehend the main ideas of authentic materials and are able to develop original written materials on familiar topics. Students gain a deeper understanding of cultural perspectives, practices, and products.

Prerequisite: *Level III of selected World Language*

SPECIALTY PROGRAMS COURSE OFFERINGS

GOVERNOR'S SCHOOL FOR SCIENCE & TECHNOLOGY (GSST)

The Governor's School for Science and Technology (GSST) at New Horizons Regional Education Center is operated by Gloucester, Hampton, Newport News, Poquoson, Williamsburg-James City County, and York County Schools. Students enrolled in the program select one of three academic strands as their focus for their Governor's School experience. Each strand provides a unique emphasis on both the science subject matter and associated career fields. In addition, each strand will foster research through a Research Methodology and Ethics course the junior year, and an Honors Research and Mentorship placement the senior year.

Engineering Strand

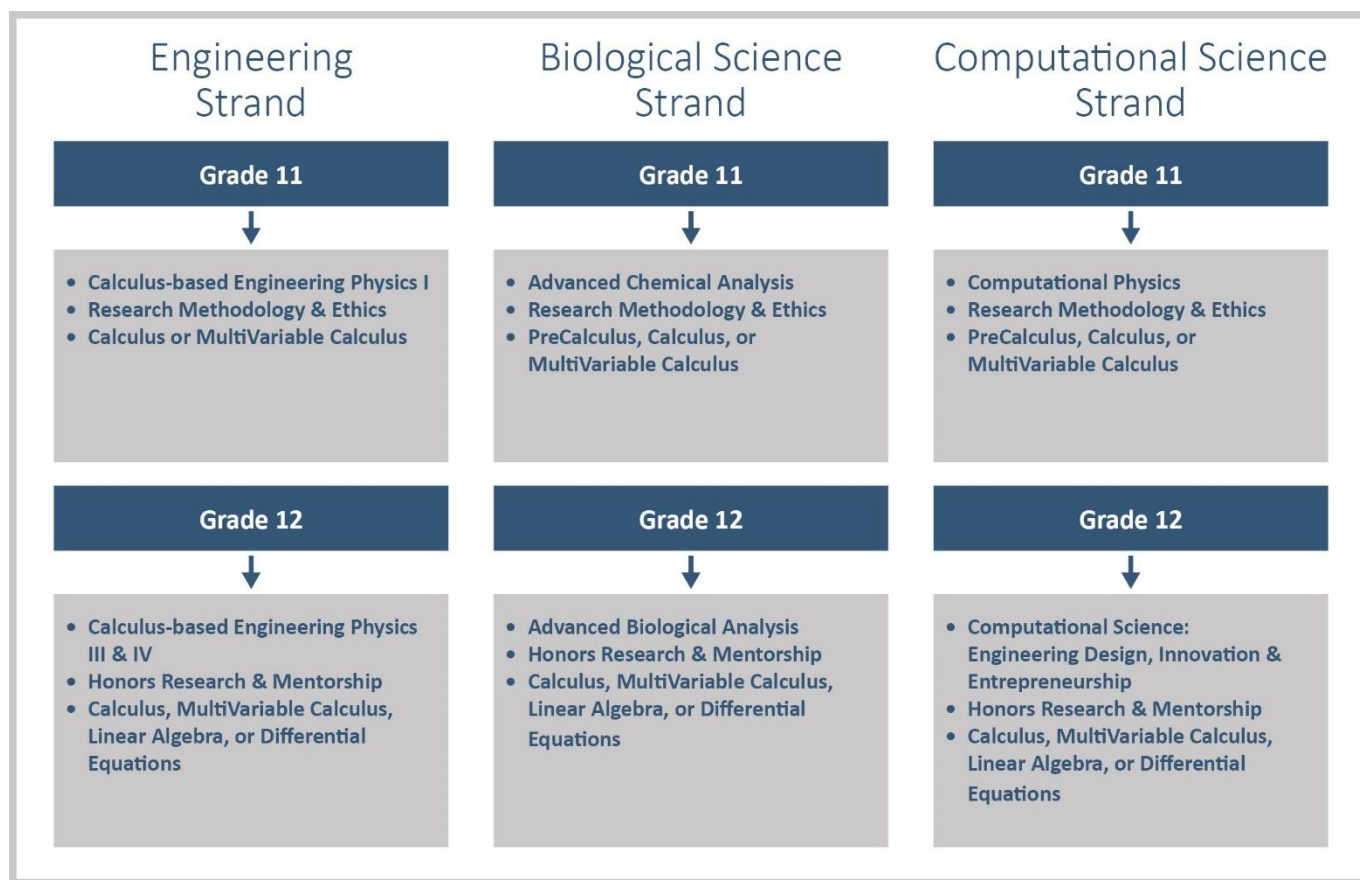
The Engineering Strand involves an intense, rigorous study of fundamental principles of engineering and calculus-based physics.

Biological Science Strand

The Biological Science Strand provides insights into organic and inorganic chemistry, cell and molecular biology, genetics, and the diversity and physiology of organisms.

Computational Science Strand

The Computational Science Strand builds conceptual knowledge and problem-solving skills in the areas of software development, modeling and simulation of discrete and continuous systems and topics in non-calculus based physics.



GSST COURSE OFFERINGS

ADVANCED CHEMICAL ANALYSIS**4471**

Grade 11

2 Weighted Credits

This course focuses on the fundamental principles and laws of chemistry. Extensive laboratory work and problem solving will serve as the basic tools for students to explore chemistry topics. The course will provide insights into organic and inorganic chemistry. The students will explore advanced concepts such as kinetics, acid/base chemistry, equilibrium, thermochemistry and electrochemistry. The course will emphasize problem solving and higher order thinking skills through chemical calculations.

NOTE: *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.*

Prerequisite: *High School Chemistry*

CALCULUS-BASED ENGINEERING PHYSICS I**4571-1**

Grade 11

2 Weighted Credits

This is a mathematically rigorous course that investigates the principals of classical mechanics and thermodynamics. Includes kinematics, Newton's laws of motion, work, energy, momentum, rotational kinematics, dynamics and static equilibrium, elasticity, gravitation, fluids, simple harmonic motion, calorimetry, ideal gas law, and the laws of thermodynamics. The course covers calculus-based introductory physics with laboratory sequence. It provides the student with a broad understanding of the general concept and principles of the physical universe, and prepares the student for advanced study in physical sciences and engineering through development of skills in problem solving, critical thinking and quantitative reasoning, and an understanding of the methods of scientific inquiry and experiments. The course is the first year of a two-year calculus-based introductory physics course with laboratory sequence.

Prerequisite: *Calculus*

COLLEGE MODERN PRE-CALCULUS**3162**

Grade 11

1 Weighted 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.

COMPUTATIONAL PHYSICS**4525**

Grade 11

2 Weighted Credits

Teaches fundamental principles of physics and scientific programming in Python. Based on college-level Physics 201 and 202, the course covers forces, Newton's laws of motion, conservation laws, gravity, properties of matter, oscillations,

optics, electricity, magnetism, and special relativity. In the first semester, students study college physics and Python as two separate subjects. Then, during the second semester, programming skills are applied to the solution of physics problems. The concepts are reinforced through weekly labs, hands-on demonstrations, and projects.

Prerequisite: *Algebra II/Trigonometry*

RESEARCH METHODOLOGY AND ETHICS**4610**

Grade 11

1 Weighted Credit

This year-long course provides junior STEM students with knowledge and experiences on how to conduct scientific researches and engineering projects. Students will study contemporary issues in scientific research while conducting independent research projects outside of class. Students are encouraged to select projects consistent with their strand or career goals. Course topics include research design strategies, data analysis and representation (with and without computer-assistance), norms of conduct for ethical research behavior, and the historical basis for current research regulations, among others. All students must conduct a review of the primary literature to support their research design assumptions, prepare and present a plan of their proposed research for institutional review and approval, conduct their studies and report their findings via formal technical paper as well as oral presentation. All students present posters in our junior science symposium, judged by professionals in various fields. Participation in regional science and engineering fairs are highly encouraged; learning fundamental knowledge of the engineering method, design for human use, and entrepreneurship are requisite skills today to perform research, problem-solve, innovate, and create opportunities in the real world. The engineering design content of the course requires that students first understand and then continuously improve their skills in the engineering method, the fundamentals of design for human use, and the mindset and skills of entrepreneurship.

COLLEGE CALCULUS**3177**

Grades 11-12

1 Weighted Credit

This course covers two 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, students 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.

NOTE: *Successful completion of this course will prepare students to enroll in multivariable calculus and linear algebra.*

MULTIVARIABLE CALCULUS**3178**

Grades 11-12

1 Weighted 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.

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.*

LINEAR ALGEBRA**3180**

Grade 12

1 Weighted Credit

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.*

ADVANCED BIOLOGICAL ANALYSIS**4371**

Grade 12

2 Weighted 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.

NOTE: *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 III & IV:**MODERN PHYSICS AND APPLIED PHYSICS:****ENGINEERING DESIGN PRINCIPALS****4580**

Grade 12

2 Weighted 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 also includes a series of project-based engineering learning experiences to help students acquire and apply the skills, tools, and best practices of the engineering profession. Learning tools include, for example, computer programming with C++ language with object-oriented programming, 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 with identifying 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 Jefferson Labs.

Prerequisite: *Engineering Physics I, Calculus*

COMPUTATION SCIENCE: ENGINEERING**DESIGN, INNOVATION & ENTREPRENEURSHIP****4550**

Grade 12

2 Weighted 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 also includes 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.

Prerequisite: *Computational Physics and Pre-Calculus*

DIFFERENTIAL EQUATIONS**3179**

Grade 12

1 Weighted Credit

This 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: *Successful completion of GSST College Calculus*

HONORS RESEARCH & MENTORSHIP**46121**

Grade 12

2 Weighted 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 the mentorship work. Students will prepare research documents using LaTeX 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. Students will explore the new and young field of data science at an introductory level that provides a broad overview of the use and application of data science in daily life. Moreover, students will learn to think critically with regard to the ethics of data collection and analysis in research, industry, and government. Programming will be an integral part of the course material and assignments. Students will learn how to program in R, a program for statistics and data science. Overall, topics that are covered include introductory statistics, use and ethics of data analysis, collection, and use, and programming of data analysis programs in R.

NOTE: *This course provides students with an opportunity to integrate theory, knowledge and application through a research experience.*

INTERNATIONAL BACCALAUREATE (IB) DIPLOMA

The IB Diploma Programme requires each student to take courses in six academic areas. To qualify for the International Baccalaureate Diploma, students must take examinations in six subject areas, participate in the Creativity, Activity, and Service (CAS) program, and write an extended essay during the grades 11 and 12.

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

While the International Baccalaureate (IB) Programme provides a two-year curriculum, students are encouraged to participate in Pre-Diploma classes in grades 9 and 10.

IB courses are identified as SL (Standard Level), requiring a minimum of 150 instruction hours, or HL (Higher Level), requiring 240 instructional hours.

Pre-Diploma Course Recommendations

Grade 9	Grade 10	Grade 11	Grade 12
<ul style="list-style-type: none"> Advanced English 9 AP World History Advanced Geometry or Algebra II/Trigonometry Biology I Level II or III French or Spanish 	<ul style="list-style-type: none"> Advanced English 10 AP United States Government Algebra II/Trigonometry or Math Analysis Chemistry I Level III or IV French or Spanish 	<ul style="list-style-type: none"> IB English HL 11 IB Biology HL 11 or IB Chemistry HL 11 or IB Physics HL 11 IB French SL/HL or Spanish SL/HL or Classical Languages SL (Latin) IB Math SL or Math Applications IB History HL 11 IB Geography SL or Theatre SL Elective(s) 	<ul style="list-style-type: none"> IB English HL 12 IB Biology HL 12 or IB Chemistry HL or Physics HL 12 IB French SL/HL or Spanish SL/HL or Classical Languages SL (Latin) AP Calculus, AP Stats, Math Analysis, or Probability/Stats IB History HL 12 Theory of Knowledge Elective(s)

IB DIPLOMA PROGRAMME COURSE OFFERINGS

GROUP 1: STUDIES IN LANGUAGE & LITERATURE

IB LANGUAGE A: LANGUAGE AND LITERATURE - ENGLISH (HL) IB 1150

Grade 11 1 Weighted Credit

This course offers a study of American, British, and world literature. The course offers students an introduction to the elements of rhetoric and cultural studies through study of a variety of fiction and non-fiction, poetry, and drama. The works of Huxley, Flaubert, el Saadawi, Shakespeare, Dickinson, Dostoevsky, and other selected authors are offered for in-depth study, in addition to selected poems and essays. The course focuses on rhetorical analysis through written and oral communication. The assessments encompass expository and persuasive essays, literary analysis, compare/contrast essays, close passage analysis, commentary, research, and oral assignments. Materials for internal and external assessments (both oral and written) for the IB Diploma Programme are prepared.

Prerequisite: *Advanced English 10*

IB LANGUAGE A: LANGUAGE AND LITERATURE - ENGLISH (HL) IB 1160

Grade 12 1 Weighted Credit

This course continues the curriculum from IB Language and Literature – English (HL) in grade 11.

GROUP 2: LANGUAGE ACQUISITION

IB CLASSICAL LANGUAGES: LATIN (SL) IB 5330

Grade 11 1 Weighted Credit

This course continues the study of grammar and ancient culture in previous levels while focusing on translation of extended passages. Course expectations include a systematic study of grammar, text handling, and written assessments geared toward the successful completion of Internal Assessments and IB Examinations. Particular attention is paid to understanding classical texts in their original language as well as appreciating these texts in their social, political, and historical contexts. The second year of this course is competed in 12th grade.

IB LANGUAGE B: FRENCH (HL) IB 51421 IB LANGUAGE B: FRENCH (SL) IB 5142

Grade 11 1 Weighted Credit

This course continues the study of grammar and culture of previous levels while focusing on language acquisition and development. Students explore significant themes through a variety of text types, which include both literary and non-literary selections (e.g. short stories, extracts from novels, newspapers, magazines, other media sources). Course expectations include a systematic study of grammar, text handling, oral components, and written assessments geared toward the successful completion of Internal Assessments and IB Examinations. Particular attention is paid to intertextual analysis and writing around themes of social

relationships, communication and media, and global issues. The second year of this course is competed in 12th grade.

NOTE: *At the HL level, students prepare for additional IB assessments which focus on literary interpretation.*

IB LANGUAGE B: SPANISH (HL) IB 55421 IB LANGUAGE B: SPANISH (SL) IB 5542

Grade 11 1 Weighted Credit

This course continues the study of grammar and culture of previous levels while focusing on language acquisition and development. Students explore significant themes through a variety of text types, which include both literary and non-literary selections (e.g. short stories, extracts from novels, newspapers, magazines, other media sources). Course expectations include a systematic study of grammar, text handling, oral components, and written assessments geared toward the successful completion of Internal Assessments and IB Examinations. Particular attention is paid to intertextual analysis and writing around themes of social relationships, communication and media, and global issues. The second year of this course is completed in grade 12.

NOTE: *At the HL level, students prepare for additional IB assessments which focus on literary interpretation.*

IB SPANISH AB INITIO 11 IB 55521

Grade 11 1 Weighted Credit

This language acquisition course is designed for students with no previous experience in or very little exposure to the target language. Students develop their receptive, productive, and interactive skills while learning to communicate in Spanish in familiar and unfamiliar contexts. Students develop the ability to communicate through the study of language, themes, and texts.

IB CLASSICAL LANGUAGES: LATIN (SL) IB 5340

Grade 12 1 Weighted Credit

This course continues the curriculum from IB Classical Languages (SL) in grade 11.

IB LANGUAGE B: FRENCH (HL) IB 51621 IB LANGUAGE B: FRENCH (SL) IB 5162

Grade 12 1 Weighted Credit

This second-year course continues the curriculum from IB Language B: French (HL) and IB Language B: French (SL) in grade 11.

NOTE: *At the HL level, students prepare for additional IB assessments which focus on literary interpretation.*

IB LANGUAGE B: SPANISH (HL) IB 55621 IB LANGUAGE B: SPANISH (SL) IB 5562

Grade 12 1 Weighted Credit

This second-year course continues the study of grammar and culture of previous levels while focusing on language acquisition and development. Students explore significant themes through a variety of text types, which include both literary and non-literary selections (e.g. short stories, extracts from novels, newspapers, magazines, other media sources). Course expectations include a systematic study of

grammar, text handling, oral components, and written assessments geared toward the successful completion of Internal Assessments and IB Examinations. Particular attention is paid to inter-textual analysis and writing around themes of social relationships, communication and media, and global issues.

NOTE: At the HL level, students prepare for additional IB assessments which focus on literary interpretation.

IB SPANISH AB INITIO 12

 **IB 55522**

Grade 12

1 Weighted Credit

This second-year course continues the curriculum from IB Spanish Ab Initio 11.

Prerequisites: IB Spanish Ab Initio 11

GROUP 3: INDIVIDUALS AND SOCIETIES

IB 20TH CENTURY WORLD HISTORY (HL) **IB 2360**

Grade 11

1 Weighted Credit

This course focuses on the history of the Americas and topics in 20th century world history. United States and Latin American history are covered from the colonial period to the present. World history topics include: 20th century wars, the rise of single-party states, and the Cold War. External and internal assessments in fulfillment of the IB Diploma Programme are collected through a research study. This course also prepares students for the IB Examination in Group 3, the external assessment components. The second year of this course is completed in grade 12.

Prerequisite: AP World History or AP European History

IB 20TH CENTURY WORLD HISTORY (HL) **IB 2361**

Grade 12

1 Weighted Credit

This course continues the curriculum from IB 20th Century World History (HL) in grade 11.

Prerequisite: IB 20th Century World History

Prerequisite or Co-requisite: AP US Govt. and Politics

IB GEOGRAPHY (SL) **IB 2210**

Grade 11

1 Weighted Credit

This course focuses on the interactions between individuals, societies and the physical environment in both time and space. It seeks to identify trends and patterns in these interactions and examines the processes behind them. The course integrates both physical and human geography and ensures that students acquire elements of both scientific and socio-economic methodologies. Students who do not take Group 6 Theatre Arts may take Geography as their sixth IB course.

GROUP 4: EXPERIMENTAL SCIENCES

IB BIOLOGY (HL) **IB 4380**

Grade 11

1 Weighted Credit

This course is designed to meet the objectives of the IB Biology Programme. Throughout the course, four basic biological concepts are used that allow students to study the content at differing levels of complexity (hierarchy). The four concepts are structure and function, universality versus diversity, equilibrium within systems, and evolution. Topics covered during the first year of this course include: scientific

method, life processes, human physiology, genetics, ecology and plant science, and evolution. During the second year, students complete two of the following options: evolution, neurobiology and behavior, applied plant and animal science, ecology and conservation, or human physiology. The Group 4 project and the required 65 hours of lab work for internal assessment are completed in this course. The second year of this course is completed in grade 12.

IB BIOLOGY (HL)

IB 4390

Grade 12

1 Weighted Credit

This course continues the curriculum from IB Biology (HL) in grade 11.

Prerequisite: IB Biology (HL)

IB CHEMISTRY (HL)

IB 4480

Grade 11

1 Weighted Credit

This course is designed to meet the objectives of the IB Chemistry Programme. At the core of the course are eleven topics: quantitative chemistry, atomic structure, periodicity, bonding, energetics, kinetics, equilibrium, acids and bases, oxidation, organic chemistry, and measurement and data processing. Additional focus is given to five topics chosen from atomic structure, periodicity, bonding, energetics, kinetics, equilibrium, acids and bases, oxidation, or organic chemistry. During the second year, students complete two of the following options: modern analytical chemistry, human biochemistry, chemistry in industry and technology, medicine and drugs, environmental chemistry, food chemistry, and further organic chemistry and conservation. The Group 4 project and the required 50 hours of lab work for internal assessment are completed in this course. The second year of this course is completed in grade 12.

IB CHEMISTRY (HL)

IB 4490

Grade 12

1 Weighted Credit

This course continues the curriculum from IB Chemistry (HL) in grade 11.

Prerequisite: IB Chemistry (HL)

IB PHYSICS (HL)

IB 45901

Grade 11

1 Weighted Credit

This course is designed to meet the objectives of the IB Physics Programme and is the first year of a two-year course. Topics covered include measurement, mechanics, thermal physics, waves, electricity and magnetism, and quantum and nuclear physics. During the second year, students complete one of the following options: relativity, engineering physics, imaging, or astrophysics. Extensive laboratory investigations are part of instruction. The Group 4 project and the additional 50 hours of lab work for internal assessment are completed during this course. Instruction is geared toward the successful completion of IB Diploma requirements and IB Examination preparation. The second year of this course is completed in grade 12.

IB PHYSICS (HL)

IB 45902

Grade 12

1 Weighted Credit

This course continues the curriculum from IB Physics (HL) in grade 11.

Prerequisite: IB Physics (HL)

GROUP 5: MATHEMATICS & COMPUTER SCIENCE**IB MATHEMATICS (SL)****IB 31951**

Grade 11

1 Weighted Credit

This course is for students who enjoy developing their mathematics to become fluent in the construction of mathematical arguments and develop strong skills in mathematical thinking. They will explore real and abstract applications of these ideas, with and without technology. This course includes topics that are both traditionally part of a pre-university mathematics course (for example, functions, trigonometry, calculus) as well as topics that are amenable to investigation, conjecture and proof, for instance the study of sequences and series. There is also a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments. Substantial personal research in the form of a project is a requirement of the course. Students who complete IB Math (SL) may take AP Calculus, AP Stats, Probability and Statistics, or Calculus their senior year.

Prerequisite: *Math Analysis*

IB MATH APPLICATIONS**IB 3162**

Grade 11

1 Weighted Credit

This course emphasizes the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course also includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. The course makes extensive use of technology to allow students to explore and construct mathematical models. IB Math Applications will develop mathematical thinking, often in the context of a practical problem and using technology to justify conjectures. Substantial personal research in the form of a project is a requirement of the course. Students who complete IB Math Applications may take AP Stats, Math Analysis or Probability and Statistics their senior year.

Prerequisite: *Algebra II/Trigonometry*

GROUP 6: THE ARTS**IB THEATRE (SL)****IB 1431**

Grade 11

1 Weighted Credit

This course engages students in critically studying theater of diverse cultures and historical periods, developing as reflective practitioners of a variety of aspects of theatrical performance, and working both independently and collaboratively to devise and produce original theatrical interpretations and/or productions. Course expectations include a variety of assignments geared toward completing IB Internal and External Assessments. IB assessments include a substantial research investigation, writings about practical performance aspects, and a collaborative original piece of theater.

Prerequisite for students not in the full Diploma Programme: *Drama II* or *instructor permission*

THEORY OF KNOWLEDGE**IB THEORY OF KNOWLEDGE (TOK)****IB 1197**

Grade 12

1 Weighted Credit

This course is a requirement in partial fulfillment of the IB Diploma Programme. The course focuses on the understanding and development of the systems of knowledge that exist in the world. Through a variety of sources, the student studies the ways of knowing and areas of knowledge in an effort to acquire an understanding of the totality of knowledge. The goal of the course is for students to unify their own thoughts about knowledge and increase their understanding of the world around them. Assessments include: presentations, journal entries, and one essay of 1,200-1,600 words at the conclusion of the course on topics prescribed by IBO.

This is a required course for all IB Diploma students

NAVAL SCIENCES (THS & YHS)

HIGH SCHOOL COURSE OFFERINGS

NAVY JROTC I (NJROTC)

79130
79131

Grades 9-12

1 Credit

This course is a study of basic naval orientation, citizenship and government, leadership skills, wellness and fitness, and first aid. The curriculum includes two areas of study: (1) the Cadet Field Manual with an introduction to military drill, uniforms, military customs and courtesies, and (2) the Introduction to NJROTC with the history of JROTC, citizenship, and laws-authority-responsibility. Cadets will study leadership skills, behavioral sciences, motivation and relationships. Cadets will have a balanced program of instruction in wellness including building health skills through exercise, nutrition, and lifetime planning.

NOTE: Students in this course have an opportunity to take an industry certification test.

NOTE: Navy JROTC I may fulfill the requirements for Health and PE 9.

NAVY JROTC II (NJROTC)

79160
79161

Grades 10-12

1 Credit

This course expands cadets' knowledge and experience beyond the introduction to NJROTC class. The curriculum includes two areas of study: (1) Maritime History with studies of war at sea, the US Navy, strategy and tactics, and (2) the Nautical Sciences with studies of maritime geography, and oceanography-meteorology-astronomy. The Curriculum includes: further study of the various facets of leadership, behavioral sciences, physical fitness and healthy lifestyles. Navy JROTC II and III are offered in alternating years as a combined 10th and 11th grade class.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Navy JROTC I or transfer from other JROTC program

NAVY JROTC III (NJROTC)

79180
79181

Grades 11-12

1 Credit

This course expands cadets' knowledge and experience beyond the introduction to NJROTC class. The curriculum includes two areas of study: (1) Naval Knowledge with studies of sea power, national security, military law, and laws of the sea, and (2) the Naval Skills with studies of shipboard life, seamanship, rules of the road, and navigation. The Curriculum includes: further study of the various facets of leadership, behavioral sciences, physical fitness and healthy lifestyles. Navy JROTC II and III are offered in alternating years as a combined 10th and 11th grade class.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Navy JROTC II or transfer from other JROTC program

NAVY JROTC IV (NJROTC)

79190
79191

Grade 12

1 Credit

This course is the continued study of the more effective leadership and communication skills. The curriculum includes two areas of study: (1) Leadership Theory with studies of ethics and morals, and leadership case studies, and (2) the Leadership Laboratory with possible assignments to position of authority and responsibility of other cadets. Independent study by individual cadets in the areas of their interest in naval and leadership topics are required as specified by the Navy JROTC Instructors are included in this course. Assignment to a leadership laboratory position is voluntary; however, all cadets will complete the required readings and conduct an independent study program that includes presentation to the class.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Navy JROTC III, SNSI approval, or transfer from other JROTC program

NEW HORIZONS REGIONAL EDUCATION CENTER

High school students in the York County School Division who have completed applicable prerequisites are eligible to apply to take Career & Technical Education courses offered through the New Horizons Regional Education Center (NHREC).

NOTE: Fees may be required for some Career & Technical Education (CTE) course offerings. Student-selected verified credit may be earned for some CTE course offerings.

CAREER CLUSTER: CONSTRUCTION TECHNOLOGY

BUILDING CONSTRUCTION I, II & III	8601
	8602
	8603
Grades 11-12	3 Credits

Location: Woodside Lane

This course provides an opportunity to obtain entry-level job skills in residential and commercial construction. Students are exposed to all aspects of residential construction. Upon graduation, students may pursue a career in carpentry or carpenter's helper. Spin-off careers such as siding, roofing, insulation, dry wall installers, dry wall finishers, and entry-level cabinet makers are other areas open to carpentry graduates. Students are required to demonstrate competency in areas such as use of hand and power tools, blueprint reading, building materials, foundation layout, rough framing, roof framing, exterior finishing, interior finishing, stair construction, and simple cabinet construction.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Ability to read a ruler to 1/16 increments, basic math skills using fractions & decimals, eye-hand coordination, a willingness to work outside in varying weather conditions, and successful completion of 10th grade English

ELECTRICITY AND RENEWABLE ENERGY	8533
	8534
Grades 11-12	3 Credits

Location: Woodside Lane

Electricity and Renewable Energy is a one-year program that teaches the basic concepts used by electricians to install, maintain and repair wiring, equipment and fixtures. Students in this program will also explore alternative renewable energy sources and will learn to install hydrogen fuel cells, solar panels and communication cable and wiring. As our

electricity and alternative renewable energy resource needs continue to grow, so will the career opportunities in this field. Because we depend so much on electricity and other energy sources for the way we live and work, careers in this field will always be in high demand.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Completion of Algebra I and English 10 with a grade of "C" or above

HEATING/VENTILATION/AIR CONDITIONING (HVAC MECHANICAL) I & II	8503
	8504
Grades 11-12	3 Credits

Location: Woodside Lane

This one-year course prepares students to install, maintain, and repair air conditioning, refrigeration, and heating equipment including oil, electric, and gas.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Mechanical aptitude, manual dexterity, knowledge of basic mathematics, ability to learn use of blueprints, successful completion of 10th grade English

PLUMBING AND PIPEFITTING	8551
	8552
Grades 11-12	3 Credits

Location: Woodside Lane

This one-year program provides students the opportunity to learn to safely assemble, install, and repair pipes and fittings, and install fixtures of heating, water, and drainage systems, according to specification and plumbing codes. A morning and an afternoon session are offered.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Successful completion of 10th grade English

CAREER CLUSTER: ENGINEERING/MANUFACTURING TECHNOLOGY

MECHATRONICS	8554
	8555
	8556
Grades 11-12	3 Credits

Location: Butler Farm

This is a one-year program offered at Butler Farm Campus through a partnership with VPCC. This course will lead to industry certification and prepares students for manufacturing jobs as electrical/mechanical or mechatronics technicians who design, install, maintain, repair, or

troubleshoot manufacturing systems that include electrical and mechanical equipment, instrumentation, controls, and automation. This class is dual enrolled with VPCC for 20 college credits.

Industry Certification - Siemens Level 1 Mechatronics Certification; FESTO Industry 4.0 Certifications

Prerequisite: Successful completion of 10th grade English; students must take and pass the VPCC Virginia math and English placement test before acceptance into this course.

VIRTUAL MACHINING & DESIGN**8539****8540**

Grades 11-12

3 Credits

Location: Butler Farm

This is a one-year course that provides an introduction to students to use precision tools and instruments to include operation and setup of various types of precision grinders, milling machines, and drill presses. There is also a focus on computer numerical control program writing, setup, and operation for lathe and milling machines. Students who successfully complete the Precision Machining program will be eligible for a VPCC Precision Machining Career Studies Certificate upon graduation.

NOTE: This class is dually enrolled with VPCC for 20 college credits.

Industry Certification - National Institute of Metalworking Skills Certifications

Prerequisite: Successful completion of 10th grade English; students must take and pass the VPCC Virginia math and English placement test before acceptance into this course.

WELDING I & II**8672****8673**

Grades 11-12

3 Credits Per Year

Location: Butler Farm and Woodside Lane

This is a two-year, three-period course in which students learn to use shielded metal arc welding equipment to weld surface, fillet and groove welds in the flat, horizontal, vertical, and overhead positions. This course employs oxyacetylene equipment for cutting metal as well as plasma arc. The TIG and MIG welding processes are also covered. **Expectations:** All students in welding are required to do physical labor related to welding. Welding is a construction trade and demands physical involvement.

Expenses: Students are required to provide the welding kit and the clothes in which they weld. Boots with steel toes, long sleeve shirts, and long pants are the required attire.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Good hand-eye coordination, vision, manual dexterity, successful completion of 10th grade English

CAREER CLUSTER: HEALTH SCIENCE**DENTAL CAREERS****8328****8329**

Grades 11-12

3 Credits Per Year

Location: Butler Farm

This two-year program provides the training necessary to become an integral part of the dental profession. The course offers students supervised training as a dental assistant and the educational requirements for x-ray certification upon passing a certification exam. Additional training is provided for students to administer schedule VI topical medicinal agents, including topical fluoride and desensitizing agents.

Industry Certification - Radiation Health & Safety Examination; National Occupational Competency Testing Institute Exam

Prerequisite: Emotional stability, manual dexterity, social adjustment, good grooming, excellent interpersonal communication skills, good physical condition, desire to work with people, ability to read and comprehend technical material at a minimum of 10th grade level, successful completion of 10th grade English, and Biology with a minimum grade of "B." Uniforms, liability insurance, and Hepatitis-B vaccinations required for second-year students in dental office.

MEDICAL ASSISTANT**8345****8346**

Grades 11-12

3 Credits

Location: Butler Farm

This one-year program prepares students to assist physicians by performing functions related to both business administration and clinical duties of a medical office. Instruction in the business aspects includes: insurance reporting, office accounting, medical records, and medical transcription. Clinical instruction includes: preparation of the

patient for examination and treatment, routine laboratory procedures, and use of the electrocardiograph machine.

Industry Certification - National Occupational Competency Testing Institute Medical Assisting Exam; National Certified Clinical Medical Assistant Exam

Prerequisite: Successful completion of 10th grade English, and must have completed one semester of keyboarding applications and a full-year of Biology both with a grade of "B" or above. Students enrolled in a Governor's STEM Health Academy will be given priority within their school division for admission to this program. Students must be 17 years old before April 30th to be eligible to take the national clinical medical assistant certification exam. Current TB skin test results & a copy of immunizations must be on file with New Horizons no later than Sept. 30th. A flu shot is required by Oct. 31st. Knowledge of medical terminology & anatomy and physiology are also helpful. The American Heart Association CPR BLS course is required.

NURSE AIDE**8360****8362**

Grades 11-12

3 Credits

Location: Butler Farm

This one-year course prepares students for employment at a Nurse Aide/Home Health Aide and/or for entry into the Practical Nursing program. During the last quarter of the school year, students receive on-site training in local nursing homes and mentorship sites. Each student must provide his/her own transportation to these sites. Results of a current (good for one year) TB skin test must be on file with the NHREC not later than the end of the third quarter of the school year. This is a one-year program, and program completers are eligible to take the Virginia National Council of State Board of Nursing Incorporated Examination (Ohio Nurses Testing Service) to become a Certified Nurse Aide in the state of Virginia. Completers are also eligible to take the

Foundation for Hospice and Homecare National Certification Program for Home Care Aides.

Industry Certification - Virginia Board of Nursing State Examination; AHA BLS Examination; AHA First Aid Examination

Prerequisite: *Students must have a desire to work with people, be in good physical condition, have good hand/eye coordination, possess manual dexterity, and have the ability to read and comprehend technical material at a 10th grade reading level. Results of a current (good for one year) TB skin test must be on file with New Horizons CTEC no later than October 30th. Students must pass a general safety rules test with 100% accuracy prior to attending clinical training. Also, students must have successfully completed 10th grade English, and a full year of Biology with a grade of "B" or better.*

PHYSICAL AND OCCUPATIONAL THERAPY I & II 8365 8366

Grades 11-12 3 Credits

Location: Butler Farm

This one-year course is designed to provide an introduction to the professions of physical and occupational therapy. Students explore the principles and practices of therapists in the health care industry and participate in clinical observation under the direct supervision of a licensed physical and/or occupational therapist. Clinical skills in the area of physical therapy and occupational therapy enable students to gain understanding of rehabilitative care, which is practiced throughout the continuum of care and across the life span of individuals. After successful completion of this course, students may seek higher education for specific degrees/licensure in a variety of fields such as physical therapy, occupational therapy, speech therapy, sports medicine, athletic training, chiropractic medicine, biology, or exercise science.

Industry Certification – National Physical Therapy Aide Certification Exam (CPTA); Healthcare Providers BLS/CPR, and Opioid Training

Prerequisite: *Successful completion of 10th grade English, and Biology and Algebra I with a grade of "B" or better*

CAREER CLUSTER: HUMAN SCIENCES

COSMETOLOGY I & II 8745 8746

Grades 11-12 3 Credits Per Year

Location: Butler Farm/Woodside Lane

This two-year course prepares students for state licensing as a cosmetologist. Instruction includes manicuring, shampooing, scalp and hair treatment, hair styling, and salon management.

NOTE: *Purchase of equipment and supplies is required.*

Industry Certification - Virginia State Cosmetology License Exam; National Occupational Competency Testing Institute Cosmetology Exam

Prerequisite: *Eye-hand coordination, manual dexterity, good color discrimination, ability to follow oral & written*

VETERINARY TECH 1 8088 VETERINARY TECH 2 8089

Grades 11-12 3 Credits

Location: Woodside Lane

This one-year course prepares students to respect and safely handle and treat classroom animals. The students come to understand the various breeds and species of animals and are able to identify basic requirements for veterinary care and general health maintenance. The students receive training in handling, grooming, feeding and properly medicating a variety of animals. In addition, animal nutrition, disease and basic first aid are explored. Students also perform the routine technical, maintenance and office duties associated with veterinary work.

NOTE: *Students in this course have an opportunity to take an industry certification test.*

Prerequisite: *Desire to work with people, good physical condition, enjoy handling and caring for animals, manual dexterity, successful completion of 10th grade English, and completion of Biology with a grade of "C" or better*

PHARMACY TECH 8305 8306

Grade 12 3 Credits

Location: Woodside Lane

With our average population increasing in age, prescription medications are rapidly growing in their importance in the health-care industry. Those in the industry on the Virginia Peninsula have identified Pharmacy Technician as their number one area of employment need. In the next several years, job growth for pharmacy technicians will be twice the average for all occupations in Virginia. The New Horizons program will provide students an in-depth exposure to the pharmaceutical industry. It will assist students in becoming skilled in preparing/dispensing prescriptions, compounding medications, preparing intravenous medications, stocking medications and repackaging medication. The Pharmacy Technician Program is a one-year (two-semester class) course. Students will be prepared to take the ExCPT Examination which is recognized nationally.

Prerequisite: *Completion of Algebra I and English 10 with a grade of "B" or above*

directions, ability to multi-task, successful completion of 10th grade English. Must have completed or currently be enrolled in biology or chemistry, and have basic math skills that include addition, subtraction, and simple fractions. Must meet Department of Virginia, Department of Professional and Occupational Regulation, and school attendance requirements.

CULINARY ARTS I & II 8275 8276

Grades 11-12 3 Credits Per Year

Location: Woodside Lane

This two-year course prepares students to enter employment in food service occupations. Instruction

includes: sanitation, nutrition, food preparation, purchasing, and inventory control.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Good personal hygiene, adaptability, the desire to work with people, minimum ninth grade reading level, ability to comprehend & follow directions, understanding of concepts of measurement, ability to accurately perform arithmetic operations on whole, decimal & fractional numbers

EARLY CHILDHOOD EDUCATION 8234 8285

Grades 11-12 3 Credits

Location: Woodside Lane

This is a one-year program that prepares students to be employed in the field of child care. Emphasis is placed on the development of children from birth to five years of age. A laboratory pre-school program is operated for this program.

CAREER CLUSTER: INFORMATION TECHNOLOGY

CISCO NETWORKING I & II 8542 8543 8544 8545

Grades 11-12 3 Credits Per Year

Location: Woodside Lane

This is a rigorous industry designed course taught by a CISCO certified instructor in a highly technical networking lab. The first semester qualifies the students to take the CISCO CCENT verification through training and technical labs in computer ethics, identifying security threats, and security defense. The second semester offers the potential for students to take the CISCO CCNA exam through training in configuring and troubleshooting routers, switches, and network devices. The class is dual enrolled for 14 college credits through VPCC.

NOTE: Students in this course have an opportunity to take certification tests CISCO CCNA, Certiport IT Specialist - Networking.

Prerequisite: Students enrolling in Cisco Networking I & II must have completed an advanced Math course above Algebra I with a grade of "B" or above, and have successfully completed 10th grade English. This one-year course meets the sequential elective requirement.

COMPUTER PROGRAMMING & ADVANCED PROGRAMMING 6640 6641

Grades 11-12 3 Credits

Location: Woodside Lane

This industry designed course will allow students to focus on computer science and apply key programming concepts, algorithmic procedures, programming languages, and web based applications. In the Advanced Programming course, students will use object-oriented programming to design and develop database and multimedia programs and applications. The class is dual enrolled for 14 VPCC credits.

Opportunities for experience in early childhood centers are also available. Expectations: Students enrolled in this course are expected to work a certain number of hours in local early childhood centers during both the first and second years of the course. Students are required to have their own personal craft supplies and a Tuberculin skin test.

NOTE: This program offers dual enrollment college credit through VPCC.

NOTE: Students in this course have an opportunity to take an industry certification test.

Prerequisite: Genuine desire to work with young children in loving, respectful ways, ability to develop skills in keeping written records & develop written work plans, minimum of 10th grade reading level and successful completion of 10th grade English

NOTE: Students in this course have an opportunity to take certification test Certiport – IT Specialist - Java.

Prerequisite: Students enrolling in Computer Programming & Advanced Programming must have completed Algebra I with a grade of "C" or above, and have successfully completed 10th grade English. This one-year course meets the sequential elective requirement.

CYBERSECURITY SYSTEMS TECHNOLOGY 8628 8629

Grades 11-12 3 Credits

Location: Woodside Lane

Students enter the world of computer technology and gain practical experience in assembling a computer system. Students will install, configure, and secure various operating systems. Students will troubleshoot computers and peripherals and use system tools and diagnostic software. They develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer components. Students will train in procedures for optimizing and troubleshooting concepts for computer systems, subsystems, and networks. Students will gain a basic understanding of emerging technologies including unified communications, mobile, cloud, and virtualization technologies. This one-year course prepares students for postsecondary education and training and a successful career in information technology.

NOTE: Students enrolling in Cybersecurity Systems Technology must have completed a computer applications course and English 10 both with a grade of "C" or above. This one-year course meets the sequential elective requirement.

NOTE: Students in this course have an opportunity to take certification tests CompTia A + / CompTIA ITF+, IT Specialist Certifications, NOCTI.

CYBERSECURITY OPERATIONS**NEW**
6304
6306

Grades 11-12

3 Credits

Location: Butler Farm

Cybersecurity Operations is designed to teach computer and network administration and security. Students learn cybersecurity concepts, including the practice of protecting systems, networks, and programs from digital attacks. Cybersecurity is defined as the steps and processes taken to protect networks, devices, and programs, and data from unauthorized access that can result in theft or damage. Students learn to establish, implement, and maintain security networks. Contextual instruction and student

participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

NOTE: Students in this course have an opportunity to take certification tests Security +, IT Specialist Certifications, NOCTI.

Prerequisite: Students enrolling in Cybersecurity Operations must have completed both a computer applications course and English 10 with a grade of "C" or above.

CAREER CLUSTER: PUBLIC SERVICE**CRIMINAL JUSTICE****8702**
8703

Grades 11-12

3 Credits

Location: Butler Farm/Woodside Lane

Students in this one-year program are preparing for many of the exciting, challenging, and rewarding careers in the criminal justice field. These opportunities require people who want to operate in both high energy and high-tech fluid environments filled with constant challenges and service commitments. Students will study the history of and types of law enforcement requirements as they gain an understanding of local, state, and federal law enforcement departments and jurisdictions. Students will learn about and use some of the newest technology in the criminal justice field as they undertake and engage in crime scene investigations. Some of the finest local state, federal, and private sector industry professionals provide classroom presentations and hands-on training opportunities. Students will also learn about the court system and corrections. This course is dual enrolled for 6 credits with VPCC.

NOTE: Under current regulations, an individual must be 21 years old to be a police officer. The cost of materials and certification is the responsibility of the student.

Industry Certification - National Occupational Competency Testing Institute Criminal Justice Exam

Prerequisite: Minimum GPA of 2.0 and successful completion of 10th grade English, a genuine interest in pursuing a career in criminal justice, solid writing & communication skills

to take the State Certification Exam administered by the Virginia Department of Health.

NOTE: Additional requirements for the state exam include: not having been convicted of a felony involving any sexual crime and no convictions of any other act which is a felony under the laws of this state or the United States, except that such felony is eligible for certification if within five (5) years after date of final release no additional felonies have been committed. Expenses for this course include: insurance, supplies, and exam.

Industry Certification - EMT state certification, First Aid – AHA, Basic Life Support – AHA, Mass Casualty I & II – OEMS, NIMS – 100,200,700,800 - FEMA, National Occupational Competency Testing Institute EMS Exam, and Emergency Vehicle Operations Course - VAVRS

Prerequisite: At least 17 years of age, successful completion of 10th grade math and English, ability to communicate verbally via telephone & radio equipment, lift, carry, and balance a minimum of 125 pounds (250 with assistance), interpret written, oral & diagnostic instructions, use good judgment & remain calm, read manuals, encyclopedias & road maps, accurately discern street signs & address numbers, interview patient, family members & by-standers, document in writing all relevant information, converse with co-workers & hospital staff regarding status of patient, bend, stoop & crawl on uneven terrain, withstand varied environmental conditions

FIRE SCIENCE**8705**
8706

Grades 11-12

3 Credits

Location: Butler Farm

Firefighters are one of the three public safety divisions (EMS, fire & law enforcement). This course provides indoctrination to the firefighting profession. Students will be evaluated and then academically and physically prepared for the rigors of being a firefighter. The course of study will entail numerous field trips to local firefighting facilities after school hours and on the weekends. Handling of hazardous materials will be studied. Students will experience actual fighting of fires in order to obtain Fire Fighter I & II certifications.

EMERGENCY MEDICAL TECHNICIAN**8333**
8334

Grades 11-12

3 Credits

Location: Butler Farm

This course prepares students to perform as emergency medical technicians. Students are prepared to determine the nature and extent of illness and injury, take vital signs, and establish priority for emergency care. Students participate in extricating patients from entrapment, use prescribed techniques and equipment, and report observations both verbally and in writing about care of patients at the scene and en route to the hospital. Program completers are eligible

NOTE: This program offers an opportunity for a Fire Fighter apprenticeship with the completion of EMT.

Industry Certification - Fire Fighter I & II; Hazardous Materials Awareness – DFP

Prerequisite: At least 16 years of age on first day of class, and must have completed English 10 with a grade of “C” or

above. Completion of physical exam using a NHREC form. Students not recommended entry by a physician will not be able to enter this program.

CAREER CLUSTER: TRANSPORTATION

AUTO BODY TECHNOLOGY I & II

8676
8677
8678

Grades 11-12

3 Credits Per Year

Location: Butler Farm

In the global automobile collision repair industry, there is a growing demand for qualified auto body technicians. In this course, students are taught damage analysis, estimating, customer service, non-structural analysis, damage repair, welding, painting and refinishing techniques that include surface preparation, spray gun and related equipment operation, paint mixing, matching, applying, and final vehicle detailing. Students also work with a variety of materials, using metal finishing and body filling techniques to prepare surfaces and repair panels. The second-year course deals with advanced techniques in Auto Body Technology and students may perfect their auto body skills and move toward employment in the industry. These courses are dual enrolled with VPCC for college credit.

NOTE: Each student pays for an auto body repair kit. This course is not recommended for individuals with respiratory or allergy problems. Employment opportunities exist in the auto, tire, and service facilities such as Wal-Mart, Costco, Merchants, Firestone, Jiffy Lube, Caliber Collision, Suttle Motors, Coxton's Collision, and various local automotive dealerships.

Industry Certification - Automotive Service Excellence (ASE) Entry Level Student Certifications

Prerequisite: Eye-hand coordination, manual dexterity, physical strength and stamina, and successful completion of 10th grade math and English

AUTOMOTIVE TECHNOLOGY I & II

8506
8507

Grades 11-12

3 Credits Per Year

Location: Butler Farm

This is a two-year program that prepares students to become entry-level auto technicians. In the first year, students study automotive systems and their operation, perform routine maintenance, and replace selected auto parts. The student has the opportunity to apply for a summer mentorship program sponsored by participating auto dealers. The curriculum includes: shop safety tools, service manuals and publications, automotive engine theory, service and operation, basic electrical theory and operation, suspension and driver train component operations and repair, and heating/air conditioning and emissions control systems. In the second year, students intensively study automotive electrical/electronic systems and learn to diagnose and correct malfunctions related to drivability and engine performance.

NOTE: This program offers dual enrollment college credit through VPCC in Automotive Technology II. Student must have a 2.6 GPA if seeking dual enrollment credit.

Industry Certification - Automotive Service Excellence (ASE) Entry Level Student Certifications

Prerequisite: Eye-hand coordination, manual dexterity, physical strength & stamina, successful completion of 10th grade English

MARINE SERVICE TECHNOLOGY I & II

8750
8751

Grades 11-12

3 Credits

In this introduction to service and repair of watercraft and marina operations, students learn marine trade skills in areas including shop and boating safety, inboard and outboard systems, carpentry, fiberglass construction and repair, electricity, welding, vessel storage/handling, and tools and equipment operation.

SCHOOL OF THE ARTS: MIDDLE SCHOOL ARTS MAGNET

Only middle school students accepted into the Middle School Arts Magnet (mSAM) may enroll in the courses listed in this section.

mSAM COURSE OFFERINGS

LITERARY ARTS 6

11092

Grade 6 Year

This interdisciplinary course is designed for students with a demonstrated interest in writing, literature, and the related arts. Structured to enhance the skills needed for successful academic performance in subsequent English and fine arts classes, this course emphasizes literature, composition, vocabulary development, communication, and critical thinking skills. Students receive an in-depth introduction to various genres of literature and the fine arts. This course replaces English 6 or Advanced English 6 for students enrolled in mSAM.

DANCE ARTS 6

93022

Grade 6 Year

This introductory dance arts course promotes dance as a healthy lifestyle choice and as an art form. Content focuses on the concepts of fitness and wellness utilizing dance as a cardiorespiratory activity. Students explore dance through creative movement, improvisation, the basics of choreography, dance terminology, and a variety of dance forms. Each dance form provides exposure to the diversity of style, historical, and cultural aspects of the dance arts. This course replaces Physical Education/Lifetime Fitness 6 for students enrolled in mSAM.

THEATRE ARTS 6

13902

Grade 6 Year

This interdisciplinary course explores the theatre from the perspectives of history, culture, genres, performance, and the role of theatre arts in contemporary society. Students gain in-depth knowledge of ensemble, non-verbal and verbal communication skills, and the role of the audience. Content includes classical and modern drama, critical thinking, speaking skills, and oral presentation. Students participate in a variety of theatrical opportunities.

LITERARY ARTS 7

11103

Grade 7 Year

This course expands student exploration of literature, writing, and language skills in a creative and challenging interdisciplinary environment that brings together literature and the fine arts. Students experience literature-based opportunities to enhance the skills needed for successful academic performance in subsequent English or fine arts classes. Both as readers and creators, students extend their expressive talents beyond the ordinary. Writing and critical thinking are major components of this course which replaces English 7 or Advanced English 7 for students enrolled in mSAM.

DANCE ARTS 7

93023

Grade 7 Year

This dance arts course expands exploration of dance in its many forms and provides students with exposure to the diversity of the dance arts. Content focuses on the concepts of fitness and wellness, utilizing dance as a cardiorespiratory activity. Creative movement, dance terminology, the mechanics of movement, the basics of choreography, and improvisation augment student appreciation of each dance form's historical and cultural contribution. This course replaces Physical Education/Lifetime Fitness 7 for students enrolled in mSAM.

THEATRE ARTS 7

13903

Grade 7 Year

This interdisciplinary course expands on student exploration of the theatre from the perspectives of history, culture, genres, performance, and the role of theatre arts in contemporary society. Students master skills necessary for in-depth play interpretation, study elements of theatrical production and design, and learn to differentiate between the meaningful and the mediocre in the arts as an audience member. Critical thinking, speaking skills, and oral presentation are emphasized.

LITERARY ARTS 8

11204

Grade 8 Year

This interdisciplinary course provides in-depth exploration of literature, writing, and language skills in a creative and challenging environment that incorporates the fine arts. Students experience literature-based opportunities to enhance the skills needed for successful academic performance in subsequent English or fine arts courses. Composition, literature, vocabulary development, communication, and critical thinking are major components of this course which replaces English 8 or Advanced English 8 for students enrolled in the mSAM.

DANCE ARTS 8

93024

Grade 8 Year

This dance arts course continues to provide in-depth study of dance in its many forms and expands students' exposure to the diversity of the dance arts. Content focuses on the concepts of fitness and wellness utilizing dance as a cardiorespiratory activity. Applications of creative movement, dance terminology, the mechanics of movement, choreography, and improvisation enhance student appreciation of each dance form's historical and cultural contribution. This course replaces Physical Education/Lifetime Fitness 8 for students enrolled in mSAM.

THEATRE ARTS 8**13904**

Grade 8

Year

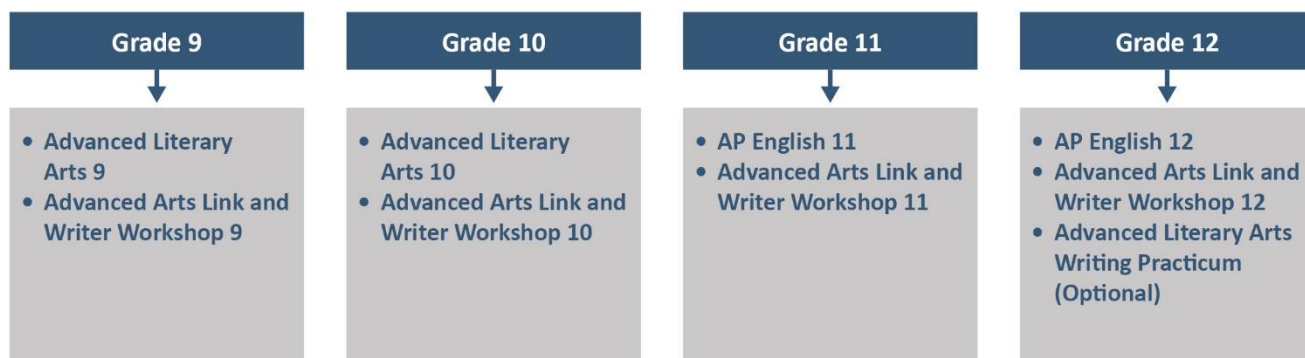
This interdisciplinary course continues to provide student investigation of the theatre from the perspectives of history, culture, genres, performance, and the role of theatre arts in contemporary society. Students apply knowledge and skills through participation in various theatrical venues with an emphasis on the role of the production team (e.g., designers, performer, and technical support staff). Critical thinking, speaking skills, and oral presentation are emphasized.

SCHOOL OF THE ARTS

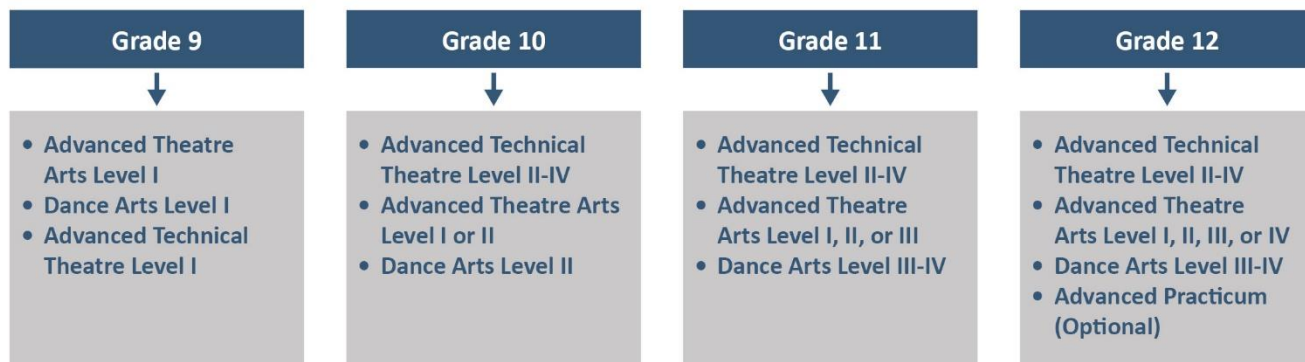
Only students accepted into the School of the Arts (SOA) may enroll in the courses listed within this section.

Students may enroll in classes as their schedule allows.

Literary Arts Track



Dance Arts & Theatre Track



SOA COURSE OFFERINGS

ADVANCED LITERARY ARTS 9

ADVANCED LITERARY ARTS 9	117710
ADVANCED ARTS LINK AND WRITER WORKSHOP 9*	117711

Grade 9	2 Weighted Credits
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These two interdisciplinary courses explore the elements of the fine and literary arts with an emphasis on the relationship among the arts and the development of standards to help students become discerning lifelong patrons of the arts. They also include an analysis of 19th – 21st century literature with emphasis on literary devices and techniques and the elements of character, setting, and theme. Students are involved in a study of skills, techniques, and models for writing fiction and nonfiction, and for gathering information through primary and secondary sources to include the use of electronic databases. Students plan and present individual and group presentations integrating art and literature and use collaborative strategies to evaluate various genres in literature to include essays, short stories, novels, drama, and poetry. Throughout the year, students will participate in integrated field study in a variety of art forms, including field trips and guest artists. All students will also write an original one-act play. These courses build a foundation to prepare students for the AP Language and Literature Exams.

Prerequisite: Application & Audition***Fine Arts Elective**

ADVANCED LITERARY ARTS 10

ADVANCED LITERARY ARTS 10	117720
ADVANCED ARTS LINK AND WRITER WORKSHOP 10*	117721

Grade 10	2 Weighted Credits
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These two interdisciplinary courses are designed for students with demonstrated interest and talent in writing, literature, and other fine arts. Literature serves as the basis and/or model for student writing and oral presentations. Included is an analysis of literature with emphasis on devices, techniques, and the elements of character, setting, theme, point of view, tone, and dialogue. These interdisciplinary courses focus on the literature and other arts of ancient world cultures and their influence on the culture of the modern world. Quarter-by-quarter students will travel the ancient world – learning about the literature and arts associated with various classic world cultures including Greece, Egypt, Persia, India, China, and Japan. Students will use a variety of collaborative learning strategies, study skills, and models for writing their own original literary and artistic works. Through these studies and activities, the students will develop an understanding of archetypal patterns of the literature of each culture, parallels of the elements within the arts of each culture, and socioeconomic factors affecting the arts of world cultures. The study of Music Appreciation is an integral element of the Advanced Arts

Link. The courses help prepare students for the English AP Exam.

Prerequisite: Advanced Literary Arts 9 or Application & Audition***Fine Arts Elective**

ADVANCED LITERARY ARTS 11

AP ENGLISH 11: LANGUAGE & COMPOSITION	117730
ADVANCED ART LINK AND WRITER WORKSHOP 11*	117731

Grade 11	2 Weighted Credits
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These two interdisciplinary courses are designed for students with demonstrated interest and talent in writing, literature, and other fine arts. Literary study is rooted in American literature with an emphasis on rhetorical nonfiction and related theories of literary criticism. Students explore themes of diversity, perseverance, and art as social commentary as they continue to grow into discerning patrons of the arts. Student-generated writings emphasize the development of a cogent argument through nuanced synthesis and analysis supported by specific examples and direct quotations. Students examine and revise a variety of technical writing for audience, purpose, clarity, and format. Emphasis is placed on investigative skills using technology as well as primary and secondary sources for gathering and synthesizing information. Throughout the year, students will participate in integrated field study in a variety of art forms, including field trips and guest artists. All students will also write an original one-act play. These courses prepare students for the AP Language and Composition Exam.

Prerequisite: Advanced Literary Arts 10 or Application & Audition***Fine Arts Elective**

ADVANCED LITERARY ARTS 12

AP ENGLISH 12: LITERATURE & COMPOSITION	117740
ADVANCED ARTS LINK AND WRITER WORKSHOP 12*	117741

Grade 12	2 Weighted Credits
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These interdisciplinary courses are designed for advanced students with demonstrated skills in writing and the analysis of literature and the related arts. The courses focus on the study of British Literature and contemporary world cultures through an investigation of literature and art. Students identify the interrelationships of problems concerning contemporary society and broaden their global perspective of cultures by studying the manner in which literature, philosophy, visual arts, and music reflect cultural value systems. Students make formal oral presentations using visual aids and available technology. Students also examine the philosophical ideas and stylistic techniques of both classic and contemporary prize-winning authors as a basis for the continuing development of skills and techniques for writing and analyzing poetry, fiction, and nonfiction. Emphasis is placed on investigative skills using technology as well as primary and secondary sources for gathering and

synthesizing information. Students examine and revise a variety of technical writing for audience, purpose, clarity, and format. These courses help prepare students for the AP Literature Exam. Students enrolled in these classes will complete a Senior Project on a topic of their own choice. Qualified students take **either** Advanced Arts Link and Writer Workshop 12 with AP English 12 **OR** Advanced Arts Link and Writer Workshop 12 with Practicum and AP English 12.

Prerequisite: Advanced Literary Arts 11 or Application & Audition

***Fine Arts Elective**

AP ENGLISH 12: LITERATURE & COMPOSITION **117740**

ADVANCED ARTS LINK AND WRITER WORKSHOP 12 WITH PRACTICUM **117742**

Grade 12 3 Weighted Credits

These interdisciplinary courses are designed for advanced students with demonstrated skills in writing and the analysis of literature and the related arts. This course focuses on the practical application of writing theory and process through specialized field experiences and/or community service in the area of written communication and/or the arts. Credit toward fulfilling course requirements may also be awarded for interdisciplinary, arts-related field experiences under instructor supervision. A minimum of 140 after-school supervised hours are required. Students will also be required to complete a cumulative research project and make a formal end-of-course presentation. Students must maintain a passing grade in all courses to remain in this program. Qualified students take **either** Advanced Arts Link and Writer Workshop 12 with AP English 12 **OR** Advanced Arts Link and Writer Workshop 12 with Practicum and AP English 12.

Prerequisite: Application & interview required.

ADVANCED THEATRE ARTS I* **144010**

Grades 9-11 1 Weighted Credit

This interdisciplinary course is designed for students with demonstrated acting ability who also exhibit an awareness that theatre is a discipline requiring diligent study and application. The course emphasizes the interdisciplinary nature of the fine arts; theatre as a reflection of social, political, and economic conditions; play analysis for interpretation, character development, and production values; acting theory; vocal and physical skills and techniques; and practical application of theory, skills, and techniques.

Prerequisite: Application & Audition

***Fine Arts Elective**

ADVANCED TECHNICAL THEATRE I* **14354**

Grades 9-12 1 Weighted Credit

Through this first-year course that emphasizes safety and procedures, students interested in backstage work focus on the basic elements of design and the technical elements of theatre production. Students gain practical experience for working as technicians in a lab theatre on set construction, scenery painting, and lighting. After-school supervised hours are required.

Prerequisite: Application & Audition

***Fine Arts Elective**

IMPROVISATION COMEDY/ SKETCH COMEDY* **1448**

Grades 9-12 1 Credit

This course is an introduction to improvisational performance and sketch comedy writing. The first semester is focused on the building blocks of scenic improvisation, improvising scenes, character work, improvisation, and improvisation in performance. The second semester uses scenic improvisation to develop written sketch comedy. Students will learn basic scene structure, character development, establish action, and learn the styles and genres of comedy. Weekly writing assignments and in-class exercises generate material and establish a regular writing schedule. Each semester culminates in performance.

NOTE: If space is available, only Non-SOA BHS students may enroll in this course.

DANCE ARTS I* **9311**

Grades 9-12 1 Credit

This dance course focuses on techniques and skills necessary to attain performance level, with emphasis on interpreting dance in an emotional context. The interdisciplinary focus includes a survey of dance classics that allow for study of visual arts and music related to the time period of the dance under study. The course requires reading and written work as well as practical dance effort.

Prerequisite: Application & Audition

***Fine Arts Elective or One Physical Education Credit**

ADVANCED THEATRE ARTS II* **144011**

Grades 10-12 1 Weighted Credit

This interdisciplinary course is designed to focus on acting styles for period plays and the historical and cultural perspective needed to perform period plays. The course is an in-depth, broadening continuation of the Advanced Theatre Arts I course and continues to emphasize the interdisciplinary nature of the fine arts; theatre as a reflection of social, political, and economic conditions; play analysis for interpretation, character development, and production values; acting theory; vocal and physical skills and techniques; and practical application of theory, skills, and techniques.

Prerequisite: Advanced Theatre Arts I

***Fine Arts Elective**

ADVANCED TECHNICAL THEATRE II-IV* **1435**

Grades 10-12 1 Weighted Credit

This course is designed for students interested in backstage work and focuses on training students to be theatre technicians and introduces them to basic elements of design. The course provides opportunities for working as technicians in a lab theatre on sets, lighting, sound, and props. Content includes the basic principles of set, lighting, sound, and prop design followed by the applied work. The course also includes reading plays, exploring the changes that have occurred in theatrical design, and studying the contributions of important designers. The course provides information and experience needed by technicians to function responsibly and efficiently as part of a theatrical team. Experience in backstage work is helpful but not necessary. Students must maintain a passing grade in ALL courses to remain in this program as well as to remain in each performance. After-

school, supervised hours are required. (May be continued with instructor recommendation and a minimum GPA of 2.5)
Prerequisite: Advanced Technical Theatre
***Fine Arts Elective**

ADVANCED TECHNICAL THEATRE III-IV WITH PRACTICUM* **14355**

Grades 11-12 2 Weighted Credits

This course is designed for advanced technical theatre students interested in working backstage at theatrical productions. It continues to train students to be theatre technicians and introduces them to advanced elements of design. The course requires students to work as technicians on sets, lighting, sound, and props for SOA productions. Content includes advanced principles of set, lighting, sound, and prop design accompanied with applied design. The course also includes reading plays, exploring the changes that have occurred in theatrical design, and studying the contributions of important designers. The course provides knowledge and experience needed by technicians to function responsibly and efficiently as part of a theatrical team. A minimum of 140 after-school supervised hours are required. Students must participate on multiple show crews throughout the year. Students will complete a practicum design project and make a formal end-of-course presentation. Students must maintain a passing grade in ALL courses to remain in this program, as well as to remain in each performance. (May be continued with instructor recommendation and a minimum GPA of 2.5). Qualified students will take **either** Advanced Technical Theatre II-IV **OR** Advanced Technical Theatre III-IV with Practicum.

Prerequisite: Advanced Technical Theatre II. Application & interview required.
***Fine Arts Elective**

DANCE ARTS II* **9313**

Grades 10-12 1 Credit

This dance course is a natural progression from Dance Arts I. The focus of the course is the enhancement and refinement of dance skills and techniques. In addition, the course addresses the more technical aspects of dance performance, such as basic principles in lighting, set, sound, and costume design, as they relate to dance performance. Reading, written assignments, and dance performances are required components of this course.

Prerequisite: Dance Arts I
***Fine Arts Elective or One Physical Education Credit**

ADVANCED THEATRE ARTS III* **144012**

Grades 11-12 1 Weighted Credit

This course further develops the skills acquired in Advanced Theatre Arts II and continues to emphasize the interdisciplinary nature of the fine arts. Particular focus is given to analysis and interpretation of modern and contemporary plays. Practical application of theory and process are provided through specialized field experiences and/or community service.

Prerequisite: Advanced Theatre Arts II
***Fine Arts Elective**

DANCE ARTS III **9316**

Grades 11-12 1 Weighted Credit

This dance course is a natural progression from Dance Arts II. The focus of the course is choreography composition to include staging, lighting design, costume design and impact of performance. During this course, students also gain exposure to leadership positions within the rehearsal and impact of performance. Reading, written assignments, and dance performances are required components of this course.

Prerequisite: Dance Arts II

ADVANCED THEATRE ARTS IV* **144013**

Grade 12 1 Weighted Credit

This course continues to emphasize the interdisciplinary nature of the fine arts and focuses on selected components of performance to meet individual needs. The course provides individual and/or group projects, which may include: directing, design, acting, and creative dramatics. Working field experiences may be provided, with instructor approval, in cooperation with selected theatre groups and/or schools.

Prerequisite: Advanced Theatre Arts III
***Fine Arts Elective**

ADVANCED THEATRE ARTS IV WITH PRACTICUM* **144016**

Grade 12 2 Weighted Credits

This course focuses on practical application of curriculum theory and process through acting projects in the lab theatre. Historical analysis is used as an interdisciplinary focus to produce works-in-progress. Credit toward fulfilling course requirements may be awarded for participation in a minimum of one main-stage production (crew or performer), for arts-related field experiences with instructor approval, and for satisfactorily completing advanced analysis assignments. A minimum of 140 after-school, supervised hours are required. Students will complete a documented research paper and make a formal end-of-course presentation. Students must maintain a passing grade in all courses to remain in this program, as well as to remain in each performance. Qualified students will take **either** Advanced Theatre Arts IV **OR** Advanced Theatre Arts IV with Practicum.

Prerequisite: Advanced Theatre Arts III. Application & interview required.
***Fine Arts Elective**

DANCE ARTS IV **93151**

Grade 12 1 Weighted Credit

The focus of this level IV course is mechanics of choreography phrasing. Choreography composition is dissected into elements of timing, imagery, and phrasing overlap. Advanced dance techniques are introduced into the training. During this course students also gain exposure to leadership positions within the rehearsal and production processes.

Prerequisite: Dance Arts III

DANCE ARTS IV WITH PRACTICUM**93153**

Grade 12

2 Weighted Credits

This course focuses on practical application of curriculum theory and process through dance projects. Historical analysis is used as an interdisciplinary focus to produce works-in-progress. Credit toward fulfilling course requirements may be awarded for participation in a minimum of one production (choreographer or performer), for arts-related field experiences with instructor approval, and for satisfactorily completing advanced analysis

assignments. A minimum of 140 after-school, supervised hours are required. Students will complete a documented research paper and make a formal end-of-course presentation. Students must maintain a passing grade in all courses to remain in this program, as well as to remain in each performance. Qualified students will take **either** Dance Arts IV **OR** Dance Arts IV with Practicum.

Prerequisite: *Dance Arts III. Application & interview required.*

YORK RIVER ACADEMY

Only students accepted into York River Academy may enroll in the courses listed within this section.

York River Academy students may enroll in courses outlined in other parts of this *Program of Studies* as the courses are available at YRA, as well as courses offered through YCSD Virtual High School and Virtual Virginia.

YRA COURSE OFFERINGS

CYBERSECURITY OPERATIONS**NEW 6304**

Grades 10-12

1 Credit

Cybersecurity Operations is designed to teach computer and network administration and security. Students learn cybersecurity concepts, including the practice of protecting systems, networks, and programs from digital attacks. Students learn to establish, implement, and maintain security networks. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

NOTE: *Students in this course have an opportunity to take an industry certification test.*

Prerequisites: *Cybersecurity Fundamentals*

DESIGN, MULTIMEDIA & WEB TECHNOLOGIES I 6630

Grades 10-12

1 Credit

This course covers design techniques used to create a variety of publications using desktop publishing software. Students enhance their presentation skills through the use of multimedia hardware and software. Web page design and development concepts are also covered. This course prepares students to take the industrial certification exam to become a Microsoft Office Specialist (MOS).

NOTE: *Students in this course have an opportunity to take an industry certification test.*

DESIGN MULTIMEDIA & WEB TECHNOLOGIES II**NEW 6631**

Grades 10-12

1 Credit

In this course, students acquire advanced skills in design, multimedia, and web development by applying project management principles to create professional quality digital media projects. Work-based learning experiences allow students to apply layout and design techniques in real-world situations. Students create portfolios that include a resume, certifications earned, and a variety of print, multimedia, and website projects produced in the course.

NOTE: *Students in this course have an opportunity to take an industry certification test.*

Prerequisites: *Design, Multimedia & Web Technologies I*

APPLIED RESEARCH PROJECTS**98289**

Grades 11-12

1 Credit

Applied Research Projects is a year-long course designed to showcase student mastery of technology principals through selected projects. This course for eleventh grade students builds expertise and knowledge in the areas of Web Design, Computer Repair, and integration of technology in a variety of tasks and settings. Industry certifications are pursued.

APPENDIX A – SEQUENTIAL ELECTIVE

Sequential electives mean any series of courses in which the content increases or expands in scope and sequence as students move through various levels of the courses. Students must take two sequential electives to complete their graduation requirements for a Standard or Advanced Studies Diploma. Some courses may be interchangeable. Any additional content course not required for graduation meets the requirements of a sequential elective; to include additional courses in math, science, social studies, and world language. ****Please speak with your school counselor as you are planning your academic course offerings to meet graduation requirements.***

English Sequential Electives

Year One Course Name

Literary Magazine/Mass Media I
Newspaper/Mass Media I
Yearbook/Mass Media I

Year Two Course Name

Literary Magazine/Mass Media II
Newspaper/Mass Media II
Yearbook/Mass Media II

Fine Art Sequential Electives

Year One Course Name

Art I Foundations

Art II: Intermediate
Art III: Advanced Intermediate
Photography & Communication Design I
Drama I A/B

Drama II A/B
Drama III A/B

Year Two Course Name

Crafts
Ceramics A/B
Art II: Intermediate
Computer Graphic Art
3D Design
Art III: Advanced Intermediate
Art IV: Advanced
Photography & Communication Design II
Drama II A/B
Technical Theatre A/B
Drama III A/B
Drama IV A/B

Music

Year One Course Name

Chorus I
Small Vocal Ensemble I
Beginning Guitar
Brass Sectionals I
Percussion Sectionals I
Stage Band I
Symphonic Band I
Woodwind Sectionals I
Music Theory

Year Two Course Name

Chorus II
Small Vocal Ensemble II
Guitar II
Brass Sectionals II
Percussion Sectionals II
Stage Band II
Symphonic Band II
Woodwind Sectionals II
AP Music Theory

General Topics

Year One Courses

Computer Science Foundations

Year Two Courses

Computer Science Principles

Health & PE

Year One Courses

PE 11 A/B

Year Two Courses

PE 12 A/B

Social Studies

Year One CoursesPsychology
Sociology**Year Two Courses**Sociology
AP Psychology
Psychology
AP Psychology

Naval Sciences

Year One CoursesNavy JROTC II
Navy JROTC III**Year Two Courses**Navy JROTC III
Navy JROTC IV

Career & Technical Education

Year One Courses

Accounting

Accounting II

Advanced Drawing/Design/CAD

Aerospace Technology

Architectural Drawing/Design/CAD

Year Two CoursesAccounting II
Business Management
Computer Information Systems I & II
Design, Multimedia, and Web Technologies
Digital Applications
Entrepreneurship Education I & IIBusiness Law
Business Management
Computer Information Systems I or II
Systems
Design, Multimedia, and Web Technologies
Digital Applications
EntrepreneurshipArchitectural Drawing/Design/CAD
Basic Technical Drawing/Design/CAD
Engineering Drawing/Design/CAD

Unmanned Aircraft Systems

Advanced Drawing/Design/CAD
Basic Technical Drawing/Design/CAD
Engineering Drawing/Design/CAD

Career & Technical Education (Cont'd.)

Business Management	Accounting I or II Computer Information Systems I & II Design, Multimedia, and Web Technologies Entrepreneurship Education I & II Marketing I & II Sports and Entertainment Management
Computer Information Systems	Accounting I & II Business Management Computer Information Systems II Design, Multimedia, and Web Technologies Digital Applications Entrepreneurship Education I & II Information Technology Fundamentals
Cybersecurity Fundamentals	Cybersecurity Operations (YRA only)
Design, Multimedia, and Web	Accounting I & II Business Management Computer Information Systems I & II Digital Applications Information Technology Fundamentals
Digital Applications	Accounting I & II Business Management Computer Information Systems I & II Design, Multimedia and Web Technology Information Technology Fundamentals
Emergency Medical Technician (GHSA only)	Emergency Medical Technician II (GHSA only)
Engineering Drawing and Design	Advanced Drawing and Design Architectural Drawing and Design Basic Technical Drawing/Design/CAD
Entrepreneurship Education I	Accounting I & II Business Management Computer Information Systems I & II Entrepreneurship Education II Fashion Marketing I & II Introduction to Marketing Marketing Management Marketing I & II Sports and Entertainment Management Sports and Entertainment Marketing
Fashion Marketing I	Entrepreneurship Education I & II Fashion Marketing II Introduction to Marketing Marketing Management Marketing I & II

Career & Technical Education (Cont'd.)

Fashion Marketing II	Entrepreneurship Education I & II Fashion Marketing I Introduction to Marketing Marketing Management Marketing I & II
Game Design and Development I	Game Design and Development II
Information Technology Fundamentals	Computer Information Systems I & II Design, Multimedia and Web Technology I & II (YRA only) Digital Applications
Introduction to Health and Medical Sciences	Medical Terminology Sports Medicine I & II Leadership Development
Introduction to Marketing	Entrepreneurship Education I & II Fashion Marketing I & II Marketing Management Marketing I & II Sports and Entertainment Management Sports and Entertainment Marketing
Leadership Development	Virginia Teachers for Tomorrow Introduction to Health and Medical Sciences Medical Terminology
Life Planning	Nutrition and Wellness Virginia Teachers for Tomorrow
Marketing I	Business Management Entrepreneurship Education I & II Fashion Marketing I & II Introduction to Marketing Marketing Management Marketing II Sports and Entertainment Management Sports and Entertainment Marketing
Marketing Management	Entrepreneurship Education I & II Fashion Marketing I & II Introduction to Marketing Marketing I & II Sports and Entertainment Management Sports and Entertainment Marketing
Medical Terminology	Introduction to Health and Medical Sciences Leadership Development
Nutrition and Wellness	Culinary Arts I & II Life Planning
Sports and Entertainment Management	Business Management Entrepreneurship Education I & II Introduction to Marketing Marketing Management Marketing I & II Sports and Entertainment Marketing

Career & Technical Education (Cont'd.)

Sports and Entertainment Marketing

Entrepreneurship Education I & II

Introduction to Marketing

Marketing Management

Marketing I & II

Sports and Entertainment Management

Sports Medicine I

Sports Medicine II

Introduction to Health and Medical Sciences

Virginia Teachers for Tomorrow I

Leadership Development

Life Planning

Virginia Teachers for Tomorrow II

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NOTES

Middle Schools

Grafton Middle School
Main Office: **757-898-0525**
Counseling Office: **757-898-0560**

Queens Lake Middle School
Main Office: **757-220-4080**
Counseling Office: **757-220-4070**

Tabb Middle School
Main Office: **757-898-0320**
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Counseling Office: **757-898-0410**

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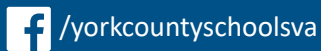
Bruton High School
Main Office: **757-220-4050**
Counseling Office: **757-220-4055**

Grafton High School
Main Office: **757-898-0530**
Counseling Office: **757-898-0550**

Tabb High School
Main Office: **757-867-7400**
Counseling Office: **757-867-5399**

York High School
Main Office: **757-898-0354**
Counseling Office: **757-898-0424**

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Main Office: **757-898-0516**
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Title IX Coordinator
Chief Human Resources Officer
302 Dare Road
Yorktown, VA 23692
757-898-0349

Section 504/ADA Coordinator
Director of Student Services
302 Dare Road
Yorktown, VA 23692
757-898-0300



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