



2018-19 Secondary Registration & Information Guide

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INTRODUCTION

Purpose

The *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.

Beginning with the 2013-2014 academic year, all schools shall 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 of 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

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 are required to attend training prior to beginning the course. Students must log in to these virtual courses daily and must be actively engaged in online discussion. They will learn to track messages, submit documents electronically, and meet online with teachers and students through a virtual classroom. To learn more about available online courses, students may make an appointment with their school counselor.

Some online courses require tuition payment. The tuition amount is determined based on the course and student circumstances. Specific virtual course information and requirements are listed within the Course Offerings section.

Students entering grade 9 in 2013-14 or later 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,” in 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 the 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: Certain students who have completed a prescribed course of study as defined by the local school board are awarded Special Certificates if they do not qualify for diplomas.

Advanced Studies Diplomas (26 Credits)

Discipline Area	First time students in the 9 th grade 2017-2018 and before (class of 2021 and before)		First time students in the 9 th grade 2018-2019 (class of 2022)	
	Standard Credits Required	Verified Credits Required	Standard Credits Required	Verified Credits Required
English	4	2	4	2
Mathematics ¹	4	2	4	1
Laboratory Science ²	4	2	4	1
History & Social Sciences ³	4	2	4	1
World Languages ⁴	3		3	
Health & PE	2		2	
Fine Arts or Career/ Technical Education	1		1	
Economics & Personal Finance	1		1	
Electives ⁶	3		3	
Student-Selected Test		1		
Virtual Course ⁷	✓		✓	
First Aid/CPR/AED ⁸	✓		✓	
Total	26	9	26	5

Standard Diplomas (22 Credits)

Discipline Area	First time students in the 9 th grade 2017-2018 and before		First time students in the 9 th grade 2018-2019 (class of 2022)	
	Standard Credits Required	Verified Credits Required	Standard Credits Required	Verified Credits Required
English	4	2	4	2
Mathematics ¹	3	1	3	1
Laboratory Science ²	3	1	3	1
History & Social Sciences ³	4	1	4	1
World Language, Fine Arts, or CTE ^{4,5}	2		2	
Health & PE	2		2	
Economics & Personal Finance	1		1	
Electives ⁶	3		3	
Student-Selected Test		1		
Virtual Course ⁷	✓		✓	
First Aid/CPR/AED ⁸	✓		✓	
Career/Technical Education Credential ⁹	✓		✓	
Total	22	6	22	5

Modified Standard Diplomas (20 Credits)

Students Entering Ninth Grade in 2013-2014 or Later

The Modified Standard Diploma will not be available through the Virginia Department of Education for students who enter the ninth grade in 2013-2014 or later. Credit accommodations will be provided to allow students with disabilities who previously would have pursued a Modified Standard Diploma to earn a Standard Diploma.

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. AFDA must be taken prior to Algebra II for credit towards the advanced studies graduation requirement; if out of sequence, the course will count as a math elective. 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 and technical 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 (Part I counts as one math credit and Part II counts as an elective credit), and one verified credit in mathematics. In order to receive math credit for Geometry Part I, students must also complete Geometry Part II.

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 earned by students 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 World History to 1500 AD or AP Human Geography, World History from 1500 AD to the Present or AP European History, Virginia and U.S. History, and Virginia and U.S. Government. The superintendent or superintendent's designee may waive specific local course requirements for transfer students or students moving out of the IB Diploma Program, as long as all requirements set forth by the Code of Virginia and State Board of Education are met. For the Standard Diploma, YCSD requires one additional History and Social Science credit beyond the minimum course and credit requirements required in the Standards of Accreditation (8 VAC 20-131-50) governing diploma requirements for the standard diploma. As stated in the Secondary Program of Studies, credit accommodations provide alternatives for eligible students with disabilities to earn verified credits required to graduate with a standard diploma. These credit accommodations include the use of alternative courses to meet the standard credit requirements. As such, the superintendent or the superintendent's designee may permit, in limited circumstances, a student with a disability who qualifies for credit accommodations to earn a standard diploma by meeting the minimum requirements as outlined in the Standards of Accreditation. A division panel will review requests for consideration on a case by case basis.

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 Standard Diploma, credits for this

requirement shall include one credit in fine or performing arts or career or technical education. Per the Standards of Quality, a computer science course may be considered a career and technical education credit.

6. Electives: For the Advanced Studies Diploma students must earn three (3) electives. Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality. For the Standard Diploma, credits must include at least two (2) sequential electives. Students who are permitted to earn a standard diploma by meeting the minimum requirements as outlined in the Standards of Accreditation will be required to earn (3) three elective credits.

7. Virtual Course: For the Standard and the Advanced Studies Diploma students entering 9th grade for the first time in 2013-14 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 entering the 9th grade for the first time in the 2016-17 school year, 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.

9. Career/Technical Education Credential: Students entering 9th grade for the first time in 2013-14 shall earn a career and technical education credential approved by the Board of Education that could include, but not be limited to, the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment. 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 8VAC20-131-420 B.

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

Locally Awarded Verified Credit: Eligible students that entered the ninth grade for the first time prior to the 2018-2019 school year, may be awarded a total of three locally-awarded verified credits in English, mathematics, science, and history/social science. Eligible first-time ninth graders beginning with the 2018-2019 school year may be able to earn no more than one locally awarded verified credit in English, mathematics, science, and history/social science.

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.

Transfer Students: See your school counselor for all graduation requirements.

For more information on high school graduation requirements in the Commonwealth of Virginia, visit the High School Graduation link on the Virginia Department of Education's website at <http://www.doe.virginia.gov>.

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 (Early College Scholars).

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 Advanced Mathematics & Technology Seal: Awarded to students who earn the Standard or Advanced Studies Diploma and satisfy all of the mathematics requirements for the Advanced Studies Diploma with a "B" average in those courses; **and** pass a certification examination from a recognized industry, trade or professional organization **or** acquire a professional license in a career/technical area **or** pass an exam approved by the Board that confers college-level credit in a technology or computer science.

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) be 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 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 Services Seal: Awarded to students who complete the requirements for York County School Division's Community Services Program.

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. A summary chart of available AP and advanced courses is provided in Appendix B.

Dual Enrollment

Thomas Nelson 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 TNCC 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.

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.

Governor's Health Sciences Academy

Bruton High School in York County and Warwick High School in Newport News are the participating schools in the Governor's Health Sciences Academy. High school students in all four comprehensive high schools may have the opportunity to participate in a variety of opportunities related to the health care field such as visiting research labs, businesses, colleges and universities to include a summer experience focused on Health Sciences developed by the Peninsula Council for Workforce Development.

Academy students are required to meet the following criteria to complete the program successfully: complete an advanced mathematics course beyond Algebra II, complete an advanced science course beyond Chemistry, maintain a minimum of a 2.5 GPA, and must complete the divisional career pathway resulting in an industry certification and/or at least nine (9) transferrable college credits. The Governor's Health Sciences Academy completers will earn a Governor's 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 & Engineering.

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 schools 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 department 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, Arabic), Physical Education & Lifetime Fitness 8; Elective.

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 six (6) AP classes representing four (4) content areas.
- 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.

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 have not been accepted to the full IB Diploma Programme may enroll in an IB course (either SL or HL) provided there is space 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 examination and the IB registration as explained in the *Student Handbook*. Students with demonstrated financial need may request a waiver of the IB registration and 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

- The minimum grade point average for the IB Diploma Programme is indicated in the IB Diploma Programme admissions agreement. Pre-Diploma/IB students are required to have a minimum GPA of 3.0 at the end of ninth grade, a 3.25 at the end of 10th grade, and a 3.4 at the end of 11th grade.

NOTE: Students entering the ninth grade in the fall of 2017 must maintain a cumulative 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 are subject to being 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.
- 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, and 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 Naval Science 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. Cadets may be eligible for college credit for NJROTC courses, from the University of Colorado, if course requirements are met. 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 rhythmic 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 QLMS for core courses, and are transported to the School of the Arts (SOA) at Bruton High School for Literary Arts, Theatre Arts, and Rhythmic 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. SOA programs emphasize academic growth and artistic development, the multidisciplinary nature of the arts, standards to differentiate between the meaningful and the mediocre 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. Transportation from York County high schools to SOA is provided for students.

Admission Procedures

Admission to SOA is by application/audition (requires two 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 full time and 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 repeat 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 VA

VirtualVirginia.org, also known as Virtual VA, is a part of the Virginia Department of Education's Virginia Virtual Advanced Placement School. These online classes are an exciting and challenging way for students in grades 7 through 12 to expand their academic course options. Classes feature a rich variety of media including multimedia, online field trips, simulations, and interactive learning tools.

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 and web design 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 16 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 16 Career Clusters, career pathways and sample career specialties or occupations.

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.

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.

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.

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.

 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 Veterinarian Technician Fish/Game Warden	Botanist Ecologist Environmental Engineer Veterinarian
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Introduction to Forensic Science Exploring Our World Introduction to Technology Inventions and Innovations Engineering Design and Problem Solving Technological Systems	Ecology & Environmental Science	Veterinary Science

 Architecture & Construction	Careers in designing, planning, managing, building and maintaining the built environment.	
Pathways in this Cluster		
Design/Pre-Construction 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
Introduction to Technology Inventions & Innovations Engineering Design and Problem Solving Technological Systems	Basic Technical Drawing/Design/CAD Architectural Drawing/ Design/CAD Advanced Drawing/Design/ CAD Engineering Exploration Technology Foundations	Building Construction I, II & III Electricity and Renewable Energy HVAC

 CareerClusters® <small>PATHWAYS TO COLLEGE & CAREER READINESS</small> Architecture & Construction	Careers in designing, planning, managing, building and maintaining the built environment.
 CareerClusters® <small>PATHWAYS TO COLLEGE & CAREER READINESS</small> 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.

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
Printing Equipment Operator Actor, Dancer, Musician	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 Intro to Programming & Game Design Introduction to Technology Inventions & Innovations Writers' Roundtable Yearbook/Public Speaking	Art/Drama/Band/Chorus Design, Multimedia & Web Technologies Evolution of Cinema A & B Programming & Game Design Programming & Introduction to Computer Science Literary Magazine/Mass Media I & II Newspaper/Mass Media I & II Public Speaking: Presentation Yearbook/Mass Media I & II	

 CareerClusters® <small>PATHWAYS TO COLLEGE & CAREER READINESS</small> Business Management & Administration	Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.
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Pathways in this Cluster

General Management
 Business Information Management
 Human Resources Management


Operations Management
 Administrative Support


Sample Career Options


Diploma with Some Training	Certification or Associate's Degree	Bachelor's Degree or Above
Administrative Assistant Customer Service Representative Receptionist	Legal Assistant Office Manager Claims Adjuster	Certified Public Accountant Finance Director Human Resources Manager


Related YCSD Elective Courses


Middle School	High School	New Horizons Regional Education Center
Criminal Justice	Computer Applications	


 CareerClusters® <small>PATHWAYS TO COLLEGE & CAREER READINESS</small> Business Management & Administration	Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.	
Digital Literacy Public Speaking	Fashion Marketing I & II/CO-OP & OE Fundamentals of Marketing Marketing I & II/ CO-OP & OE Marketing Management Sports & Entertainment	


 <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	Teacher School Counselor Principal Speech-Language Pathologist
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Art/Band/Drama/Chorus Digital Literacy Public Speaking Writers' Roundtable	Psychology Sociology	Early Childhood Education


 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div> <div>Finance</div>	Planning, services for financial and investment planning, banking, insurance, and business financial management.	
Pathways in this Cluster		
Securities & Investments Business Finance Accounting	Insurance Banking Services	
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
Digital Literacy	Accounting I & II	


 CareerClusters® <small>PATHWAYS TO COLLEGE & CAREER READINESS</small> Finance	Planning, services for financial and investment planning, banking, insurance, and business financial management.
Public Speaking	


 <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		
Governance National Security Foreign Service Planning	Revenue & Taxation Regulation Public Management & Administration	
Sample Career Options		
Diploma with Some Training	Certification or Associate's Degree	Bachelor's Degree or Above
Cargo Inspector Postal Clerk	Census Clerk Legislative Assistant	City Manager Internal Revenue Investigator Lobbyist
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Criminal Justice Digital Literacy Newspaper/Mass Media Public Speaking Writers Roundtable	Naval Science 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
Intro to Forensic Science	Intro to Health & Medical Sciences Medical Terminology Leadership Development	Dental Assistant I & II Emergency Medical Technician Medical Assistant

 CareerClusters® <small>PATHWAYS TO COLLEGE & CAREER READINESS</small> Health Science	Planning, managing, and providing therapeutic services, diagnostic services, health information, support services, and biotechnology research and development.	
	Sports Medicine	Nursing Aide Pharmacy Technician Physical and Occupational Therapy I & II Veterinary Science

 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div> <div>Hospitality & Tourism</div>	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
Tour Guide Guest Services Representative Cook	Travel Agent Hotel Manager Food Service Manager/Chef	Director of Tourism Event Planner Marketing Manager
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Digital Literacy Exploring Our World Newspaper/Mass Media Public Speaking Writers' Roundtable	Sports and Entertainment Marketing I	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
Criminal Justice	Business Law	Cosmetology I & II

 CareerClusters® <small>PATHWAYS TO COLLEGE & CAREER READINESS</small> Human Services	Preparing individuals for employment in career pathways that relate to families and human needs.	
Public Speaking	Business Management	

 CareerClusters® <small>PATHWAYS TO COLLEGE & CAREER READINESS</small> 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.	
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Pathways in this Cluster


Network Systems Information Support & Services	Web & Digital Communications Programming & Software Development
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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
Digital Literacy Intro to Programming & Game Design Inventions and Innovations Engineering Design and Problem Solving Technological Systems	Computer Application Computer Information Systems I & II Design, Multimedia & Web Technologies Information Technology Fundamentals Programming & Game Design Programming & Introduction to Computer Science AP Computer Science Student Technology Leadership Corp	Cisco Networking / Cyber Security Academy Computer Programming Applications and Gaming & Advanced Programming Cybersecurity Systems Technology

 CareerClusters® <small>PATHWAYS TO COLLEGE & CAREER READINESS</small> Law, Public Safety, Corrections & Security	Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.	
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Pathways in this Cluster


Correction Services Emergency & Fire Management Services Security & Protective Services	Law Enforcement Services Legal Services
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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


 Law, Public Safety, Corrections & Security	Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.	
Middle School	High School	New Horizons Regional Education Center
Criminal Justice Introduction to Forensic Science Public Speaking Writers' Roundtable		Criminal Justice EMT Firefighter


 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.	
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
Inventions and Innovations Engineering Design and Problem Solving Technological Systems	Basic Technical Drawing/Design/CAD Engineering Drawing/Design/CAD Marketing Management	Automation & Mechanical Production Technology Mechatronics I, II, III Precision Machining Welding I & II

 Marketing	Planning, managing, and performing marketing activities to reach organizational objectives.	
Pathways in this Cluster		
Marketing Management Professional Sales Merchandising		
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

 CareerClusters® <small>PATHWAYS TO COLLEGE & CAREER READINESS</small> Marketing	Planning, managing, and performing marketing activities to reach organizational objectives.	
Related YCSD Elective Courses		
Middle School	High School	New Horizons Regional Education Center
Art/Drama/Chorus Newspaper/Mass Media Public Speaking Writers' Roundtable	Fundamentals of Marketing Fashion Marketing I & II Marketing I & II Sports/Entertainment Marketing Sports Entertainment Management	

 <div>CareerClusters® PATHWAYS TO COLLEGE & CAREER READINESS</div> <div>Science, Technology, Engineering & Mathematics</div>	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
Digital Literacy Intro to Programming & Game Design Introduction to Technology Inventions and Innovations Engineering Design and Problem Solving Technological Systems	Technology Foundations Basic Technical Drawing/Design/CAD Engineering Drawing/Design/ CAD Engineering Exploration	Mechatronics I, II, III

 <div>CareerClusters[®] PATHWAYS TO COLLEGE & CAREER READINESS</div> <div>Transportation, Distribution & Logistics</div>	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	

 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.	
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
Digital Literacy Introduction to Technology Inventions and Innovations Engineering Design and Problem Solving Technological Systems Public Speaking		Auto Collision and Refinishing I, II & III Auto 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 for his/her 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.

Summer Academic Assignments

Summer academic requirements for designated courses that students will take during the next school year are assigned to students during the last few weeks of the current school year. These assignments are consistent among schools throughout the school division, and students enrolled in these courses are expected to complete the assignments prior to the beginning of the next school year.

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

	Course Title ↓		Icon Descriptor (See Key Below) ↓	
	TECHNOLOGY FOUNDATIONS		NEW 8403	← Course Code
Grade Level Availability →	Grades 9-10		1 Credit	← Length/Credit
Course Description →	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.			
Previous Course(s)/Criteria for Enrollment (when applicable) →	Prerequisite: None			

ICON LEGEND	 Virtual Course
	 New Course

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/Technology Education to earn a Standard Diploma. At least one of the credits must be in Fine Arts or Career/Technical Education.

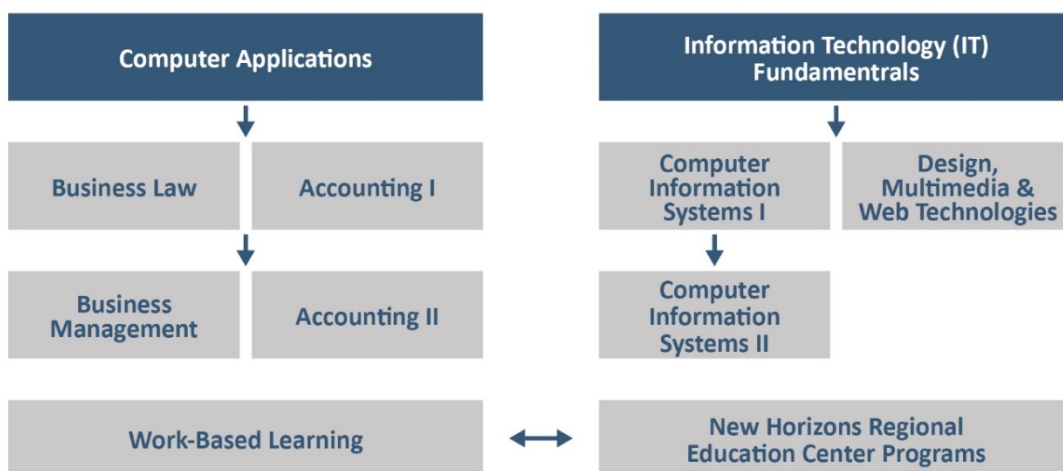
Students who enter the ninth grade for the first time in 2013-2014 or later must earn a career and technical education credential approved by the Board of Education to graduate with a Standard Diploma. High school CTE courses, including courses offered at New Horizons Regional Education Center, offer industry certification testing opportunities as indicated in course descriptions. All students enrolled in Economics & Personal Finance will take two industry certification tests: the WISE Financial Literacy test and the Workplace Readiness Skills for the Commonwealth test.

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 and Technical Education credit requirements for graduation. CTE courses are offered in the following categories: Business & Information Technology, 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 Course Offerings section of this *Program of Studies*. For additional information about NHREC, call (757) 898-0469.

Business & Information Technology

Business & IT Course Offerings & Suggested Sequences



Related Electives (Grades 9-12)

- Life Planning
- Career Mentorship
- Service Learning
- Leadership Business & Information Technology

Requirements for Career/Technical Program

Completer in Business & Information Technology:

- Any two occupational Business & 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

KEYBOARDING BASICS 6 61506

Grade 6 Quarter

This course is designed for middle school students to develop touch skills for entering alphabetic, numeric, and symbolic information on a keyboard. Students learn to produce simple technical and non-technical documents.

KEYBOARDING/COMPUTER APPLICATIONS I 61507

Grades 7-8 Semester

This course provides an opportunity for students to review and reinforce correct keyboarding techniques and gain a basic knowledge of word processing and graphics applications. Students demonstrate an understanding of computer concepts through application of knowledge. Students learn software packages and the operation of many

types of equipment such as word processors, printers, copiers, and computers.

KEYBOARDING/COMPUTER APPLICATIONS II 61508

Grade 8 Semester

This course provides an opportunity for students to review and reinforce correct keyboarding techniques, gain advanced knowledge of word processing and graphics applications, and gain a basic understanding of spreadsheet and database applications. Students demonstrate an understanding of computer concepts through application of knowledge. Students learn software packages and the operation of many types of equipment such as word processors, printers, copiers, and computers.

NOTE: Successful completion of Keyboarding/Computer Applications I & II applies toward the Business & Information Technology program completion in high school and allows a student to enroll in higher-level business courses.

HIGH SCHOOL COURSE OFFERINGS

COMPUTER APPLICATION 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 students who entered grade 9 in 2011 and beyond.

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 take the WISE Financial Literacy industry certification test in this course.

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.

BUSINESS LAW 6132

Grades 10-12 .5 Credit

This course is designed for students to explore the foundations of the American legal system and economic and social concepts as they relate to legal principles and to business and personal laws.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

BUSINESS MANAGEMENT 6136

Grades 10-12 .5 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.

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, spreadsheets, 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.

DESIGN, MULTIMEDIA & WEB TECHNOLOGIES 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.

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

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

COOPERATIVE EDUCATION 982610

Grades 11-12 1 Credit

Cooperative Education is a teaching method available in each occupational course. This is a career-preparation method that combines CTE classroom instruction with paid employment that is directly related to the student's plan of study. The school and the employer plan, coordinate, and supervise the instruction and employment so that each contributes directly to the student's career objectives and employability. Students may earn credit toward graduation for cooperative education experiences, and they normally work between 11-15 hours per week to achieve a minimum of 396 hours.

NOTE: Students must complete an application.

Co-requisite: Enrollment in any other occupational Business & Information Technology course(s) for the entire year.

LEADERSHIP BUSINESS PROGRAM 90961

90962

Grades 11-12 .5 Credit

This is a structured, guided, independent study of business. Approval by the teacher and the principal is recommended for enrollment in this course. (May be continued.)

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. In FACS Exploratory II, 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.

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.

Governor's Health Sciences Academy (BHS)

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

SPORTS MEDICINE I

 7660

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

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 spend time in a hospital as well as in other medical facilities either in a job-shadowing or a mentorship experiences.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

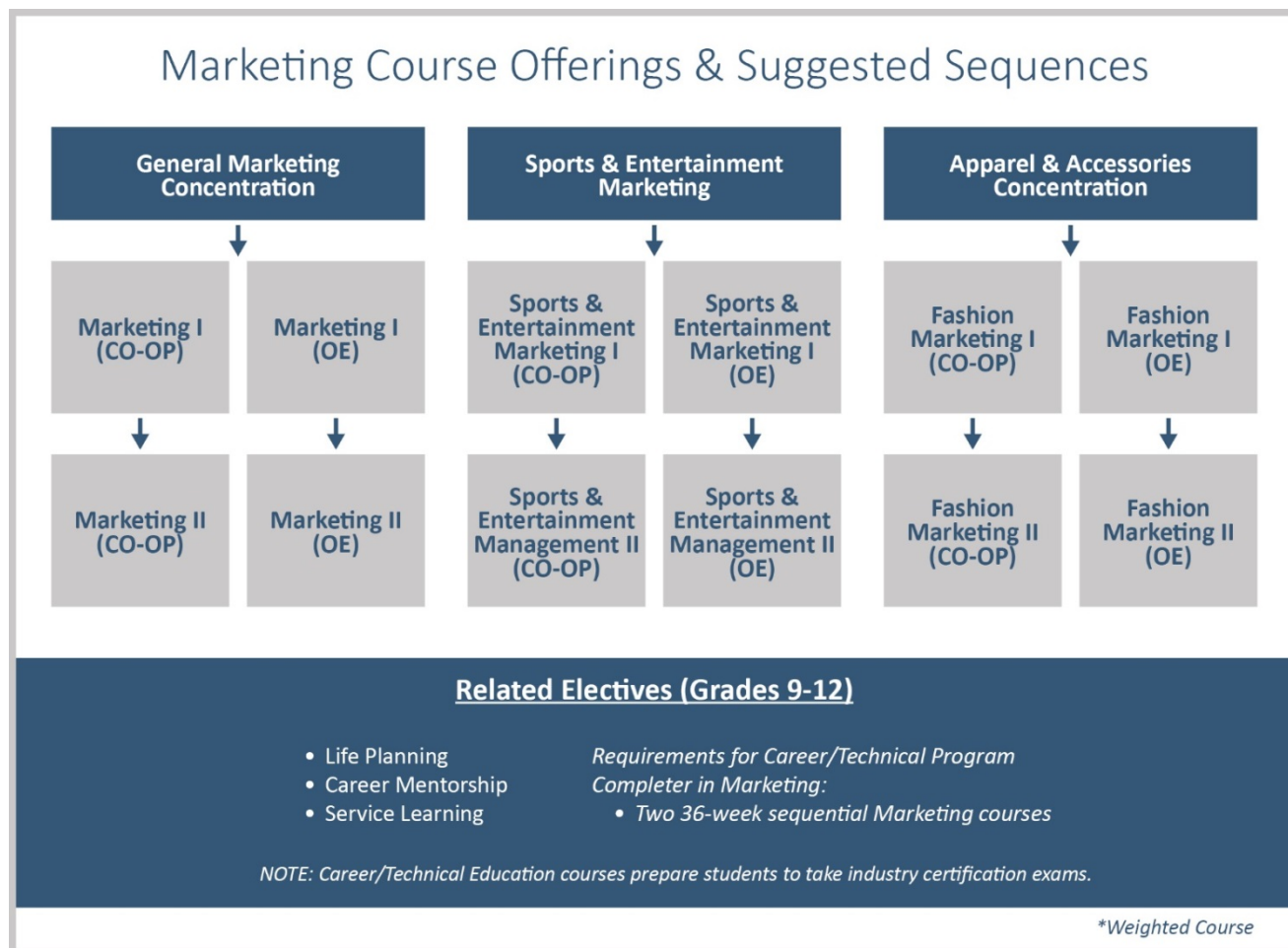
Recommended Prerequisite: Introduction to Health & Medical Sciences and Medical Terminology

Marketing Education

The Marketing Education program prepares students for full-time employment in retail, wholesale, and service businesses. Students must complete an application.

Cooperative Education (CO-OP) combines classroom instruction with a minimum of **540 hours** of supervised on-the-job training. Training occurs in an approved local marketing business and is coordinated by the marketing teacher-coordinator. On-the-job training during the summer months may be applied toward the 540 hours if documented by a training plan and supervised by the teacher-coordinator.

Occupational Experiences (OE) combines classroom instruction with a minimum of **360 hours** of occupational experiences (simulations, community-based projects, periodic employment) that are planned, supervised, and documented by the marketing teacher-coordinator. Occupational experiences during the summer months may be applied toward the 360 hours if supervised by the teacher-coordinator.



HIGH SCHOOL COURSE OFFERINGS

FUNDAMENTALS OF MARKETING	8110
Grades 9-12	1 Credit
This basic elective course provides students with an understanding of marketing and prepares them for entry-level marketing employment.	
NOTE: Students in this course have an opportunity to take an Industry Certification Test.	

FASHION MARKETING I/CO-OP	81401
FASHION MARKETING I/OE	81402
Grades 10-12	CO-OP 3 Credits OE 2 Credits
Students gain basic knowledge of the apparel and accessories industry. Students develop general marketing skills necessary for successful employment in fashion marketing, general marketing skills applicable to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, market planning, and product/service technology as well as academic skills (mathematics, science, English, and history/social science)	

related to the content are part of this course. Computer/technology applications supporting this course are studied.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

MARKETING I/CO-OP **81201**
MARKETING I/OE **81202**

Grades 10-12 CO-OP 3 Credits
OE 2 Credits

Students learn functions involved in the marketing of goods and services and develop competencies necessary for successful marketing employment including personal selling, advertising, visual merchandising, physical distribution, purchasing, market planning, product/service technology, and marketing mathematics.

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/OE **81752**

Grades 10-12 CO-OP 3 Credits
OE 2 Credits

Students develop an understanding of fundamental marketing concepts and theories as they relate to the sports, entertainment, and recreation industries. Students will investigate the components of branding, sponsorships, and endorsements, as well as promotion plans needed for sports, entertainment, and recreation events. The course also supports career development skills and explores career options. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

FASHION MARKETING II/CO-OP **81451**
FASHION MARKETING II/OE **81452**

Grades 11-12 CO-OP 3 Credits
OE 2 Credits

Students gain in-depth knowledge of the apparel and accessories industry and skills important for supervisory-management employment in apparel businesses. They develop advanced skills unique to fashion marketing and advanced general marketing skills applied to the apparel and accessories industry. Professional selling, sales promotion, buying, merchandising, marketing research, product/service technology, and supervision as well as academic skills (mathematics, science, English, and history/social science) 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 (CO-OP or OE) or Fashion Marketing I (CO-OP or OE)

MARKETING II/CO-OP **81301**
MARKETING II/OE **81302**

Grades 11-12 CO-OP 3 Credits
OE 2 Credits

In the general Marketing concentration, students gain in-depth knowledge of marketing functions, the supervisory and management responsibilities for those functions, and Virtual Enterprise software. They also learn competencies important for successful supervisory management, employment, and advancement to other management positions.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

Prerequisite: Marketing I/CO-OP or OE

SPORTS & ENTERTAINMENT
MANAGEMENT II/CO-OP **81771**

SPORTS & ENTERTAINMENT
MANAGEMENT II/OE **81772**

Grades 11-12 CO-OP 3 Credits
OE 2 Credits

Students will build on prior knowledge of sports, entertainment, and recreational marketing. This course focuses on the principles of management and planning supported by research, financial, and legal concepts. Students will be able to plan and execute an event, develop a career plan, and establish a sports, entertainment or recreation marketing product/business. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer technology applications supporting the course are studied. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

Prerequisite: Marketing I (CO-OP or OE) or Sports and Entertainment Marketing I (CO-OP or OE)

MARKETING MANAGEMENT **8132**

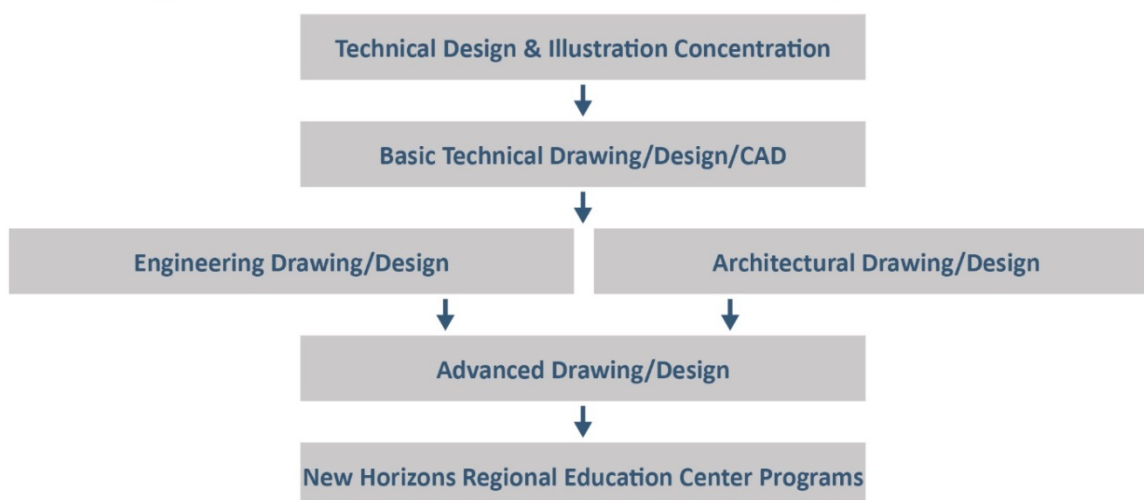
Grade 12 1 Credit

High school seniors who plan to attend college with a concentration in marketing, business, or management and/or who have tentative plans to manage or own a business will benefit from this course. Students develop critical-thinking and decision-making skills through the application of marketing principles to (a) small and large businesses, (b) nonprofit organizations, (c) the professions, (d) service industries, and other institutions or associations that market products, services, ideas, or people. Academic knowledge and skills (mathematics, science, English, and history-social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied.

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)

- Life Planning
- Career Mentorship
- Service Learning
- Technology Foundations

- Leadership Technology Education
- 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.

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.

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.

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. 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

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. 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

ENGINEERING EXPLORATION

8450

Grades 10-12

1 Credit

This course will enable students to examine technology and engineering fundamentals related to solving real-world problems. Students will be exposed to a variety of engineering specialty fields and related careers and will gain a basic understanding of engineering history and design using mathematical and scientific concepts. Students will participate in hands-on projects in a laboratory setting as they communicate information through team-based presentations, proposals, and technical reports.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

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 & Engineering Drawing or Architectural Drawing

LEADERSHIP TECHNOLOGY EDUCATION

90963

90964

Grades 11-12

.5 Credit

This course provides in-depth study for technology education students. Students are required to obtain recommendation of the instructor prior to enrolling in this course. (May be continued.)

ENGLISH

Students must earn a minimum of four credits in English, with two verified credits, in order to graduate.

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
- Newspaper Magazine/Mass Media 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.

NOTE: Summer assignments are required.

ENGLISH 6

1109

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 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.

NOTE: Summer assignments may be required.

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.

NOTE: Summer assignments are required.

ENGLISH 7

1110

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. 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.

NOTE: Summer assignments may be required.

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 be provided the opportunity to 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. Students 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.

NOTE: Summer assignments are required

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.

NOTE: Summer assignments may be required.

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.

NOTE: Summer assignments are required.

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.

NOTE: Summer assignments may be required.

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 AP Exam. World literature and language through reading and the development of analytical oral and written expression are emphasized.

NOTE: Summer assignments are required.

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. Students 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.

NOTE: Summer assignments may be required.

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.

NOTE: Summer assignments are required.

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.

NOTE: Summer assignments may be required.

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.

NOTE: Summer assignments are required.

Prerequisite: English 11

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.

NOTE: Summer assignments are required.

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

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/Technology Education to earn a Standard Diploma. At least one of the credits must be in Fine Arts or Career/Technical Education.

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. Courses that satisfy the sequential elective requirement are identified in Appendix A.

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 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, paper mache, 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**ART HERITAGE****V9170**

Grades 10-12

1 Credit

This course provides a forum for students to explore art, its analysis, aesthetics, history, and appreciation in a setting other than a studio or an AP Art History class. It offers an opportunity for daily support of the SOLs and makes many interdisciplinary connections. Art Heritage prepares the student to be a potential patron, consumer of art, future artist, aesthetic critic, and historian.

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. Using digital cameras, black and white photography and color photography are the focus. 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 three-dimensional design as well as becoming aware of contemporary ideas. Students in this course will explore and learn the basic concepts of three-dimensional 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; any Ceramics or 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.

NOTE: Summer assignments are required**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****91472**

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. (May be continued.)

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.

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.

HIGH SCHOOL COURSE OFFERINGS

**DRAMA IA
DRAMA IB****14101
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.

SURVEY OF THE WORLD DRAMA**V14203**

Grades 9-12 Year

This course is an exploration of drama from many cultures and ages that begins in Ancient Greece and extends into the 1990's. Students participate in reading, discussing, and analyzing these works as literature and theatre. Students view recorded performances as they discuss various interpretations of the plays.

**TECHNICAL THEATRE A
TECHNICAL THEATRE B****14351
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
DRAMA IIB****14201
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
DRAMA IIIB****14301
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
DRAMA IVB****14401
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**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

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. (May be continued.)

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. (May be continued.)

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 and participation in concerts and other musical performances is a requirement of this course.

BRASS SECTIONALS 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. (May be continued.)

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. (May be continued.)

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. (May be continued.)

Prerequisite: Concert Band I or Sectionals I & Audition

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. (May be continued.)

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. (May be continued.)

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. (May be continued.)

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. (May be continued.)

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 91981

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. (May be continued.)

GENERAL TOPICS

MIDDLE SCHOOL COURSE OFFERINGS

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. (May be continued.)

CAREER COMPASS 6

982801

Grade 6

Quarter

This course promotes the development of self-awareness and skills for job success. Students explore work styles and career clusters. The course provides a personal sense of direction, a desire for personal improvement, and a willingness to learn about career planning. Content skills are developed through career exploration experiences, including portfolio development, as well as classroom integration activities.

CONFLICT RESOLUTION SKILLS 6

98267

Grade 6

Quarter

This course provides students with skills in understanding self, listening to and understanding others, communicating with others, understanding causes of conflict, and learning and practicing resolution skills. The course also helps students learn behaviors they can use in daily living to reduce school and community violence.

DIGITAL LITERACY

00666

Grade 6

Quarter

In this exploratory wheel course, students gain proficiency with a variety of technology tools and applications that support content lessons and student products.

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.

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.

READERS' ROUND TABLE

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.

CAREER DISCOVERY

982802

Grades 7-8

Semester

This course guides students toward responsible decisions regarding future career decisions. Activities enable students to increase self-awareness and make wise educational and occupational decisions as they plan for a career. Students investigate multiple careers after exploring their interests and skills, and they discover the courses that will prepare them for their career choices. Through a variety of classroom activities, including the use of technology and continued portfolio development, students enhance their employability and decision-making skills as well as expand their career options.

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.

EXPLORING OUR WORLD

982805

Grades 7-8

Semester

Students will explore critical world issues with a focus on geography, social, political, and economic influences. Students will gain a global perspective of real-time phenomenon affecting society.

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.

NEWSPAPER/MASS MEDIA 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.

WRITERS' ROUNDTABLE 00664

Grades 7-8 Year

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

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. (May be continued.)

LANGUAGE AND CULTURES 57101

Grades 9-12 1 Credit

This course is designed to help English Learners with proficiency levels of 1 or 2 adjust to life in their community and school environment. Students will have the opportunity to experience the United States culture and customs through the printed word and use of hands-on materials such as phone books, money, calculators and much more. The students will also be introduced to principles of basic reading and math as integrated into the study of culture and customs.

LIFE PLANNING 98264

Grades 9-12 .5 Credit

In this course, students focus on developing a life-management plan, developing strategies for lifelong career planning, coordinating personal and career responsibilities, and establishing a plan for using resources. Process skills, applicable to all subjects, are used throughout the course and include thinking, communication, leadership, and management.

NUTRITION AND WELLNESS 98263

Grades 9-12 .5 Credit

In this course, students focus on making choices that promote wellness and good health; analyzing relationships between psychological and social needs and food choices; choosing foods that promote wellness; obtaining and storing food for self and family; preparing and serving nutritious meals and snacks; selecting and using equipment for food preparation; and identifying strategies to promote optimal nutrition and wellness of society. Teachers highlight the skills of math, science, and communication when appropriate.

PROGRAMMING & GAME DESIGN**V98408**

Grades 9-12 1 Credit

This course provides a solid foundation in the essentials of programming and game design. Students will use programming language and game-development software to create engaging, interactive games in a variety of styles. In addition to learning about game genres, students will study all aspects of the game-design process including hand-on projects that teach all elements of game development. This virtual course offers students opportunities to expand technology skills through analysis and development of online games, graphics and animation.

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.

PROGRAMMING & INTRODUCTION**TO COMPUTER SCIENCE****V98409**

Grades 10-12 1 Credit

Students will use programming techniques to include control structures, functions, parameters, objects and classes. Application of game elements are used as a fundamental principal in integrating computer science concepts using C++ and other appropriate programming languages.

SAT PREPARATION 98261

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

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

STUDENT TECHNOLOGY LEADERSHIP CORPS B984010

Grades 10-12 1 Credit

This course is uniquely designed to offer students an opportunity to advance their technological skills and leadership skills by supporting staff and students with the productive use of technology. Students will model online safety and responsible use of devices and applications. Viewed as the technology gurus of the school community, students will work with Informational Technology (IT) staff to provide assistance with hardware, software, networking,

troubleshooting, and provide support with the integration of technology. Work sites may vary depending on the location in YCSD.

NOTE: This course satisfies the virtual course requirement.

Prerequisite: *Application & Interview*

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*

EVOLUTION OF CINEMA A 98406

EVOLUTION OF CINEMA 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 exposes 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 as well as research skills.

MULTIMEDIA COMMUNICATIONS SEMINAR 0128

Grades 11-12 1 Credit

This course promotes information literacy and proficiency in the interdisciplinary use of multimedia technologies and communications. Designed to encourage students to integrate applications software into the curriculum, the course emphasizes a variety of multimedia tools using presentation packages, internet, web design, and telecommunications. Within the framework of their career and higher education goals, students refine communication skills and use various types of multimedia applications to produce collaborative, curriculum-based projects.

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. (May be continued.)

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

SERVICE LEARNING 9072

Grade 12 1 Credit

Service Learning is an elective course that requires the student to perform 140 documented hours of service in one non-profit agency or institution agreed upon by the student, the parent, the agency, and the service learning instructor. The service is performed from October to May. The class meets at specified times designated by the school principal. Students are required to maintain a daily journal, a log of completed service hours that are verified by the service learning instructor and the agency coordinator, and an exit project on the service experience. Topics covered during class meetings include journal writing, civic participation, and problem solving. In this course, students acquire knowledge and skills to do the following: 1) identify societal problems/issues and propose real solutions; 2) connect curricular knowledge and skills to their own lives and the lives of others; 3) demonstrate active and responsible citizenship through participation in processes of local government and agencies; and 4) think, talk, and write about their experiences in providing service to individuals and to the community. Seniors are encouraged to consider service learning as a valuable course option.

Service learning provides opportunities for students to use 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

Students must earn a minimum of two credits in Health & Physical Education to graduate.

Virginia's standards for physical education are grouped into five strands: skilled movement, movement principles and concepts, personal fitness, responsible behaviors and physically active lifestyle.

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.

NAVAL SCIENCE I (NJROTC) 79132 79133

Grades 9-12 .5 Credit Each

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 life time 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.

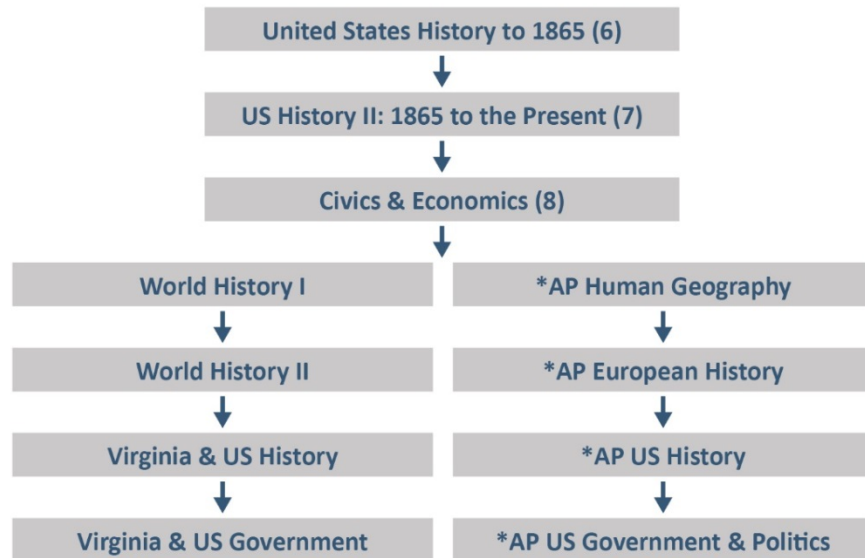
HISTORY/SOCIAL SCIENCE

Students must earn a minimum of four credits, with two verified, in History/Social Science to earn an Advanced Studies Diploma.

Students must earn a minimum of three credits, with one verified, in History/Social Science to earn a Standard Diploma.

The history and social science academic disciplines develop students' knowledge and skills of history, geography, civics and economics and enables 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 Science Course Offerings & Suggested Sequences



History/Social Science Electives (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 continue to use skills in historical and geographical analysis to explore the history of the United States from the

end of Reconstruction (1865) to the present. 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**V2210**

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.

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. Summer assignments are required.

Prerequisites for ninth grade students: Suggested grade of "A" in Advanced English 8 and completion of at least one high school credit course with a suggested grade of "B" or better.

WORLD HISTORY II**2216**

Grade 10

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 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 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.

NOTE: Summer assignments are required.

Prerequisite: Recommendation from World History I teacher and English teacher with a suggested grade of "B" or better in World History I

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.

NOTE: Summer assignments are required.

AP WORLD HISTORY**V2380**

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.

NOTE: Summer assignments are required

Prerequisites: Recommendation from the previous history teacher and an overall "B" average in related history courses.

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.

NOTE: Summer assignments are required.

Prerequisite: Recommendation from World History II teacher and English teacher with a suggested grade of "B" or better in World History II

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**

Students are introduced to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of settings. The course aims to illustrate the rich diversity of political life, to show available institutional alternatives, to explain differences in processes and policy outcomes, and to communicate the importance of global political and economic changes. China, Great Britain, Mexico, Nigeria, and Russia form the core of this course. Also, Iran will be included as time allows. Students taking 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.

Prerequisites: U.S. History or World History

AP MICRO ECONOMICS  V2802

Grades 11-12 .5 Weighted Credit

Students study the behavior of individuals and businesses as they exchange goods and services in the marketplace. Students will learn why the same product costs different amounts at different stores, in different cities, at different times. In addition, students will learn to spot patterns in economic behavior and how to use those patterns to explain buyer and seller behavior under various conditions. Micro Economics studies the economic way of thinking, understanding the nature and function of markets, the role

of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in promoting a healthy economy. 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.

AP MACRO ECONOMICS V2803

Grades 11-12 .5 Weighted Credit

Students learn why and how the world economy can change from month to month, how to identify trends in our economy, and how to use those trends to develop performance measures and predictors of economic growth or decline. Students will examine how individuals, institutions and influences affect people, and how those factors can impact employment rates, government spending, inflation, taxes and production. This course prepares students for the AP Exam and for further study in business, political science and history. Students taking this course are encouraged to take the AP Exam.

DIRECTED STUDY HISTORY/SOCIAL SCIENCE 29962**29963**

Grades 11-12 .5 Credit

This is a structured, guided independent study of history/social science. (May be continued.)

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.

NOTE: Summer assignments are required.

Prerequisite: Recommendation from AP U.S. History teacher and English teacher with a suggested grade of "B" or better in AP U.S. History or an "A" in Virginia & U.S. History (This prerequisite does not apply to IB students.)

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

Students must earn a minimum of four credits, with two verified, in Mathematics to earn an Advanced Studies Diploma.

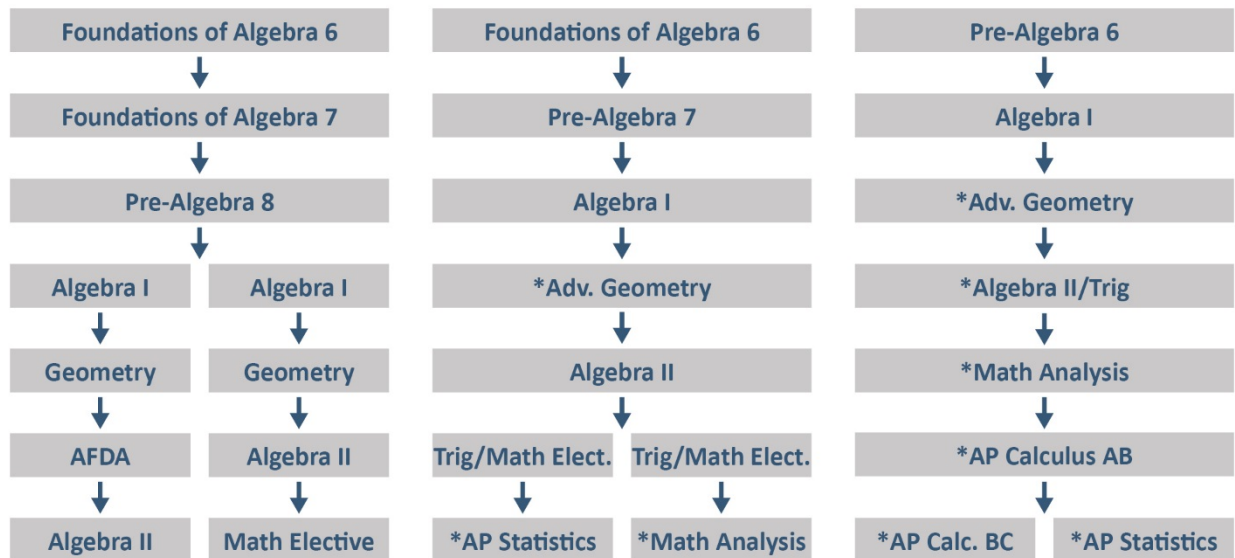
Students must earn a minimum of three credits, with one verified, in Mathematics to earn a Standard Diploma.

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.

Students enrolled in the following high school credit math courses must successfully complete the first semester of the course prior to taking the second semester: Algebra I/A&B; Geometry/A&B; and Algebra II/A&B. Students who do not pass the first semester of these courses will be re-enrolled in the first semester of the course and have their schedules adjusted if necessary. Each semester math course carries a .5 credit.

Mathematics Course Offerings & Suggested Sequences



Mathematics Electives (Grades 9-12)

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

*Weighted Course

MIDDLE SCHOOL COURSE OFFERINGS

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 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 7**NEW 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 eighth grade Mathematics SOL Assessment.*

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.

ALGEBRA IA**31301****ALGEBRA IB****31302**

Grades 7-8

.5 Credit Each

These courses are studies 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 for Algebra IA: *Pre-Algebra 6 or Pre-Algebra 7*

Prerequisite for Algebra IB: *Algebra IA*

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.

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 IA & IB*

HIGH SCHOOL COURSE OFFERINGS

ALGEBRA IA 31301
ALGEBRA IB 31302

Grades 9-12 .5 Credit Each

These courses are studies 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 for Algebra IB: Algebra IA

ALGEBRA I 3130
 Grades 9-12 1 Credit

This course studies 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.

Co-requisite (BHS,GHS,THS,YHS): Algebra I Math Lab Elective

Prerequisite (YRA): Algebra I Math Lab Elective

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 (YRA) 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

ALGEBRA IIA 31351
ALGEBRA IIB 31352

Grades 9-12 .5 Credit Each

The content of these courses 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. The courses also include a transformational approach to graphing functions.

Prerequisite for Algebra IIA: Algebra I

Prerequisite for Algebra IIB: Algebra IIA

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 IA & IB

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.

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 (YRA) 3143
 Grades 9-12 1 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. The courses emphasize two-dimensional and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems.

GEOMETRY A 31431
GEOMETRY B 31432
 Grades 9-12 .5 Credit Each

The content of these courses 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. The courses emphasize two-dimensional and three-dimensional reasoning skills,

coordinate and transformational geometry, and the use of geometric models to solve problems.

Prerequisite for Geometry A: Algebra I

Prerequisite for Geometry B: Geometry A

TRIGONOMETRY AND FUNCTIONS 3163

Grades 9-12 1 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. In addition, algebra topics that are not covered in the Algebra II curriculum will be explored. An emphasis will be placed on functions and topics found on college entrance exams.

Prerequisite: Geometry and 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. Concepts covered in this course are found on college entrance exams.

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, of 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.

NOTE: Summer assignments are required.

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.

NOTE: Summer assignments are required.

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.

NOTE: Summer assignments are required.

Prerequisite: Trigonometry

CALCULUS 31601

Grades 10-12 1 Credit

This course provides a thorough treatment of calculus through the 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

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. Recommendation from math teacher with a suggested grade of "A" or "B" in Algebra II or Algebra II/Trigonometry.

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*

PROBABILITY & STATISTICS WITH DISCRETE MATHEMATICS (YRA)**31902**

Grades 10-12

1 Credit

This course introduces 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. Students are introduced to 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*

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*

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.

NOTE: *This course fulfills a math diploma requirement for students seeking the Modified Standard Diploma ONLY. Other students may take this course for elective credit.*

Prerequisite: *Algebra I*

AP COMPUTER SCIENCE A**3185**

Grades 11-12

1 Weighted Credit

This course is designed to prepare students for the AP Computer Science exam. Content offers a further exploration of computer skills and applications using Java programming language. Students taking this course are encouraged to take the AP Exam.

NOTE: *Summer assignments are required.*

Prerequisite: *Algebra II or Algebra II/Trigonometry*

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. (May be continued.)

SENIOR MATHEMATICS**3136**

Grade 12

1 Credit

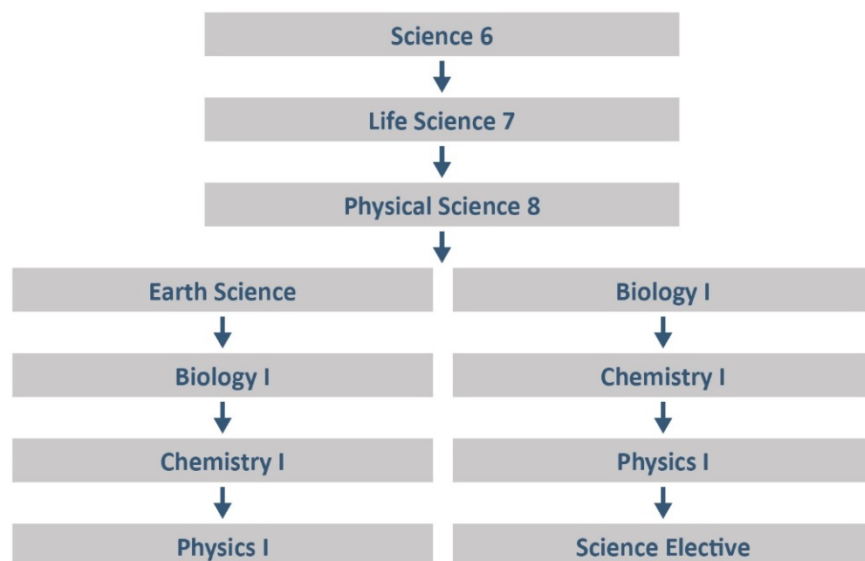
This course is designed for college-bound seniors to provide added mathematics instruction that supports success on entrance exams and in freshman math courses. Topics studied include advanced algebra, analytic geometry, functions, sequences and series, and probability.

SCIENCE

Students must earn a minimum of four credits, with two verified, in Science to earn an Advanced Studies Diploma. They must take courses in at least three Sciences to earn a Standard Diploma. They must take courses in at least two different disciplines.

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 Electives (Grades 9-12)

- Directed Study Science
- *AP Physics 1
- *AP Biology
- *AP Chemistry
- *AP Environmental Science
- Atmospheric Science & Climatology
- Ecology and Environmental Science
- *Biology II/Mammalian Anatomy & Physiology
- *Biology II/Marine Science
- Governor's School for Science & Technology

**Weighted Course*

MIDDLE SCHOOL COURSE OFFERINGS

SCIENCE 6

4105

Grade 6

Year

This introductory course is designated 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.

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.

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 the 21st century skills.

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**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: Grade of "C" or better in Algebra I and one year of another lab science

ECOLOGY & ENVIRONMENTAL SCIENCE**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.

NOTE: Summer assignments are required.

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.

NOTE: Summer assignments are required.

Prerequisite: Chemistry I; Recommendation from science teacher with a suggested grade of "B" or better in 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. (May be continued.)

PHYSICS I**45101**

Grades 11-12

1 Weighted 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. (May be continued.)

APPLIED HISTORY/SOCIAL SCIENCE 00K850

Grades 6-8 Year

This individualized instructional course encompasses the major content components of the 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. (May be continued.)

APPLIED MATHEMATICS 00K830
31102
31112
31122

Grades 6-8 Year

This course is designed to continue mathematics reasoning and calculations skills introduced/mastered in the 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. (May be continued.)

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. (May be continued.)

**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. (May be continued.)

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. (May be continued.)

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. (May be continued.)

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. (May be continued.)

NOTE: Practical Math does not count as a mathematics credit for a Standard or a Modified 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. (May be continued.)

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. (May be continued.)

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 help them achieve success in a vocational training program or in the Job Coach Program. 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; PG 1 Credit

This program provides community-based work adjustment and job training for students with disabilities. Students are enrolled by referral through the Transition Resource Teacher. 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 PG 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 job skill development. The goal of this program is competitive employment for student participants. Interested students must go through an application process, including an interview at the hospital and meet normal hospital employment requirements in order to be accepted. Additionally, applicants should have completed their affiliation with the high school, yet remain eligible for services with either a modified standard or special diploma. Referrals should be made to the Transition Resource Teacher. This course is for one year only and may not be repeated.

WORLD LANGUAGES

Students must earn a minimum of three credits in World Languages to earn an Advanced Studies Diploma. Credits must include three years of one language or two years of two languages. Students must earn a minimum of two credits in the areas of World Languages, Fine Arts, or Career/Technology Education to earn a Standard Diploma. At least one of the credits must be in Fine Arts or Career/Technical Education.

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 high 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 the 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

Grades 7-8 Semester

This course provides an introduction to the cultural heritage and beginning conversational skills in French and Spanish.

SURVEY OF WORLD LANGUAGES

V5700

Grades 7-8 Year

This course is designed to expose middle school students to the language and culture of four World Languages; Latin, Spanish, French, and Chinese. Students will practice beginning conversational skills, written concepts and oral language to prepare for level one World Language courses. Students are actively engaged in online discussion and learn to track messages, submit documents electronically, and meet online in "live" sessions with teachers and students using chat and virtual whiteboard components.

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.

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

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.

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

V5020

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.

Prerequisite: *Level I of selected World Language*

HIGH SCHOOL COURSE OFFERINGS

AMERICAN SIGN LANGUAGE



V5990

Grades 9-12

1 Credit

This course provides an introduction of ASL as a visual language which is expressed through the hands, face, and body language. Students will actively engage in the development of visual language including phonemic components, fingerspelling, and movement to communicate. Emphasis is placed on grammar, culture, history, terminology, and other unique characteristics associated with ASL. This course will include a required face to face component.

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; to practice oral communication and to 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.

LATIN I

5310

Grades 9-12

1 Credit

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

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.

Prerequisite: *Level I of selected World Language*

LATIN II

5320

Grades 9-12

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*

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*

FRENCH III

5130

SPANISH III

5530

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 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*

GERMAN III

5230

ARABIC III



V5030

MANDARIN CHINESE III



V5830

Grades 10-12

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 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 III **5330**
 Grades 10-12 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*

FRENCH IV **5140**
SPANISH IV **5540**
 Grades 10-12 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*

GERMAN IV **5240**
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*

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*

AP FRENCH LANGUAGE **5170**
 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. At this level, students create and listen with understanding to reports, presentations, interpretive, and expressive composition with understanding. 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.

NOTE: *Summer assignments are required.*

Prerequisite: *French IV/Teacher Recommendation*

AP SPANISH LANGUAGE **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.

NOTE: *Summer assignments are required.*

Prerequisite: *Spanish IV/Teacher Recommendation*

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 CHINESE LANGUAGE AND CULTURE  **V5860**
 Grades 11-12 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.

NOTE: *Summer assignments are required.*

Prerequisite: Mandarin Chinese IV/Teacher
Recommendation

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. (May be continued.)

SPANISH CONVERSATION AND CULTURE 5505

Grade 12 1 Weighted Credit

This course is designed to maintain and enhance the students’ communicative skills and knowledge of Spanish and Hispanic cultures. Students develop more advanced communication skills in all four areas: listening, speaking, reading and writing, with an emphasis on the ability to interact orally. Students continue to use more complex language structures and express abstract ideas with reasonable fluency. At this level students will gain greater insight into culture through literature and other advanced reading. Emphasis is placed on current events and increasing cultural understanding and knowledge. There is an emphasis on community and global involvement with the language, including outreach activities. The primary language spoken at this level is Spanish.

Prerequisite: AP Spanish

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 Methods and Ethics course the junior year and an Honors Research and Mentorship placement the senior year.

Engineering Strand

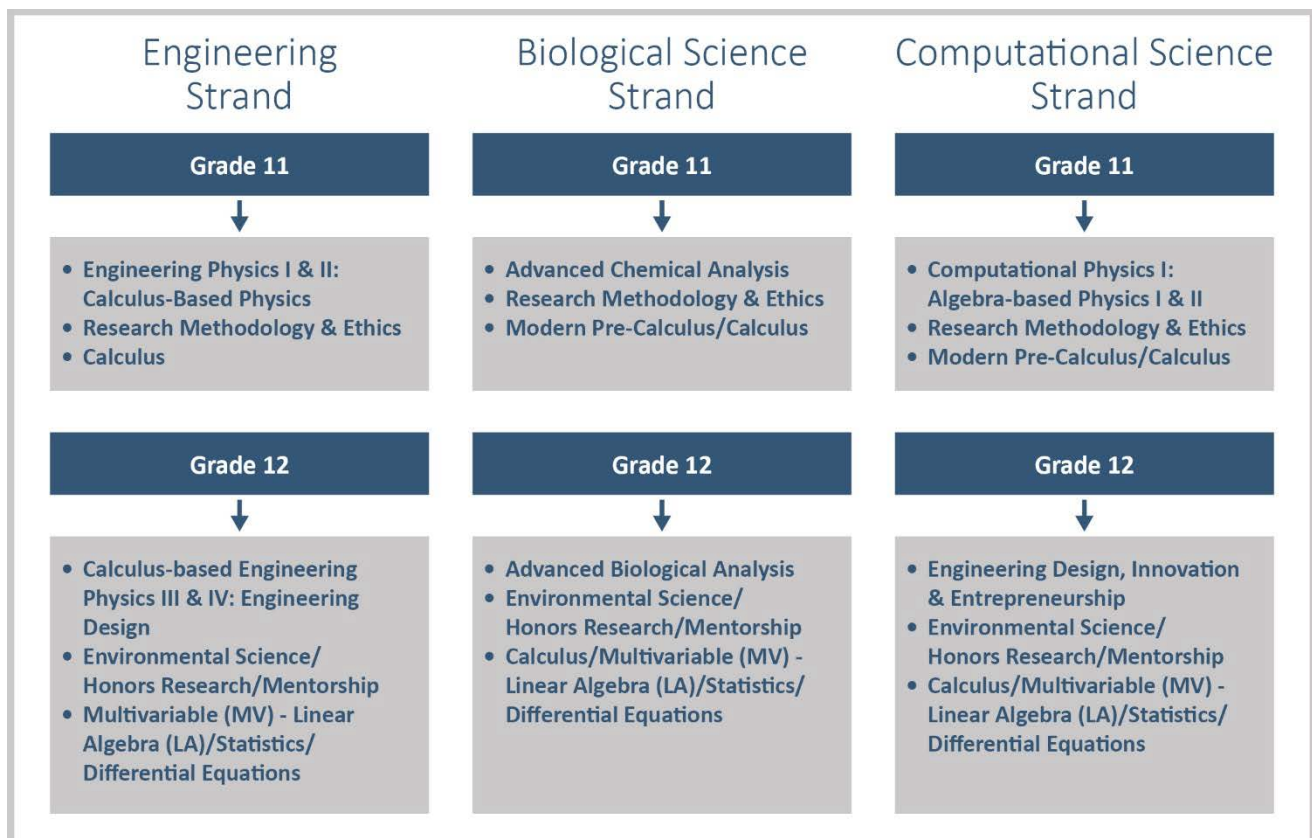
The Engineering Strand involves an intense, rigorous study of fundamental principles of engineering and calculus-based physics.

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 Computation Science & Engineering 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 through chemical calculations.

NOTE: *Advanced Chemical Analysis is a college-level course with a strong focus on laboratory work. It examines topics studied during the first year of college by science majors.*

COLLEGE CALCULUS 3177

Grades 11-12 1 Weighted Credit

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

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

CALCULUS-BASED ENGINEERING PHYSICS I & II: MECHANICS TO ELECTROMAGNETISM 45701

Grade 11 2 Weighted Credits

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

points of view needed by professionals are important general goals.

Co-requisite: *Enrollment in GSST College Calculus Course*

ENGINEERING DESIGN INNOVATION & ENTREPRENEURIALSHIP 03201

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

Prerequisite: *Computational Physics and Pre-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.

RESEARCH METHODOLOGY & ETHICS 4610

Grade 11 1 Weighted Credit

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. All students complete application materials for the Tidewater Science and Engineering Fair, and participation in this, and other fairs, is highly encouraged. This course will serve as a preparatory course for the Honor Research and Mentorship Program.

MULTIVARIABLE CALCULUS/ LINEAR ALGEBRA

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. 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 animals. The laboratory experience is a major component of the course, allowing students the opportunity to use technologies applied in research, 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 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, industry standard engineering and research modeling and simulation software, hands-on design and troubleshooting of solid state electronics and digital systems, and industry standard computer-aided-design software, and additive manufacturing fabrication systems. In challenging keystone projects, students are tasked with identifying real-world engineering problems or opportunities in order to propose and seek client approval for their unique solutions or innovations. Following these experiences, students will 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 & II. Calculus

DIFFERENTIAL EQUATIONS AND MATH METHODS IN PHYSICS

02123

Grade 12

1 Weighted Credit

The first semester the emphasis will be on Ordinary Differential Equations (ODE). Partial Differential Equations (PDE) at the end of the first semester and conclude the second semester by looking at modeling the four fundamental forces and other applied topics. The construction of mathematical models to address real-world problems has been one of the most important aspects of each of the branches of science. It is often the case that these mathematical models are formulated in terms of equations involving functions as well as their derivatives. Such equations are called differential equations. These differential equations are the language in which the laws of nature can be expressed. Understanding the properties of solutions of differential equations is fundamental to much of contemporary science and engineering. If only one independent variable is involved, often time, the equations are called ordinary differential equations. The course will demonstrate the usefulness of ordinary differential equations for modeling physical and other phenomena. Complementary mathematical approaches for their solution will be presented, including analytical methods, graphical analysis and numerical techniques. This course also covers the classical partial differential equations of applied mathematics, physics, and engineering: diffusion, Laplace/Poisson, and wave equations. It also includes

methods and tools for solving these PDEs, such as separation of variables, Fourier, Laplace, Legendre, Bessel series and transforms, eigenvalue problems, and Green's functions. Emphasis during the second semester will be placed on building and modeling the fundamental forces of nature. **Prerequisite: Prerequisite for Differential Equations is successful completion of Multivariable Calculus/Linear Algebra and permission of the instructor.**

ENVIRONMENTAL SCIENCE:

RESEARCH APPLICATIONS/MENTORSHIP 4271 46121

Grade 12	2 Weighted Credits
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In the fall semester, students integrate aspects of biology, chemistry, earth science, and physics in the study of the environment. Exploration of relationships between organisms and their biotic and abiotic environment at multiple levels of biological system hierarchy serves as the foundation for this course. Laboratory and fieldwork are integral components of the course. Students undertake field sampling for water quality and biotic components. While analyzing their own data, students will become familiar with concepts such as spatial and temporal variation in natural systems, species diversity, and community similarity indices. Critical thinking, risk analysis, and cost-benefit analysis will be emphasized as students identify and analyze alternative solutions to complex environmental problems. Current or on-going environmental issues and/or case histories will be emphasized. Spring semester will emphasize ecological principals from physiological ecology to ecosystem ecology. Mentorship involves students in concentrated research or project development in firms and laboratories throughout the Tidewater area. 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 Minitab statistical software for presentation and analysis of data. This course provides students with an opportunity to integrate theory, knowledge, and application through a research experience.

COMPUTATIONAL PHYSICS 4525

Grade 11	2 Weighted Credits
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Computer Physics Course objectives provide a study of the key concepts in object-oriented programming (Java / Python) and design (data abstraction, data encapsulation, composition, inheritance and code re-use and implementation design techniques), programming constructs (primitives, references, classes, methods and interfaces), evaluating expressions (numeric, string and Boolean), program analysis (testing, debugging, run-time exceptions, pre and post conditions, assertions, analysis of

algorithms and numerical representation of integers), data structures (strings, lists, one and two dimensional arrays and their accompanying operations – traversals, insertion and deletion), searching (sequential and binary), sorting (selection, insertion and merge sort) and develop an understanding of the ethical and social issues as it relates to the study of Computer Science. The course is a non-calculus treatment of physics dealing with topics in classical and modern physics. Physics course objectives apply the equations of kinematics to predict the position and the velocity at a later time, Newton's laws of motion to find the acceleration of the objects and to identify other forces in the system, the conservation laws (mechanical energy conservation, and momentum conservation, and angular momentum conservation) to compare the system before and after the interaction, find the solutions of problems involving rectilinear motion, parabolic motion, circular motion, & objects in equilibrium, apply the conservation laws to the solutions of problems involving collisions, conservative & non-conservative forces, understand the fluid mechanics, such as buoyant force and Bernoulli's equation, solve problems involving thermal expansion, heat transfer, thermodynamic processes & the behavior of ideal gases. Second semester course focuses on fundamental principles of physics covering mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics.

Prerequisites: Algebra II/Trigonometry

STATISTICAL RESEARCH METHOD 3190

Grades 11-12	1 Weighted Credit
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This course is a comprehensive conceptual and practical presentation of probability, descriptive/inferential statistics, and the key ideas underlying statistical and quantitative reasoning. Statistical methods of organizing, summarizing, and displaying data combined with statistical testing are used to solve problems from a myriad of areas such as business, engineering, biology, and medicine. Advantages and limitations of statistical methods are developed. Graphing calculators and Minitab statistical software are extensively utilized with a project/report focus. The emphasis is on the interpretation of the statistical results rather than the mere computation. Topics include random variables, sampling, distribution families, binomial and Poisson probabilities, conditional probability, estimations, data analysis, contingency tables, frequentist and Bayesian perspectives, simple and multiple regression analysis including linear, power, and exponential fit, confidence intervals, hypothesis testing for means and proportions, Chi-square, ANOVA, and several non-parametric testings and design of experiments.

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. Academic courses taken by students in the IB Diploma Programme must be completed during the regular academic year, not during summer school, with the exceptions of Virtual High School Health and PE 9 or 10 and/or Virtual High School Economics and Personal Finance.

NOTE: Only students admitted to the IB Diploma Programme or students receiving teacher recommendation may enroll in the courses detailed within this section.

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 Level I Latin 	<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 Level II Latin 	<ul style="list-style-type: none"> IB English HL 11 IB Biology HL 11 or IB Chemistry HL 11 or IB Physics SL 11 IB French SL/HL or Spanish SL/HL or Classical Languages SL (Latin) IB Math SL or Math Studies SL IB History HL 11 IB Geography SL or Theatre HL Elective(s) 	<ul style="list-style-type: none"> IB English HL 12 IB Biology HL 12 or IB Chemistry HL or Physics SL 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 Theatre HL 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 completed in 12th grade.

IB LANGUAGE B: FRENCH (HL) IB51421

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 completed 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 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 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.

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.

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 12th grade.

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 will be 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 (SL)

IB 45801

Grade 11 1 Weighted Credit

This is the first part of a two-year course designed to satisfy the IB science requirement at the Standard Level. Topics covered include measurement, mechanics, thermal physics, waves, and optics. Extensive laboratory investigations are part of instruction. Group 4 projects commence during this course. Students are required to complete a lab portfolio that contains all lab work performed. Instruction is geared toward the successful completion of IB Diploma requirements and IB Examination preparation. The second year of this course is completed in 12th grade.

IB PHYSICS (SL)

IB 45802

Grade 12 1 Weighted Credit

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

Prerequisite: IB Physics (SL)

GROUP 5: MATHEMATICS & COMPUTER SCIENCE

IB MATHEMATICS (SL)

IB 31951

Grade 11 1 Weighted Credit

This course includes advanced topics in numbers and algebra, functions, equations, introduction to circular functions, trigonometry, matrices, vectors, probability, statistics, and calculus. The first year of IB Mathematics (SL) is intended to prepare students for detailed study of statistics, probability, and calculus in the second year of the

course. Students complete a portfolio in fulfillment of the IB Diploma Programme that is assessed at the conclusion of the second year. Students who complete IB Math (SL) may take AP Calculus, AP Stats, Probability and Statistics, or Calculus their senior year.

Prerequisite: *Math Analysis*

IB MATHEMATICAL STUDIES (SL) IB 3162

Grade 11 1 Weighted Credit

This course is designed to develop skills needed for success with the mathematical demands of a technological society and to emphasize the application of mathematics to real-life situations. Substantial personal research in the form of a project is a requirement of the course. This math course is an option for students with varied backgrounds who are not likely to require advanced mathematics beyond the IB Diploma Programme. The second year of the course is completed during the senior year. Students who complete IB Mathematical Studies (SL) may take AP Stats, Math Analysis or Probability and Statistics their senior year.

Prerequisite: *Algebra II/Trig*

GROUP 6: THE ARTS

IB THEATRE (HL) IB 1432

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, an independent oral presentation, and a cumulative portfolio project.

IB THEATRE (HL) IB 1433

Grade 12 1 weighted Credit

This course continues the curriculum from IB Theatre (HL) in 11th grade

Prerequisite: *IB Theatre (HL)*

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

NAVAL SCIENCE I (NJROTC) 79130

79131

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 life time planning.

NOTE: *Students in this course have an opportunity to take an Industry Certification Test.*

NOTE: *Naval Science I may fulfill the requirements for Health and PE 9.*

NAVAL SCIENCE 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 life styles. Naval Science 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: *Naval Science I or transfer from other JROTC program*

NAVAL SCIENCE 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 life styles. Naval Science 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: Naval Science I or transfer from other JROTC program.

NAVAL SCIENCE 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 Naval Science 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: Naval Science 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 and technical education courses offered through the New Horizons Regional Education Center (NHREC).

NOTE: Fees may be required for some Career/Technical course offerings. Student-selected verified credit may be earned for some Career/Technical course offerings

CAREER CLUSTER: AUTOMOTIVE TECHNOLOGY

AUTO COLLISION AND REFINISHING I, II & III **8676**
8677
8678

Grades 11-12 3 Credits

Location: Butler Farm

This program prepares students to repair motor vehicle bodies. Instruction includes chassis alignment and reconstruction of components. These two year-long courses may be taken for either a one-year or two-year program. The second-year course deals with advanced techniques in auto body technology, or students may elect to take Auto Painter during the second year.

NOTE: Each student pays for an auto body repair kit. This course is not recommended for individuals with respiratory or allergy problems. Credentialing Test: Employment opportunities exist in the auto tire and service facilities such as Wal-Mart, Costco, Merchants, Firestone, Jiffy Lube, etc.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

Prerequisite: Eye-hand coordination, manual dexterity, physical strength & stamina, and minimum eighth grade reading/math levels.

AUTO TECHNOLOGY I & II **8506**
8507

Grades 11-12 3 Credits

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 study automotive electrical/electronic systems intensively and learn to diagnose and correct malfunctions related to drivability and engine performance.

NOTE: This program offers dual enrollment college credit through TNCC in Auto Technology II.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

Prerequisite: Eye-hand coordination, manual dexterity, physical strength & stamina, and minimum 10th grade reading level with successful completion of Algebra I.

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 minimum eighth grade reading level.

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.

CAREER CLUSTER: ENGINEERING/MANUFACTURING TECHNOLOGY

AUTOMATION & MECHANICAL PRODUCTION & TECHNOLOGY

8547
8558

Grades 11-12 3 Credits

Location: Butler Farm

This is a one-year course that provides an overview and orientation to careers in various fields of manufacturing. Students will repair and maintain commercial or industrial equipment in buildings and program robots used in assembly and manufacturing systems.

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 TNCC. This course will lead to industry certification and prepares students for manufacturing jobs as electrical/mechanical or mechatronics technicians who design, install, maintain, repair, or troubleshoot manufacturing systems that include electrical and mechanical equipment, instrumentation, controls, and automation. This class is dual enrolled with TNCC for 22 college credits.

HEATING/VENTILATION/AIRCONDITIONING (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.

PRECISION MACHINING

8539
8540

Grades 11-12 3 Credits

Location: Continental

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 TNCC Precision Machining Career Studies Certificate upon graduation.

WELDING I & II

8672
8673

Grades 11-12 3 Credits

Location: Butler Farm – Welding I & II

Woodside Lane – Welding II

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 mechanical aptitude; good eye-hand coordination; ability to tolerate heat, smoke & working in confined spaces; tolerance to weather; good physical condition without allergies or breathing problems.

CAREER CLUSTER: HEALTH SCIENCES

DENTAL ASSISTANT I & II**8328****8329**

Grades 11-12

3 Credits

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.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

Prerequisite: Emotional stability, manual dexterity, social adjustment, good grooming, excellent interpersonal communication skills, good physical condition, desire to work with people, ability to read & comprehend technical material at a minimum of 10th grade level. 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.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

Prerequisite: One semester of Keyboarding applications or equivalent, minimum 10th grade reading level, and completion of Biology with a grade of "C" or above. Current TB skin test must be on file with NHREC.

NURSING 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.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

Prerequisite: Desire to work with people, good physical condition, good eye-hand coordination, manual dexterity, ability to read & comprehend technical material at a 10th grade level, knowledge of basic mathematics, compliance with dress code including short fingernails, white uniform, white shoes, white hosiery & watch with a second hand.

PHARMACY TECH**8305****8306**

Grades 11-12

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.

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 88kills 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.

Prerequisite: Successful completion of Biology and Algebra I.

VETERINARY SCIENCE**8083****8088**

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, minimum 10th grade reading level and completion of Biology with a grade of "C" or better.

CAREER CLUSTER: HUMAN SCIENCES**COSMETOLOGY I & II****8527****8528**

Grades 11-12

3 Credits

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.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

Prerequisite: Eye-hand coordination, manual dexterity, good color discrimination, ability to follow oral & written directions, minimum 10th grade reading level, and completion of English 10 and Biology with a "C" average.

CULINARY ARTS I & II**8275****8276**

Grades 11-12

3 Credits

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: This program offers dual enrollment college credit through TNCC.

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: Butler Farm

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. 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. Fee requirements for this course include: liability insurance, apron rental, HERO club fee, and a criminal background check.

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

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 completion of English 10 with a "C" average or above.

CAREER CLUSTER: INFORMATION TECHNOLOGY**CISCO NETWORKING/
CYBERSECURITY ACADEMY****8542****8543****8544****8545**

Grades 11-12

3 Credits

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 at TNCC.

NOTE: Students enrolling in Cisco Networking/Cyber Security Academy must have completed an advanced Math course above Algebra I with a grade of "B" or above. This one-year course meets the sequential elective requirement. Students may earn college credit through TNCC.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

**COMPUTER PROGRAMMING APPLICATIONS AND
GAMING & 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 program and applications. The class is dual enrolled for 18 TNCC credits.

NOTE: Students enrolling in Computer Programming Applications and Gaming & Advanced Programming must have completed Algebra I with a grade of "C" or above. This one-year course meets the sequential elective requirement. Students may earn college credit through TNCC.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

**CYBERSECURITY SYSTEMS TECHNOLOGY/
ADVANCED CYBERSECURITY
SYSTEMS TECHNOLOGY****8628****8629**

Grades 11-12

3 Credits

Location: Butler Farm

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. The class is dual enrolled for 6 TNCC credits.

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.

CAREER CLUSTER: PUBLIC SERVICE**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 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 felon 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. This program offers dual enrollment college credit through Thomas Nelson Community College.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

Prerequisite: At least 17 years of age, 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, with minimum 10th grade reading/math levels.

FIREFIGHTER I & II

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.

NOTE: This program offers dual enrollment college credit through TNCC as well as an opportunity for a Fire Fighter apprenticeship with the completion of EMT.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

Prerequisite: At least 16 years of age on first day of class, completion of physical exam using a NHREC form, and must have completed English 10 with a grade of "C" or above.

CRIMINAL JUSTICE

8702

8703

Grades 11-12

3 Credits

Location: Butler Farm/Woodside Lane

This one-year course introduces students to careers in law enforcement, corrections, and private security. The course also establishes a good base for those students going to college or into the military.

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.

NOTE: Students in this course have an opportunity to take an Industry Certification Test.

Prerequisite: Minimum GPA of 2.0, a genuine interest in pursuing a career in criminal justice, solid writing & communication skills, minimum grade 10 reading level.

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.

RHYTHMIC ARTS 6

93022

Grade 6

Year

This introductory rhythmic 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 cardio-respiratory 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 rhythmic 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 that replaces English 7 or Advanced English 7 for students enrolled in mSAM.

RHYTHMIC ARTS 7**93023**

Grade 7

Year

This rhythmic arts course expands exploration of dance in its many forms and provides students with exposure to the diversity of the rhythmic arts. Content focuses on the concepts of fitness and wellness, utilizing dance as a cardio-respiratory 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 that replaces English 8 or Advanced English 8 for students enrolled in the mSAM.

RHYTHMIC ARTS 8**93024**

Grade 8

Year

This rhythmic arts course continues to provide in-depth study of dance in its many forms and expands students' exposure to the diversity of the rhythmic arts. Content focuses on the concepts of fitness and wellness utilizing dance as a cardio-respiratory 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

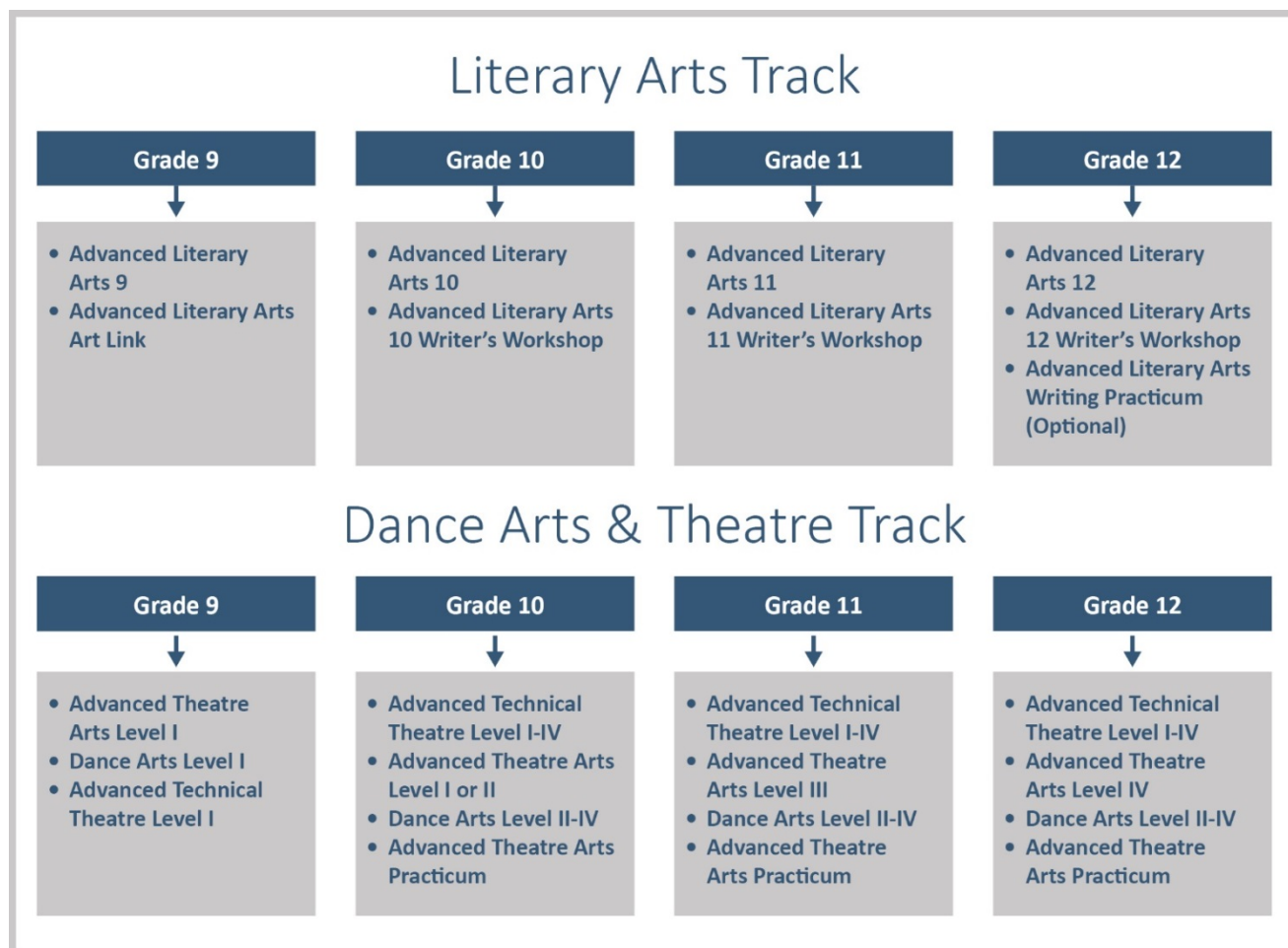
Year

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 both the Dance Arts and the Theatre Arts classes. Additionally, students may take Advanced Technical Theatre in combination with any of the other classes that are not offered during conflicting periods.



SOA COURSE OFFERINGS

ADVANCED LITERARY ARTS 9

ADVANCED ENGLISH 9 **117710**
ADVANCED ARTS LINK AND WRITERS WORKSHOP 9* **117711**

Grade 9 1 Weighted Course

These interdisciplinary courses are explorations of the basic elements of the fine and literary arts with an emphasis on the relationship among the arts and the development of standards to differentiate between the meaningful and the mundane in 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. The courses help prepare students for the English AP Exam.

Prerequisite: Application & Audition

****Fine Arts Elective***

ADVANCED LITERARY ARTS 10

ADVANCED ENGLISH 10	117720
ADVANCED ARTS LINK AND WRITER WORKSHOP 10*	117721

Grade 10	1 Weighted Course
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These 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 courses are based on thematic units focusing on literature evolving from the oral tradition, featuring the role of women in the fine arts, examining the questions of innate evil, and discussing misfits within society. Using collaborative learning strategies, students are involved in a study of skills, techniques, and models for writing poetry, drama, fiction, and nonfiction, and for gathering information through available technology. Students produce original writings from the categories of notation, recollection, investigation, imagination, and cogitation. Students also examine printed consumer material for audience, clarity of writing, and document design. The primary emphasis of the interdisciplinary writing is to develop an understanding of archetypal patterns, parallels of the elements within the arts, and socioeconomic factors affecting the arts of particular historical periods. 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

ADVANCED ENGLISH 11	117730
ADVANCED ART LINK AND WRITER WORKSHOP 11*	117731

Grade 11	1 Weighted Course
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These interdisciplinary courses are designed for students with demonstrated interest and talent in writing, literature, and other fine arts. The courses focus on philosophies ranging from Socratism to existentialism and the literature reflecting these ideas. The impact of the questioning of traditional beliefs and the experimentation in artistic expression within the fine arts are emphasized. Students examine these philosophic ideas and stylistic techniques as revealed in the communication and/or the arts of prehistoric cultures through post-modernism. This study provides models from the categories of notation, recollection, investigation, imagination, and cogitation. Writings emphasize the changing nature of language and utilize literary devices and techniques that reflect the course of study. Students are involved in a study of skills, techniques, and samples focusing on the elements and conventions for writing fiction and nonfiction. Investigative skills are emphasized for gathering information through primary and secondary sources including the use of electronic databases.

These courses help prepare students for the English AP Exam.

Prerequisite: Advanced Literary Arts 10 or Application & Audition

***Fine Arts Elective**

ADVANCED LITERARY ARTS 12

ADVANCED ENGLISH 12	117740
ADVANCED ARTS LINK AND WRITER WORKSHOP 12*	117741

Grade 12	1 Weighted Course
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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 world cultures through an investigation of literature and art. Within an historical framework, 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 Nobel Prize winners in literature 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, and on 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 English AP Exam.

Prerequisite: Advanced Literary Arts 11 or Application & Audition

***Fine Arts Elective**

ADVANCED WRITER WORKSHOP 12 WITH PRACTICUM	117742
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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. 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. Credit toward fulfilling course requirements may also be awarded for interdisciplinary, arts-related field experiences under instructor supervision. After school, (30) supervised hours are required. The student will also be required to complete a cumulative research project and present it for judging at the end of the course. Students must maintain a passing grade in all courses to remain in this program.

Prerequisite: Application

ADVANCED THEATRE ARTS I*	144010
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Grades 9-11	1 Weighted Credit
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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 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. After school supervised hours are required. Students must participate on multiple show crews throughout the year. 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)

Prerequisite: Advanced Technical Theatre

***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 Credit

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 analysis assignments. After school, supervised hours are required. Students must maintain a passing grade in all courses to remain in this program as well as to remain in each performance.

Prerequisite: *Open to students in grades 10-12 who are enrolled in the fourth year SOA theatre course.*

***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*

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

WEB DESIGN/FRESHMAN SEMINAR **98280**

Grade 9 1 Credit

The Web Design portion is a semester long course where students learn to create and publish Web pages using HTML, XHTML, and Macromedia Dreamweaver. Students learn how to manipulate text, optimize images, insert hyperlinks, create tables, submit forms and build a portfolio. The Freshman Seminar portion assesses specific academic needs of targeted, academically at-risk students 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, components of Freshman Seminar include: note-taking

strategies, reading/writing across the curriculum, organizational skills, test-taking strategies, time management, and career preparation.

A+ COMPUTER REPAIR I **98281**

A+ COMPUTER REPAIR II **98282**

Grades 9-10 1 Credit Each

These two courses engage students in an overview of computers and how software and hardware work together. In the first-year course content includes: the system board, understanding and managing memory, hard drive installation and support, and an overview of infrastructure. Second year content focuses on multimedia technology, understanding and supporting Windows workstations, purchasing a PC or building your own, and certification test preparation.

WEB DESIGN I	98283
WEB DESIGN II	98284

Grades 9-10	1 Credit Each
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In these two courses, topics include: overview of the Internet, web page authoring, hypertext markup language (HTML), HTML coding, HTML hyperlinks, horizontal rules and graphic elements, objects, plug-ins, viewers, and JAVA script. Second year content emphasizes web design principles, web page layout, multimedia considerations, and web development.

NOTE: Optional TNCC dual enrollment is available for this course. If students choose TNCC dual enrollment (3-credit TNCC course) tuition is charged and credit is awarded at the high school and college. TNCC's application process, placement testing procedures, and timelines must be followed.

TNCC required Prerequisite for dual enrollment credit: IT Fundamentals

DIGITAL PORTFOLIO SEMINAR I	98402
DIGITAL PORTFOLIO SEMINAR II	98403

Grades 9-10	1 Credit Each
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In these two courses, topics include peripherals; software; graphic organization and design; SOL preparation; creation of home pages; links to evidence learned; and refining, publishing, and presentation of documents. In the first-year course, students create digital portfolios with hyperlinks and descriptions of artifacts/evidence of learning. The second-year course content emphasizes Flash, the Flash environment, and in-depth service learning projects.

21ST CENTURY THEMES I	98400
21ST CENTURY THEMES II	98401

Grades 9-10	1 Credit Each
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These two courses provide an interdisciplinary, creative, and innovative approach to ideas and contemporary themes. Students learn clear, cogent strategies for effective use of web-based expository writing and 21st century media. Second year content expands on skills learned in the first year and engages students in problem-based learning projects.

APPLIED RESEARCH PROJECTS	98289
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Grades 11-12	1 Credit
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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.

21ST CENTURY THEMES III	98404
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Grades 11-12	1 Credit
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21st Century Themes III is a year-long course that addresses the challenges of our technological society through projects designed to showcase students' proficiency in the manipulation of various hardware and software applications. This course is offered to eleventh grade students. Students are engaged in preparation for industry certifications in IC3 as well as other certification exams.

WEB APPLICATIONS	98295
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Grades 11-12	1 Credit
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In Web Applications, the advanced Web Design student is challenged to research emerging technologies to create cutting edge projects. Students create virtual tours, publish podcasts and Webcasts, and oversee community Web-based projects. Industry certifications are pursued.

APPENDIX A – SEQUENTIAL ELECTIVES

Below is a listing of courses that can satisfy the Standard Diploma focused sequential electives graduation requirement within various content areas. The first-year course is underlined, with the second-year course option(s) listed below.

Art

Art I: Art Foundations

Art II
Art Heritage
AP Art History
Ceramics A or B
Computer Graphic Art
Crafts: Cultural Arts or Decorative Arts/Design

Photography & Communication Design I

Photography & Communication Design II

Drama

Drama I

Drama II
Survey of World Drama
Technical Theatre

Music

Brass Sectionals I

Brass Sectionals II

Chorus I

Chorus II
Small Vocal Ensemble II

Concert Band I

Concert Band II

Percussion Sectionals I

Percussion Sectionals II

Small Vocal Ensemble I

Chorus II
Small Vocal Ensemble II

Symphonic Band I

Symphonic Band II

Woodwinds, Brass or Percussion Sectionals I

Concert Band II
Symphonic Band II

Woodwind Sectionals I

Woodwind Sectionals II

English

Literary Magazine/Mass Media I

Literary Magazine/Mass Media II

Newspaper/Mass Media I

Newspaper/Mass Media II

Yearbook/Mass Media I

Yearbook/Mass Media II

World Languages

Arabic I

Arabic II

French I

French II

German I

German II

Latin I

Latin II

Mandarin Chinese I

Mandarin Chinese II

Spanish I

Spanish II

School of the Arts

Advanced Arts Link 9

Advanced Arts Link 10

Advanced Technical Theatre I

Advanced Technical Theatre II

Advanced Theatre Arts I

Advanced Theatre Arts II

Advanced Writer Workshop 10

Advanced Writer Workshop 11

Dance Arts I

Dance Arts II

Health & Physical Education

Physical Education A (Grade 11)

Physical Education B (Grade 11)

Physical Education A (Grade 12)

Physical Education B (Grade 12)

NJROTC

Naval Science I

Naval Science II

Naval Science III

Naval Science IV

Sequential electives are also available within CTE, NHREC, and the Governor's School course listings. Additional information is available in each school's counseling office.

APPENDIX B – AP AND ADVANCED COURSES

AP Courses

AP Art History
 AP Biology
 AP Calculus AB
 AP Calculus BC
 AP Chemistry
 AP English 11
 AP English 12
 AP Environmental Science
 AP European History
 AP French Language
 AP Human Geography
 AP Music Theory
 AP Physics I
 AP Psychology
 AP Spanish Language
 AP Statistics
 AP Studio Art
 AP US Government
 AP United States History

Virtual VA (VDOE AP School)

AP Art History
 AP Biology
 AP Calculus AB
 AP Calculus BC
 AP Chemistry
 AP Computer Science
 AP English 11
 AP English 12
 AP Environmental Science
 AP European History
 AP French Language
 AP Human Geography
 AP Physics I
 AP Physics II
 AP Psychology
 AP Spanish Language
 AP Statistics
 AP Studio Art
 AP US Government
 AP United States History

Advanced Courses

Advanced English 10
 Advanced English 9
 Advanced Geometry
 Advanced Literary Arts 9, 10,11,12
 Advanced Literary Arts Writing Practicum
 Advanced Technical Theatre I, II, III, IV
 Advanced Technical Theatre III & IV with Practicum
 Advanced Theatre Arts I, II, III, IV
 Advanced Theatre Arts III & IV with Practicum
 Biology II: Mammalian Anatomy & Physiology
 Biology II: Marine Science
 French IV
 German IV
 Governor's School for Science & Technology courses
 IB Biology (HL) (11&12)
 IB Chemistry (HL) (11&12)
 IB Classical Languages: Latin (SL) (11&12)
 IB History of the Americas (11&12)
 IB Language A: Language & Literature-English (HL) (11&12)
 IB Language B: French/Spanish (SL) (HL) (11&12)
 IB Mathematical Studies (SL) (11)
 IB Physics (SL) (11&12)
 IB Theatre (HL) (11&12)
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 Math Analysis, Algebra II/Trigonometry
 Spanish Conversation and Culture
 Spanish IV

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NOTES



302 Dare Rd. | Yorktown, Virginia 23692

School Board

Barbara S. Haywood
District 1
757-593-9071

Michael Anderson
District 2
757-897-0027

Mark A. Medford
District 3
757-898-7348

James E. Richardson
District 4
757-869-0573

Robert W. George, D.D.S.
District 5
757-897-1925

School Division

Victor Shandor, Ed.D.
Division Superintendent
757-898-0310

Stephanie L. Guy, Ed.D.
Chief Academic Officer
757-898-0366

Bill Bowen
Chief Financial Officer
757-898-0449

James Carroll, Ed.D.
Chief Human Resources Officer
757-898-0349

Carl L. James, Ed.D.
Chief Operations Officer
757-898-0466

Instruction

Elaine Gould, Ph.D.
Director of Student Services
757-898-0455

Candi Skinner
Director of Elementary Instruction
757-898-0450

Anthony Vladu, Ed.D.
Director of Secondary Instruction
757-898-0409

Administration

Aaron Butler, Ed.D.
Director of School Administration
757-833-2182

The York County School Division does not discriminate on the basis of race (Title VI), color, religion, national origin, veteran status, sex, gender (Title IX), age or disability (Section 504), or any other protected class in its educational programs, activities or employment and provides equal access to the Boy Scouts and other designated youth groups. The following positions have been designated to handle inquiries regarding the non-discrimination policies:

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