$$
\begin{gathered}
\text { 2024-25 } \\
\text { PROGRAM } \\
\text { OF STUDIES }
\end{gathered}
$$

Registration and Information Guide for Future Ready Graduates

TABLE OF CONTENTS
TABLE OF CONTENTS ..... i
INTRODUCTION ..... 1
Purpose ..... 1
Academic and Career Plan ..... 1
Using the Program of Studies ..... 1
DIPLOMAS \& GRADUATION REQUIREMENTS ..... 2
Advanced Studies Diploma (26 Credits) ..... 2
Standard Diploma (22 Credits) ..... 3
Explanations and Clarifications ..... 3
Special Recognitions ..... 4
PROMOTION AND CREDIT INFORMATION ..... 5
Course Credits ..... 5
Promotion ..... 5
Grade Point Average and Class Rank ..... 6
SCHEDULING ..... 6
Middle School Scheduling ..... 6
High School Scheduling ..... 6
Course Selection Changes ..... 7
Virtual \& Blended Learning Courses ..... 7
Virtual High School Summer Academy ..... 7
SPECIALTY PROGRAMS ..... 8
Advanced Placement and Advanced Courses ..... 8
Early College Program ..... 8
Dual Enrollment ..... 8
Associate's Degree Pathway/ Uniform Certificate of General Studies ..... 8
Early College Scholars ..... 8
Governor's Health Sciences Academy ..... 9
Governor's School for Science \& Technology (GSST) ..... 9
Honors Program ..... 9
International Baccalaureate Diploma Programme ..... 10
Naval Sciences ..... 10
School of the Arts: Middle School Arts Magnet ..... 10
School of the Arts ..... 11
York River Academy ..... 11
THE 17 CAREER CLUSTERS ..... 12
COURSE OFFERINGS ..... 22
Career \& Technical Education ..... 23
Business \& Information Technology ..... 23
Family \& Consumer Science ..... 26
Governor's Health Sciences Academy ..... 27
Marketing Education ..... 28
Technology Education ..... 30
English ..... 33
Fine Arts ..... 38
Art ..... 38
Drama ..... 40
Music ..... 41
General Topics ..... 44
Health \& PhysIcal Education ..... 46
History \& Social Science ..... 47
Mathematics ..... 50
Science ..... 54
Special Education ..... 57
World Languages ..... 59
SPECIALTY PROGRAMS COURSE OFFERINGS ..... 63
Governor's School for Science \& Technology (GSST) ..... 63
International Baccalaureate (IB) Diploma ..... 66
Naval Sciences (THS \& YHS) ..... 70
New Horizons Regional Education Center ..... 71
School of the Arts: Middle School Arts Magnet ..... 79
School of the Arts ..... 81
York River Academy ..... 85
Appendix A - Sequential Elective ..... 86
Index ..... 91
Notes ..... 95

## INTRODUCTION

## Purpose

The 2024-25 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. If you have suggestions or feedback on course offerings, please complete the Program of Studies Feedback form by scanning the QR code with your phone.


## Academic and Career Plan

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

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

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

## 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.
$\square \quad$ Choose a career cluster/path that closely relates to your interests, skills, values and strengths.
$\square \quad$ Explore occupations that relate to your skills.
$\square \quad$ 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

## DIPLOMAS \& GRADUATION REQUIREMENTS

The Commonwealth of Virginia's Board of Education establishes graduation requirements for all students enrolled in public schools. Additional requirements may be prescribed by the local school board.
Students may be awarded a diploma or a certificate upon graduation from a Virginia high school. The requirements for a student to earn a diploma from a Virginia high school are the requirements that are in effect when that student enters the ninth grade for the first time.
The York County School Division provides several diploma options and certificates to meet the individual needs of students. School counseling services provide regular opportunities for students and parents/guardians to evaluate student progress toward diploma requirements and to make adjustments to the type of diploma selected when necessary. Specific requirements for the diplomas listed in this section are available on following pages.
NOTE: Graduation and course requirements listed within this Program of Studies are subject to change due to possible modifications in state requirements.
Advanced Studies Diploma: This is the recommended diploma for students seeking entrance into a competitive four-year college or university upon graduation.

Standard Diploma: This diploma signifies that the student has met proficiency standards established by the Virginia Board of Education in reading, writing, mathematics, science and history.
NOTE: Once a student with disabilities has earned a Standard Diploma or Advanced Studies Diploma, YCSD's obligation to provide free appropriate public education is terminated.

Applied Diploma: In accordance with the requirements of the Standards of Quality, a student with disabilities who completes the requirements of his or her IEP and does not meet the requirements for other diplomas shall be awarded an Applied Diploma.
Special Certificate: A Certificate of Program Completion is an option for a senior who has met the standard units of credit requirements for a Standard Diploma but has not earned the verified credits required for graduation. The Certificate of Program Completion is not a diploma and should only be considered once all attempts to earn a Standard Diploma or Advanced Studies Diploma have been exhausted.

## Advanced Studies Diploma (26 Credits)

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

## Standard Diploma (22 Credits)

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

## Explanations and Clarifications

1. Mathematics: For the Advanced Studies Diploma, the courses completed to satisfy this requirement shall include at least three different course selections from among Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit. For the Standard Diploma, the courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I, Geometry, Algebra Functions and Data Analysis, or Algebra II. Computer Mathematics may be used in conjunction with Algebra I and Geometry to satisfy mathematics graduation requirements if the student also completes a career \& technical education concentration. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit. Standard Diploma credit accommodations for students with disabilities may include three standard credits in mathematics that include Algebra I (Part I and Part II each count as one math credit) and Geometry, and one verified credit in mathematics.
2. Science: For the Advanced Studies Diploma, credits must be from at least three different science disciplines: Earth science, biology, chemistry, or physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma. Per the Standards of Quality, a computer science course credit may be considered a science course credit. For the Standard Diploma, the courses completed to satisfy this requirement shall include course
selection from at least two different science disciplines. Per the Standards of Quality, a computer science course credit may be considered a science course credit.
3. History/Social Science: For the Advanced Studies Diploma, credits must include Virginia and U.S. History, Virginia and U.S. Government, and two courses in either world history or geography or both. For the Standard Diploma, credits must include Virginia and U.S. History, Virginia and U.S. Government, and one course in either world history or geography. The board shall approve courses to satisfy this requirement.
4. World Languages: For the Advanced Studies Diploma, credits must include three (3) years of one language or two (2) years each of two languages.
5. World Languages, Fine Arts, or Career \& Technical Education: For the Advanced Studies Diploma, students must earn a minimum of one (1) credit in the areas of fine arts or career and technical education. A computer science course may be considered a career \& technical education credit. For the Standard Diploma, students must earn a minimum of two credits in the areas of world languages, fine arts, or career \& technical education. At least one of the credits must be in fine arts or career \& technical education. Per the Standards of Quality, a computer science course may be considered a career \& technical education credit.
6. Electives: For the Advanced Studies Diploma students must earn three (3) electives. For the Standard Diploma students must earn four (4) electives. Two of these electives must be sequential, as outlined in the Standards of Quality. For the Advanced Studies Diploma, the sequential electives may be in
any discipline, as long as the courses are not specifically required for graduation as noted in the Regulations Establishing Standards for Accrediting Public Schools in Virginia (8VA20-131-51). Additional information on sequential electives is available in the school counseling office.
7. Virtual Learning: For the Standard Diploma and the Advanced Studies Diploma, students shall successfully complete one virtual course, which may be a noncreditbearing course or a required elective credit-bearing course that is offered online.
8. First Aid/CPR/AED: Students will be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an Individualized Education Program (IEP) or 504 Plan which documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in the Regulations Establishing Standards for Accrediting Public Schools in Virginia (8VAC20-131-420 B).
9. AP, Honors, IB, Dual Enrollment, Work-Based Learning, or CTE Credential: Students shall (i) complete an Advanced Placement, honors, International Baccalaureate, or dual enrollment course; or (ii) complete a high-quality workbased learning experience, as established by board guidance on work-based learning; or (iii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the Advanced Studies Diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.
10. Credit Accommodations: Credit accommodations provide alternatives for eligible students with disabilities to earn verified credits required to graduate. Credit accommodations for students with disabilities may include:

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

11. Locally Awarded Verified Credit: Eligible students may earn no more than one locally awarded verified credit in English, mathematics, science, and history/social science, if earning either a Standard Diploma or Advanced Studies Diploma.
NOTE: Once a student with disabilities has earned a Standard Diploma or Advanced Studies Diploma, YCSD's obligation to provide free appropriate public education is terminated.
12. Transfer Students: See your school counselor for all graduation requirements. Visit the High School Graduation link on the Virginia Department of Education's website at http://www.doe.virginia.gov for more information on high school graduation requirements in the Commonwealth of Virginia.

## Special Recognitions

The Standards for Accrediting Schools in Virginia, adopted by the Virginia Board of Education, establishes high school graduation requirements and certain diploma seal recognitions.
The York County School Division and the International Baccalaureate (IB) Programme offer additional academic recognitions. Students may earn multiple recognitions.
State Board of Education Seal: Awarded to students who earn the Standard Diploma or Advanced Studies Diploma with an average grade of " $A$ " or better.

Governor's Seal: Awarded to students who earn an Advanced Studies Diploma with a "B" average or better, and who successfully complete college-level coursework to earn nine (9) transferable college credits in Advanced Placement, International Baccalaureate, Cambridge, or dual enrollment courses, which are all opportunities to be an Early College Scholar.
State Board of Education Career \& Technical Education Seal: Awarded to students who earn the Standard Diploma or Advanced Studies Diploma and complete a prescribed sequence of courses in a career \& technical education concentration or specialization and maintain a " $B$ " average in those courses; or pass a certification examination; or acquire a professional license from the Commonwealth of Virginia.

State Board of Education Diploma Seal for Science, Technology, Engineering, and Mathematics (STEM): Awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and satisfy all math and science requirements for the Advanced Studies Diploma with a "B" average or better in all course work, and

- successfully complete a 50 hour or more work-based learning opportunity in a STEM area, and
- satisfy all requirements for a career \& technical education concentration. A concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the CTE Administrative Planning Guide, and
- pass one of the following:
- a Board of Education CTE STEM-H credential examination, or
- an examination approved by the Board that confers a college-level credit in a STEM field.
State Board of Education Seal of Biliteracy: Awarded to students who earn either a Board of Education-approved diploma and (i) pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level; and (ii) are proficient at the intermediate-mid level or
higher in one or more languages other than English, as demonstrated through an assessment from a list to be approved by the superintendent of public instruction.
State Board of Education Seal for Excellence in Science and the Environment: Awarded to students who meet each of the following criteria:
- Earn either a Standard Diploma or Advanced Studies Diploma
- Complete at least three different first-level boardapproved laboratory science courses and at least one rigorous advanced-level or postsecondary-level laboratory science course, each with a grade of "B" or higher
- Complete laboratory or field-science research and present that research in a formal, juried setting
- Complete at least 50 hours of voluntary participation in community service or extracurricular activities that involve the application of science such as environmental monitoring, protection, management, or restoration.

State Board of Education Excellence in Civics Education Seal: Awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and meet each of the following criteria:

- Complete Virginia \& United States History and Virginia \& United States Government courses with a grade of "B" or higher.
- Have good attendance and no disciplinary infractions as determined by local school board policies.
- Complete 50 hours of voluntary participation in community service or extracurricular activities, such as volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate; participating in Boy Scouts, Girl Scouts or similar youth organizations; participating in Junior Reserve Officer Training Corps (JROTC); participating in political campaigns, government internships, Boys State, Girls State or Model General Assembly; or participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.

York County School Division Honors Seal: Awarded to students who complete the course of study for the York County School Division Honors program.
York County School Division Community Service Seal: Awarded to students who complete the requirements for York County School Division's Community Service program.
International Baccalaureate Diploma: Awarded to students who complete the course of study and exams for the International Baccalaureate Programme.

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

## 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. See YCSD Policy IKFA - Locally Awarded Verified Credits.
Weighted Credit: Advanced Placement, advanced or other courses are identified as "weighted credit," for which credit is increased due to the rigor of the curriculum and quality of work accomplished.
Transfer Credit: Transfer grades and credits from other school divisions will be accepted by the York County School Division provided the courses are compatible with local and state regulations. Weighted credits will be awarded only to those transfer courses that are also weighted in the York County School Division and will be computed according to YCSD procedure. If a transfer student completed a weighted course in another school division prior to the academic year that the course was first offered for weighted credit by the

York County School Division, the student will not receive weighted credit for the course. Additional information is available in school counseling offices.

## Promotion

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

| Grade 10 | 5 credits minimum |
| :--- | :--- |
| Grade 11 | 10 credits minimum |
| Grade 12 | 15 credits minimum |

NOTE: Rising 9th grade students are limited to take Health \& PE9 or a high school credit bearing course where the credit was formally omitted.

## 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). Please reference Superintendent Regulations, IU, for additional information.
Early Graduation Graduating early is defined as a student seeking to complete graduation requirements for a Standard Diploma or Advanced Studies Diploma, prior to the student's cohort year of graduation. Participation in an Individual Student Alternative Education Plan (ISAEP) program or General Education Development Test (GED) program shall not be included in the definition of Early Graduation.
Families should consult their school counselor for additional information surrounding graduation requirements and the application process for requesting Early Graduation.

## SCHEDULING

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

## Middle School Scheduling

Grade 6: Students take six (6) classes on an A/B rotation schedule including a double block for English, a double block for mathematics, a block for physical education, and a block for an encore course selection from the Exploratory Wheel, Beginning Band, or Introduction to Chorus. The Exploratory Wheel allows students to take four (4) nine-week electives during the school year.
Grades 7 \& 8: Students take eight (8) classes on an $A / B$ rotation schedule. Students may have double blocks for English and/or for mathematics. Students take both required and elective courses.

## High School Scheduling

Bruton High, Grafton High, Tabb High and York High: Operate on a seven (7) course A/B rotation schedule, with one class scheduled daily and six block classes scheduled on alternating days. Courses can be semester-long or year-long.
York River Academy: Operates on a Hybrid $4 \times 4$ schedule. The Hybrid $4 \times 4$ 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 $4 \times 4$ schedule - eight credit-bearing courses Seniors or term graduates lacking credits to meet the Standard Diploma graduation requirements may be approved to take more than seven original credit bearing courses in order to attempt on time graduation during the
student's cohort year. Ninth through twelfth grade students can take no more than seven original credit bearing courses per year except for the following limited circumstances:
- Students in grades 11 and 12 who require seven courses in their schedule to meet graduation requirements, may take work-based or service learning as an 8th period.
- Students in grades 11 and 12 may be approved to take Economics and Personal Finance online as an 8th period, under specific circumstances. Please reference Superintendent Regulations, IGBGA, for additional information.
Abbreviated Schedule: Seniors or term graduates must be in good academic standing for on-time graduation to have a reduced course load. In addition, the student must have completed or scheduled during senior year one of the following:
- Advanced Placement, International Baccalaureate, or a Dual Enrollment course;
- Two or more credits of a state-approved Career and Technical Education (CTE) sequence and earn a CTE credential;
- A work-based learning experience;
- A service learning experience; or
- Three JROTC courses and a CTE credential.

Please speak with your school counselor if you are seeking an abbreviated schedule during your senior year.
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. When courses are not available in a school, other options may be explored. Please see your student's school counselor for alternative course enrollment options.

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 both our local, Virtual High School (VHS) program and Virtual Virginia (VVA), the state administered online program. Approved courses in the Program of Studies that are unavailable to a student within their individual school may be available online through either VHS or VVA. Students approved to take a course virtually as a part of their
traditional schedule will participate in those courses in the school's virtual lab. Juniors and seniors participating in special programs that limit their access to elective courses may be approved to take Economics and Personal Finance as a 5th block virtually only as necessary to meet Virginia and York County School Division graduation requirements. Students are most successful in virtual courses if they are independent learners, have good time-management skills, and maintain a regular schedule of logging into courses and communicating with the online teacher.
Students must log into these virtual courses daily and must be actively engaged in online discussion and activities. They will learn to submit documents electronically, navigate learning management systems and meet online with teachers and students through a virtual classroom. Students may make an appointment with their school counselor to learn more about available online courses. Specific virtual course information and requirements are listed within the Course Offerings section. Students are required to take one virtual or blended learning course prior to graduation. YCSD defines blended learning as a combination of face-to-face instruction with online instruction. See YCSD Policy \& SREG: IGBGA Online Courses and Virtual School Programs.

## Virtual High School Summer Academy

Students who desire to accelerate or recover high school credit courses during the summer must do so through YCSD's Virtual High School (VHS) Summer Academy. This is an asynchronous online learning program designed for rising 9th grade through current 12th grade students. Students may earn one original credit or two credit recovery courses each summer. Course offerings for rising 9th graders are limited to Health and PE 9 and high school courses taken in middle school that the student has formally omitted. Each full-credit course is approximately 140 online instructional class hours, and each credit recovery course is approximately 70 online instructional hours. Summer Academy course offerings are based on sufficient enrollment and staff availability. Tuition is required for high school credit-bearing courses. Important registration information, specific program dates, tuition rates and program details will be outlined in the Summer Academic Programs Catalog.

## 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 gradelevel courses in a particular content area. High school students who have completed prerequisite courses are eligible for AP courses as well as Virtual Virginia AP courses.
Students enrolled in an AP course are encouraged to take the AP exam for that course. Taking AP exams does not automatically enable a student to gain college credits. Credit award decisions are made by individual colleges.

## Early College Program

The Early College Program (ECP) is a partnership between Virginia Peninsula Community College (VPCC) and York County School Division. Eligible high school seniors are concurrently enrolled in their high school and VPCC. Students complete dual enrollment English 111/112 (Dual Enrollment English 12) and remaining courses required for graduation prior to winter break of their senior year. In January, students transition full time to the VPCC campus and begin a course load of at least 12 college credits. Spring VPCC courses will follow the college schedule. Students have the opportunity to complete state and local graduation requirements, remain involved in sports, clubs, and activities at their home school, while earning transferable college credits at a reduced tuition rate. Participation in VHSL activities requires students to meet eligibility requirements during both the fall and spring semesters.

To be eligible for the Early College Program, students must have achieved a cumulative GPA of 3.0 or higher, earned passing scores on both the Reading and Writing End of Course Standards of Learning assessments, and require limited course credits to complete graduation requirements. The courses offered in this program are part of the Commonwealth College Course Collaborative (CCCC). As such, ECP students must maintain a "C" average during their senior year in each of their dual enrolled and college courses to earn transferable college credit. Please consult your school counselor for additional information regarding the application process and program timelines. See YCSD Policy LEB- Advanced/Alternative Courses for Credit.

## Dual Enrollment

In partnership with Virginia Peninsula Community College (VPCC), students may be eligible to receive college credit for specific courses taken in York County School Division. Successfully completed dual enrollment (DE) courses provide students with both high school and college credit simultaneously. Students with junior or senior standing that meet VPCC's dual enrollment eligibility criteria may dual enroll with documentation of parent and principal approval. Dual
enrollment courses are college-level courses. Credits and grades earned in dual enrollment courses become a part of a student's permanent college transcript. Students interested in taking dual enrollment courses are encouraged to visit Transfer Virginia to see which colleges and universities will accept transfer credit from VPCC. Dual enrollment course offerings in schools are based upon availability of staff who meet requirements set by VPCC. Please check with your school counselor regarding available dual enrollment course offerings for your school. See YCSD Policy LEBAdvanced/Alternative Courses for Credit.

## Associate's Degree Pathway/ Uniform Certificate of General Studies

Virginia Peninsula Community College (VPCC) and the York County School Division have an agreement in place that allows high school students to complete an Associate's degree or a one year Virginia Community College System (VCCS) Uniform Certificate of General Studies concurrently with a high school diploma.
Students are encouraged to begin exploring this pathway at the start of their seventh grade year as successful completion may require students to:

- Meet specific eligibility criteria (age, grade level, test scores, cumulative GPA)
- Participate in Advanced Placement (AP) courses beginning in the 9th grade
- Achieve an AP exam score of 3 or higher on associated course exams
- Apply to VPCC as a degree seeking dual enrollment student
- Participate in courses through VPCC during summer sessions*
- Enroll in courses through VPCC during the traditional school year in addition to their YCSD required high school courses*
*Families are solely responsible for tuition and related fees for courses taken through VPCC, excluding specified dual enrollment courses available in YCSD schools, provided by YCSD teachers.

Please contact your school counselor for more information regarding students individual course planning and requirements to complete these pathways.

## Early College Scholars

The Early College Scholars program allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma. Participants must have a "B" average or better, must be pursuing an Advanced Studies

Diploma with a Governor's Seal, and must complete 15 hours of college-level coursework (i.e., Advanced Placement, International Baccalaureate, or dual enrollment) that will earn at least 15 transferable college credits.

## Governor's Health Sciences Academy

The Governor's Health Sciences Academy (GHSA) provides high school students with a rigorous course of study that will prepare them for high demand, high wage, and high skill health sciences careers. GHSA courses are offered in the therapeutic and diagnostic services pathways.
GHSA is located at Bruton High School and is open to all YCSD students in grades 9-12 in the York County School Division. GHSA students are required to meet the following criteria to complete the program successfully: take a mathematics and science course each year in high school, maintain a minimum of a 2.5 GPA , and earn an industry certification or at least nine (9) transferrable college credits. GHSA completers will earn the Governor's Health Sciences Academy seal on their diploma.

## Governor's School for Science \& Technology (GSST)

The Governor's School for Science \& Technology (GSST) is a two-year, half-day program, offered at the New Horizons Regional Educational Center (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, and Computational Science.

## Prospective Student Pipeline

. The Prospective Student Pipeline (PSP) for Governor's School provides a registration of interest in the program. Students who register for the PSP will be subscribed to the PSP Newsletter, GSST's main information portal. In addition, the student's school counselor will be alerted of the student's interest in GSST so that the school counselor can help the student select appropriate math and science courses. There are two possible entry routes for the PSP:

1. School referral - schools identify $8^{\text {th }}$ and $9^{\text {th }}$ grade students who meet certain academic benchmarks, and parents of these students are then invited to fill out a registration of interest.
2. Self-referral - anyone interested in receiving the newsletter can subscribe by registering through GSST's PSP website.

## Admissions Procedures

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

## Honors Program

The York County School Division Honors program is designed to provide students in grades 8-12 with the opportunity to complete a rigorous academic program.
Eligible students choosing to participate in this program are required to complete all program requirements listed below. For going beyond the state's requirements for an Advanced Studies Diploma, students who successfully complete the Honors program will be recognized with the Honors Seal on their diplomas.
Additional information on this academic opportunity is available in the school counseling office of each middle and high school.

## Program Requirements

## Grade 8

- Students must complete the following courses: Advanced English 8; Civics and Economics; Algebra I or Advanced Geometry; Physical Science 8; World Language I/II (French, German, Latin, Spanish), Physical Education \& Lifetime Fitness 8; Elective.
- To remain in the Honors program 8th grade students may not have a final grade lower than a "C."


## Grades 9-12

- Students in the Honors program must maintain a cumulative GPA of 3.25 in the ninth grade, and 3.50 in grades 10 through 12.
Students must take a minimum of four (4) credits of the same world language. World language courses taken for high school credit and successfully completed in the seventh grade may count as one of the four consecutive years.
NOTE: Virtual Virginia may not offer Arabic IV yearly. As such, this language will not fulfill the Honors Program requirement.
- Students must take a minimum of six (6) AP courses representing four (4) content areas. Literary Arts 11 and Literary Arts 12, dual enrollment courses for transferable college credit, and qualifying Governor's School classes may be used to meet one or more Honors Program requirements:
- College Calculus
- Multivariable Calculus/Linear Algebra
- Advanced Chemical Analysis
- Advanced Biological Analysis
- Calculus Based Engineering Physics I and II
- Calculus Based Engineering Physics III and IV
- Computational Physics
- Engineering Design Innovation \& Entrepreneurship
- To remain in the Honors program, high school students must remain enrolled in a full course load each year, may not repeat a course, may not drop/withdraw from a class after the drop/add period, and may not have a final grade lower than a "C." In addition, eighth grade
students may not expunge Algebra I or any World Language I course.
- Beginning in ninth grade, students must complete 20 hours of community service outside of school.
Additional information on this academic opportunity is available in the school counseling office of each middle and high school.


## International Baccalaureate Diploma Programme

The International Baccalaureate (IB) Programme is a rigorous, two-year college preparatory course of study for academically talented students in grades 11 and 12. A PreDiploma program is available to eligible students in grades 9 and 10. Admission to the York High Pre-Diploma program and Diploma Programme is by application.
All IB courses are taught by instructors trained in IB instruction at workshops conducted by the International Baccalaureate Organization (IBO). The courses are designed to develop strong writing, time management, and critical/higher order thinking skills in students. In addition, through these courses, each student is exposed to the internationally minded, interdisciplinary nature of the IB liberal arts curriculum.
IB courses are identified as SL (Standard Level), requiring a minimum of 150 instruction hours, or HL (Higher Level), requiring 240 instructional hours. All IB courses carry weighted credit.
Students in grades 11 and 12 who are not participating in the full IB Diploma Programme may enroll in an IB course (either SL or HL ) provided there is space available, there is no equivalent AP course available, the student receives two teacher recommendations, and all course-specific prerequisites have been met.
IB Diploma Programme course students are responsible for the costs associated with the IB examination as explained in the Student Handbook. Students with demonstrated financial need may request a waiver of the IB examination fees from the principal.
Specific course information and IB requirements are provided within the Course Offerings section of this Program of Studies.

## Program Requirements

- Pre-Diploma/IB students are required to have a minimum GPA of 3.25 in the ninth grade, and 3.50 in grades 10 through 12.
NOTE: Students who do not maintain the minimum GPA will be withdrawn from the IB Diploma Programme.
- Students may not earn a final grade lower than a "C" in any course and remain in the Pre-Diploma/IB Diploma Programme. Students may not repeat a course or drop/withdraw from a class after the add/drop period. Eighth grade students accepted into the program may not expunge Algebra I, Advanced Geometry, or any World Language I or II course.
- Pre-Diploma students may opt to leave the program and re-enroll in the honors program at their home school if they meet honors requirements.


## Pre-Admissions Procedures

Admission to the Pre-Diploma program for grades 9 and 10 is by application. The program prepares accepted students for participation in the IB Diploma Programme in grades 11 and 12.
Applications and information regarding the IB Diploma Programme, which is housed at York High School, may be obtained from the school counseling department at each middle school or from the IB Diploma Programme Coordinator, (757) 890-5014.

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

## Naval Sciences

The purpose of Naval Junior Reserve Officer Training Corps (NJROTC) at THS and YHS is to instill in students the value of citizenship, service to their community and the United States, personal responsibility, and a sense of accomplishment. A student must be attending a YCSD high school and be a United States citizen or admitted for permanent residence to enroll in this program.
Each Navy JROTC course is composed of three (3) hours of classroom work and two (2) hours of drill or physical activity each week. Frequent field trips and voluntary participation in NJROTC activities such as drill team and rifle team are additional features of the Naval Science Program.
All NJROTC cadets are eligible to participate in SAT and ACT online college preparatory programs at no cost. Participation in NJROTC offers students an advantage in competition for military academy and college ROTC scholarships. Students who complete two (2) or more years of the program are eligible to enter the military at an advanced pay grade and may be eligible to be a career \& technical education completer.

## School of the Arts: <br> Middle School Arts Magnet

The Middle School Arts Magnet (mSAM) for students in grades 6 through 8 provides enrichment and instruction in literary arts, theatre arts, and dance arts. Learning experiences encourage students to work independently and collaboratively to develop writing skills, prepare performances, and create exhibitions that display their appreciation of the arts, develop critical thinking and problem-solving skills, and enhance self-esteem. Excellence
in the arts is a natural extension of the middle school academic program.
Interested middle school students may apply for this program, which is located at Queens Lake Middle School (QLMS). For additional information on the mSAM, contact the QLMS Principal at (757) 220-4083.

## Admission Procedures

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

## School of the Arts

The York County School of the Arts (SOA) provides high school students with an enriched and challenging fine arts educational opportunity that emphasizes academic growth and artistic development, the multidisciplinary nature of the arts, standards to differentiate between the ordinary and the extraordinary in the arts, and fine arts career opportunities.
SOA is located at Bruton High School and is open to all students in grades 9 through 12 in the York County School Division who maintain a GPA of 2.5 or higher and a " C " average in their SOA course(s). Transportation from York County high schools to SOA is provided for students.

## Admission Procedures

Admission to SOA is by application/interview (requires three letters of recommendation, demonstration of ability, reading
comprehension on or above grade level, and a minimum GPA of 2.5). Information about the SOA program may be obtained from the SOA Coordinator at (757) 220-4095.
NOTE: Participation in the Middle School Arts Magnet program does not guarantee admission to the School of the Arts.

## 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 careerpreparatory education in core subject areas with emphasis on computer technology while working toward a Standard Diploma or an Advanced Studies Diploma.
At YRA, instructional activities are student-centered with teachers using collaborative approaches and blended instruction that prepare students for success in the classroom and the world of work. Applications for YRA are available in the school counseling office in each middle and high school. Contact the YRA Principal at (757) 898-0516 for additional information.

## THE 17 CAREER CLUSTERS

A Career Cluster is a grouping of occupations and broad industries based on commonalities. Career Clusters help students investigate careers and design their courses of study to advance their career goals. For this reason, Virginia has adopted the nationally accepted structure of 17 Career Clusters, career pathways and sample career specialties or occupations.
Within each career cluster, there are multiple career pathways that represent a common set of skills and knowledge, both academic and technical, necessary to pursue a full range of career opportunities within that pathway - ranging from entry level to management, including technical and professional career specialties.

## AGRICULTURE, FOOD \& NATURAL RESOURCES

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

## ARCHITECTURE \& CONSTRUCTION

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

## ARTS, A/V TECHNOLOGY \& COMMUNICATIONS

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

## BUSINESS MANAGEMENT \& ADMINISTRATION

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

## EDUCATION \& TRAINING

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

## ENERGY

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

## FINANCE

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

## GOVERNMENT \& PUBLIC ADMINISTRATION

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

## HEALTH SCIENCE

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

## HOSPITALITY \& TOURISM

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

## HUMAN SERVICES

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

## INFORMATION TECHNOLOGY

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

## LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY

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

## MANUFACTURING

Planning, managing, and performing the processing of materials into intermediate or final products, and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

## MARKETING

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

## SCIENCE, TECHNOLOGY, ENGINEERING \&

## MATHEMATICS

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

## TRANSPORTATION, DISTRIBUTION AND LOGISTICS

Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water, and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

The Career Clusters ${ }^{\circledR}$ brand logo and its extensions are the property of the National Career Technical Education Foundation, as managed by NASDCTEc.

|  | 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 <br> Animal Systems <br> Environmental Service Syst <br> Food Products \& Processin |  Na <br>  Plan <br>  Po | Resources Systems stems <br> Structural \& Technical Systems |
| Sample Career Options |  |  |
| Diploma with Some Training | Certification or Associate's Degree | Bachelor's Degree or Above |
| Florist <br> Landscaper/Groundskeeper <br> Pest Control <br> Veterinary Assistant | Biological Technician Environmental Technician <br> Fish/Game Warden Veterinarian Technician | Botanist <br> Ecologist <br> Environmental Engineer <br> Veterinarian |
| Related YCSD Elective Courses |  |  |
| Middle School | High School | New Horizons Regional Education Center |
| Career Investigations Energy, Architecture, and the Environment (PLTW) <br> Engineering Design \& Problem Solving <br> Family \& Consumer Science Courses Introduction to Forensic Science <br> Introduction to Technology <br> Inventions and Innovations <br> Make It Your Business <br> Technological Systems | Career Internship <br> Career Mentorship <br> Credit for Work Experience <br> Ecology <br> Nutrition \& Wellness | Veterinary Science I \& II |


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


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



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

## Pathways in this Cluster

Business Information Management
Administrative Support
Operations Management General Management Human Resources Management

## Sample Career Options

| Diploma with Some Training | Certification or Associate's Degree | Bachelor's Degree or Above |
| :--- | :--- | :--- |
| Administrative Assistant <br> Customer Service Representative <br> Receptionist | Claims Adjuster <br> Legal Assistant <br> Office Manager | Certified Public Accountant <br> Finance Director <br> Human Resources Manager |
| Middle School | High School | New Horizons Regional <br> Education Center |
| Criminal Justice <br> Career Investigations <br> Computer Solutions <br> Make It Your Business <br> Public Speaking | Career Internship <br> Career Mentorship |  |
|  | Credit for Work Experience <br> Digital Applications <br> Entrepreneurship Education I \& II <br> Marketing Exploration <br> All Marketing I \& II courses <br> Marketing Management |  |


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


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


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


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


| CareerClusters <br> PATHWAYS TO COLLEGE \& CAREER READINESS Health Science | 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 <br> 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 <br> Registered Nurse (RN) <br> Physician |
| Related YCSD Elective Courses |  |  |
| Middle School | High School | New Horizons Regional Education Center |
| Career Investigations Intro to Forensic Science Make It Your Business Health and Medical Sciences Exploratory | Career Internship <br> Career Mentorship <br> Credit for Work Experience <br> Emergency Medical Technician I \& II <br> Intro to Health \& Medical Sciences <br> Leadership Development <br> Medical Terminology <br> Sports Medicine I \& II | Dental Careers I \& II Emergency Medical <br> Technician I, II \& III <br> Medical Assistant I \& II <br> Nurse Aide I \& II <br> Pharmacy Technician I \& II <br> Physical and Occupational <br> Therapy I \& II <br> Veterinary Science I \& II |


|  | 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 Travel \& Tourism <br> Lodging Recreation, Amusements \& Attractions |  |  |
| Sample Career Options |  |  |
| Diploma with Some Training | Certification or Associate's Degree | Bachelor's Degree or Above |
| Cook <br> Guest Services Representative <br> Tour Guide | Food Service Manager/Chef Hotel Manager Travel Agent | Director of Tourism Event Planner Marketing Manager |
| Related YCSD Elective Courses |  |  |
| Middle School | High School | New Horizons Regional Education Center |
| Career Investigations <br> Digital Journalism <br> Computer Solutions <br> Family \& Consumer Science Courses <br> Make It Your Business <br> Public Speaking <br> Writers' Roundtable | Career Internship <br> Career Mentorship <br> Credit for Work Experience <br> Nutrition \& Wellness <br> Sports and Entertainment Marketing I <br> Sports and Entertainment Management II | Culinary Arts I \& II |


| Human Services | 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 Serv 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 <br> Volunteer Coordinator |
| Related YCSD Elective Courses |  |  |
| Middle School | High School | New Horizons Regional Education Center |
| Career Investigations <br> Criminal Justice <br> Family \& Consumer Science Courses <br> Make It Your Business <br> Public Speaking | Business Management <br> Career Internship <br> Career Mentorship <br> Credit for Work Experience <br> Life Planning <br> Nutrition \& Wellness | Cosmetology I \& II <br> Culinary Arts I \& II <br> Early Childhood Education I \& II |


| CareerClusters 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. |  |
| :---: | :---: | :---: |
| Pathways in this Cluster |  |  |
| Information Support \& Services Network Systems | Programming \& Software Development Web \& Digital Communications |  |
| Sample Career Options |  |  |
| Diploma with Some Training | Certification or Associate's Degree | Bachelor's Degree or Above |
| Computer Repair Technician Data Entry <br> Help Desk Technician | Database Administrator Web Designer | Computer Programmer Network Administrator Software Engineer |
| Related YCSD Elective Courses |  |  |
| Middle School | High School | New Horizons Regional Education Center |
| Career Investigations <br> Computer Science Discoveries <br> Computer Solutions <br> Design and Robotics (PLTW) <br> Engineering Design \& Problem <br> Solving <br> Intro to Programming \& Game <br> Design <br> Inventions and Innovations <br> Make It Your Business <br> Technological Systems | AP Computer Science A <br> AP Computer Science Principles <br> Career Internship <br> Career Mentorship <br> Computer Information Systems I \& II <br> Computer Science Foundations <br> Computer Science Principles <br> Credit for Work Experience <br> Cybersecurity Fundamentals <br> Design, Multimedia \& Web Technologies <br> Digital Applications <br> Game Design \& Development I \& II Information Technology Fundamentals | Cisco Networking I \& II <br> Computer Programming \& Gaming <br> Applications <br> Cybersecurity Systems Technology <br> Cybersecurity Operations |


|  | Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services. |  |
| :---: | :---: | :---: |
| Pathways in this Cluster |  |  |
| Correction Services Emergency \& Fire Manageme Security \& Protective Services |  Law <br> Lega  | orcement Services rvices |
| 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 <br> Emergency Management Director Probation Officer |
| Related YCSD Elective Courses |  |  |
| Middle School | High School | New Horizons Regional Education Center |
| Criminal Justice <br> Introduction to Forensic Science <br> Make It Your Business <br> Public Speaking <br> Writers' Roundtable | Career Internship <br> Career Mentorship <br> Credit for Work Experience | Criminal Justice <br> Emergency Medical Technician I, II \& III Firefighting I \& II |


|  | 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 <br> Manufacturing Production \& Process Deve Maintenance, Installation \& Repair |  Quality Assuranc <br> Logistics \& Inven  <br>   | Control ironmental 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 <br> Safety Engineer |
| Related YCSD Elective Courses |  |  |
| Middle School | High School | New Horizons Regional Education Center |
| Career Investigations <br> Design and Robotics (PLTW) <br> Engineering Design \& Problem Solving <br> Intro to Technology <br> Inventions and Innovations <br> Make It Your Business <br> Technological Systems | Career Internship <br> Career Mentorship <br> Credit for Work Experience <br> Basic Technical Drawing/Design/CAD <br> Engineering Drawing/Design/CAD <br> Advanced Drawing/Design/CAD <br> Marketing Management | Mechatronics I, II \& III <br> Virtual Machining and Design I \& II <br> Welding I \& II |


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


|  | Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services. |  |
| :---: | :---: | :---: |
| Pathways in this Cluster |  |  |
| Engineering \& Technology Science \& Math |  |  |
| Sample Career Options |  |  |
| Diploma with Some Training | Certification or Associate's Degree | Bachelor's Degree or Above |
| Drafter Field Crew Surveyor | CAD Technician Electronics Technician Survey Technician | Aerospace Engineer Chemist Statistician |
| Related YCSD Elective Courses |  |  |
| Middle School | High School | New Horizons Regional Education Center |
| Career Investigations <br> Computer Solutions <br> Design and Robotics (PLTW) <br> Energy, Architecture, and the <br> Environment (PLTW) <br> Engineering Design \& Problem Solving Intro to Programming \& Game Design Introduction to Technology Inventions and Innovations <br> Make It Your Business <br> Technological Systems | Advanced Drawing/Design/CAD <br> Aerospace Technology <br> Basic Technical Drawing/Design/CAD <br> Career Internship <br> Career Mentorship <br> Credit for Work Experience <br> Engineering Drawing/Design/CAD <br> Unmanned Aircraft Systems | Mechatronics I, II \& III |


| CareerClusters ${ }^{\circ}$ PATHWAYS TO COLLEGE \& CAREER READINESS <br> Transportation, Distribution \& Logistics | Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance. |  |
| :---: | :---: | :---: |
| Pathways in this Cluster |  |  |
| Transportation Operations Logistics Planning \& Management Service Warehousing \& Distribution Center Oper Facility \& Mobile Equipment Maintenanc | Transportation Systems/Infrastructure Planning, <br> Management \& Regulation <br> Health, Safety \& Environmental Management Sales and Service |  |
| Sample Career Options |  |  |
| Diploma with Some Training | Certification or Associate's Degree | Bachelor's Degree or Above |
| Dispatcher Mechanic Truck Driver | Avionics Technician Customs Inspector Flight Attendant | Air Traffic Controller Pilot <br> Port Manager |
| Related YCSD Elective Courses |  |  |
| Middle School | High School | New Horizons Regional Education Center |
| Career Investigations <br> Design and Robotics (PLTW) <br> Engineering Design \& Problem Solving <br> Introduction to Technology <br> Inventions and Innovations <br> Make It Your Business <br> Public Speaking <br> Technological Systems | Aerospace Technology <br> Career Internship <br> Career Mentorship <br> Credit for Work Experience <br> Unmanned Aircraft Systems | Auto Body and Collision Technology I \& II Automotive Technology I \& II Marine Service Technology |

## COURSE OFFERINGS

The following section provides information on courses offered by the York County School Division. 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.

## High School Courses Taken in Middle School

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

## Course Fees

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

## How to Read a Course Description



## CAREER \& TECHNICAL EDUCATION

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

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

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

Career \& Technical Education (CTE) courses are designed to prepare young people for productive futures while meeting the commonwealth's need for well-trained and industrycertified technical workers. A sequence of courses can provide students with entry-level employment skills for internships, apprenticeships and preparation for industry certification. All CTE courses listed meet the Career \& Technical Education credit requirements for graduation. CTE courses are offered in the following categories: Business \& Information Technology, Family \& Consumer Sciences, Health \& Medical Sciences, Marketing Education, and Technology Education.
The New Horizons Regional Education Center (NHREC) provides additional opportunities for students throughout the region who have met prescribed prerequisites. Courses available at NHREC are detailed in the Specialty Programs Course Offerings section of this Program of Studies. For additional information about NHREC, call (757) 766-1100.

Business \& Information Technology

## Business \& IT Course Offerings \& Suggested Sequences



## Related Electives (Grades 9-12)

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

Requirements for Career/Technical Program
Completer in Business \& Information Technology:

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

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

# MIDDLE SCHOOL COURSE OFFERINGS 

## COMPUTER SOLUTIONS 6 <br> 6607 Grade 6 Quarter

Students are introduced to computing devices and software as problem-solving tools. Students complete a variety of projects incorporating word processing, database, presentation, and spreadsheet software. Basic Internet safety, coding, and device maintenance are components of this course.
COMPUTER SOLUTIONS I 66077
Grades 7-8
Semester
Students learn skills to use computing devices and software as problem-solving tools. Students complete a variety of projects incorporating word processing, database, presentation, and spreadsheet software. Basic Internet safety, coding, and device maintenance are components of this course. Emphasis is placed on the application and analysis of technologies to solve problems.

COMPUTER SOLUTIONS II
66078
Grade 7-8
Semester
Students expand their understanding of computers as problem-solving tools. Emphasis is placed on using software to evaluate and create products such as documents, multimedia presentations, databases, graphs, charts, and webpages. A review of Internet safety, coding, and device maintenance are components of this course.
Prerequisites: Computer Solutions I
MAKE IT YOUR BUSINESS 8114
Grades 7-8 Semester
Students design, establish, and operate a small-group or class business, producing a service or product that meets an identified school or community need. Emphasis is placed on the introduction and application of business terminology, basic entrepreneurship concepts, and fundamental business principles. Basic academic skills (mathematics, science, English, and history/social science) are integrated into this course.

## HIGH SCHOOL COURSE OFFERINGS

| 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.
ACCOUNTING II 6321
Grades 11-12 1 Credit
This course provides students in-depth knowledge of accounting procedures and techniques utilized in solving business problems and in making financial decisions. Students use the calculator, computer, and accounting software, with emphasis on electronic spreadsheets, to analyze and interpret business applications.
NOTE: Students in this course have an opportunity to take an industry certification test. Prerequisite: Accounting I

| BUSINESS MANAGEMENT | 6136 |
| :--- | ---: |
| Grades 9-12 | 1 Credit |

In this course, students study basic management concepts and leadership styles as they explore business ownership, planning, economics, international business, and human relations issues. Students also explore the foundations of economic and social concepts as they relate to legal principles and to business laws.
NOTE: Students in this course have an opportunity to take an industry certification test.
COMPUTER INFORMATION SYSTEMS I
6612
Grades 10-12 1 Credit
In this course, students apply problem-solving skills to reallife situations through database, spreadsheet, word processing, and presentation software with integrated activities. Various digital input technologies, including
speech recognition, are covered. This course prepares students to take the industrial certification exam to become a Microsoft Office Specialist (MOS).
NOTE: Students in this course have an opportunity to take an industry certification test.
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
CYBERSECURITY FUNDAMENTALS
6302
Grades 9-12
1 Credit
Cybersecurity affects every individual, organization, and nation. This course focuses on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity.

## DIGITAL APPLICATIONS <br> 6611

Grades 9-12 1 Credit

This course is designed for students to review correct keyboarding techniques while using software packages to gain a basic knowledge of word processing, spreadsheet, database, graphics, internet, and multimedia applications.
NOTE: Students in this course have an opportunity to take an industry certification test.

| ECONOMICS AND PERSONAL FINANCE | B6120 |
| :--- | :--- |
| Grades 9-12 | 1 Credit |

## This blended-learning course is required for all students.

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

## ENTREPRENEURSHIP EDUCATION I <br> 9093

Grades 11-12 1 Credit
This course introduces students to the exciting world of creating, owning, and launching their own businesses. Students will learn concepts and techniques for planning an entrepreneurial venture, using design thinking and business model development. Students will learn about financial statements, marketing principles, sales and customer service, and basic economic principles for successful operation.
NOTE: Students in this course have an opportunity to take an industry certification test.

## ENTREPRENEURSHIP EDUCATION II 9094

Grade 12 1 Credit
Building upon concepts introduced in Entrepreneurship Education I, this course is designed for students who wish to concentrate on advanced strategies for entrepreneurship. The focus of the course is on the development of a business plan and small business management. Students will establish, market, and maintain a business.
Prerequisites: Entrepreneurship Education I

GAME DESIGN AND DEVELOPMENT I
Grades 9-12
V8400
The game design industry is the fastest revenue-growing entertainment medium and has created many new job disciplines. In this project-based course, students will create innovative games through the application of graphic design, animation, audio, and writing skills. Students will work in teams while developing problem-solving, critical thinking, and effective communication skills. They will analyze, design, prototype, and critique interactive games within a project management environment. Career opportunities across multiple industries, including the entertainment and educational arenas, will be explored.

## GAME DESIGN AND DEVELOPMENT II V8401 <br> Grades 10-12 1 Credit

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

## Prerequisite: Game Design and Development I V8400

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.

# Family \& Consumer Science 

## MIDDLE SCHOOL COURSE OFFERINGS

## FAMILY AND CONSUMER SCIENCES EXPLORATORY I <br> 8206 <br> 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 science, fine arts, and technology are integrated throughout the course.

## FAMILY AND CONSUMER SCIENCES

 EXPLORATORY II8263 Grades 7-8 Semester
Family and Consumer Sciences Exploratory II provides a foundation for managing individual, family, work, and community roles and responsibilities. Students focus on their individual development as well as their relationships and roles within the family unit. They learn how to maintain their living and personal environments and to use nutrition and wellness practices. Students apply consumer and family resources, develop textile, fashion, and apparel concepts, and explore careers related to family and consumer
sciences. Time is provided for developing education and early childhood concepts and leadership skills. In this course students will complete a career inventory, learn about career clusters and pathways, and demonstrate workplace readiness skills.

## 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 conflictresolution 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 science, and technology are integrated throughout the course. Students will also complete a career inventory, learn about career clusters and pathways, and demonstrate workplace readiness skills.

## HIGH SCHOOL COURSE OFFERINGS

| LIFE PLANNING | 8227 |
| :--- | ---: |
| Grades 9-12 | 1 Credit |

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

| NUTRITION AND WELLNESS | 8229 |
| :--- | ---: |
| Grades 9-12 | 1 Credit |

Students enrolled in Nutrition and Wellness focus on understanding wellness, investigating principles of nutrition, using science and technology in food management, ensuring food safety, planning menus and preparing food, and exploring careers in the field of nutrition and wellness. Critical thinking and practical problem solving are emphasized.
VIRGINIA TEACHERS FOR TOMORROW I 9062
Grades 11-12 1 Credit
Virginia Teachers for Tomorrow (VTfT) fosters student interest, understanding, and appreciation of the teaching profession, and allows secondary students to explore
careers in education. Students build a foundation for teaching, learn the history, structure and governance of teaching, apply professional teaching techniques in the VTfT classroom and field experience, and reflect on their teaching experiences.
NOTE: Dual Enrollment option available through Shenandoah University.
Prerequisite: Students must submit an application to be considered for enrollment in the program.
VIRGINIA TEACHERS FOR TOMORROW II 9072
Grade 12
1 Credit
Students continue to explore careers in the Education and Training Cluster and pathways. This course provides the opportunity for students to prepare for careers in education as they research postsecondary options, learn about the process of teacher certification in Virginia, and participate in a practicum experience.
NOTE: Dual Enrollment option available through Shenandoah University. Students must have approval from Virginia Teachers for Tomorrow I teacher.
Prerequisites: Virginia Teachers for Tomorrow I (VTfT)

# Governor's Health Sciences Academy 

## MIDDLE SCHOOL COURSE OFFERINGS

## HEALTH AND MEDICAL SCIENCES EXPLORATORY

Grade 7-8
Semester
Students explore health and medical sciences careers and related clusters, participate in interactive activities, and receive an overview of the healthcare industry. Course
content includes the criteria for entering various healthcare careers. Students gain communication, problem solving, and critical thinking skills. This course will be offered at Queens Lake Middle School.

## HIGH SCHOOL COURSE OFFERINGS


#### Abstract

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 <br> Grades 10-12 1 Credit

This course is designed to help students learn health care language. Topics are presented in logical order beginning with each body system's anatomy and physiology, and progressing through pathology, diagnostic procedures, therapeutic interventions, and finally pharmacology. Students learn concepts, terms, and abbreviations for each topic. NOTE: Students in this course have an opportunity to take an industry certification test. Recommended Prerequisite: Introduction to Health and Medical Sciences

| EMERGENCY MEDICAL TECHNICIAN I | DE-8333 |
| :--- | ---: |
| EMERGENCY MEDICAL TECHNICIAN II | DE-8334 |
| Grades $11-12$ | 2 Credits |

Students explore and apply the fundamentals of EMS, anatomy, physiology, and medical terminology while demonstrating skills in assessing and managing patient care, including assessing the scene and understanding shock, resuscitation, and trauma. Students build their knowledge and skills for providing basic life support by focusing on the areas of EMS operations, medical emergencies, and management of special patient populations.
NOTE: This course is Dually Enrolled with Virginia Peninsula Community College (VPCC) and will take place at the VPCC Historic Triangle campus. This course prepares students for state and national certifications. Students must be at least 16 years old prior to the first day of EMT instruction. Students successfully completing the course will earn 8 VPCC credits. Students must meet admission and course placement requirements of the college. Requirements for admission include the completion of an application for admission to the college and demonstration of readiness for college through Grade Point Average (GPA), placement testing or eligible assessments.

## LEADERSHIP DEVELOPMENT 9097

Grades 11-12 1 Credit
Students will develop competencies in identifying individual aptitudes in relation to effective leadership skills including understanding organizational behavior, using effective communication in the workplace, handling human resources and organizational problems, resolving conflict, and planning for the future. Continuing education in leadership is emphasized as well as practical leadership experiences in cooperation with school and community leaders. Students will complete a 40-hour externship in the health sciences field.
NOTE: Students in this course have an opportunity to take an industry certification test. Recommended Prerequisite: Introduction to Health and Medical Sciences, and Medical Terminology

SPORTS MEDICINE I
8316
Grades 11-12 1 Credit
This course of studies provides students with the basic concepts and skill set required for an entry-level position as a sports medicine assistant. It introduces students to topics such as injury prevention, nutrition, first aid/CPR/AED, exercise physiology, and biomechanics. Students study basic human anatomy and physiology, medical terminology, legal and ethical issues in sports medicine, and career preparation. Course competencies have been constructed so as not to go beyond the professional scope of aide/assistant level. Mastery of the material in this course would provide students with a strong background should they wish to pursue certification in areas such as first aid, CPR, AED, and/or personal trainer.
Prerequisite: Introduction to Health and Medical Sciences, and Medical Terminology

SPORTS MEDICINE II 8317

Grade 12 1 Credit

Upon successful completion of this course, students will be eligible to take the National Academy of Sports MedicineCertified Personal Trainer (NASM-CPT) exam. This course builds upon basic knowledge acquired in Sports Medicine I on topics such as exercise physiology, biomechanics, exercise program design, and injury prevention, assessment, treatment, and management. Students prepare for a career in sports medicine, including completing an internship.
Prerequisite: Introduction to Health and Medical Sciences, Medical Terminology, and Sports Medicine I

## Marketing Education

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

Cooperative Education (CO-OP) combines classroom instruction with a minimum of 280 hours of supervised on-the-job training. Training occurs in an approved local marketing business and is coordinated by the marketing teacher-coordinator during the school year. On-the-job training during summer months may be applied toward the 280 hours if documented by a training plan and supervised
by the teacher-coordinator, for Level II students. Students may earn one additional credit for completing an additional 280 hours of coordinated work experience (560). Contextual instruction and student participation in co-curricular career and technical student organization (DECA) activities will develop leadership, interpersonal, and career skills. Highquality work-based learning will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

## Marketing Course Offerings \& Suggested Sequences



## Related Electives (Grades 9-12)

- Career Mentorship

Requirements for Career/Technical Program

- Career Internship

Completer in Marketing:

- Two 36-week sequential Marketing courses
- Service Learning
- Credit for Work Experience

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

## HIGH SCHOOL COURSE OFFERINGS

## FASHION MARKETING I/CO-OP FASHION MARKETING I

CO-OP 2 Credits

1 Credit
This course leads students into the exciting and everchanging world of fashion. Students gain knowledge of marketing as it relates to the fashion industry. From brick-and-mortar retail establishments to online retail and social media marketing, students will explore aspects such as
trends, technology, the buying process, visual merchandising, the nature and history of fashion and fashion designers, and the global impact of the fashion industry on the economy. The course explores career options and develops workplace readiness skills. Academic skills related to the content are part of this course.
NOTE: Students in this course have an opportunity to take an industry certification test.
FASHION MARKETING II/CO-OP 81451 FASHION MARKETING II 81452

## Grades 11-12 <br> CO-OP 2 Credits

1 Credit

This advanced-level course prepares students for a career in the global fashion industry. Students gain deeper knowledge of the field and apply skills in marketing. Students explore sustainability, social responsibility, entrepreneurship, technology applications, buying, portfolio development, and careers. The course explores career options and develops workplace readiness skills. Academic skills related to the content are part of this course.
NOTE: Students in this course have an opportunity to take an industry certification test.

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

MARKETING I/CO-OP 81201
MARKETING I 81202
Grades 10-12 CO-OP 2 Credits 1 Credit
Students will learn how products are developed, branded, and sold. They will analyze industry trends and gain handson experience in the marketing of goods, services, and ideas and be prepared for success in postsecondary education and employment. Topics include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and changes in the marketplace. The course explores career options and develops workplace readiness skills.
NOTE: Students in this course have an opportunity to take an industry certification test.

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

In this course, students learn to leverage marketing activities to best differentiate themselves and their businesses. They will participate in supervisory and management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing, distribution, selling, operations research, and promotion. Students will prepare for marketing careers and postsecondary education, continuing to enhance self-presentation, communication, and leadership skills. The course explores career options and develops workplace readiness skills.
NOTE: Students in this course have an opportunity to take an industry certification test.
Prerequisite: Marketing I or Marketing I/CO-OP
MARKETING EXPLORATION
8110
Grades 9-11
1 Credit
Explore the world of marketing to understand its importance in today's society. Students will develop skills related to interpersonal communication, self-presentation, economics, marketing, sales, employability, career discovery,
promotion, and ethical decision-making-all essential skills in any career. The course explores career options and develops workplace readiness skills.
NOTE: Students in this course have an opportunity to take an industry certification test.
MARKETING MANAGEMENT 8132
Grade 12
1 Credit
This course is designed for high school students interested in a career in marketing, business, or management and/or who have plans to manage or own a business. Students will be exposed to all aspects of marketing and management, including branding, digital marketing, promotion, communication, and career opportunities in marketing. This course will prepare students for industry certifications. The course explores career options and develops workplace readiness skills.
NOTE: Students in this course have an opportunity to take an industry certification test.
SPORTS \& ENTERTAINMENT MARKETING I/CO-OP 81751 SPORTS \& ENTERTAINMENT MARKETING I 81752 Grades 10-12 CO-OP 2 Credits 1 Credit
This course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports and entertainment industries. Students will investigate the components of customer service, branding, product development, pricing and distribution, business structures, sales processes, digital media, sponsorships and endorsements, as well as promotion needed for sports and entertainment events. The course explores career options and develops workplace readiness skills.
NOTE: Students in this course have an opportunity to take an industry certification test.

## SPORTS \& ENTERTAINMENT <br> MANAGEMENT II/CO-OP <br> 81771 <br> SPORTS \& ENTERTAINMENT MANAGEMENT II 81772 Grades 11-12 CO-OP 2 Credits 1 Credit

Students will build on prior knowledge of sports and entertainment marketing. This course focuses on the principles of management and planning supported by research and by financial, economic, ethical, and legal concepts. Students will be able to plan and execute an event, establish a sports, entertainment, or recreation marketing product/business, and develop a career plan. The course explores career options and develops workplace readiness skills.
NOTE: Students in this course have an opportunity to take an industry certification test.
Prerequisite: Marketing I or Marketing I/CO-OP, Sports and Entertainment Marketing I or Sports and Entertainment Marketing I/CO-OP

## Technology Education Course Offerings \& Suggested Sequences



## Related Electives (Grades 9-12)

- Career Internship
- Career Mentorship
- Service Learning
- Credit for Work Experience

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.

## MIDDLE SCHOOL COURSE OFFERINGS

DESIGN AND ROBOTICS (PLTW)

Grades 7-8
Students learn about the history and impact of automation and robotics as they explore mechanical systems, energy transfer, machine automation, and computer control systems. Students discover the design process and develop an understanding of the influence of creativity and innovation in their lives. They are then challenged and empowered to use and apply what they've learned throughout the unit to design a therapeutic toy for a child who has cerebral palsy.

| INTRODUCTION TO TECHNOLOGY | 8481 |
| :--- | ---: |
| Grade 6 | Quarter |

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

## INVENTIONS \& INNOVATIONS

8464
Grades 7-8
Semester
The focus of this course is inventions and innovation technology. Students study tools and machines, power and energy, transportation, and communication. Students apply skills with individual creativity to create models and inventions. Students will also complete a career inventory, learn about career clusters and pathways, and demonstrate workplace readiness skills.

TECHNOLOGICAL SYSTEMS 8463
Grades 7-8
Semester
Students utilize hands-on activities to understand a systems approach to solving problems and understanding technology. Working in teams, students rotate through a number of activities including constructing models, producing items, and using computers to describe and control systems. The impact of technology on the students' world and future careers is addressed. Students will also complete a career inventory, learn about career clusters and pathways, and demonstrate workplace readiness skills.

## HIGH SCHOOL COURSE OFFERINGS

| ADVANCED DRAWING/DESIGN/CAD | 8438 |
| :--- | ---: |
| Grades 11-12 | 1 Credit |

This course provides advanced computer applications in drawing and design with emphasis on isometric, oblique, perspective, and auxiliary views, revolutions, multi-view projection, and working drawings.
NOTE: Students in this course have an opportunity to take an industry certification test.
Prerequisite: Basic Technical Drawing/Design/CAD, and Engineering Drawing/Design/CAD or Architectural Drawing/Design/CAD

## AEROSPACE TECHNOLOGY 8487

 Grades 9-11 1 CreditAerospace Technology offers an introduction to the aerospace industry through a hands-on approach and exploration of topics such as flight, space, and supporting technologies. Students explore the aviation and space industries by examining the history of aviation, aerodynamics and aircraft components, flight conditions, airport and flight operations, space systems, rocketry, and living and working in space.

## ARCHITECTURAL DRAWING/DESIGN/CAD 8437 Grades 10-12 1 Credit

This course permits students to learn more about the principles of architecture and related drafting practices and techniques, building on the knowledge and skills mastered in Basic Technical Drawing/Design/CAD. The course provides information helpful for students wishing to pursue a career in architecture, interior design, or building construction.
NOTE: Students in this course have an opportunity to take an industry certification test.
Prerequisite: Basic Technical Drawing/Design/CAD

BASIC TECHNICAL DRAWING/DESIGN/CAD 8435
Grades 9-12
1 Credit
Basic Technical Drawing/Design/CAD 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.
CYBERSECURITY OPERATIONS 6304
Grades 10-12 1 Credit
Cybersecurity Operations is designed to teach computer and network administration and security. Students learn cybersecurity concepts, including the practice of protecting systems, networks, and programs from digital attacks. Students learn to establish, implement, and maintain security networks. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.
NOTE: Students in this course have an opportunity to take an industry certification test. This course is only taught at York River Academy
Prerequisites: Cybersecurity Fundamentals
DESIGN, MULTIMEDIA \& WEB TECHNOLOGIES I 6630 Grades 10-12 1 Credit
This course covers design techniques used to create a variety of publications using desktop publishing software. Students enhance their presentation skills through the use of multimedia hardware and software. Web page design and development concepts are also covered. This course prepares students to take the industrial certification exam to become a Microsoft Office Specialist (MOS).
NOTE: Students in this course have an opportunity to take an industry certification test. This course is only taught at York River Academy

## DESIGN MULTIMEDIA \& <br> WEB TECHNOLOGIES II

Grades 10-12 1 Credit

In this course, students acquire advanced skills in design, multimedia, and web development by applying project management principles to create professional quality digital media projects. Work-based learning experiences allow students to apply layout and design techniques in real-world situations. Students create portfolios that include a resume, certifications earned, and a variety of print, multimedia, and website projects produced in the course.
NOTE: Students in this course have an opportunity to take an industry certification test. This course is only taught at York River Academy
Prerequisites: Design, Multimedia \& Web Technologies I
ENGINEERING DRAWING/DESIGN/CAD 8436
Grades 10-12 1 Credit

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

UNMANNED AIRCRAFT SYSTEMS
DE-8910
Grades 11-12 1 Weighted Credit
Unmanned Aircraft Systems prepares students to fly drones under the Federal Aviation Administration's (FAA) Part 107 guidelines. Students get an overview of the national airspace system, FAA regulations, and the design and operation of small drones. Students monitor weather, address loading and performance of drones, and coordinate flight operation logistics. They perform administrative tasks, train to fly, and, finally, fly small, unmanned aircraft systems (sUAS).
NOTE: This course is Dually Enrolled with Virginia Peninsula Community College (VPCC). Students must meet admission and course placement requirements of the college. Requirements for admission include the completion of an application for admission to the college and demonstration of readiness for college through Grade Point Average (GPA), placement testing or eligible assessments. Students must be 16 to take the certification test and receive the FAA Part 107 Remote Pilot Certificate.

## ENGLISH

As graduation requirements vary based on graduation year and diploma type, please refer to page 3 for additional information.

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

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


## MIDDLE SCHOOL COURSE OFFERINGS


#### Abstract

ENGLISH 6 ..... 1109 Grade 6 ..... Year

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


## ADVANCED ENGLISH 6 11091

Grade 6 Year
This course provides an opportunity for students to independently read a variety of fiction, narrative nonfiction, nonfiction, and poetry for appreciation and comprehension. Students will compare literary elements, participate in shared inquiry discussions, formulate questions, build generalizations, and give academic responses to literature.Students will also plan, draft, revise, and edit narrative, descriptive, expository, and persuasive writing with attention to composition and written expression, as well as sentence formation, usage, and mechanics. Students
will begin the study of word origins and continue vocabulary development. Technology will be used as a tool to research, organize, and communicate information.

| ENGLISH 7 | 1110 |
| :--- | ---: |
| Grade 7 | Year |

## Grade 7

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

## ADVANCED ENGLISH 7 11101

Grade 7
Year
This course provides an opportunity for students to read a wide variety of fiction, nonfiction, and poetry while becoming more independent and analytical. Students will compare literary elements, participate in shared inquiry discussions, formulate questions, build generalizations, and give academic responses to literature. Students will learn to analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Students will continue the study of word origins and continue vocabulary development. Technology will be used as a tool to research, organize, and communicate information.

ENGLISH 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.

## ADVANCED ENGLISH 8 11201

Grade 8
Year
This course provides an opportunity for students to develop an appreciation for literary genres through a study of a wide variety of selections while becoming more independent and analytical. Students will compare literary elements, participate in shared inquiry discussions, formulate questions, build generalizations, and give academic responses to literature. Students will develop analytical and critical thinking skills through close reading, commentary, and literary critique. Students will analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills, and will continue the study of word origins and continue vocabulary development. Increased requirements for research and reporting in all subjects will be supported by the use of print, electronic databases, online resources, and other media.

# ENGLISH ELECTIVE COURSE OFFERINGS 

| DIGITAL JOURNALISM | 00669 |
| :--- | ---: |
| Grades 7-8 | Year |

This class provides students an opportunity to engage in relevant writing and reporting within a variety of formats (written, video, and audio). Students learn effective methods of communication. Additionally, students understand the components of a strong interview and engage in interviews with students, staff, and members of the community.

## MIDDLE SCHOOL PUBLIC SPEAKING 982804 <br> 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.

Grades 7-8 Year
This year-long course provides students the opportunity to work on the production of a school yearbook. Basic fundamentals include short and long-range planning, yearbook terminology, conducting an interview, and introduction to the Yearbook Avenue website. Students will also receive instruction in journalistic writing and photography.

| READERS' ROUNDTABLE | 00665 |
| :--- | ---: |
| Grades 7-8 | Semester |

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

[^0]
## HIGH SCHOOL COURSE OFFERINGS

| ENGLISH 9 | 1130 |
| :--- | ---: |
| Grade 9 | 1 Credit |

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

## ADVANCED ENGLISH 9

11301
Grade $9 \quad 1$ 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 higherlevel analytical and critical thinking skills through close reading, commentary, and literary critique. Writing will encompass narrative, expository, and persuasive forms with attention to audience and purpose. Students will analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Increased requirements for critical reading, thinking, writing, and collaboration are expected. Students will continue the development of vocabulary with attention to connotations, idioms, and allusions.

## ENGLISH 10

1140
Grade 10
1 Credit
This course is designed to develop students' critical and analytical language skills. Students will read and analyze literary texts from a variety of eras and cultures, and will be provided multiple opportunities to develop analytical and critical thinking skills through close reading, commentary, and literary critique. Elements of syntax, usage, and mechanics are integrated with reading, writing, and discussion activities. Students will analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Students will continue the development of vocabulary with attention to connotations, idioms, allusions, and the evolution of language.

## Prerequisite: English 9

ADVANCED ENGLISH 10: AP SEMINAR
01013
Grade 10
1 Weighted Credit
An English course taught in the AP Seminar style, Advanced English 10: AP Seminar helps students build foundational writing, collaboration, research, and presentation skills for future success in high school, college, and their career. Students learn to synthesize information from different sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations. Students read and analyze articles, studies, and other texts. Emphasis will be on gathering and
combining information from sources and viewing an issue from multiple perspectives. Written components include crafting, communicating and defending arguments based on evidence, skills necessary for success on the End of Course Reading and Writing SOLS.
Prerequisite: English 9
ENGLISH 11
1150
Grade 11
1 Credit
This course is designed to enhance students' appreciation of literature through the study of both classical and contemporary American literature. Students will identify prevalent themes and characterization present in American literature which are reflective of history and culture. Students will use a variety of nonfiction texts to draw conclusions and make inferences citing textual support. Students will write clear and accurate personal, professional, and informational correspondence and reports for research and other application. Students will continue to analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Students will continue to expand and develop vocabulary.

## Prerequisite: English 10

AP ENGLISH 11: LANGUAGE \& COMPOSITION
1196
Grade 11
1 Weighted Credit
This introductory college-level course is designed to give students opportunities to deepen and expand their understanding of how written language functions rhetorically. As writers, students will learn how to communicate intentions and elicit readers' responses in particular situations. Students will read and analyze a broad range of challenging nonfiction and prose selections. Reading and writing activities in this course also deepen students' knowledge and control of formal conventions of written language. Students taking this course are encouraged to take the AP Exam.
Prerequisite: English 10
ENGLISH 12
1160
Grade 12 1 Credit
This course is designed to enhance students' organizational skills, audience awareness, appropriate vocabulary and grammar, and oral communication and presentation skills. Students apply historical and cultural context while reading and analyzing British literature and literature of other cultures. The course advances students' preparation for critical reading, college, and workplace writing. Increased expectations for critical thinking, academic writing, and reading are expected. Students will continue to analyze their own writing and set goals to improve their grammar, usage, mechanics, and/or organizational skills. Students will expand general and specialized vocabulary through speaking, listening, reading, and viewing.
Prerequisite: English 11

AP ENGLISH 12: LITERATURE \& COMPOSITION 1195 Grade 12

1 Weighted Credit
This college-level course is designed to engage students in the careful reading and critical analysis of imaginative literature. In this course, students will explore literary works from various genres and time periods. Students will practice close reading for selected texts in order to deepen their understanding of the ways writers use language and provide meaning and pleasure for their readers. As students read, they will consider the structure, style, and themes of the work to include the use of figurative language, imagery, symbolism, and tone. Students taking this course are encouraged to take the AP Exam.
Prerequisite: English 11

DUAL ENROLLMENT ENGLISH 12 (ENG 111 \& ENG 112) DE-ENG111 DE-ENG112
Grade 12
1 Weighted Credit
ENG 111 - This introductory college-level course introduces students to critical thinking and the fundamentals of academic writing. Through the writing process, students refine topics; develop and support ideas; investigate, evaluate, and incorporate appropriate resources; edit for effective style and usage; and determine appropriate approaches for a variety of contexts, audiences, and purposes. Writing activities will include exposition and argumentation with at least one researched essay.

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

## ENGLISH ELECTIVE COURSE OFFERINGS

| LITERARY MAGAZINE/MASS MEDIA I | 1200 |
| :--- | ---: |
| Grades $9-12$ | 1 Credit |

This course provides students with the opportunity to engage in editing, production, and publication of media such as a literary magazine. Students in this course will analyze various forms of literature to include creative works of poetry, prose, nonfiction, and multimedia representations. Students will practice skills such as building intrigue, scene development, establishing voice, creating characters, and overall reader engagement. Students will have the opportunity to work on various projects. Advertisements may be sold for publications. NOTE: This course is a Fine Arts elective.

## LITERARY MAGAZINE/MASS MEDIA II <br> 12001 <br> Grades 10-12 1 Credit

This course provides students with the opportunity to continue editing, producing, and publishing media such as a literary magazine. Students in this course will continue to hone their editing and design skills with selected literary media pieces. Students will have the opportunity to work on various projects and include creative pieces of prose, poetry, nonfiction, and multimedia within their publication. Advertisements may be sold for publications.
NOTE: This course is a Fine Arts elective.

## Prerequisite: Literary Magazine/Mass Media I

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.

## NEWSPAPER/MASS MEDIA II 1211 <br> 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 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.
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

## PUBLIC SPEAKING: COMMUNICATION 13001 <br> 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.

| 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 <br> 1165 <br> 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.

| FILM STUDIES A | 98406 |
| :--- | ---: |
| FILM STUDIES B | 98407 |
| Grades 11-12 | .5 Credit Each |

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

As graduation requirements vary based on graduation year and diploma type, please refer to page 3 for additional information.

Fine Arts education is an integral part of the total instructional program. Knowledge and skills that students acquire through instruction in the fine arts include the abilities to think critically, solve problems creatively, make informed judgments, work cooperatively within groups, appreciate different cultures, imagine and create. All courses listed within this section satisfy the Fine Arts credit towards graduation requirements.

## Art

## MIDDLE SCHOOL COURSE OFFERINGS

| EXPLORATORY ART 6 | 9103 |
| :--- | ---: |
| Grade 6 | Quarter |
| This course contributes to the students' development of an |  |
| aesthetic appreciation of the world around them through |  |
| exploratory experiences in a variety of media including |  |
| drawing, painting, and crafts. |  |
| INTRODUCTION TO ART | 9105 |
| Grades 7-8 |  |

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.

## DRAWING AND PAINTING 91061 Grades 7-8 Semester

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


#### Abstract

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.


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 III: ADVANCED INTERMEDIATE | 9140 |
| :--- | ---: |
| Grades 11-12 | 1 Credit | This course continues the emphasis on the development of 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

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

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 wheelthrowing techniques are included.

## CRAFTS: CULTURAL ARTS 91612 <br> 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 <br> Grades 9-12 . 5 Credi

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

## PHOTOGRAPHY \& COMMUNICATION DESIGN I <br> 9190 <br> Grades 10-12 <br> 1 Credit

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

## PHOTOGRAPHY \& COMMUNICATION DESIGN II 9191 Grades 11-12 <br> 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

COMPUTER GRAPHIC ART
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

THREE-DIMENSIONAL (3D) DESIGN 9197

Grades 10-12 1 Credit

This course provides the opportunity for students to develop perceptual, creative, technical, and problem-solving skills in a sculptural context. Students will learn basic world histories of 3D design and become aware of contemporary ideas.

Students in this course will explore and learn the basic concepts of 3D design, the technical application of a variety of tools and materials, and develop perceptual skills through analyzing and identifying three-dimensional visual components. Activities will include both additive and subtractive methods in a diverse range of media.
Prerequisite: Art I or any Ceramics/Crafts course offering
AP ART HISTORY
9151
Grades 11-12
1 Weighted Credit
This course is designed to provide the same benefits to secondary school students that are provided by an introductory college course in art history: an understanding and enjoyment of architecture, sculpture, painting, and other art forms within an historical and cultural context. Students taking this course are encouraged to take the AP Exam.
Prerequisite: English or Art Teacher Recommendation
AP STUDIO ART: 2D
9148
Grades 11-12
1 Weighted Credit
This course is designed for the highly motivated student who is seriously interested in the study of art. Student will develop a portfolio that shows a fundamental competence and range of understanding in visual concerns. This portfolio will focus on the two-dimensional design issues through any two-dimensional medium, including digital art and photography. Students are encouraged to submit a portfolio to the College Board for evaluation.

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

AP STUDIO ART: 3D
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

## 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
Grades 7-8
Semester
This course provides opportunities for students to explore various aspects of drama including play reading and interpretation, basic acting techniques, and theatre history. Successful completion of Introduction to Drama is preferred prior to enrollment in this course.

## INTRODUCTION TO DRAMA <br> 13901 <br> Grades 7-8 Semester

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

## SCENIC DESIGN AND SET BUILD <br> 13905

Grades 7-8 Semester
This course provides students the opportunity to study scenic design. The course will cover essential elements needed to build sets for live performances. Students who sign up for this course will be required to paint, build and design sets. The goal of this course is to engage students to think critically and collaboratively.

## HIGH SCHOOL COURSE OFFERINGS

| DRAMA IA | 14101 |
| :--- | ---: |
| DRAMA IB | 14102 |
| Grades 9-12 | .5 Credit Each |
| This course is an introduction to drama with an emphasis on |  |
| collaboration, basic acting techniques, theatre history, play |  |
| reading, and interpretation. |  |
| NOTE: A full year fulfills the fine arts requirement. |  |
| DRAMA IIA | 14201 |
| DRAMA IIB | 14202 |
| Grades 10-12 | .5 Credit Each |

This course continues the study of drama with an emphasis on acting techniques, technical theatre (stagecraft), staff management, and one-act play production.
NOTE: A full year fulfills the fine arts requirement.
Prerequisite: Two semesters of Drama I
DRAMA IIIA 14301
DRAMA IIIB 14302
Grades 11-12 . 5 Credit Each
This course expands the study of drama with an emphasis on advanced acting techniques, directing, theatre management, and one-act play production.
NOTE: A full year fulfills the fine arts requirement.
Prerequisite: Two semesters of Drama II

DRAMA IVA 14401
DRAMA IVB 14402
Grade 12
5 Credit Each
In this course, students work intensely on a major project of their choosing in the field of drama. Students submit project proposals in areas that may include dramaturgy, writing or directing. Once the proposal is accepted, students meet with the teacher to establish the criteria for each step of the project from initial tasks through the evaluation process.
NOTE: A full year fulfills the fine arts requirement.
Prerequisite: Two semesters of Drama III

## TECHNICAL THEATRE A 14351 TECHNICAL THEATRE B 14352 <br> 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.

## Music

## MIDDLE SCHOOL COURSE OFFERINGS

| VOCAL |  |
| :---: | :---: |
| INTRODUCTION TO CHORUS | 9269 |
| Grade 6 | Semester |
| Introduction to Chorus is a mixed vocalists. Emphasis is placed on th skills, music theory, and a reperto that can be utilized for school and | female singing ections mances. |
| BEGINNING CHORUS 6 | 692 |
| Grade 6 | Il |
| This performance-based class he beginning vocal techniques, part-sig sight-reading. Public performanc culmination of specific instructional required to attend and/or partic outside the school day to suppo learning in the classroom. | develop ing, and as a will be mances assess |
| 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 beginningstudents on woodwind, brass, or percussion instruments.
BEGINNING BAND ..... 9232
Grades 7-8 ..... YearThis course provides a program of instruction for first-yearband students on woodwind, brass, or percussioninstruments.
INTERMEDIATE BAND ..... 9233
Grades 7-8 ..... Year
This course provides the opportunity for students tocontinue to develop their instrumental music skills.
Prerequisite: Audition or one year of instrumental music experience
ADVANCED BAND ..... 9234
Grades 7-8 ..... Year
This course provides the opportunity for students to refinetheir instrumental music skills.
Prerequisite: Audition or one year of instrumental music experience
MUSIC TECHNOLOGY ..... 5124
Grades 7-8 ..... SemesterStudents engage in the exploration of music productionthrough writing, arranging, tracking, mixing and masteringmusic using technology. The course also includes lessons onthe history of the music industry and the business behind it.

## HIGH SCHOOL COURSE OFFERINGS

| VOCAL | 9260 |
| :--- | ---: |
| CHORUS I | 1 Credit |
| Grades $9-12$ |  |
| 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. |  |
| CHORUS II |  |
| Grades 10-12 |  |
| 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. |  |

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., Treble Choir, TBB (Tenor, Bari, Bass) Choir, Jazz Choir, Show Choir, Madrigal Singers, quartets, etc.) Theory, sight-reading, musical techniques, and various musical styles are emphasized. Students selecting this course should have previous choral experience.
Prerequisite: 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., Treble Choir, TBB (Tenor, Bari, Bass) Choir, Jazz Choir, Show Choir, Madrigal Singers, quartets, etc.) Theory, sight-reading, musical techniques, and various musical styles are emphasized. Students selecting this course should have previous choral experience.
Prerequisite: Small Vocal Ensemble I or Chorus I \& Audition

## INSTRUMENTAL

| 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
CONCERT BAND II 9238

## Grades 10-12

1 Credit
This course continues the refinement of skills learned in Concert Band I. Students apply the basic fundamentals of tone production, rhythmic concepts, proper articulation, and the performance of medium level band literature. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.
Prerequisite: Concert Band I or Sectionals I \& Audition
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
SYMPHONIC BAND II
9240
Grades 10-12 1 Credit
In this course, advanced instruction in individual and group performance is expanded. The Symphonic Band represents the school in concerts, festivals, parades, football games, and other school-related activities. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

## Prerequisite: Symphonic Band I or Sectional I \& Audition

## WIND ENSEMBLE I 9241

Grades 9-12 1 Credit
Wind Ensemble is the most advanced band ensemble. The course is designed to provide students with the opportunity to perform technically and musically challenging repertoire and to develop their musical skills and artistry at the highest level. This course expands upon the knowledge gained in Concert Band and Symphonic Band.

## Prerequisites: Audition

WIND ENSEMBLE II 9242
Grades 10-12 1 Credit
Wind Ensemble is the most advanced band ensemble. The course is designed to provide students with the opportunity to perform technically and musically challenging repertoire and to develop their musical skills and artistry at the highest level. This course expands upon the knowledge gained in Concert Band and Symphonic Band.
Prerequisites: Wind Ensemble I \& 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
WOODWIND SECTIONALS II 92342
Grades 10-12 1 Credit This course continues small group instruction in the woodwind family. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.
Prerequisite: Woodwind Sectionals I \& Audition
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
PERCUSSION SECTIONALS II 92344
Grades 10-12 1 Credit This course continues small group instruction in the percussion family. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.
Prerequisite: Percussion Sectionals I \& Audition

## BRASS SECTIONALS I <br> 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

BRASS SECTIONALS II 92346
Grades 10-12
1 Credit
This course continues small group instruction in the brass family. Participation in marching band, band camp, and/or other related band activities is a requirement of this course.
Prerequisite: Brass Sectionals I \& Audition
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

| STAGE BAND II | 92501 |
| :--- | :--- |
| Grades 10-12 | 1 Credit |

Students continue to represent the school in concerts, festivals, and dances in the contemporary jazz idiom. This course may be taken concurrently with Symphonic Band.

Participation in marching band, band camp, and/or other related band activities is a requirement of this course.

## Prerequisite: Stage Band I \& Audition <br> BEGINNING GUITAR-ACOUSTIC 9245 Grades 9-12 1 Credit

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

| 9247 |  |
| :--- | ---: |
| GUITAR II | 1 Elective Credit |

Guitar II is a continuation of the Beginning Guitar-Acoustic curriculum. Students continue to learn new guitar skills including complex chords, melodic, and fingerstyle playing techniques. Guitar ensemble as well as accompaniment techniques are explored in depth to allow the student to become a proficient guitarist for real-world applications. Outcomes of this class include skills for life-long applications and advanced social and cultural awareness.
NOTE: Students provide their own guitar and textbook. Contact instructor for more information.
Prerequisite: Beginning Guitar-Acoustic or teacher recommendation

## MUSIC APPRECIATION A <br> 92221 <br> 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

Grades 9-12
1 Credit
This course concentrates on development of a working knowledge of music fundamentals as applied to arranging and composition.
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

# MIDDLE SCHOOL COURSE OFFERINGS 

| SET FOR SUCCESS | 00668 |
| :--- | :--- |
| Grade 6 | Quarter |

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

| ACADEMIC SEMINAR | 9828 |
| :--- | ---: |
|  | 98286 |
|  | 98287 |
|  | 98288 |
| Grades 6-8 | Semester |

These courses provide students with accelerated instruction in mathematics and/or reading comprehension components. Within these courses, student data will be utilized to determine students' entry points and accelerate them toward grade level standards. While reading comprehension of grade level content is the ultimate goal in these courses, scaffolds in vocabulary and fluency instruction will be provided. Likewise, foundational math skills will be taught through grade level instruction.

| CAREER INVESTIGATIONS | 9068 |
| :--- | ---: |
|  | 9069 |
| Grade 6 | Quarter |
| Grades 7-8 | Semester |

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

## ADVANCED COURSE EXPERIENCE <br> 982808 <br> Grades 7-8 Semester

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

COMPUTER SCIENCE DISCOVERIES
982809
Grades 7-8 Semester
Computer Science Discoveries, is an introductory computer science course that empowers students to create authentic artifacts and engage with computer science as a medium for creativity, communication, and problem solving. This course inspires students as they design and program websites, apps, and robots.
CRIMINAL JUSTICE 9826 Grades 7-8 Semester
This course will provide hands-on learning in criminal investigation and legal proceedings. Students will apply scientific investigation and technology to analyze legal cases.

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.

## HIGH SCHOOL COURSE OFFERINGS

| ACADEMIC TUTORIAL | 982856 |
| :--- | ---: |
|  | 982857 |
| Grades 9-12 | .5 Credit Each |
| This course assesses specific academic needs in the areas of |  |
| reading, writing and mathematics, and provides structured |  |
| remediation within the school day. Content is designed to |  |
| increase the academic success of the students in their regular |  |
| high school course work. In addition to basic academic |  |
| fundamentals, this course also includes note-taking |  |
| strategies, reading/writing across the curriculum, |  |
| organizational skills, test-taking strategies, time |  |
| management, and career preparation. |  |

COLLEGE \& CAREER PREPARATION 98262
Grades 9-12
. 5 Credit
This course is designed to provide students with experiences to help define and shape their post-secondary plans. Students will learn how to navigate the pathways that connect education and employment through presentations facilitated by community stakeholders. Topics will include, but are not limited to: the college application process, how to apply for scholarships, marketing oneself for employment, analyzing strengths and interest to determine the best career fit, and learn the necessary soft skills to be successful in one's chosen pathway. Students will have an opportunity to visit local colleges, businesses, and participate in cultural field trips.

| COMPUTER SCIENCE FOUNDATIONS | 10012 |
| :--- | :--- |
| Grades 9-12 | 1 Credit |

This course provides an emphasis on computer programming within the context of broader concepts of computer science. The course builds on the concepts of computer science developed in prior grade levels. The course provides a transition from block-based programming to a text-based programming language and familiarizes the student with developing and executing computer programs. Programmable computing tools are used to facilitate design, analysis, and implementation of computer programs. Students will use these tools for exploring and creating computer programs, facilitating reasoning and problem solving, and verifying solutions.

## COMPUTER SCIENCE PRINCIPLES 10011

Grades 10-12 1 Credit
Computer Science Principles builds on the concepts introduced in the Computer Science Foundations course (10012). Students in this course will expand their programming skills and begin to think about and analyze their own problem-solving process. Students will continue to develop the ideas and practices of computational thinking and consider how computing impacts the world. Programmable computing tools are used to facilitate design, analysis, and implementation of computer programs. Students will use these tools for exploring and creating computer programs, facilitating reasoning and problem solving, and verifying solutions.

## Prerequisite: Computer Science Foundations

| LEADERSHIP SEMINAR A | 982891 |
| :--- | ---: |
| LEADERSHIP SEMINAR B | 982892 |
| Grades $10-12$ | .5 Credit Each |

This course offers a study of theories of leadership with an emphasis on four strands: developing knowledge of self and others, defining leadership, developing leadership skills and practices, and practicing leadership through service projects.
$\begin{array}{lr}98261 \\ \text { SAT PREPARATION } 10-12 & \text { (Pass/Fail) } 5 \text { Credit }\end{array}$
Grades 10-12 (Pass/Fail) . 5 Credit
This course provides preparation for the critical reading, writing and language, and mathematics sections of the Scholastic Aptitude Test (SAT).

| APPLIED RESEARCH PROJECTS | 98289 |
| :--- | :--- |
| Grades 11-12 | 1 Credit |

Applied Research Projects represent a capstone experience for students at York River Academy in a business or technology area of the students choosing. Students will propose an area of independent study that is not currently taught or an extension of previous YRA coursework, design the project they will complete to demonstrate new learning and present to a staff member for review and mentorship. This project will then be monitored with quarterly mentor meetings and a presentation to faculty and peers during the $4^{\text {th }}$ Quarter of the assigned semester.

CAREER INTERNSHIP 982610
Grades 11-12 1 Credit
Students apply academic and technical knowledge and skills through paid work experiences. The school and the employer plan, coordinate, and supervise on-the-job training activities to align with the student's career field of interest. Students will be required to work a minimum of 280 hours during the school year and complete all required documentation and reflection activities.
NOTE: Students must complete an application from the employing agency.

CAREER MENTORSHIP
982893
Grades 11-12
1 Credit
This course is a non-paid, work-based experience that allows students to apply knowledge, develop skills, and see a strong work ethic in practice. Students log 140 hours in a sponsoring work site and present a final project to earn one credit.

## Prerequisite: Application

CREDIT FOR WORK EXPERIENCE 982620
This is a pass/fail course offering students working at an after-school and/or summer job an opportunity to earn an additional .5 elective credit for every 70 hours worked. This is not to exceed a total of two (2) credits or 280 hours during their high school experience. Students must submit required documentation consisting of a Supervisor Evaluation Form indicating successful demonstration of Workplace Readiness Skills, as well as submission of a log of hours worked validated by the employer.

## STUDENT ASSISTANCE EXPERIENCE 98265

 98266Grades 11-12 No Credit

This elective offers students the opportunity to expand their knowledge by assisting in areas that may include the computer lab, library, science lab, school offices, or certain classes.
Prerequisite: Application and recommendation of staff member being assisted
SERVICE LEARNING 22104
Grade 11-12 1 Credit
Service learning goes beyond students participating in community service. Service learning enables students to learn and apply academic, social, and personal skills to improve their community. Students perform 140 hours of service as they identify a community need and plan, implement, and evaluate a solution. Service learning provides opportunities for students to apply their knowledge and skills within the setting of certain non-profit agencies and organizations in York County and the greater Hampton Roads area.
Prerequisite: Application

## HEALTH \& PHYSICAL EDUCATION

As graduation requirements vary based on graduation year and diploma type, please refer to page 3 for additional information.

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

## MIDDLE SCHOOL COURSE OFFERINGS


#### Abstract

PHYSICAL EDUCATION/LIFETIME FITNESS 6 Grade 6 7111

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

\section*{PHYSICAL EDUCATION/LIFETIME FITNESS 77121}

Grade 7 Year This course incorporates activities designed to develop lifetime physical fitness and conditioning through participation in selected team and individual activities. Safety issues related to sports and recreation are included.


## PHYSICAL EDUCATION/LIFETIME FITNESS 8 7210

Grade 8
Year
This course incorporates activities designed to develop lifetime physical fitness and conditioning through participation in selected team and individual activities. Safety issues related to sports and recreation are included.

## HIGH SCHOOL COURSE OFFERINGS

| HEALTH \& PHYSICAL EDUCATION | 7300 |
| :--- | ---: |
| Grade 9 | 1 Credit |

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

## NAVY JROTC I (NJROTC) <br> 79132 <br> 79133 <br> Grades 9-12 1 Credit

This course is a study of basic naval orientation, citizenship and government, leadership skills, and wellness, fitness, and first aid. The curriculum includes two areas of study: (1) the Cadet Field Manual with an introduction to military drill, uniforms, military customs and courtesies, and (2) the Introduction to NJROTC with the history of JROTC, citizenship, and laws-authority-responsibility. Cadets will study leadership skills, behavioral sciences, motivation and relationships. Cadets will have a balanced program of instruction in wellness including building health skills through exercise, nutrition, and lifetime planning.
NOTE: Enrollment in this course fulfills the Health \& PE 9 requirement for NJROTC students.

## HEALTH, DRIVER EDUCATION \& PHYSICAL EDUCATION 7405

## Grade 10

 1 CreditThis 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 <br> 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

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

As graduation requirements vary based on graduation year and diploma type, please refer to page 3 for additional information.

## History \& Social Science Course Offerings \& Suggested Sequences <br> 

## History \& Social Science Additional Course Offerings (Grades 9-12)

- Sociology: Aspects \& Tools of Culture
- Sociology: Institutions \& Issues
- African American History
- Psychology
- *AP Psychology
- *AP Comparative Government \& Politics
- *AP Macroeconomics
- *AP Microeconomics


## MIDDLE SCHOOL COURSE OFFERINGS

## UNITED STATES HISTORY TO 18652353

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 <br> 1865 TO PRESENT 2354

Grade 7 Year
Students will continue to use skills for historical and geographical analysis as they examine American history since 1865. Emphasis is placed on the fundamental concepts in civics, economics, and geography.

## CIVICS AND ECONOMICS

 2357Grade 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.

| WORLD GEOGRAPHY 2210 |
| :--- |
| Grades 9-10 |
| 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.

WORLD HISTORY I 2215 Grade 91 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 HISTORY II | 2216 |
| :--- | ---: |
| Grade 10 | 1 Credit |

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

## AP WORLD HISTORY

2380
Grades 10-12
1 Weighted Credit
The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts in interaction with different types of human societies. Students taking this course are encouraged to take the AP exam

AP EUROPEAN HISTORY 2399
Grades 10-12
1 Weighted Credit
AP European History is an introductory college-level European history course. Students cultivate their understanding of European history through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like interaction of Europe and the world; economic and commercial developments; cultural and intellectual developments; states and other institutions of power; social organization and development; national and European identity; and technological and scientific innovation.

## VIRGINIA \& UNITED STATES HISTORY <br> 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 UNITED STATES HISTORY 2319
Grade 11
1 Weighted Credit
AP U.S. History is an introductory college-level U.S. history course. Students cultivate their understanding of U.S. history from c. 1491 A.D. to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures.

## DUAL ENROLLMENT VIRGINIA \& UNITED STATES HISTORY DE-HIS 122

DE-HIS 121

Grade 11
1 Weighted Credit
HIS 121 - This college-level course introduces students to the history of the United States from its origins to 1877. Includes the European exploration, development of the American colonies and their institutions, the Revolution, major political, social and economic developments, geographical expansion, the Civil War, and Reconstruction. UCGS/Passport Course

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

HIS 122 - This college-level course introduces students to the history of the United States from 1865 to present. Includes major political, social and economic developments since 1865, overseas expansion, the two world wars, the Cold War and the post-Cold War era. Can be taken out of sequence. UCGS/Passport Course
Prerequisite(s): Student must be eligible for dual enrollment through VPCC.

VIRGINIA \& UNITED STATES 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.

AP UNITED STATES GOVERNMENT \& POLITICS
2445

## Grade 12

1 Weighted Credit
AP U.S. Government and Politics is an introductory collegelevel course in U.S. government and politics. Students cultivate their understanding of U.S. government and politics through analysis of data and text-based sources as they explore topics like constitutionalism, liberty and order, civic participation in a representative democracy, competing policy-making interests, and methods of political analysis.

## HISTORY \& SOCIAL SCIENCE ELECTIVE COURSE OFFERINGS

## AFRICAN AMERICAN HISTORY <br> 2371 <br> Grades 10-12 1 Elective Credit

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

| PSYCHOLOGY | 2900 |
| :--- | ---: |
| Grades 10-12 | 1 Credit |

Grades 10-12
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.

| AP PSYCHOLOGY |  |
| :--- | ---: |
| Grades 10-12 | 1 Weighted Credit |

This course is an introductory college-level psychology course. Students cultivate their understanding of the systematic and scientific study of human behavior and mental processes through inquiry-based investigations as they explore concepts like the biological bases of behavior, sensation, and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology.

| 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 | 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 GOVERNMENT \& POLITICS:


V2450 COMPARATIVE
Grades 11-12
1 Credit
AP Comparative Government \& Politics introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures, policies, and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students compare the effectiveness of approaches to many global issues by examining how different governments solve similar problems. They also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. Students in this course are encouraged to take the AP Exam.
NOTE: This course does NOT substitute for U.S. Government under the Virginia Standards of Learning.
Prerequisite: U.S. History or World History
AP MACROECONOMICS
V2803

## Grades 11-12

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

## AP MICROECONOMICS

Grades 11-12
. 5 Weighted Credit
AP Microeconomics is a fast-paced, college-level course that focuses on the decision making of individuals, households, firms, and the government. Students will study a variety of economic theories and analyze their practical applications in the real world. Course topics include the product market
(including forces of supply and demand), factor/resource markets (including labor and capital), and competition/market structures. This course prepares students for the AP Exam and for further study in business, history, and political science. Students taking this course are encouraged to take the AP Exam.

MATHEMATICS

As graduation requirements vary based on graduation year and diploma type, please refer to page 3 for additional information.
Placement of students in specific middle school and high school math courses is based on factors which may include one or more of the following: previous math performance, math SOL test performance, standardized test scores, and teacher/administrator recommendation.

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

Mathematics Course Offerings \& Suggested Sequences


Mathematics Additional Course Offerings (Grades 9-12)

- Algebra III
- Discrete Mathematics
- *AP Calculus AB
- Data Science
- Calculus
- *AP Calculus BC
- Trigonometry
- *Math Analysis
- *AP Statistics
- Probability \& Statistics
- *DE Precalculus
- *AP Computer Science A

[^1]
## MIDDLE SCHOOL COURSE OFFERINGS

| FOUNDATIONS OF ALGEBRA 6 | 3110 |
| :--- | ---: |
| Grade 6 | Year |

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

| PRE-ALGEBRA 6 | 31106 |
| :--- | ---: |
| Grade 6 | Year |

As a preparatory course to Algebra I (high school creditbearing 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 " $A$ " or " $B$ " overall in fifth grade mathematics; a pass advanced score on either the fourth or fifth grade mathematics SOL assessment and a minimum of a passing score on the other.

## FOUNDATIONS OF ALGEBRA 7 <br> 3111

Grade 7
Year
This course continues the development of algebraic knowledge from Foundations of Algebra 6. The course addresses the seventh grade math Standards of Learning. Students will expand their understanding of Algebra concepts through the mathematical process goals of communication, collaboration, problem solving, reasoning, and representations. Students completing this course are required to take the seventh grade SOL test.

## PRE-ALGEBRA 7

31117
Grade 7
Year
This course supports the transition from Foundations of Algebra 6 to Algebra I (high school credit-bearing course) and addresses the math Standards of Learning for grades seven and eight. Students will be required to utilize the mathematical process goals of communication, collaboration, problem solving, reasoning, and representations in the exploration of number sense, computation, estimation, measurement, geometry, probability, statistics, patterns, functions, and algebra. Students completing the course are required to take the eighth grade SOL test.
Prerequisite: Recommendation from previous mathematics teacher with a suggested grade of " $A / B$ " in Foundations of

## Algebra 6 or " $C$ " or below in Pre-Algebra 6, and a minimum of a passing score greater than or equal to 450 on the sixth grade mathematics SOL assessment.

## PRE-ALGEBRA 8 <br> 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.

| ALGEBRA I | 3130 |
| :--- | ---: |
| Grades 7-8 | 1 Credit |

This course is a study of the algebraic concepts needed to solve algebraic equations. Students use algebra as a tool for representing and solving a variety of practical problems. Tables and graphs are used to interpret algebraic expressions, equations, and inequalities, and to analyze functions. Students make connections and build relationships among algebra and arithmetic, geometry, and probability and statistics.

## Prerequisite: Pre-Algebra 6 or Pre-Algebra 7

Recommendation from previous mathematics teacher with a suggested grade average of " $A$ " or " $B$ " overall for PreAlgebra 6 or Pre-Algebra 7; a passing score on the Grade 8 mathematics SOL assessment.
ADVANCED GEOMETRY 31433

## Grade 8

1 Weighted Credit
The content of this course offers a study of plane, threedimensional, 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 twodimensional and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. This course provides the foundation for students to pursue a sequence of advanced mathematical studies from Algebra II/Trigonometry to Mathematical Analysis to AP Calculus.
Prerequisite: Algebra I; Recommendation from previous mathematics teacher with a suggested grade average of " $A$ " or " $B$ " in Algebra and a passing score on the Algebra I mathematics SOL assessment.

| ALGEBRA I | 3130 |
| :--- | ---: |
| Grades 9-12 | 1 Credit |

This course is a study of the algebraic concepts needed to solve algebraic equations. Students use algebra as a tool for representing and solving a variety of practical problems. Tables and graphs are used to interpret algebraic expressions, equations, and inequalities and to analyze functions. Students make connections and build relationships among algebra and arithmetic, geometry, and probability and statistics.

## ALGEBRA I MATH LAB ELECTIVE <br> 32003 <br> Grades 9-12 <br> 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

## GEOMETRY

3143
Grades 9-12
1 Credit
This course is a study of plane, three-dimensional, and coordinate geometry. Methods of justification of theorems include: paragraph proofs, flow charts, two-column proofs, indirect proofs, coordinate proofs, and verbal arguments. The courses emphasize two-dimensional and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems.

## Prerequisite: Algebra I

ADVANCED GEOMETRY
31433
Grades 9-10
1 Weighted Credit
The content of this course offers a study of plane, threedimensional, 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 twodimensional and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. This course provides the foundation for students to pursue a sequence of advanced mathematical studies from Algebra II/Trigonometry to Mathematical Analysis to AP Calculus. Prerequisite: Algebra I
ALGEBRA, FUNCTIONS
AND DATA ANALYSIS (AFDA)
3134
Grades 9-12
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, logarithmic equations or a system of equations.
NOTE: Course must be taken in sequence for math credit. Prerequisite: Algebra I

| DATA SCIENCE | 3139 |
| :--- | ---: |
| Grades $10-12$ | 1 Credit |

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

| ALGEBRA II | 3135 |
| :--- | ---: |
| Grades 9-12 | 1 Credit |

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 II/TRIGONOMETRY 3137
Grades 9-10
1 Weighted Credit
This course combines the content of Algebra II and Trigonometry and is taught at an accelerated pace. It provides the foundation for students to pursue a sequence of advanced mathematical studies from Mathematical Analysis to AP Calculus.
Prerequisite: Algebra I \& Geometry or Advanced Geometry and recommendation from math teacher
ALGEBRA III 31602
Grades 10-12 . 5 Credit
This course explores algebra topics that are not covered in the Algebra II curriculum. Topics studied include analytic geometry, functions, sequences and series, and probability. Successful completion of this course prepares students for Mathematical Analysis or college-level calculus courses. College entrance exams concepts are covered.

## Prerequisite: Geometry or Advanced Geometry \& Algebra II or Algebra II/Trigonometry

PROBABILITY \& STATISTICS 31901
Grades 10-12 . 5 Credit
This course provides a general introduction to probability and statistics. Topics include: descriptive statistics, probability, and a study of the methods used to analyze data and make predictions. A variety of application exercises and statistical software are utilized.
Prerequisite: Geometry or Advanced Geometry \& Algebra II,
or Algebra II/Trigonometry
TRIGONOMETRY
3150
Grades 10-12
.5 Credit
This course provides a thorough treatment of trigonometry through the study of trigonometric definitions, applications, graphing, and solving trigonometric equations and inequalities. Emphasis is placed on using connections
between right triangle ratios, trigonometric functions, circular functions, the language of mathematics, logic of procedure, and interpretations of results. Applications and modeling are included.

## Prerequisite: Geometry \& Algebra II

## DISCRETE MATHEMATICS

 3154Grades 10-12 . 5 Credit
This course introduces contemporary mathematics with an emphasis on applications centered on the topics of probability, management science, social science, and measurement theory.
Prerequisite: Geometry or Advanced Geometry \& Algebra II, or Algebra II/Trigonometry
MATHEMATICAL ANALYSIS 3162
Grades 10-12
1 Weighted Credit
This course extends students' knowledge of function characteristics and introduces them to another mode of mathematical reasoning. Students enrolled in Mathematical Analysis have mastered Algebra II concepts and have completed trigonometry. The content of this course serves as an appropriate preparation for a calculus course. Graphing calculators or computer graphing simulators are used.
Prerequisite: Geometry or Advanced Geometry, and Algebra II/Trigonometry or Algebra II and Trigonometry, and recommendation from math teacher with a suggested grade of " $A$ " or " $B$ " in Algebra II or Algebra II/Trigonometry

| DUAL ENROLLMENT PRECALCULUS | DE-MTH161 |
| :--- | ---: |
| (MTH 161 \& 162) | DE-MTH162 |
| Grades 11-12 | 1 Weighted Credit |

MTH 161 - The content of the course presents topics in power, polynomial, rational, exponential, logarithmic functions, and systems of equations.
MTH 162 - The content of the course presents topics in trigonometry, trigonometric applications including Law of Sines and Cosines and an introduction into conics.

Dual Enrollment: Precalculus I and Dual Enrollment: Precalculus II will prepare students for a course in statistics, applied calculus, and courses in calculus with analytic geometry. This is accomplished by providing students with the necessary competencies in algebra, functions, and conics. Students must get a grade of "C" or above in Precalculus I in order to continue into Precalculus II.

## Prerequisite: Algebra II/Trigonometry or Algebra II and Trigonometry

CALCULUS 31601 Grades 10-12 1 Credit
This course provides a thorough study of elementary functions, limits, and integral and differential calculus. Topics include: techniques and applications of the derivative, techniques and applications of the definite integral, and the Fundamental Theorem of Calculus.
Prerequisite: Mathematical Analysis \& IB Math Applications

AP CALCULUS AB
31771
Grades 10-12
1 Weighted Credit
This course is designed to prepare students for the AP Calculus $A B$ exam. Content is centered on properties of elementary functions, limits, and integral and differential calculus. A rigorous treatment of calculus theory and application is presented. Students taking this course are encouraged to take the AP Exam. This course may not be taken concurrently with AP Calculus BC.

## Prerequisite: Mathematical Analysis \& IB Math Applications

AP CALCULUS BC
31772
Grades 10-12
1 Weighted Credit
This course is designed to prepare students for the AP Calculus BC exam. Content includes topics in AP Calculus AB and explores in-depth additional calculus applications, including analysis of derivatives, L'Hôpital's Rule, applications of integrals, techniques of anti-differentiation, and polynomial approximations and series. Students taking this course are encouraged to take the AP Exam. This course may not be taken concurrently with AP Calculus AB.
Prerequisite: Mathematical Analysis \& IB Math
Applications
AP STATISTICS
3192
Grades 10-12
1 Weighted Credit
This course is designed to prepare students for the AP Statistics exam. In the course, students are introduced to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include exploring data, planning a study, anticipating patterns, and utilizing statistical inference. Students taking this course are encouraged to take the AP Exam.
Prerequisite: Algebra II or Algebra II/Trigonometry
AP COMPUTER SCIENCE A
3185
Grades 11-12
1 Weighted Credit
This course offers a further exploration of computer skills and applications using Java programming language. Students taking this course are encouraged to take the AP Exam.
Prerequisite: Algebra II or Algebra II/Trigonometry
AP COMPUTER SCIENCE PRINCIPLES
10160
Grades 11-12
1 Weighted Credit
AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course introduces students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns and computing impacts. The course instructional materials are based on concepts outlined by the College Board and prepares students to take the Advanced Placement Computer Science Principles Examination.
Prerequisite: Algebra I

As graduation requirements vary based on graduation year and diploma type, please refer to page 3 for additional information.

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

## Science Course Offerings \& Suggested Sequences



Science Additional Course Offerings (Grades 9-12)

- Atmospheric Science \& Climatology
- Ecology
- *Biology II/Mammalian Anatomy \& Physiology
- *Biology II/Marine Science
- *AP Biology
- *AP Environmental Science
- *AP Physics
- *AP Chemistry
- *AP Computer Science A

Science Discipline Areas

Biology

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

Earth Science

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


## Chemistry

- Chemistry I
- *AP Chemistry

Physics

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


## MIDDLE SCHOOL COURSE OFFERINGS

## SCIENCE 6 <br> 4105 <br> Grade 6 <br> Year

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

LIFE SCIENCE 7 4115
Grade 7
This introductory biology course is designed to introduce students to the scientific method of inquiry. Hands-on experiences with microscopes and other laboratory equipment enable students to study single and multi-celled organisms and their interrelationships.

## ENGINEERING DESIGN \& PROBLEM SOLVING <br> 982806

Grades 7-8
Semester
This class exposes students to engineering-related careers through hands-on science, technology, engineering, and math activities which emphasize the engineering design process and incorporate high demand and high paying skills. In this course students will complete a career inventory, learn about career clusters and pathways, and demonstrate workplace readiness skills.

| INTRODUCTION TO FORENSIC SCIENCE | 98269 |
| :--- | ---: |
| Grades 7-8 | Semester |

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

## HIGH SCHOOL COURSE OFFERINGS

| ENVIRONMENTAL SCIENCE | 4200 |
| :--- | ---: |
| Grade 9 | 1 Credit |

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

## BIOLOGY I 4310 <br> 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.
Prerequisite: Biology I
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

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.
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 problemsolving techniques, and communicate effectively.

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

PHYSICS I 45101
Grades 10-12 1 Credit

Students build on basic physical science principles through in-depth exploration of applications in the everyday world. Key areas covered in this course include: force and motion, work and energy transformations, wave phenomena and the electromagnetic spectrum, light, electricity, fields, and nonNewtonian physics. The course emphasizes a complex understanding of experimentation, the analysis of data, and the use of reasoning and logic to evaluate evidence. Course objectives stress the practical application of physics in other areas of science, technology, and engineering.

## Prerequisite: Biology I

Co-requisite: Algebra II/Trigonometry or Trigonometry
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.

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

ECOLOGY 4340
Grades 10-12 1 Credit
This applications lab science course teaches the relationship between people and their environment. The course stresses the significance of ecosystems, food, water, air, soil, mineral, and energy resources. Laboratory experiences provide a study of air, soil, and water pollution; food webs; endangered animals and habitats; energy sources; and recycling.
Prerequisite: Biology I
AP BIOLOGY
Grades 11-12
1 Weighted Credit
This course is designed to prepare students for the AP Biology exam and to meet the objectives of general biology courses at the college level. A series of a minimum of eight (8) required experiments for the AP Exam are conducted along with additional lab experiences. Students taking this course are encouraged to take the AP Exam.

## Prerequisite: Biology I \& Chemistry I

AP CHEMISTRY 4470 Grades 11-12 1 Weighted Credit
This course is designed to acquaint the student who has successfully completed Chemistry I with additional concepts covered in general college chemistry courses. Sufficient laboratory experiences are offered to reinforce classroom material, familiarize the student with equipment and chemicals, develop laboratory skills and techniques, and to observe, interpret, and draw conclusions. Students taking this course are encouraged to take the AP Exam.
Prerequisite: Chemistry I

AP ENVIRONMENTAL SCIENCE
42701
Grades 11-12
1 Weighted Credit
The goal of the course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Students taking this course are encouraged to take the AP Exam.
Prerequisite: Algebra I; Completion of two high school laboratory sciences - one credit of Life Science (Biology) and one credit of Physical Science (Earth Science or Chemistry) is also recommended.

AP PHYSICS I
4570
Grades 11-12
1 Weighted Credit
This course is an algebra-based, introductory, college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and handson, inquiry-based laboratory work as they explore a systematic introduction to Newtonian mechanics. Topics include kinematics, forces, work, energy and power, momentum, rotational motion and dynamics, oscillations and fluids.It emphasizes the development of conceptual understanding and problem-solving ability using algebra and trigonometry and vectors. 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 Co-requisite: Mathematical Anaylsis

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 thermodynamics, electricity, magnetism, optics, waves, sound 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

## 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.

## MIDDLE SCHOOL COURSE OFFERINGS

| ACADEMIC LAB | 7896 |
| :--- | ---: |
|  | 78961 |
|  | 78962 |
| Grades 6-8 | Semester |
| These courses are designed to provide specialized instruction |  |
| in basic skill areas using innovative teaching strategies and |  |
| an individualized approach as outlined on the student's IEP. |  |
| In addition to academic skills, social and transition skills are |  |
| addressed. (May be repeated) |  |

APPLIED ENGLISH
00K810
Grades 6-8 Year
This individualized instructional course emphasizes basic reading, listening, speaking, spelling, vocabulary, grammar, and writing as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

## APPLIED HISTORY/SOCIAL SCIENCE 00K850 Grades 6-8 Year

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

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.

| APPLIED MATHEMATICS | $00 K 830$ |
| :--- | ---: |
|  | 31102 |
|  | 31112 |
|  | 31122 |
| Grades 6-8 | Year |

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

| APPLIED SCIENCE | 00 K840 |
| :--- | ---: |
|  | 41052 |
|  | 41152 |
|  | 41252 |
| Grades 6-8 | Year |

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

## PRE-VOCATIONAL TRAINING <br> \& 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

| AC | ICAL ENGLISH |
| :---: | :---: |
| 78965 | Grades 9-12 |
| Grades 9-12 . 5 Credit | 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. |
| 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. |  |
|  | PRACTICAL HISTORY/SOCIAL SCIENCE 2998 |
| ALGEBRA I MATH LAB 31303 | Grades 9-12 |
| Grades 9-12 1 Math Credit | 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. |
| This course is offered to students enrolled in Algebra I who qualify and meet the requirements for Credit Accommodations. |  |

PRACTICAL LIFE SKILLS 78963
Grades 9-12 Year
This individualized instructional course is designed to develop, strengthen, or reinforce basic adaptive skill areas as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

## PRACTICAL MATH 3201

## Grades 9-12

 YearThis is an individualized instructional course of basic mathematical concepts needed for independent living as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.
NOTE: Practical Math does not count as a mathematics credit for a Standard Diploma.

## PRACTICAL SCIENCE <br> 4612

Grades 9-12 Year
This individualized instructional course for identified students with disabilities is designed to develop attitudes, values, and science knowledge that lead to responsible participation in the world of work and to productive citizenship as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.

## PRE-VOCATIONAL SKILLS <br> 78981

Grades 9-12 Year
This individualized instructional course of work adjustment and other skills needed for career awareness and job placement for identified students with disabilities is designed to teach/reinforce work adjustment as outlined on the student's IEP. This course may be offered in a pull-out setting or in a general education setting.
PROJECT EXPLORE 78982
Grades 9-12 Year
This course is designed as an introductory course for students with disabilities to assist in understanding, changing and improving specific work behaviors that will aid in the fulfillment of postsecondary goals. Project EXPLORE is operated through school based enterprises in each of the four high schools. Related functional academic skills are taught in the classroom to support the jobs required for the business. This course is intended to prepare students for Project EXPERIENCE and may be repeated based on individual student needs.

PROJECT EXPERIENCE
78983
Grades 11-12
1 Credit
This program provides community-based employment skills for students with disabilities. Students submit applications to Coordinator of Special Education for Secondary Transition for approval to enroll in this course. The program is based on a supported employment model with adaptations being made for the needs of individual students. Students are supervised at the work site by a Para-educator Job Coach. Program emphasis is on IEP Transition goals, the development of work behaviors, as well as work skills. The Para-educator Job Coach works cooperatively with home school teachers and adult service providers to support each student's Individual Transition Plan, coordinate student programming, and address student needs. This training program has several objectives: job exploration, job preparation and first-hand knowledge of work requirements. The goal is to transition students from school to employment or adult services, according to their individual needs. This course may be repeated based on individual student needs.

## PROJECT SEARCH 78984

Grade 12 Year
This individualized instruction post graduate program includes a full day of functional instruction and job coaching. Students rotate through internships with mentors and job coaches assisting in employment skill development. The goal of this program is competitive employment for student participants. Interested students must go through an application process, including an interview, and meet Business Liaison's employment requirements before being accepted to the program. Additionally, applicants should have completed their affiliation with the high school, yet remain eligible for services with an Applied Studies Diploma. Applications should be submitted to the Coordinator of Special Education for Secondary Transition. This course is for one year only and may not be repeated.

## WORLD LANGUAGES

As graduation requirements vary based on graduation year and diploma type, please refer to page 3 for additional information.

The acquisition of other languages will enable students to communicate across cultures and gain knowledge of other cultures in order to interact effectively within the community and global marketplace.
NOTE: German I-IV and Latin I-IV will be offered virtually beginning in grade 7 for students who do not have Latin or German courses available in their schools.

## MIDDLE SCHOOL COURSE OFFERINGS

## EXPLORATORY WORLD LANGUAGES \& WORLD CULTURES 57001 <br> Grade 6 Quarter

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

## EXPLORATORY FRENCH \& SPANISH 6 57002

## Grade 6

Quarter
This course provides an introduction to French and Spanish culture and languages.
ESL RIGOR 11084
Grades 6-8
Year
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.
EXPLORATORY WORLD LANGUAGES
57003
Grade 7-8
Semester
This course introduces cultural heritage and beginning conversational skills in French and Spanish.

GERMAN I


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 I 5110 SPANISH I 5510
Grades 7-8
1 Credit
Students develop the ability to communicate about themselves and their immediate environment using simple
sentences containing basic language structures. Students learn basic skills in listening, speaking, reading and writing with an emphasis on the ability to communicate orally and in writing in various social and academic settings.

| LATIN I | ( ${ }^{\text {P }} \mathrm{V} 5310$ |
| :---: | :---: |
| Grades 7-8 | 1 Credit |
| Level I Latin is a study of grammatical patterns and vocabulary with introductory translation of Latin stories. |  |
| GERMAN II | ( ${ }_{\text {¢ }} \mathrm{V} 5220$ |
| LATIN II | ( ${ }^{\text {P }} \mathrm{V} 5220$ |
| 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
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

## HIGH SCHOOL COURSE OFFERINGS

## AMERICAN SIGN LANGUAGE I <br> Grades 9-12 <br> V5910

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

| AMERICAN SIGN LANGUAGE II | V5920 |
| :--- | ---: |
| Grades $9-12$ | 1 Credit |

Grades 9-12
1 Credit
In this course, students will build upon the skills that were taught in American Sign Language I and continue to increase their ability to comprehend and respond with increasing accuracy to expressive American Sign Language (ASL). ASL II provides basic instruction in production and comprehension, vocabulary, and grammar, and eventually leads to increased communicative and cultural proficiency in ASL. Emphasis is placed on the progressive development of expressive and receptive skills. The culture, history, current events, and traditions of the deaf community are introduced on the appropriate level through selected readings, visual recordings, and other authentic materials. Students will be able to converse with another student or individuals within the deaf community, with emphasis on appropriate language used in common communication settings.

## Prerequisite: American Sign Language I

AMERICAN SIGN LANGUAGE III
V5930
Grades 9-12
1 Credit
In this course, students will build upon the skills taught in ASL II and continue to increase their ability to comprehend and respond with increasing accuracy to expressive American Sign Language. ASL III provides advanced instruction in production and comprehension, vocabulary, and grammar, leading to increased communicative and cultural proficiency in ASL. Emphasis is placed on the progressive development of expressive and receptive skills. The culture, history, current events, and traditions of the Deaf community are expounded upon through selected readings, visual recordings, and other authentic materials. Visually attending, signing, individual feedback, interactive activities and group activities are designed to instruct, reinforce, connect language skills, and develop signacy. This course includes applications, problem solving, higher-order thinking skills, and performance-based and project-based assessments. Students will be able to converse with another student or individuals within the Deaf community with emphasis on appropriate language used in common communication settings. This course aligns with the Virginia Department of Education's Framework for Instruction in American Sign Language in Virginia's Public Schools.
Prerequisite: American Sign Language I and American Sign Language II (required)
ENGLISH AS A WORLD LANGUAGE I 5710
Grades 9-12 1 Credit
This course is designed to help English Learners with proficiency in vocabulary development, grammar, word order, and parts of speech. Students practice oral communication, and develop writing skills within the context of home life, student life, leisure time, and post-secondary endeavors.

ESL RIGOR
15153
Grades 9-12 1 Credit
The course provides high school English Learners with strategies and skills to build academic vocabulary, comprehension, and content knowledge through reading and analyzing a variety of non-fiction texts.

| GERMAN I | 5210 |
| :--- | :--- | :--- |
| FRENCH I | 5110 |
| SPANISH I | 5510 |
|  |  |
| 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.

GERMAN II 由 5220 FRENCH II 5120 SPANISH II 5520

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

|  | © |
| :--- | ---: |
| 5230 |  |
| GERMAN III | 5130 |
| FRENCH III | 5530 |
| SPANISH III | 1 Credit |

Students continue to develop proficiency in all four language skills: listening, speaking, reading, and writing, with an emphasis on the ability to communicate orally and in writing at a higher level with minimal use of English in the classroom. Emphasis is on communication using more complex sentences and language structures within the cultural context of home life, student life, leisure time, vacation and travel.
Prerequisite: Level II of selected World Language
LATIN I
5310
Grades 9-12 1 Credit
Level I Latin is a study of grammatical patterns and vocabulary with introductory translation of Latin stories.

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

| ARABIC III |
| :--- |
| MANDARIN CHINESE III |
| Grades 10-12 |
| Students continue to develop proficiency in all four language |
| skills: listening, speaking, reading, and writing, with an |
| emphasis on the ability to communicate orally and in writing |
| at a higher level with minimal use of English in the classroom. |
| Emphasis is on communication using more complex |
| sentences and language structures within the cultural |
| context of home life, student life, leisure time, vacation and |
| travel. |
| NOTE: Virtual Virginia may not offer Arabic IV yearly. As <br> such, this language will not fulfill the Honors program <br> requirement. <br> Prerequisite: Level II of selected World Language <br> ENGLISH AS A WORLD LANGUAGE II <br> Grades 9-12 |

This course supports 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: Level I of a World Language or Screener Assessment Score

GERMAN IV

## Prerequisite: Level III 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

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.

## Prerequisite: Mandarin Chinese IV/Teacher Recommendation

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. Emphasis is placed on listening to native speakers, reading periodicals with more advanced vocabulary and grammatical structures, writing compositions several paragraphs in length, and orally communicating facts and ideas using all tenses and moods with reasonable fluency. The primary language spoken at this level is French. Students taking this course are encouraged to take the AP Exam.

## Prerequisite: French IV/Teacher Recommendation

AP GERMAN 5270
Grades 11-12
1 Weighted Credit
AP German is designed to increase students' knowledge of German culture and language; it is also designed to prepare students for the AP German Language and Culture exam. This course will integrate all three communicative modes: interpersonal (oral and written), interpretive (oral and written), and presentational (oral and written); it will do this through the use of authentic materials. When communicating, students will demonstrate an understanding of the German culture, will incorporate interdisciplinary topics (Connections), will make comparisons between English and German and between German and American cultures (Comparisons), and will use German in real-life settings (Communities). Students will show an awareness of practices, perspectives, and cultural products, both tangible and intangible.
Prerequisite: German IV. Native speakers are evaluated after level 3.

AP LATIN LITERATURE
V5380
Grades 11-12
1 Weighted Credit
This course is designed to prepare students to take the AP exam for college credit. Students will translate accurately from Latin into English the poetry or prose they are reading, and will demonstrate a grasp of grammatical structures and
vocabulary. Stylistic analysis is an integral part of the advanced work in AP Latin Literature as students will read and interpret poetry and prose at sight. Students will study and analyze passages from the poetry of Catullus paired with selections from Ovid. Students taking this course are encouraged to take the AP Exam.

## Prerequisite: Latin III

AP SPANISH LANGUAGE AND CULTURE
5570

## Grades 11-12 <br> 1 Weighted Credit

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

AP SPANISH LITERATURE AND CULTURE 5506

## Grades 11-12

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

## LATIN IV

5340
Grades 11-12
1 Weighted Credit
Level IV Latin continues the study of Roman prose and poetry within the context of Roman history and its contributions to our modern world.
Prerequisite: Latin III
MANDARIN CHINESE IV
V5840
Grades 11-12
1 Weighted Credit
Students continue to develop and refine their proficiency in all four language skills: listening, speaking, reading, and writing, with an emphasis on the ability to interact orally and in writing. They communicate on a variety of topics using more complex language structures. At this level, students comprehend the main ideas of authentic materials and are able to develop original written materials on familiar topics. Students gain a deeper understanding of cultural perspectives, practices, and products.
Prerequisite: Level III of selected World Language

## SPECIALTY PROGRAMS COURSE OFFERINGS

## GOVERNOR'S SCHOOL FOR SCIENCE \& TECHNOLOGY (GSST)

The Governor's School for Science and Technology (GSST) at New Horizons Regional Education Center is operated by Gloucester, Hampton, Newport News, Poquoson, Williamsburg-James City County, and York County Schools. Students enrolled in the program select one of three academic strands as their focus for their Governor's School experience. Each strand provides a unique emphasis on both the science subject matter and associated career fields. In addition, each strand will foster research through a Research Methodolgy 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 calculusbased physics. Prerequisites: Biology, Chemistry, and math minimum of Precalculus.

## 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. Prerequisites: Biology, chemistry, and math minimum of Algebra II/Trig. Recommended students take physics at their zoned school.

## Computational Science Strand

The Computational Science Strand builds conceptual knowledge and problem-solving skills in the areas of software development, modeling and simulation of discrete and continuous systems and topics in non-calculus based physics. Prerequisites: Biology, chemistry, and math minimum of Algebra II/Trigonometry.


## GSST COURSE OFFERINGS

## CALCULUS-BASED ENGINEERING PHYSICS I 4571-1

Grade 11
2 Weighted Credits
This is a mathematically rigorous course that investigates the principals of classical mechanics and thermodynamics. Includes kinematics, Newton's laws of motion, work, energy, momentum, rotational kinematics, dynamics and static equilibrium, elasticity, gravitation, fluids, simple harmonic motion, calorimetry, ideal gas law, and the laws of thermodynamics. The course covers caluculus-based introductory physics with laboratory sequence. It provides the student with a broad understanding of the general concept and principles of the physical universe, and prepares the student for advanced study in physical sciences and engineering through development of skills in problem solving, critical thinking and quantitative reasoning, and an understanding of the methods of scientific inquiry and experiments. The course is the first year of a two-year calculus-based introductory physics course with laboratory sequence. Prerequisite: Calculus
COLLEGE MODERN PRE-CALCULUS
3162
Grade 11
1 Weighted Credit
This course is an intensive, rigorous approach to mathematics designed to prepare students for college calculus. First semester, students will focus on the algebraic and geometric properties of polynomial, rational, exponential, logarithmic, and trigonometric functions, and engage in discussions about how these models are represented in the real world. Second semester, students will learn the analytic properties of trigonometric functions and geometric conics, as well as learning the properties of polar coordinates, vectors, matrices, parametrics, and sequences and series. The course concludes with an introduction to calculus.

## COMPUTATIONAL PHYSICS

4525
Grade 11
2 Weighted Credits
Teaches fundamental principles of physics and scientific programming in Python. Based on college-level Physics 201 and 202, the course covers forces, Newton's laws of motion, conservation laws, gravity, properties of matter, oscillations, optics, electricity, magnetism, and special relativity. In the first semester, students study college physics and Python as two separate subjects. Then, during the second semester, programming skills are applied to the solution of physics problems. The concepts are reinforced through weekly labs, hands-on demonstrations, and projects.

## Prerequisite: Algebra II/Trigonometry

RESEARCH METHODOLOGY AND ETHICS 4610
Grade $11 \quad 1$ Weighted Credit
This year-long course provides junior STEM students with knowledge and experiences on how to conduct scientific researches and engineering projects. Students will study contemporary issues in scientific research while conducting independent research projects outside of class. Students are encouraged to select projects consistent with their strand or career goals. Course topics include research design
strategies, data analysis and representation (with and without computer-assistance), norms of conduct for ethical research behavior, and the historical basis for current research regulations, among others. All students must conduct a review of the primary literature to support their research design assumptions, prepare and present a plan of their proposed research for institutional review and approval, conduct their studies and report their findings via formal technical paper as well as oral presentation. All students present posters in our junior science symposium, judged by professionals in various fields. Participation in regional science and engineering fairs are highly encouraged; learning fundamental knowledge of the engineering method, design for human use, and entrepreneurship are requisite skills today to perform research, problem-solve, innovate, and create opportunities in the real world. The engineering design content of the course requires that students first understand and then continuously improve their skills in the engineering method, the fundamentals of design for human use, and the mindset and skills of entrepreneurship.
COLLEGE CALCULUS 3177
Grades 11-12
1 Weighted Credit
This course covers two semesters of university-level calculus for scientists and engineers, emphasizing understanding and application. The first semester covers limits and continuity of functions, techniques and applications of differentiation, and introduces integration. The second semester covers applications and advanced techniques of integration, differential equations, sequences and series, and analytical geometry. Upon completion of this course, students will understand both the geometric and rate of change analyses of differential and integral calculus. Students will apply their understanding of calculus to modeling real-world situations mathematically and be able to solve those mathematical models. NOTE: Successful completion of this course will prepare students to enroll in multivariable calculus and linear algebra.
$\begin{array}{lr}\text { MULTIVARIABLE CALCULUS } & 3178 \\ \text { Grades 11-12 } & 1 \text { Weighted Credit }\end{array}$
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 3space, optimization of functions in several variables, and use of integral calculus to study area, volume, and other applications. The semester concludes with an examination of the calculus of vector fields.
Prerequisite: GSST College Calculus or completion of AP Calculus BC with a score of 5 on the exam, or a score of 4 and permission of the instructor.

In linear algebra, students use matrix theory to solve systems of linear equations and apply knowledge of the determinant to describe the nature of those solutions. The algebra and applications of linear transformations will be studied in both real and general vector spaces. Students will calculate eigenvalues and eigenvectors of linear transformations and use these to diagonalize linear systems. Applications include best fit functions and solutions of systems of 1st order, linear differential equations.
Prerequisite: GSST College Calculus or completion of AP Calculus BC with a score of 5 on the exam, or a score of 4 and permission of the instructor.

## ADVANCED BIOLOGICAL ANALYSIS

4371
Grade 12
2 Weighted Credits
In the fall semester, topics in the field of cell and molecular biology will be addressed, some of which include the roles of biological macromolecules, cellular organization and metabolism, and cellular processes such as communication, reproduction, respiration, and photosynthesis. In addition, mechanisms of inheritance and control of gene expression will be examined, followed by a study of developments in biotechnology. In the spring semester, evolution, phylogeny, and the diversity of living things will be discussed, with a special focus on the anatomy and physiology of plants and animals. The laboratory experience is a major component of the course, allowing students the opportunity to use technologies applied in research as well as medical and forensic laboratories while designing their own experiments and analyzing and interpreting their results. The anatomy and physiology of various vertebrate organ systems will be compared while dissecting animals in the laboratory.
NOTE: Advanced Biological Analysis is a college-level course that examines the topics typically studied during the first year of college by biology majors.

## Prerequisite: Advanced Chemical Analysis

## CALCULUS-BASED ENGINEERING PHYSICS II: MODERN PHYSICS AND APPLIED PHYSICS: <br> ENGINEERING DESIGN PRINCIPALS 45712

Grade 12
2 Weighted Credits
This second-year calculus-based phsyics course builds upon the foundational principles established in the first year, exploring advanced topics in a cohesive manner. The course integrates theoretical understanding with practical application, emphasizing problem-solving skills and conceptual mastery. Physics II covers fluid mechanics and thermodynamics, electricity and magnetism, optics, and modern physics, extending the knowledge gained in the first semester. Adopting a practical approach inspired by projectbased engineering experiences, the course aims to develop essential engineering skills. Students engage in computer programming in C++ with a focus on object-oriented programming, participate in hands-on design and troubleshooting of solid-state electronics and digital systems, utilize industry-standard computer-aided design software, and work with additive manufacturing fabrication systems. Throughout the semester, students tackle
challenging keystone projects following the earlier-described approach. They identify authentic engineering problems, propose innovative solutions, obtain client approval, and proceed to design, build, and demonstrate their final products. These projects involve professional interactions with esteemed leaders from organizations such as NASA, SNAME, and the Jefferson Labs.
Prerequisite: Engineering Physics I, Calculus
COMPUTATION SCIENCE: ENGINEERING
DESIGN, INNOVATION \& ENTREPRENEURSHIP
4550 Grade $12 \quad 2$ Weighted Credits Learning fundamental knowledge of design innovation and science disciplines and the requisite skills to perform research, problem-solve, innovate, and create opportunities in the real world are the overarching goals of this course. The course also includes a series of project-based learning experiences to help the student acquire and apply the skills, tools, and best practices of the STEM profession. Learning tools include, for example, industry standards and research modeling and simulation software, hands-on design and troubleshooting of solid state systems, and industry standard computer-aideddesign software, and additive manufacturing fabrication systems. In challenging keystone projects, students are tasked to identify real-world engineering problems or opportunities, to propose and seek client approval for their unique solutions or innovations, then to design, build, and demonstrate their final products.

## Prerequisite: Computational Physics and Pre-Calculus

DIFFERENTIAL EQUATIONS
3179
Grade 12
1 Weighted Credit
This year-long course introduces the methods, theory, and applications of differential equations. The course introduces first-order, second and higher-order linear equations, series solutions, linear systems of first-order differential equations, and the associated matrix theory.

## Prerequisite: Successful completion of GSST College Calculus

HONORS RESEARCH \& MENTORSHIP
46121
Grade 12
2 Weighted Credits
Students explore advanced topics in scientific research with an emphasis on scientific literature and methods leading to the preparation of a research proposal in conjunction with the mentorship work. Students will prepare research documents using LaTeX for professional documents preparation. Mentorship involves students in concentrated research or project development in firms and laboratories throughout the Tidewater region. Students are supervised by mentors who are scientists, engineers, physicians and other professionals. Students plan, implement, document and present research or projects chosen in consultation with their mentors. Students refine their research and presentation techniques, problemsolving, critical thinking and leadership skills. Students gain proficiency with statistical software like Excel for presentation and analysis of data. Students will explore the new and young field of data science at an introductory level that provides a broad overview of the use and application of data science in daily life. Moreover, students will learn to think critically with
regard to the ethics of data collection and analysis in research, industry, and government. Programming will be an integral part of the course material and assignments. Students will learn how to program in R, a program for statistics and data science. Overall, topics that are covered include introductory statistics, use and ethics of data analysis, collection, and use, and programming of data analysis programs in $R$.

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

## INTERNATIONAL BACCALAUREATE (IB) DIPLOMA

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

The International Baccalaureate (IB) Diploma Programme at York High School in grades 11 and 12 is an internationally recognized course of study. The rigorous coursework is designed to provide students with a well-rounded education and to facilitate geographic and cultural mobility.
While the International Baccalaureate (IB) Programme provides a two-year curriculum, students are encouraged to participate in Pre-Diploma classes in grades 9 and 10.
IB courses are identified as SL (Standard Level), requiring a minimum of 150 instruction hours, or HL (Higher Level), requiring 240 instructional hours.

## IB Course Offerings \& Suggested Sequences



## IB DIPLOMA PROGRAMME COURSE OFFERINGS

## GROUP 1: STUDIES IN LANGUAGE \& LITERATURE

IB LANGUAGE A: LANGUAGE AND LITERATURE -<br>ENGLISH (HL)<br>IB 1150<br>Grade 11<br>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 LANGUAGE B: FRENCH (HL)
IB 51421
IB LANGUAGE B: FRENCH (SL)
IB 5142
Grade 11
1 Weighted Credit
This course continues the study of grammar and culture of previous levels while focusing on language acquisition and development. Students explore significant themes through a variety of text types, which include both literary and nonliterary selections (e.g. short stories, extracts from novels, newspapers, magazines, other media sources). Course expectations include a systematic study of grammar, text handling, oral components, and written assessments geared toward the successful completion of Internal Assessments and IB Examinations. Particular attention is paid to intertextual analysis and writing around themes of social relationships, communication and media, and global issues. The second year of this course is competed in 12th grade.
NOTE: At the HL level, students prepare for additional IB assessments which focus on literary interpretation.

```
IB LANGUAGE B: SPANISH (HL)
IB 55421 IB LANGUAGE B: SPANISH (SL)
IB 5542
Grade 11
1 Weighted Credit
```

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

IB SPANISH AB INITIO 11
IB 55521
Grade 11
1 Weighted Credit
This language acquisition course is designed for students with no previous experience in or very little exposure to the target language. Students develop their receptive, productive, and interactive skills while learning to communicate in Spanish in familiar and unfamiliar contexts. Students develop the ability to communicate through the study of language, themes, and texts.

IB LANGUAGE B: FRENCH (HL)
IB 51621
IB LANGUAGE B: FRENCH (SL)
IB 5162
Grade 12
1 Weighted Credit
This second-year course continues the curriculum from IB Language B: French (HL) and IB Language B: French (SL) in grade 11.
NOTE: At the HL level, students prepare for additional IB assessments which focus on literary interpretation.

| IB LANGUAGE B: SPANISH (HL) | IB 55621 |
| :--- | ---: |
| IB LANGUAGE B: SPANISH (SL) | IB 5562 |
| Grade 12 | 1 Weighted Credit |

Grade 121 Weighted Credit
This second-year course continues the study of grammar and culture of previous levels while focusing on language acquisition and development. Students explore significant themes through a variety of text types, which include both literary and non-literary selections (e.g. short stories, extracts from novels, newspapers, magazines, other media sources). Course expectations include a systematic study of grammar, text handling, oral components, and written assessments geared toward the successful completion of Internal Assessments and IB Examinations. Particular attention is paid to inter-textual analysis and writing around themes of social relationships, communication and media, and global issues
NOTE: At the HL level, students prepare for additional IB assessments which focus on literary interpretation.

IB SPANISH AB INITIO 12
IB 55522
Grade 12
1 Weighted Credit
This second-year course continues the curriculum from IB Spanish Ab Initio 11
Prerequisites: IB Spanish Ab Initio 11

GROUP 3: INDIVIDUALS AND SOCIETIES
IB 20TH CENTURY WORLD HISTORY (HL) IB 2360 Grade $11 \quad 1$ Weighted Credit
This course focuses on the history of the Americas and topics in 20th century world history. United States and Latin American history are covered from the colonial period to the present. World history topics include: 20th century wars, the rise of single-party states, and the Cold War. External and internal assessments in fulfillment of the IB Diploma Programme are collected through a research study. This course also prepares students for the IB Examination in Group 3, the external assessment components. The second year of this course is completed in grade 12.

## Prerequisite: AP World History or AP European History

| IB 20TH CENTURY WORLD HISTORY (HL) $\quad$ IB 2361 |
| :--- |
| Grade $12 \quad 1$ 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, university versus diversity, equilibrium within systems, and evolution. Topics covered during the first year of this course include: scientific method, life processes, human physiology, genetics, ecology and plant science, and evolution. During the second year, students complete two of the following options: evolution, neurobiology and behavior, applied plant and animal science, ecology and conservation, or human physiology. The Group 4 project and the required 65 hours of lab work for internal assessment are completed in this course. The second year of this course is completed in grade 12.
IB BIOLOGY (HL)
IB 4390
Grade 12
1 Weighted Credit
This course continues the curriculum from IB Biology ( HL ) in grade 11.
Prerequisite: IB Biology (HL)

IB CHEMISTRY (HL)
IB 4480
Grade 11
1 Weighted Credit
This course is designed to meet the objectives of the IB Chemistry Programme. At the core of the course are eleven topics: quantitative chemistry, atomic structure, periodicity, bonding, energetics, kinetics, equilibrium, acids and bases, oxidation, organic chemistry, and measurement and data processing. Additional focus is given to five topics chosen from atomic structure, periodicity, bonding, energetics, kinetics, equilibrium, acids and bases, oxidation, or organic chemistry. During the second year, students complete two of the following options: modern analytical chemistry, human biochemistry, chemistry in industry and technology, medicine and drugs, environmental chemistry, food chemistry, and further organic chemistry and conservation. The Group 4 project and the required 50 hours of lab work for internal assessment are completed in this course. The second year of this course is completed in grade 12.

IB CHEMISTRY (HL)
IB 4490
Grade 12
1 Weighted Credit
This course continues the curriculum from IB Chemistry (HL) in grade 11.
Prerequisite: IB Chemistry (HL)
IB PHYSICS (HL)
IB 45901
Grade 11
1 Weighted Credit
This course is designed to meet the objectives of the IB Physics Programme and is the first year of a two-year course. Topics covered include measurement, mechanics, thermal physics, waves, electricity and magnetism, and quantum and nuclear physics. During the second year, students complete one of the following options: relativity, engineering physics, imaging, or astrophysics. Extensive laboratory investigations are part of instruction. The Group 4 project and the additional 50 hours of lab work for internal assessment are completed during this course. Instruction is geared toward the successful completion of IB Diploma requirements and IB Examination preparation. The second year of this course is completed in grade 12.

IB PHYSICS (HL)
IB 45902
Grade 12
1 Weighted Credit
This course continues the curriculum from IB Physics ( HL ) in grade 11.
Prerequisite: IB Physics (HL)

## GROUP 5: MATHEMATICS \& COMPUTER SCIENCE

IB MATHEMATICS (SL) IB 31951
Grade 11
1 Weighted Credit
This course is for students who enjoy developing their mathematics to become fluent in the construction of mathematical arguments and develop strong skills in mathematical thinking. They will explore real and abstract applications of these ideas, with and without technology. This course includes topics that are both traditionally part of a pre-university mathematics course (for example, functions, trigonometry, calculus) as well as topics that are amenable to investigation, conjecture and proof, for instance the study of sequences and series. There is also a strong emphasis on
the ability to construct, communicate and justify correct mathematical arguments. Substantial personal research in the form of a project is a requirement of the course. Students who complete IB Math (SL) may take AP Calculus, AP Stats, Probability and Statistics, or Calculus their senior year. Prerequisite: Math Analysis

IB MATH APPLICATIONS
IB 3162

## Grade 11

1 Weighted Credit
This course emphasizes the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course also includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. The course makes extensive use of technology to allow students to explore and construct mathematical models. IB Math Applications will develop mathematical thinking, often in the context of a practical problem and using technology to justify conjectures. Substantial personal research in the form of a project is a requirement of the course. Students who complete IB Math Applications may take Probability \& Statistics, AP Statistics, Math Analysis, Calculus, or AP Calculus AB.
Prerequisite: Algebra II/Trigonometry
GROUP 6: THE ARTS
IB THEATRE (SL)
IB 1431
Grade 11
1 Weighted Credit
This course engages students in critically studying theater of diverse cultures and historical periods, developing as reflective practitioners of a variety of aspects of theatrical performance, and working both independently and collaboratively to devise and produce original theatrical interpretations and/or productions. Course expectations include a variety of assignments geared toward completing IB Internal and External Assessments. IB assessments include a substantial research investigation, writings about practical performance aspects, and a collaborative original piece of theater.
Prerequisite for students not in the full Diploma Programme: Drama II or instructor permission

## THEORY OF KNOWLEDGE

IB THEORY OF KNOWLEDGE (TOK)
IB 1197

## Grade 12

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

## NAVAL SCIENCES (THS \& YHS)

## HIGH SCHOOL COURSE OFFERINGS

| NAVY JROTC I (NJROTC) | 79130 |
| :--- | ---: |
|  | 79131 |
| Grades 9-12 Credit |  |
| This course is a study of basic naval orientation, citizenship |  |
| and government, leadership skills, wellness and fitness, and |  |
| first aid. The curriculum includes two areas of study: (1) the |  |
| Cadet Field Manual with an introduction to military drill, |  |
| uniforms, military customs and courtesies, and (2) the |  |
| Introduction to NJROTC with the history of JROTC, |  |
| citizenship, and laws-authority-responsibility. Cadets will |  |
| study leadership skills, behavioral sciences, motivation and |  |
| relationships. Cadets will have a balanced program of |  |
| instruction in wellness including building health skills |  |
| through exercise, nutrition, and lifetime planning. |  |
| NOTE: Students in this course have an opportunity to take an |  |
| industry certification test. |  |
| NOTE: Navy JROTC I may fulfill the requirements for Health |  |
| and PE 9. |  |
| NAVY JROTC II (NJROTC) |  |
|  |  |
| Grades 10-12 | 79160 |
| This course expands cadets' knowledge and experience |  |
| beyond the introduction to NJROTC class. The curriculum |  |
| includes two areas of study: (1) Maritime History with studies |  |
| of war at sea, the US Navy, strategy and tactics, and (2) the |  |
| Nautical Sciences with studies of maritime geography, and |  |
| oceanography-meteorology-astronomy. The Curriculum |  |
| includes: further study of the various facets of leadership, |  |
| behavioral sciences, physical fitness and healthy lifestyles. |  |
| Navy JROTC II and III are offered in alternating years as a |  |
| combined 10th and 11th grade class. |  |
| NOTE: Students in this course have an opportunity to take an |  |
| industry certification test. |  |
| Prerequisite: Navy JROTC I or transfer from other JROTC |  |
| program |  |


| NAVY JROTC III (NJROTC) | 79180 |
| :--- | :--- |
|  | 79181 |
| Grades 11-12 | 1 Credit |

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

## Prerequisite: Navy JROTC II or transfer from other JROTC program

NAVY JROTC IV (NJROTC) 79190

Grade 121 Credit
This course is the continued study of the more effective leadership and communication skills. The curriculum includes two areas of study: (1) Leadership Theory with studies of ethics and morals, and leadership case studies, and (2) the Leadership Laboratory with possible assignments to position of authority and responsibility of other cadets. Independent study by individual cadets in the areas of their interest in naval and leadership topics are required as specified by the Navy JROTC Instructors are included in this course. Assignment to a leadership laboratory position is voluntary; however, all cadets will complete the required readings and conduct an independent study program that includes presentation to the class.
NOTE: Students in this course have an opportunity to take an industry certification test.
Prerequisite: Navy JROTC III, SNSI approval, or transfer from other JROTC program

## NEW HORIZONS REGIONAL EDUCATION CENTER

## High school students in the York County School

 Division who have completed applicable prerequisites are eligible to apply to take Career \& Technical Education courses offered through the New Horizons Regional Education Center (NHREC).NOTE: Fees may be required for some Career \& Technical Education (CTE) course offerings. Student-selected verified credit may be earned for some CTE course offerings.

## CAREER CLUSTER: CONSTRUCTION TECHNOLOGY

# BUILDING CONSTRUCTION I, II \& III 

Grades 11-12
3 Credits

## Location: Woodside Lane

This program is foundational for achieving high-level; construction industry skills that can result in an exciting and lucrative career. With an emphasis on safety, students are taught to use hand and power tools, cut stock, apply construction math, interpret blueprints, and understand basic rigging. Students will become proficient in identifying and installing types of residential construction components to frame walls, floors, and ceilings, roofs, trusses, interior \& exterior doors, windows, and stairs. Students will explore specialized areas of carpentry, such as building decks, porches, and chairs as well as energy efficiency and green technology. Exploration of licensure requirements and entrepreneurial opportunities is emphasized. All students will obtain the required Construction Industry OSHA saftey credential.
NOTE: Students in this course have an opportunity to take an industry certification test: NCCER-Core \& Level I. All students will obtain the required Construction Industry OSHA 10 safety credential.
Prerequisite: Minimum 1.5 GPA; understanding of measurements and fractions, , and successful completion of Algebra I and completion of 10th grade English with a grade of "C" or above
ELECTRICITY AND RENEWABLE ENERGY I \& II 8533 8534
Grades 11-12 3 Credits

## Location: Woodside Lane

Students develop fundamental electrical skills to help them prepare for a career in the installation, operation, maintenance, and repair of residential, commercial, and industrial systems. Students will engage in hands-on activities in a lab setting. They will be introduced to residential wiring of houses and apartments; commercial wiring of retailers, schools, businesses, and hospitals; and industrial wiring of factories. Students will also study electrical theory and mathematical problems related to electricity, apply requirements of the National Electrical Code (NEC) Book, select and install conductors, examine lighting, communication, and power systems, and work with conduit and raceways, panelboards, switchboards, grounding systems, and generators. Students will also study alternative renewable energy sources including wind
generators, solar panels, \& communication cabling and wiring. 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: NCCER Core \& Level I; OSHA 10 Certification
Prerequisite: Minimum 1.5 GPA; completion of Algebra I and 10th grade English with a grade of "C" or above
HVAC (HEATING, VENTILATION, 8503
AIR CONDITIONING \& REFRIGERATION) 8504
Grades 11-12
3 Credits

## Location: Woodside Lane

In this one-year program, students are taught to professionally install, repair, and maintain the operating conditions of heating, ventilation, air conditioning, and refrigeration (HVACR) systems. Students work with piping and tubing, study the principles of heat and electricity and install duct systems. Students also explore emerging technologies, U.S. Environmental Protection Agency (EPA) regulations, energy conservation techniques, and systems with exempt and non-exempt refrigerants. Successful completion of this program will prepare students for a career as a HVACR technician.
NOTE: Students in this course have an opportunity to take an industry certification test: EPA Examinations; OSHA 10 Certification; H.E.A.T Assessment
Prerequisite: Minimum 1.5 GPA; mechanical aptitude, successful completion of 10th grade English and Algebra I with a grade of "C" or above

## PLUMBING AND PIPEFITTING I \& II <br> 8551

8552

Grades 11-12
3 Credits

## Location: Woodside Lane

This program introduces students to the plumbing profession and practices mathematical calculations required for plumbing systems. Students will read, interpret, and create drawings of piping systems. They learn to safely assemble, install, and repair pipes and fittings, and are introduced to installing fixtures of heating, water, and drainage systems, according to specifications and plumbing codes. Marine Pipefitting is taken during the 4th quarter of the course. Students will learn to read blueprints and learn ship systems. Students will obtain the skills needed to be top competitors for careers at any of the shipyards in the region.

NOTE: Students in this course have an opportunity to take an industry certification test: NCCER - Core \& Plumbing Level I; OSHA 10 Certification; OSHA Marine Certification
Prerequisite: Minimum 1.5 GPA; completion of 10th grade English and Algebra I with a grade of "C" or above

# CAREER CLUSTER: ENGINEERING/MANUFACTURING TECHNOLOGY 


#### Abstract

MECHATRONICS I, II \& III 8554 8555 8556 Grades 11-12 3 Credits

\section*{Location: Butler Farm}

This is a one-year course in which students will learn and build knowledge of mechatronic systems. These systems are comprised of mechanical, electrical, and software systems, and typically include sensors feeding data to a computer/controller, which determines how to energize a motor/actuator. Mechatronics systems form the foundation of robotics, automation, and advanced manufacturing (such as 3D printing). Mechanical, electrical, and pneumatic/hydraulic systems are explored as well as relevant computer technologies. Students will apply principles related to pneumatic, electro-pneumatic, and hydraulic control circuits as well as basic digital logic and programmable logic controllers in a complex mechatronic system. This class is dual enrolled with VPCC for 20 college credits, and students may earn a College Certificate of Studies with VPCC credits transfer into the VPCC Mechanical Engineering Technology Degree. NOTE: This program offers dual enrollment college credit through VPCC. Student must have minimum GPA of 3.0 to show English and math proficiency in order to receive dual enrollment credit; completion of Algebra II with a grade of " $C$ " or above or completion of Algebra I and Geometry with a grade of " $B$ " or above. Industry Certification - SiemensMechantronics Systems Certification; FESTO Industry 4.0 Certifications Prerequisite: Successful completion of 10th grade English; students must take and pass the VPCC Virginia math and English placement test before acceptance into this course.


| VIRTUAL MACHINING AND DESIGN I \& II | 8539 |
| :--- | ---: |
|  | 8540 |
| Grades 11-12 | 3 Credits |

## Location: Butler Farm

This is a one-year course that provides an introduction to students to use precision tools and instruments to include operation and setup of various types of precision grinders, milling machines, and drill presses. There is also a focus on computer numerical control program writing, setup, and operation for lathe and milling machines. Students who successfully complete the Precision Machining program will be eligible for a VPCC Precision Machining Career Studies Certificate upon graduation.
NOTE: This program offers dual enrollment college credit through VPCC. Student must have minimum GPA of 3.0 to show English and math proficiency in order to receive dual enrollment credit; completion of Algebra II with a grade of "C" or above or completion of Algebra I and Geometry with a grade of " $B$ " or above
Industry Certification - National Institute of Metalworking Skills Certifications; NOCTI - Machining
Prerequisite: Successful completion of 10th grade English; students must take and pass the VPCC Virginia math and English placement test before acceptance into this course.

WELDING I \& II 8672 8673

## Grades 11-12

3 Credits Per Year

## Location: Butler Farm

This is a two-year, three-period course in which students learn to use shielded metal arc welding equipment to weld surface, fillet and prove 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: American Welding Society (AWS), NOCTI-Welding; OSHA 10 Certification
Prerequisite: Minimum 2.0 GPA; good hand-eye coordination, vision, and manual dexterity

# CAREER CLUSTER: HEALTH SCIENCE 

| DENTAL CAREERS I \& II | 8328 |
| :--- | ---: |
|  | 8329 |
| Grades 11-12 | 8 Credits Per Year |
| Location: Butler Farm |  |
| Students in this two-year program are preparing to perform |  |
| all the tasks of a dental assistant. These tasks include: |  |
| exposing, processing, and mounting X-rays, and preparing |  |
| materials for various procedures including impressions, |  |
| removing sutures, placing topical anesthetics, and making |  |
| diagnostic study models for alginate impressions. This |  |
| program also gives students a foundation to pursue a Dental |  |
| Hygienist post-secondary degree through a two or four-year |  |
| college or university.Industry Certification - Radiation Health |  |
| \& Safety Examination; National Occupational Competency |  |
| Testing Institute (NOCTI) - Dental Assisting Exam |  |
| Prerequisite: Minimum 3.0 GPA; must have good hand/eye |  |
| coordination and manual dexterity, completion of Biology I |  |
| with a grade of "C" or above. Mandatory clinical experience |  |
| for all Dental II students. Clinical experience may require |  |
| drug testing and a Covid-19 vaccination and /or testing. |  |

MEDICAL ASSISTANT I \& II 8345 8346
Grades 11-12
3 Credits

## Location: Butler Farm

This one-year introductory program is designed to give an overview of the various components of the medical assistants' professional responsibilities. This course is intended for students who are preparing for many of the exciting, challenging, and rewarding careers in the healthcare field. Students will be prepared to assist physicians by performing functions related to both business administration and clinical duties of a medical office. Clinical instruction includes taking vital signs, the preparation of the patient for examination and treatment, routine laboratory procedures, and the use of the ECG machine. These opportunities require people who want to operate in a hightech fluid environment filled with constant challenges and service commitments. Industry Certification - National Occupational Competency Testing Institute (NOCTI) - Medical Assisting Exam; National Certified Clinical Medical Assistant Exam
Prerequisite: Minimum 3.0 GPA, completion of 10th grade English with a grade of "C" or above, and completion of Biology I with a grade of " $B$ " or above. Students enrolled in a Governor's STEM Health Academy will be given priority within their school division for admission to this program. Students must be 17 years old before April 30th to be eligible to take the national clinical medical assistant certification exam. Current TB skin test results \& a copy of immunizations must be on file with New Horizons no later than Sept. 30th. Hepatitis B vaccination is required and a flu shot is required by Oct. 31st. Clinical experience may require drug testing and a Covid-19 vaccination and/or testing. The American Heart Association CPR Basic Life Support (BLS) course is required.


#### Abstract

NURSE AIDE I \& II 8360 $\square 8362$

Grades 11-12 3 Credits Location: Butler Farm This one-year course prepares students for employment as 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. Program completers are eligible to take the Virginia National Council of State Board of Nursing Incorporated Examination (Ohio Nurses Testing Service) to become a Certified Nurse Aide in the state of Virginia. Completers are also eligible to take the Foundation for Hospice and Homecare National Certification Program for Home Care Aides. Industry Certification - Virginia Board of Nursing State Examination; AHA BLS Examination; AHA First Aid Examination Prerequisite: Students must have a desire to work with people, be in good physical condition, have good hand/eye coordination and manual dexterity; must be able to lift 50 pounds to safely perform their duties; minimum 3.0 GPA; students must have completed Biology I with a grade of " $B$ " orabove; results of a current (good for one year) TB skin test must be on file with New Horizons CTEC no later than October 30th. Students must pass a general safety rules test with $100 \%$ accuracy prior to attending clinical training. Clinical experience may require drug testing and a Covid-19 vaccination and/or testing.


PHYSICAL AND OCCUPATIONAL THERAPY I \& II 8365 8366
Grades 11-12
3 Credits

## Location: Butler Farm

This one-year course is designed to provide an introduction to the professions of physical and occupational therapy. Students explore the principles and practices of therapists in the health care industry and participate in clinical observation under the direct supervision of a licensed physical and/or occupational therapist. Clinical skills in the area of physical therapy and occupational therapy enable students to gain understanding of rehabilitative care, which is practiced throughout the continuum of care and across the life span of individuals. After successful completion of this course, students may seek higher education for specific degrees/licensure in a variety of fields such as physical therapy, occupational therapy, speech therapy, sports medicine, athletic training, chiropractic medicine, biology, or exercise science.
Industry Certification - National Physical Therapy Aide Certification Exam (CPTA); Healthcare Providers BLS/CPR, and REVIVE Opioid Training
Prerequisite: Minimum 3.0 GPA; completion of Biology I and Algebra I with a grade of "B" or above. Work-based Learning experience may require drug testing \& a Covid-19 vaccination and/or testing.


#### Abstract

VETERINARY SCIENCE I \& II 8088 8089

Grades 11-12 3 Credits

\section*{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 - iCEV Veterinary Medical Applications. Prerequisite: Minimum 3.0 GPA; desire to work with people, good physical condition, enjoy handling and caring for animals, manual dexterity; must be able to lift 50 pounds to safely perform their duties; completion of 10th grade English, Biology I and Algebra I with a grade of "C" or above.


PATIENT CARE TECHNICIAN
8303
Grade 12
3 Credits

## Location: Butler Farm

Offered as an advanced nursing course after the completion of Nurse Aide at the 12th-grade level, Patient Care Technician emphasizes the study of nursing occupations as related to the healthcare system. Students study normal growth and development, simple body structure and function, medical terminology, and are introduced to microbes and disease. Upon completion of this course students will have mastered the skills needed to perform electrocardiograms (ECG's); execute basic medical, lab, and exam procedures; draw blood; and provide basic patient/client care. Industry Certification: Certified Patient

Care Technician Examination (CPCT); Certified EKG Technician Examination (CET); Certified Phlebotomy Technician Examination (CPT)
Prerequisite: Minimum 3.0 GPA; Must have passed a Nurse Aide class with a " C " or better and pass the State Board Esam; Proficient in reading and comprehending complex scientific resources; Results of a current TB skin test must be on file with New Horizons no later than October 30th; Biology with a grade of " $B$ " or better; Clinical experience may require drug testing and a Covid-19 vaccination and/or testing.

## PHARMACY TECHNICIAN I \& II 8305

 8306Grade 12
3 Credits

## Location: Woodside Lane

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. This one-year course 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. Students will be prepared to take the ExCPT Examination which is recognized nationally.
NOTE: Clinical experience may require certain vaccinations; a 12-panel drug test is required; a criminal background check is required for all students 18 and older to participate in externships.
Industry Certification: National Healthcareer Association Exam for the Certification of Pharmacy Technicians (NHA ExCPT); CPR
Prerequisite: Minimum 3.0 GPA; completion of Algebra I and 10th grade English with a grade of " $B$ " or above

## CAREER CLUSTER: HUMAN SCIENCES

## COSMETOLOGY I \& II

Grades 11-12
3 Credits Per Year

## Location: Butler Farm/Woodside Lane

Upon successful completion of this two-year program students are expected to take the Commonwealth of VA State Cosmetology examination in order to become licensed practitioners. Students gain practical experience working in the cosmetology clinic/lab/salon on several platforms Instruction includes professional ethics and business skills; safety and health; hair cutting, shaping, and analysis; hair and scalp diseases and disorders; shampoos, rinses, conditioners and treatments; anatomy and physiology and chemical texture services; hair styling, coloring, and lightening; nail and skincare. Industry Certification - Virginia State Cosmetology License Exam: National Occupational Competency Testing Institute Cosmetology Exam. Prerequisite: Must have minimum 2.0 GPA, completion of

10th grade English with a grade of "C" or above, ability to multi-task, good social and communication skills, creativity and artistic ability, customer service skills. Must have completed or currently be enrolled in biology or chemistry. Must meet Department of Virginia, Department of Professional and Occupational Regulation, and school attendance requirements.
CULINARY ARTS I \& II 8275 8276

Grades 11-12
3 Credits Per Year

## Location: Woodside Lane

This two-year course prepares students to enter employment in food service occupations. Instruction includes: sanitation, nutrition, food preparation, purchasing, and inventory control in addition to food presentation and service. Students plan menus, prepare food and use a variety of kitchen equipment. NOTE: Students in this course have an
opportunity to take an industry certification test - NOCTI Examination, ServSafe Manager (Culinary 2), ServSafe Food Handlers (Culinary I), Prostart level 1 and 2
Prerequisite: Minimum 2.0 GPA, must possess adaptability and the desire to work with people, have the ability to accurately perform measurements, and work with whole numbers, decimals and fractionalconversions, completion of 10th grade English with a grade of "C" or above.
EARLY CHILDHOOD EDUCATION I \& II 8234

Grades 11-12
3 Credits

## Location: Woodside Lane

This is a one-year program that prepares students to be employed in the field of child care. Students who are interested in working professionally with young children (e.g. medical, social services, and education) may enroll in the Early Childhood Education (ECE) one-year program. Critical
thinking, practical problem-solving, and entrepreneurship opportunities within the field of early childhood education are emphasized. Practice experiences (e.g. on-site lab, local daycare centers, elementary schools, and other institutions) under the supervision of the instructor are required. Students are required to have a current Tuberculin skin test. NOTE: This program offers dual enrollment college credit through VPCC. Student must have minimum 2.0 GPA to show English and math proficiency in order to receive dual enrollment credit.
NOTE: Students in this course have an opportunity to take an industry certification test: AAFCS Examination, ServSafe Food Handlers, CPR/First Aid/AED.
Prerequisite: Minimum 2.0 GPA; completion of 10th grade English with a grade of " $C$ " or above, must have a current Tuberculin skin test, genuine desire to work with young children.

## CAREER CLUSTER: INFORMATION TECHNOLOGY

## CISCO NETWORKING I \& II <br> Grades 11-12 <br> 3 Credits Per Year

## Location: Woodside Lane

This is a rigorous industry-designed two-year course taught by a CISCO certified instructor in a highly technical networking lab. The first year qualifies the student to take the Certiport IT Specialist - Networking exam. The second year offers the potential for students to take the CISCO CCNA exam through training in configuring and troubleshooting routers, switches, and network devices. Students in this program have the opportunity to participate in the Electronic Sports (ESPORTS) team. This team uses video games for competition requiring strategy, teamwork, leadership, communication, and the skills to win.
NOTE: This program offers dual enrollment college credit through VPCC. Student must have minimum 3.0 GPA to show English and math proficiency in order to receive dual enrollment credit. Completion of Algebra II with a grade of "C" or above or completed Algebra I and Geometry with a grade of "B" or above.
NOTE: Students in this course have an opportunity to take certification tests CISCO CCNA, Certiport IT Specialist Networking. This one-year course meets the sequential elective requirement.
Prerequisite: Students enrolling in Cisco Networking I \& II must have completed an advanced Math course above Algebra I with a grade of " $B$ " or above, and have successfully completed 10th grade English.

## COMPUTER PROGRAMMING \& GAMING

 APPLICATIONSGrades 11-12
3 Credits

## Location: Woodside Lane

This industry-designed course will allow students to focus on computer science and apply key programming concepts, algorithmic procedures, programming languages, and web based applications. In the Advanced Programming course, students will use object-oriented programming to design and develop database and multimedia programs and applications. The class is dual enrolled for 14 VPCC credits.
NOTE: Students in this course have an opportunity to take certification test Certiport - IT Specialist - Java.
NOTE: This program offers dual enrollment college credit through VPCC. Student must have minimum GPA of 3.0 to show English and math proficiency in order to receive dual enrollment credit; completion of Algebra II with a grade of "C" or above or completion of Algebra I and Geometry with a "B" or above.
NOTE: This one-year course meets the sequential elective requirement

## CYBERSECURITY SYSTEMS TECHNOLOGY 8628

8629
Grades 11-12 3 Credits

## Location: Woodside Lane

Students enter the world of computer technology and gain practical experience in assembling a computer system. Students will install, configure, and secure various operating systems. Students will troubleshoot computers and peripherals and use system tools and diagnostic software. They develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer components. Students will train in procedures for optimizing and troubleshooting concepts for computer systems, subsystems, and networks. Students will gain a basic understanding of
emerging technologies including unified communications, mobile, cloud, and virtualization technologies. This one-year course prepares students for postsecondary education and training and a successful career in information technology.
NOTE: This one-year course meets the sequential elective requirement.
NOTE: Students in this course have an opportunity to take certification tests CompTia A+ / CompTIA ITF+, IT Specialist Device Configuration \& Management.
Prerequisite: Minimum 2.5 GPA; completion of a computer applications course; completion of Algebra I with a grade of " $C$ " or better, ability to read and comprehend complex technological resources and materials.
CYBERSECURITY OPERATIONS 6304
6306
Grades 11-12
3 Credits

## Location: Butler Farm

Cybersecurity Operations is designed to teach computer and network administration and security. Students learn cybersecurity concepts, including the practice of protecting systems, networks, and programs from digital attacks.

Cybersecurity is defined as the steps and processes taken to protect networks, devices, and programs, and data from unauthorized access that can result in theft or damage. Students learn to establish, implement, and maintain security networks. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.
NOTE: Students in this course have an opportunity to take certification tests Security+, IT Specialist Cybersecurity, NOCTI Cybersecurity
Prerequisite: Minimum 2.5 GPA; Students enrolling in Cybersecurity Operations must have completed both a computer applications course and Algebra I with a grade of "C" or above.

## CAREER CLUSTER: PUBLIC SERVICE

$\begin{array}{ll}\text { CRIMINAL JUSTICE } & 8702 \\ & 8703\end{array}$
Grades 11-12 3 Credits

## Location: Butler Farm/Woodside Lane

Students in this one-year program are preparing for many of the exciting, challenging, and rewarding careers in the criminal justice field. These opportunities require people who want to operate in both high energy and high-tech fluid environments filled with constant challenges and service commitments. Students will study the history of and types of law enforcement requirements as they gain an understanding of local, state, and federal law enforcement departments and jurisdictions. Students will learn about and use some of the newest technology in the criminal justice field as they undertake and engage in crime scene investigations. Some of the finest local state, federal, and private sector industry professionals provide classroom presentations and hands-on training opportunities. Students will also learn about the court system and corrections.
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: This program offers dual enrollment college credit through VPCC. Student must have minimum GPA of 2.0 to show English and math proficiency in order to receive dual enrollment credit.
Industry Certification - National Occupational Competency Testing Institute Criminal Justice Exam
Prerequisite: Completion of 10th grade English with a grade of "C" or above

## EMERGENCY MEDICAL TECHNICIAN I, II \& III

Grades 11-12 3 Credits

## Location: Butler Farm

Emergency Medical Technicians are part of one of three public safety divisions (EMS, Fire, and Law Enforcement). Their job includes the daily routine of dealing with crisis, trauma, hazardous materials, illness, injuries and the training to handle mass casualties, disaster management, and terrorism awareness. Although the job can be stressful, EMT's and Paramedics enjoy the challenge and excitement of their jobs and view them as an opportunity to make a real difference. Juniors who successfully complete EMT may be invited to return as a senior for EMT II (\#8335). There are very limited number of EMT II seats.
NOTE: Additional requirements for the state exam include: not having been convicted of a felony involving any sexual crime and no convictions of any other act which is a felony under the laws of this state or the United States, except that such felony is eligible for certification if within five (5) years after date of final release no additional felonies have been committed. Students must have no physical or mental impairment that would render them unable to perform all practical skills required. Expenses for this course include: insurance, supplies, and exam. Clinical experience may require drug testing and a Covid-19 vaccination and/or testing.
Industry Certification - EMT-B state certification, First Aid AHA, Basic Life Support - AHA, Mass Casualty I \& II - OEMS, NIMS - 100,200,700,800 - FEMA, National Occupational Competency Testing Institute EMS Exam, and Emergency Vehicle Operations Course - VAVRS
Prerequisite: Minimum 3.0 GPA, successful completion of 10th grade English


#### Abstract

FIREFIGHTING I \& II 8705 8706

\section*{Grades 11-12}

3 Credits

\section*{Location: Butler Farm/Woodside Lane}

This one-year Fire Science program introduces students to the exciting field of Fire Fighting. Students are supervised closely by qualified personnel. Policies \& and procedures are designed to ensure adequate levels of safety while allowing for flexibility to utilize independent judgment based on the level of training. Any student who jeopardizes the safety of others will be removed from the program. Students are required to attend some training sessions after school and some weekends. Attendance at these sessions is MANDATORY for those pursuing the firefighter certification.


NOTE: This program offers an opportunity for a Fire Fighter apprenticeship with the completion of EMT.
Industry Certification - Fire Fighter I \& II; Hazardous Materials Awareness from the Department of Fire Programs Prerequisite: Minimum 2.5 GPA; at least 16 years of age on first day of class, and must have completed 10th grade English with a grade of " $C$ " or above. Completion of physical exam using a NHREC form by August $1^{\text {st }}$. Students not recommended entry by a physician will not be able to enter this program. Required to volunteer OJT hours at a fire station in the spring semester.

## CAREER CLUSTER: TRANSPORTATION

AUTO BODY \& COLLISION 8676
TECHNOLOGY I, II, \& III 8677
8678
Grades 11-12 3 Credits

## Location: Butler Farm

In the global automobile collision repair industry, there is a growing demand for qualified auto body technicians. In this one-year course, students are taught damage analysis, estimating, customer service, non-structural analysis, damage repair, welding, painting and refinishing techniques that include surface preparation, spray gun and related equipment operation, paint mixing, matching, applying, and final vehicle detailing. Students also work with a variety of materials, using metal finishing and body filling techniques to prepare surfaces and repair panels. Students who successfully complete this program may be eligible to take the ASE Student Certification examinations. Instructor recommendations are required for students to return to Auto BodyTechnology III. Selected students may be eligible for work experience at local repair facilities.
NOTE: This course is not recommended for individuals with respiratory or allergy problems. Students must wear uniforms, safety glasses, leather work shoes, and other safety equipment required by the program.
Industry Certification - Automotive Service Excellence (ASE) Student Certifications Structural, Nonstructural, Painting \&Refinishing, and Mechanical \& Electrical
Prerequisite: Minimum 1.5 GPA;, completion of 10th grade English with a grade of "C" or above, be able to analyze and problem solve, demonstrate artistic ability

## AUTOMOTIVE TECHNOLOGY I \& II 8506

Grades 11-12
3 Credits Per Year

## Location: Butler Farm

In this two-year program, students explore, handle, and perform basic functions in engine repair, automatic transmission and transaxle, manual drive trains and axles, suspension and steering systems, and brakes. Second-year students will build up their basic knowledge and learn about electrical, electronic, and HVAC systems in automobiles. Students who successfully complete the program may be
eligible to take the ASE Student Certification examination. The ASE Student Certification is the first step in building a career as a service professional in the automotive industry. Summer mentorship opportunities are available in this program.
NOTE: This program offers dual enrollment college credit through VPCC. Student must have a 2.0 GPA if seeking dual enrollment credit.
NOTE: Must possess a driver's license or permit. OJT required in $2^{\text {nd }}$ year of the program. Completion of Auto Tech I with a grade of "C" or above is required to return for Auto Tech II.
Industry Certification - Automotive Service Excellence (ASE) Entry Level Student Certifications
Prerequisite: Completion of 10th grade English with a grade of "C" or above.
MARINE SERVICE TECHNOLOGY 8750 8751
Grades 11-12
3 Credits

## Location: Butler Farm

In this one-year introduction to service and repair of watercraft and marina operations, students learn marine trade skills in areas including shop and boating safety, inboard and outboard systems, carpentry, fiberglass construction and repair, electricity, vessel storage/handling, and tools and equipment operation.Industry Certification American Boat \& Yaught Council (ABYC) Exam; Virginia Boater Education Certificate; First Aid/CPR/AED; OSHA 10 Certification
Prerequisite: Minimum 1.5 GPA; demonstrate a high degree of manual \& physical dexterity; read and interpret service manuals and publications; basic water safety; should know how to swim; work with chemicals \& tolerate exposure to dust and/or odors; work in an atmosphere of loud noise \& changes in temperature; spatial awareness \& the ability to multi-task; general math skills - measurements, conversions, ratios, addition \& subtraction.

## Location: Woodside Lane

This one-year Unmanned Aircraft Systems program prepares students to fly drones under the Federal Aviation Administration's (FAA) Part 107 guidelines. Students get an overview of the national airspace system, FAA regulations, and the design and operation of small drones. Students monitor the weather, address the loading and performance of drones, collect data, and coordinate flight operation logistics. Students will use the Zephyr simulation software to practice flying. The course will be dual-enrolled with VPCC and offer 18 college-level credits and 2 industry-level credentials.
Industry Certification: Small Unmanned Aircraft Systems Flight Technician Career Studies Certificate; FAA part 107 Remote Pilot Certification; FAA TRUST Certificate
NOTE: The student must possess a minimum GPA of 2.0 to show English \& math proficiency in order to receive dual enrollment credit.

# 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


#### Abstract

DANCE ARTS 6 93022

\section*{Grade 6}

Year This introductory dance arts course promotes dance as a healthy lifestyle choice and as an art form. Content focuses on the concepts of fitness and wellness utilizing dance as a cardiorespiratory activity. Students explore dance through creative movement, improvisation, the basics of choreography, dance terminology, and a variety of dance forms. Each dance form provides exposure to the diversity of style, historical, and cultural aspects of the dance arts. This course replaces Physical Education/Lifetime Fitness 6 for students enrolled in mSAM.


DANCE ARTS 793023 Grade 7 Year This dance arts course expands exploration of dance in its many forms and provides students with exposure to the diversity of the dance arts. Content focuses on the concepts of fitness and wellness, utilizing dance as a cardiorespiratory activity. Creative movement, dance terminology, the mechanics of movement, the basics of choreography, and improvisation augment student appreciation of each dance form's historical and cultural contribution. This course replaces Physical Education/Lifetime Fitness 7 for students enrolled in mSAM.

| DANCE ARTS 8 | 93024 |
| :--- | ---: |
| Grade 8 | Year |

This dance arts course continues to provide in-depth study of dance in its many forms and expands students' exposure to the diversity of the dance arts. Content focuses on the concepts of fitness and wellness utilizing dance as a cardiorespiratory activity. Applications of creative movement, dance terminology, the mechanics of movement, choreography, and improvisation enhance student appreciation of each dance form's historical and cultural contribution. This course replaces Physical Education/Lifetime Fitness 8 for students enrolled in mSAM.
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.

LITERARY ARTS 7
11103
Grade 7
Year
This course expands student exploration of literature, writing, and language skills in a creative and challenging interdisciplinary environment that brings together literature and the fine arts. Students experience literature-based opportunities to enhance the skills needed for successful academic performance in subsequent English or fine arts classes. Both as readers and creators, students extend their expressive talents beyond the ordinary. Writing and critical thinking are major components of this course which replaces English 7 or Advanced English 7 for students enrolled in mSAM.
LITERARY ARTS $8 \quad 11204$
Grade 8 Year

This interdisciplinary course provides in-depth exploration of literature, writing, and language skills in a creative and challenging environment that incorporates the fine arts. Students experience literature-based opportunities to enhance the skills needed for successful academic performance in subsequent English or fine arts courses. Composition, literature, vocabulary development, communication, and critical thinking are major components of this course which replaces English 8 or Advanced English 8 for students enrolled in the mSAM.
THEATRE ARTS 6

13902

Grade 6
Semester
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.

| THEATRE ARTS 7 | 13903 |
| :--- | ---: |
| Grade 7 | Semester |
|  | 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.

| THEATRE ARTS 8 | 13904 |
| :--- | ---: |
| Grade 8 | Semester |
|  | 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.

VISUAL ARTS 6
12901
Grade 6
Semester
This course is designed to stimulate creativity and personal development through the exploration of a wide range of activities including painting, drawing, sculpture, and crafts. Students develop artistic skills and an aesthetic appreciation of the arts of various cultures. Students study the principles and elements of design in a wide range of media.

VISUAL ARTS 7
12902
Grade 7 Semester
This course is designed to build upon students' creativity and personal development through the exploration of a wide range of activities including painting, drawing, sculpture, and crafts. Students extend their artistic skills and appreciation of the arts of various cultures. Students study the principles and elements of design in a wide range of media.

VISUAL ARTS 8
12903
Grade 8
Semester
This course is designed to build upon students' creativity and personal development through the exploration of a wide range of activities including painting, drawing, sculpture, and crafts. Students extend their artistic skills and appreciation of the arts of various cultures. Students study the principles and elements of design in a wide range of media.

## SCHOOL OF THE ARTS

Only students accepted into the School of the Arts (SOA) may enroll in the courses listed within this section.

Students may enroll in classes as their schedule allows.

## Literary Arts Course Offerings \& Suggested Sequences



## Dance Arts \& Theatre Course Offerings \& Suggested Sequences



## SOA COURSE OFFERINGS

## ADVANCED LITERARY ARTS 9

| ADVANCED LITERARY ARTS 9 | 117710 |
| :--- | :--- |
| ADVANCED ARTS LINK AND |  |
| WRITER WORKSHOP 9 | 117711 |

Grade 9
2 Weighted Credits
These two interdisciplinary courses explore the elements of the fine and literary arts with an emphasis on the relationship among the arts and the development of standards to help students become discerning lifelong patrons of the arts. They also include an analysis of 19th 21st century literature with emphasis on literary devices and techniques and the elements of character, setting, and theme. Students are involved in a study of skills, techniques, and models for writing fiction and nonfiction, and for gathering information through primary and secondary sources to include the use of electronic databases. Students plan and present individual and group presentations integrating art and literature and use collaborative strategies to evaluate various genres in literature to include essays, short stories, novels, drama, and poetry. Throughout the year, students will participate in integrated field study in a variety of art forms, including field trips and guest artists. All students will also write an original one-act play. These courses build a foundation to prepare students for the AP Language and Literature Exams.
Prerequisite: Application \& interview required.
Note: Advanced Arts Link and Writer Workshop is a Fine Arts Elective

## ADVANCED LITERARY ARTS 10

## ADVANCED LITERARY ARTS 10 <br> ADVANCED ARTS LINK AND WRITER WORKSHOP 10 <br> 117720 117721

## Grade 10

2 Weighted Credits These two interdisciplinary courses are designed for students with demonstrated interest and talent in writing, literature, and other fine arts. Literature serves as the basis and/or model for student writing and oral presentations. Included is an analysis of literature with emphasis on devices, techniques, and the elements of character, setting, theme, point of view, tone, and dialogue. These interdisciplinary courses focus on the literature and other arts of ancient world cultures and their influence on the culture of the modern world. Quarter-by-quarter students will travel the ancient world - learning about the literature and arts associated with various classic world cultures including Greece, Egypt, Persia, India, China, and Japan. Students will use a variety of collaborative learning strategies, study skills, and models for writing their own original literary and artistic works. Through these studies and activities, the students will develop an understanding of archetypal patterns of the literature of each culture, parallels of the elements within the arts of each cultures, and socioeconomic factors affecting the arts of world cultures. The study of Music Appreciation is an integral element of the Advanced Arts

Link. The courses help prepare students for the English AP Exam.
Prerequisite: Advanced Literary Arts 9 or Application \& interview required. NOTE: Fine Arts Elective

## ADVANCED LITERARY ARTS 11

## AP ENGLISH 11: LANGUAGE \& COMPOSITION 117730 ADVANCED ARTS LINK AND WRITER WORKSHOP 11 117731

## Grade 11

2 Weighted Credits
These two interdisciplinary courses are designed for students with demonstrated interest and talent in writing, literature, and other fine arts. Literary study is rooted in American literature with an emphasis on rhetorical nonfiction and related theories of literary criticism. Students explore themes of diversity, perseverance, and art as social commentary as they continue to grow into discerning patrons of the arts. Student-generated writings emphasize the development of a cogent argument through nuanced synthesis and analysis supported by specific examples and direct quotations. Students examine and revise a variety of technical writing for audience, purpose, clarity, and format. Emphasis is placed on investigative skills using technology as well as primary and secondary sources for gathering and synthesizing information. Throughout the year, students will participate in integrated field study in a variety of art forms, including field trips and guest artists. All students will also write an original one-act play. These courses prepare students for the AP Language and Composition Exam. Prerequisite: Advanced Literary Arts 10 or Application \& interview required.
NOTE: Advanced Arts Link and Writer Workshop is a Fine Arts Elective

## ADVANCED LITERARY ARTS 12

## AP ENGLISH 12: LITERATURE \& COMPOSITION 117740 ADVANCED ARTS LINK AND WRITER WORKSHOP 12 117741

## Grade 12

2 Weighted Credits
These interdisciplinary courses are designed for advanced students with demonstrated skills in writing and the analysis of literature and the related arts. The courses focus on the study of British Literature and contemporary world cultures through an investigation of literature and art. Students identify the interrelationships of problems concerning contemporary society and broaden their global perspective of cultures by studying the manner in which literature, philosophy, visual arts, and music reflect cultural value systems. Students make formal oral presentations using visual aids and available technology. Students also examine the philosophical ideas and stylistic techniques of both classic and contemporary prize-winning authors as a basis for the continuing development of skills and techniques for writing and analyzing poetry, fiction, and nonfiction. Emphasis is placed on investigative skills using technology as
well as primary and secondary sources for gathering and synthesizing information. Students examine and revise a variety of technical writing for audience, purpose, clarity, and format. These courses help prepare students for the AP Literature Exam. Students enrolled in these classes will complete a Senior Project on a topic of their own choice. Qualified students take either Advanced Arts Link and Writer Workshop 12 with AP English 12 OR Advanced Arts Link and Writer Workshop 12 with Practicum and AP English 12.

## Prerequisite: Advanced Literary Arts 11 or Application \& interview required.

NOTE: Advanced Arts Link and Writer Workshop is a Fine Arts Elective

## AP ENGLISH 12: LITERATURE \& COMPOSITION 117740 <br> ADVANCED ARTS LINK AND <br> WRITER WORKSHOP 12 WITH PRACTICUM <br> 117742

## Grade 12

3 Weighted Credits
These interdisciplinary courses are designed for advanced students with demonstrated skills in writing and the analysis of literature and the related arts. This course focuses on the practical application of writing theory and process through specialized field experiences and/or community service in the area of written communication and/or the arts. Credit toward fulfilling course requirements may also be awarded for interdisciplinary, arts-related field experiences under instructor supervision. A minimum of 140 after-school supervised hours are required. Students will also be required to complete a cumulative research project and make a formal end-of-course presentation. Students must maintain a passing grade in all courses to remain in this program. Qualified students take either Advanced Arts Link and Writer Workshop 12 with AP English 12 OR Advanced Arts Link and Writer Workshop 12 with Practicum and AP English 12.

## Prerequisite: Application \& interview required.

NOTE: Advanced Arts Link and Writer Workshop 12 with Practicum is a Fine Arts elective.

| ADVANCED THEATRE ARTS I 144010 |  |
| :--- | ---: |
| Grades 9-11 | 1 Weighted Credit |

This interdisciplinary course is designed for students with demonstrated acting ability who also exhibit an awareness that theatre is a discipline requiring diligent study and application. The course emphasizes the interdisciplinary nature of the fine arts; theatre as a reflection of social, political, and economic conditions; play analysis for interpretation, character development, and production values; acting theory; vocal and physical skills and techniques; and practical application of theory, skills, and techniques.
Prerequisite: Application \& Audition
NOTE: 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
NOTE: 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, non-SOA 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

NOTE: 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 NOTE: 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. Afterschool, supervised hours are required. (May be continued with instructor recommendation and a minimum GPA of 2.5)

## Prerequisite: Advanced Technical Theatre

NOTE: Fine Arts Elective
ADVANCED TECHNICAL THEATRE III-IV WITH
PRACTICUM 14355
Grades 11-12
2 Weighted Credits
This course is designed for advanced technical theatre students interested in working backstage at theatrical productions. It continues to train students to be theatre technicians and introduces them to advanced elements of design. The course requires students to work as technicians on sets, lighting, sound, and props for SOA productions. Content includes advanced principles of set, lighting, sound, and prop design accompanied with applied design. The course also includes reading plays, exploring the changes that have occurred in theatrical design, and studying the contributions of important designers. The course provides knowledge and experience needed by technicians to function responsibly and efficiently as part of a theatrical team. A minimum of 140 after-school supervised hours are required. Students must participate on multiple show crews throughout the year. Students will complete a practicum design project and make a formal end-of-course presentation. Students must maintain a passing grade in ALL courses to remain in this program, as well as to remain in each performance. (May be continued with instructor recommendation and a minimum GPA of 2.5). Qualified students will take either Advanced Technical Theatre II-IV OR Advanced Technical Theatre III-IV with Practicum.

## Prerequisite: Advanced Technical Theatre II. Application \& interview required. <br> NOTE: 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

NOTE: 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 <br> NOTE: Fine Arts Elective

ADVANCED 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
NOTE: Fine Arts elective
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
NOTE: Fine Arts Elective
ADVANCED THEATRE ARTS IV
WITH PRACTICUM
144016
Grade 12
2 Weighted Credits
This course focuses on practical application of curriculum theory and process through acting projects in the lab theatre. Historical analysis is used as an interdisciplinary focus to produce works-in-progress. Credit toward fulfilling course requirements may be awarded for participation in a minimum of one main-stage production (crew or performer), for arts-related field experiences with instructor approval, and for satisfactorily completing advanced analysis assignments. A minimum of 140 after-school, supervised hours are required. Students will complete a documented research paper and make a formal end-of-course presentation. Students must maintain a passing grade in all courses to remain in this program, as well as to remain in each performance. Qualified students will take either Advanced Theatre Arts IV OR Advanced Theatre Arts IV with Practicum.

## Prerequisite: Advanced Theatre Arts III. Application \& interview required. <br> NOTE: Fine Arts Elective

ADVANCED 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
NOTE: Fine Arts elective

## ADVANCED DANCE ARTS IV WITH PRACTICUM 93153

Grade 12
2 Weighted Credits
This course focuses on practical application of curriculum theory and process through dance projects. Historical analysis is used as an interdisciplinary focus to produce works-in-progress. Credit toward fulfilling course requirements may be awarded for participation in a minimum of one production (choreographer or performer), for arts-related field experiences with instructor approval, and for satisfactorily completing advanced analysis
assignments. A minimum of 140 after-school, supervised hours are required. Students will complete a documented research paper and make a formal end-of-course presentation. Students must maintain a passing grade in all courses to remain in this program, as well as to remain in each performance. Qualified students will take either Dance Arts IV OR Dance Arts IV with Practicum.
Prerequisite: Dance Arts III. Application \& interview required.
NOTE: Fine Arts elective

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 Career \& Technical Education (CTE) Course Offerings \& Suggested Sequences



## APPENDIX A - SEQUENTIAL ELECTIVE

Sequential electives mean any series of courses in which the content increases or expands in scope and sequence as students move through various levels of the courses. Students must take two sequential electives to complete their graduation requirements for a Standard or Advanced Studies Diploma. Some courses may be interchangeable. Any additional content course not required for graduation meets the requirements of a sequential elective; to include additional courses in math, science, social studies, and world language. *Please speak with your school counselor as you are planning your academic course offerings to meet graduation requirements.

English Sequential Electives

## Year One Course Name

Literary Magazine/Mass Media I
Newspaper/Mass Media I
Yearbook/Mass Media I
Creative Writing: Poetry
Creative Writing: Prose

## Year Two Course Name

Literary Magazine/Mass Media II
Newspaper/Mass Media II
Yearbook/Mass Media II
Improvisation Comedy/Sketch Comedy

## Fine Art Sequential Electives

## Year One Course Name

Art I Foundations

Art II: Intermediate
Art III: Advanced Intermediate
Photography \& Communication Design I
Drama I A/B

Drama II A/B

Drama III A/B
Advanced Arts Link and Writer Workshop
Advanced Theatre Arts I, II, III, IV

## Year Two Course Name

Crafts
Ceramics A/B
Art II: Intermediate
Computer Graphic Art
3D Design
Art III: Advanced Intermediate
Art IV: Advanced
Photography \& Communication Design II
Drama II A/B
Technical Theatre A/B
Improvisation Comedy/Sketch Comedy
Drama III A/B
Improvisation Comedy/Sketch Comedy
Drama IV A/B
Improvisation Comedy/Sketch Comedy
Improvisation Comedy/Sketch Comedy

## Music

## Year One Course Name

Chorus I
Small Vocal Ensemble I
Beginning Guitar
Brass Sectionals I
Percussion Sectionals I
Stage Band I
Symphonic Band I
Woodwind Sectionals I
Music Theory

## Year Two Course Name

Chorus II
Small Vocal Ensemble II
Guitar II
Brass Sectionals II
Percussion Sectionals II
Stage Band II
Symphonic Band II
Woodwind Sectionals II
AP Music Theory

## General Topics

| General Topics |  |
| :---: | :---: |
| Year One Courses | Year Two Courses |
| Computer Science Foundations | Computer Science Principles |
| Health \& PE |  |
| Year One Courses | Year Two Courses |
| PE $11 \mathrm{~A} / \mathrm{B}$ | PE $12 \mathrm{~A} / \mathrm{B}$ |
| Social Studies |  |
| Year One Courses | Year Two Courses |
| Psychology Sociology | Sociology <br> AP Psychology <br> Psychology <br> AP Psychology |
| Naval Sciences |  |
| Year One Courses | Year Two Courses |
| Navy JROTC II | Navy JROTC III |
| Navy JROTC III | Navy JROTC IV |
| Career \& Technical Education |  |
| Year One Courses | Year Two Courses |
| Accounting | Accounting II <br> Business Management <br> Computer Information Systems I \& II <br> Design, Multimedia, and Web Technologies <br> Digital Applications <br> Entrepreneurship Education I \& II |
| Accounting II | Business Law <br> Business Management <br> Computer Information Systems I or II <br> Systems <br> Design, Multimedia, and Web Technologies <br> Digital Applications <br> Entrepreneurship |
| Advanced Drawing/Design/CAD | Architectural Drawing/Design/CAD Basic Technical Drawing/Design/CAD Engineering Drawing/Design/CAD |
| Aerospace Technology | Unmanned Aircraft Systems |
| Architectural Drawing/Design/CAD | Advanced Drawing/Design/CAD <br> Basic Technical Drawing/Design/CAD <br> Engineering Drawing/Design/CAD |


| Business Management | Accounting I or II |
| :---: | :---: |
|  | Computer Information Systems I \& II |
|  | Design, Multimedia, and Web Technologies |
|  | Entrepreneurship Education I \& II |
|  | Marketing I \& II |
|  | Sports and Entertainment Management |
| Computer Information Systems | Accounting I \& II |
|  | Business Management |
|  | Computer Information Systems II |
|  | Design, Multimedia, and Web Technologies |
|  | Digital Applications |
|  | Entrepreneurship Education I \& II |
|  | Information Technology Fundamentals |
| Cybersecurity Fundamentals | Cybersecurity Opertions (YRA only) |
| Design, Multimedia, and Web | Accounting I \& II |
|  | Business Management |
|  | Computer Information Systems I \& II |
|  | Digital Applications |
|  | Information Technology Fundamentals |
| Digital Applications | Accounting I \& II |
|  | Business Management |
|  | Computer Information Systems I \& II |
|  | Design, Multimedia and Web Technology |
|  | Information Technology Fundamentals |
| Emergency Medical Technician (GHSA only) | Emergency Medical Technician II (GHSA only) |
| Engineering Drawing and Design | Advanced Drawing and Design |
|  | Architectural Drawing and Design |
|  | Basic Technical Drawing/Design/CAD |
| Entrepreneurship Education I | Accounting I \& II |
|  | Business Management |
|  | Computer Information Systems I \& II |
|  | Entrepreneurship Education II |
|  | Fashion Marketing I \& II |
|  | Introduction to Marketing |
|  | Marketing Management |
|  | Marketing I \& II |
|  | Sports and Entertainment Management |
|  | Sports and Entertainment Marketing |
| Fashion Marketing I | Entrepreneurship Education I \& II |
|  | Fashion Marketing II |
|  | Introduction to Marketing |
|  | Marketing Management |
|  | Marketing I \& II |


| Fashion Marketing II | Entrepreneurship Education I \& II Fashion Marketing I Introduction to Marketing Marketing Management Marketing I \& II |
| :---: | :---: |
| Game Design and Development I | Game Design and Development II |
| Information Technology Fundamentals | Computer Information Systems I \& II <br> Design, Multimedia and Web Technology I \& II (YRA only) <br> Digital Applications |
| Introduction to Health and Medical Sciences | Medical Terminology Sports Medicine I \& II Leadership Development |
| Introduction to Marketing | Entrepreneurship Education I \& II <br> Fashion Marketing I \& II <br> Marketing Management <br> Marketing I \& II <br> Sports and Entertainment Management <br> Sports and Entertainment Marketing |
| Leadership Development | Virginia Teachers for Tomorrow Introduction to Health and Medical Sciences Medical Terminology |
| Life Planning | Nutrition and Wellness Virginia Teachers for Tomorrow |
| Marketing I | Business Management <br> Entrepreneurship Education I \& II <br> Fashion Marketing I \& II <br> Introduction to Marketing <br> Marketing Management <br> Marketing II <br> Sports and Entertainment Management <br> Sports and Entertainment Marketing |
| Marketing Management | Entrepreneurship Education I \& II <br> Fashion Marketing I \& II <br> Introduction to Marketing <br> Marketing I \& II <br> Sports and Entertainment Management <br> Sports and Entertainment Marketing |
| Medical Terminology | Introduction to Health and Medical Sciences Leadership Development |
| Nutrition and Wellness | Culinary Arts I \& II Life Planning |
| Sports and Entertainment Management | Business Management <br> Entrepreneurship Education I \& II <br> Introduction to Marketing <br> Marketing Management <br> Marketing I \& II <br> Sports and Entertainment Marketing |

Career \& Technical Education (Cont'd.)

| Sports and Entertainment Marketing | Entrepreneurship Education I \& II |
| :--- | :--- |
|  | Introduction to Marketing |
|  | Marketing Management |
|  | Marketing I \& II |
| Sports Medicine I | Sports and Entertainment Management |
|  | Sports Medicine II |
| Virginia Teachers for Tomorrow I | Introduction to Health and Medical Sciences |
|  | Leadership Development |
|  | Life Planning |
|  |  |

## INDEX

ACADEMIC LAB, 57
ACADEMIC SEMINAR, 44
ACADEMIC TUTORIAL, 44
ACCOUNTING I, 24
ACCOUNTING II, 24
ADVANCED BAND, 41
ADVANCED CHORUS, 41
ADVANCED COURSE EXPERIENCE, 44
ADVANCED DRAWING/DESIGN/CAD, 31
ADVANCED ENGLISH 10 AP SEMINAR, 35
ADVANCED ENGLISH 6, 33
ADVANCED ENGLISH 7, 34
ADVANCED ENGLISH 8, 34
ADVANCED ENGLISH 9, 35
ADVANCED GEOMETRY, 51, 52
AEROSPACE TECHNOLOGY, 31
AFRICAN AMERICAN HISTORY, 49
ALGEBRA I, 51, 52
ALGEBRA I MATH LAB, 57
ALGEBRA I MATH LAB ELECTIVE, 52
ALGEBRA II, 52
ALGEBRA II/TRIGONOMETRY, 52
ALGEBRA III, 52
ALGEBRA, FUNCTIONS AND DATA ANALYSIS (AFDA), 52
AMERICAN SIGN LANGUAGE I, 59
AMERICAN SIGN LANGUAGE II, 60
AMERICAN SIGN LANGUAGE III, 60
AP ART HISTORY, 39
AP BIOLOGY, 56
AP CALCULUS AB, 53
AP CALCULUS BC, 53
AP CHEMISTRY, 56
AP CHINESE LANGUAGE AND CULTURE, 61
AP COMPUTER SCIENCE A, 53
AP COMPUTER SCIENCE PRINCIPLES, 53
AP ENGLISH 11 LANGUAGE \& COMPOSITION, 35
AP ENGLISH 12 LITERATURE \& COMPOSITION, 36
AP ENVIRONMENTAL SCIENCE, 56
AP EUROPEAN HISTORY, 48
AP FRENCH LANGUAGE, 61
AP GERMAN, 61
AP GOVERNMENT \& POLITICS: COMPARATIVE, 49
AP HUMAN GEOGRAPHY, 48
AP LATIN LITERATURE, 61
AP MACROECONOMICS, 49
AP MICROECONOMICS, 50
AP MUSIC THEORY, 43
AP PHYSICS I, 56
AP PHYSICS II, 56
AP PSYCHOLOGY, 49
AP SPANISH LANGUAGE AND CULTURE, 62
AP SPANISH LITERATURE AND CULTURE, 62

AP STATISTICS, 53
AP STUDIO ART: 2D, 39
AP STUDIO ART: 3D, 39
AP STUDIO ART: DRAWING PORTFOLIO, 39
AP UNITED STATES HISTORY, 48
AP US GOVERNMENT \& POLITICS, 49
AP WORLD HISTORY, 48
APPLIED ENGLISH, 57
APPLIED HISTORY/SOCIAL SCIENCE, 57
APPLIED MATHEMATICS, 57
APPLIED RESEARCH PROJECTS, 45
APPLIED SCIENCE, 57
ARABIC III, 61
ARCHITECTURAL DRAWING/DESIGN/CAD, 31
ART I ART FOUNDATIONS, 38
ART II INTERMEDIATE, 38
ART III ADVANCED INTERMEDIATE, 38
ART IV ADVANCED, 38
ATMOSPHERIC SCIENCE \& CLIMATOLOGY, 55
AUTOMATION AND ROBOTICS (PLTW), 30
BASIC TECHNICAL DRAWING/DESIGN/CAD, 31
BEGINNING BAND, 41
BEGINNING BAND 6, 41
BEGINNING CHORUS 6, 41
BEGINNING GUITAR-ACOUSTIC, 43
BIOLOGY I, 55
BIOLOGY II/MAMMALIAN ANATOMY \& PHYSIOLOGY, 55
BIology II/MARINE SCIENCE, 56
BRASS SECTIONALS, 42
BRASS SECTIONALS II, 42
BUSINESS MANAGEMENT, 24
CALCULUS, 53
CAREER INTERNSHIP, 45
CAREER INVESTIGATIONS, 44
CAREER MENTORSHIP, 45
CERAMICS A, 38
CERAMICS B, 38
CHEMISTRYI, 55
CHORUS I, 41
CHORUS II, 41
CIVICS AND ECONOMICS, 47
COLLEGE \& CAREER PREPARATION, 44
COMPUTER GRAPHIC ART, 39
COMPUTER INFORMATION SYSTEMS I, 24
COMPUTER INFORMATION SYSTEMS II, 24
COMPUTER SCIENCE DISCOVERIES, 44
COMPUTER SCIENCE FOUNDATIONS, 45
COMPUTER SCIENCE PRINCIPLES, 45
COMPUTER SOLUTIONS 6, 24
COMPUTER SOLUTIONS I, 24
COMPUTER SOLUTIONS II, 24
CONCERT BAND I, 42

CONCERT BAND II, 42
CRAFTS CULTURAL ARTS, 39
CRAFTS DECORATIVE ARTS \& DESIGN, 39
CREATIVE WRITING POETRY, 37
CREATIVE WRITING PROSE, 37
CREDIT FOR WORK EXPERIENCE, 45
CRIMINAL JUSTICE, 44
CYBERSECURITY FUNDAMENTALS, 24
CYBERSECURITY OPERATIONS, 31
DATA SCIENCE, 52
DESIGN AND MODELING (PLTW), 30
DESIGN MULTIMEDIA \& WEB TECHNOLOGIES II, 32
DESIGN, MULTIMEDIA \& WEB TECHNOLOGIESI, 31
DIGITAL APPLICATIONS, 24
DIGITAL JOURNALISM, 34
DISCRETE MATHEMATICS, 53
DRAMA 6, 40
DRAMA IA \& IB, 40
DRAMA IIA \& IIB, 40
DRAMA IIIA \& IIIB, 40
DRAMA IVA \& IVB, 40
DRAMA PRODUCTIONS, 40
DRAWING AND PAINTING, 38
DUAL ENROLLMENT ENGLISH 12 (ENG 111 \& ENG 112), 36
DUAL ENROLLMENT PRECALCULUS, 53
DUAL ENROLLMENT VIRGINIA \& US HISTORY, 48
EARTH SCIENCE, 55
ECOLOGY, 56
ECONOMICS AND PERSONAL FINANCE, 25
EMERGENCY MEDICAL TECHNICIAN I \& II, 27
ENERGY AND THE ENVIRONMENT (PLTW), 30
ENGINEERING DESIGN \& PROBLEM SOLVING, 54
ENGINEERING DRAWING/DESIGN/CAD, 32
ENGLISH 10, 35
ENGLISH 11, 35
ENGLISH 12, 35
ENGLISH 6, 33
ENGLISH 7, 34
ENGLISH 8, 34
ENGLISH 9, 35
ENGLISH AS A WORLD LANGUAGE I, 60
ENGLISH AS A WORLD LANGUAGE II, 61
ENTREPRENEURSHIP EDUCATION I, 25
ENTREPRENEURSHIP EDUCATION II, 25
ENVIRONMENTAL SCIENCE, 55
ESL RIGOR, 59, 60
EXPLORATORY ART 6, 38
EXPLORATORY FRENCH \& SPANISH 6, 59
EXPLORATORY WORLD LANGUAGES, 59
EXPLORATORY WORLD LANGUAGES \& WORLD CULTURES, 59
FAMILY AND CONSUMER SCIENCES EXPLORATORY I, 26
FAMILY AND CONSUMER SCIENCES EXPLORATORY II, 26
FAMILY AND CONSUMER SCIENCES EXPLORATORY III, 26
FASHION MARKETING I, 28
FASHION MARKETING I/CO-OP, 28

FASHION MARKETING II, 29
FASHION MARKETING II/CO-OP, 29
FILM STUDIES A \& B, 37
FOUNDATIONS OF ALGEBRA 6, 51
FOUNDATIONS OF ALGEBRA 7, 51
FRENCH I, 59, 60
FRENCH II, 59, 60
FRENCH III, 60
FRENCH IV, 61
GAME DESIGN AND DEVELOPMENT I, 25
GAME DESIGN AND DEVELOPMENT II, 25
GEOMETRY, 52
GERMAN I, 59, 60
GERMAN II, 59, 60
GERMAN III, 60
GERMAN IV, 61
GRAPHIC NOVELS AS LITERATURE, 37
GREEN ARCHITECTURE (PLTW), 30
GSST
ADVANCED BIOLOGICAL ANALYSIS, 65
CALCULUS-BASED ENGINEERING PHYSICS I, 64
CALCULUS-BASED ENGINEERING PHYSICS II: MODERN PHYSICS
AND APPLIED PHYSICS, 65
COLLEGE CALCULUS, 64
COLLEGE MODERN PRE-CALCULUS, 64
COMPUTATION SCIENCE: ENGINEERING DESIGN, INNOVATION
\& ENTREPRENEURSHIP, 65
COMPUTATIONAL PHYSICS, 64
DIFFERENTIAL EQUATIONS, 65
HONORS RESEARCH \& MENTORSHIP, 65
LINEAR ALGEBRA, 65
MULTIVARIABLE CALCULUS, 64
RESEARCH METHODOLOGY AND ETHICS, 64
GUITAR II, 43
HEALTH \& PHYSICAL EDUCATION, 46
HEALTH AND MEDICAL SCIENCES EXPLORATORY, 27
HEALTH, DRIVER EDUCATION \& PHYSICAL EDUCATION, 46
IB
20TH CENTURY WORLD HISTORY (HL), 68
BIOLOGY (HL), 68
CHEMISTRY (HL), 68
GEOGRAPHY (SL), 68
IB SPANISH AB INITIO 11, 67
IB SPANISH AB INITIO 12, 67
LANGUAGE A: LANGUAGE AND LITERATURE - ENGLISH (HL), 67
LANGUAGE B: FRENCH (HL) \& (SL), 67
LANGUAGE B: SPANISH (HL) \& (SL), 67
MATH APPLICATIONS, 69
MATHEMATICS (SL), 68
PHYSICS (HL), 68
THEATRE (SL), 69
THEORY OF KNOWLEDGE (TOK), 69
INFORMATION TECHNOLOGY (IT) FUNDAMENTALS, 25
INTERMEDIATE BAND, 41
INTRODUCTION TO ART, 38
INTRODUCTION TO CHORUS, 41
INTRODUCTION TO DRAMA, 40

INTRODUCTION TO FORENSIC SCIENCE, 55
INTRODUCTION TO HEALTH AND MEDICAL SCIENCES, 27
INTRODUCTION TO PROGRAMMING \& GAME DESIGN, 44
INTRODUCTION TO TECHNOLOGY, 31
INVENTIONS \& INNOVATIONS, 31
LATIN I, 59, 60
LATIN II, 59, 61
LATIN III, 61
LATIN IV, 62
LEADERSHIP DEVELOPMENT, 27
LEADERSHIP SEMINAR A \& B, 45
LIFE PLANNING, 26
LIFE SCIENCE 7, 54
LITERARY MAGAZINE/MASS MEDIA I, 36
LITERARY MAGAZINE/MASS MEDIA II, 36
MAKE IT YOUR BUSINESS, 24
MANDARIN CHINESE III, 61
MANDARIN CHINESE IV, 62
MARKETING EXPLORATION, 29
MARKETING I, 29
MARKETING I/CO-OP, 29
MARKETING II, 29
MARKETING II/CO-OP, 29
MARKETING MANAGEMENT, 29
MATHEMATICAL ANALYSIS, 53
MEDICAL TERMINOLOGY, 27
MIDDLE SCHOOL PUBLIC SPEAKING, 34
MIDDLE SCHOOL YEARBOOK, 34
MSAM
VISUAL ARTS 6, 80
MSAM
DANCE ARTS 6, 79
DANCE ARTS 7, 79
DANCE ARTS 8, 79
LITERARY ARTS 6, 79
LITERARY ARTS 7, 79
LITERARY ARTS 8, 79
THEATRE ARTS 6, 79
THEATRE ARTS 7, 79
THEATRE ARTS 8, 80
VISUAL ARTS 7, 80
VISUAL ARTS 8, 80
MUSIC APPRECIATION A \& B, 43
MUSIC TECHNOLOGY, 41
MUSIC THEORY, 43
MUSICAL STAGE PRODUCTIONS, 41
NAVAL SCIENCES (THS \& YHS)
NAVY JROTC I (NJROTC), 70
NAVY JROTC II (NJROTC), 70
NAVY JROTC III (NJROTC), 70
NAVY JROTC IV (NJROTC), 70
NAVY JROTC I (NJROTC), 46
NEWSPAPER/MASS MEDIA I, 36
NEWSPAPER/MASS MEDIA II, 36
NHREC
AUTO BODY TECHNOLOGY I, II, \& III, 77

AUTOMOTIVE TECHNOLOGY I \& II, 77
BUILDING CONSTRUCTION I, II \& III, 71
CISCO NETWORKING I \& II, 75
COMPUTER PROGRAMMING \& ADVANCED PROGRAMMING,
75
COSMETOLOGY I \& II, 74
CRIMINAL JUSTICE, 76
CULINARY ARTS I \& II, 74
CYBERSECURITY OPERATIONS, 76
CYBERSECURITY SYSTEMS TECHNOLOGY, 75
DENTAL CAREERS I \& II, 73
EARLY CHILDHOOD EDUCATION, 75
ELECTRICITY AND RENEWABLE ENERGY I \& II, 71
EMERGENCY MEDICAL TECHNICIAN, 76
FIRE SCIENCE, 77
HEATING/VENTILATION/AIR CONDITIONING (HVAC
MECHANICAL) I \& II, 71
MARINE SERVICE TECHNOLOGY I \& II, 77
MECHATRONICS, 72
MEDICAL ASSISTANT, 73
NURSE AIDE, 73
PATIENT CARE TECHNICIAN, 74
PHARMACY TECH, 74
PHYSICAL AND OCCUPATIONAL THERAPY I \& II, 73
PLUMBING AND PIPEFITTING, 71
UNMANNED AIRCRAFT SYSTEMS, 78
VETERINARY SCIENCE $1 \& 2,74$
VIRTUAL MACHINING \& DESIGN, 72
WELDING I \& II, 72
NUTRITION AND WELLNESS, 26
PERCUSSION SECTIONALSI, 42
PERCUSSION SECTIONALS II, 42
PHOTOGRAPHY \& COMMUNICATION DESIGN I, 39
PHOTOGRAPHY \& COMMUNICATION DESIGN II, 39
PHYSICAL EDUCATION 11A \& 11B, 46
PHYSICAL EDUCATION 12A \& 12B, 46
PHYSICAL EDUCATION/LIFETIME FITNESS 6, 46
PHYSICAL EDUCATION/LIFETIME FITNESS 7, 46
PHYSICAL EDUCATION/LIFETIME FITNESS 8, 46
PHYSICAL SCIENCE 8, 55
PHYSICS I, 55
PRACTICAL ENGLISH, 57
PRACTICAL HISTORY/SOCIAL SCIENCE, 57
PRACTICAL LIFE SKILLS, 58
PRACTICAL MATH, 58
PRACTICAL SCIENCE, 58
PRE-ALGEBRA 6, 51
PRE-ALGEBRA 7, 51
PRE-ALGEBRA 8, 51
PRE-VOCATIONAL SKILLS, 58
PRE-VOCATIONAL TRAINING \& INDEPENDENT LIVING, 57
PROBABILITY \& STATISTICS, 52
PROJECT EXPERIENCE, 58
PROJECT EXPLORE, 58
PROJECT SEARCH, 58
PSYCHOLOGY, 49
PUBLIC SPEAKING COMMUNICATION, 37

```
PUBLIC SPEAKING PRESENTATION, 37
READERS' ROUNDTABLE, 34
SAT PREPARATION, 45
SCENIC DESIGN AND SET BUILD, 40
SCIENCE 6,54
SCULPTURE AND CRAFTS, 38
SERVICE LEARNING,45
SET FOR SUCCESS, 44
SMALL VOCAL ENSEMBLE I, 41
SMALL VOCAL ENSEMBLE II, 41
SOA
    ADVANCED ARTS LINK AND WRITER WORKSHOP 10, }8
    ADVANCED ARTS LINK AND WRITER WORKSHOP }12\mathrm{ WITH
    PRACTICUM, }8
    ADVANCED ARTS LINK AND WRITER WORKSHOP 9, 82
    ADVANCED DANCE ARTS III, 84
    ADVANCED DANCE ARTS IV, 84
    ADVANCED DANCE ARTS IV WITH PRACTICUM, }8
    ADVANCED LITERARY ARTS 10,82
    ADVANCED LITERARY ARTS 9, 82
    ADVANCED TECHNICAL THEATRE I, }8
    ADVANCED TECHNICAL THEATRE III-IV WITH PRACTICUM, }8
    ADVANCED TECHNICAL THEATRE II-IV, }8
    ADVANCED THEATRE ARTS I, 83
    ADVANCED THEATRE ARTS II, 83
    ADVANCED THEATRE ARTS III, 84
    ADVANCED THEATRE ARTS IV, }8
    ADVANCED THEATRE ARTS IV WITH PRACTICUM, }8
    AP ENGLISH 11: LANGUAGE & COMPOSITION AND ADVANCED
    ARTS LINK AND WRITER WORKSHOP 11, }8
    AP ENGLISH 12: LITERATURE & COMPOSITION AND
    ADVANCED ARTS LINK AND WRITER WORKSHOP 12, 82
    DANCE ARTSI, }8
    DANCE ARTS II, 84
    IMPROVISATION COMEDY/SKETCH COMEDY, 83
SOCIOLOGY: ASPECTS & TOOLS OF CULTURE, 49
SOCIOLOGY: INSTITUTIONS & ISSUES, 49
```

SPANISH II, 59, 60
SPANISH III, 60
SPANISH IV, 61
SPORTS \& ENTERTAINMENT MANAGEMENT II, 29
SPORTS \& ENTERTAINMENT MANAGEMENT II/CO-OP, 29
SPORTS \& ENTERTAINMENT MARKETING I, 29
SPORTS \& ENTERTAINMENT MARKETING I/CO-OP, 29
SPORTS MEDICINE I, 27
SPORTS MEDICINE II, 27
STAGE BAND I, 42
STAGE BAND II, 42
STUDENT ASSISTANCE EXPERIENCE, 45
SYMPHONIC BAND I, 42
SYMPHONIC BAND II, 42
TECHNICAL THEATRE A \& B, 40
TECHNOLOGICAL SYSTEMS, 31
THREE-DIMENSIONAL (3D) DESIGN, 39
TRIGONOMETRY, 52
UNITED STATES HISTORY TO 1865, 47
UNMANNED AIRCRAFT SYSTEMS, 32
US HISTORY 1865 TO PRESENT, 47
VIRGINIA \& UNITED STATES GOVERNMENT, 49
VIRGINIA \& UNITED STATES HISTORY, 48
VIRGINIA TEACHERS FOR TOMORROW I, 26
VIRGINIA TEACHERS FOR TOMORROW II, 26
WIND ENSEMBLE I, 42
WIND ENSEMBLE II, 42
WOODWIND SECTIONALS I, 42
WOODWIND SECTIONALS II, 42
WORLD GEOGRAPHY, 48
WORLD HISTORY I, 48
WORLD HISTORY II, 48
WRITERS' ROUNDTABLE, 34
YEARBOOK/MASS MEDIA I, 36
YEARBOOK/MASS MEDIA II, 36
SPANISH I, 59, 60

NOTES

## Middle Schools

Grafton Middle School
Main Office: 757-898-0525
Counseling Office: 757-898-0560

Queens Lake Middle School
Main Office: 757-220-4080
Counseling Office: 757-220-4070

Tabb Middle School Main Office: 757-898-0320
Counseling Office: 757-898-0319

Yorktown Middle School
Main Office: 757-898-0360
Counseling Office: 757-898-0410

## High Schools

Bruton High School
Main Office: 757-220-4050
Counseling Office: 757-220-4055

Grafton High School
Main Office: 757-898-0530
Counseling Office: 757-898-0550

Tabb High School Main Office: 757-867-7400 Counseling Office: 757-867-5399

York High School
Main Office: 757-898-0354
Counseling Office: 757-898-0424

York River Academy
Main Office: 757-898-0516
Counseling Office: 757-898-0517

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 Special Education
302 Dare Road
Yorktown, VA 23692
757-898-0455

School Division
302 Dare Rd. | Yorktown, Virginia 23692


[^0]:    WRITERS' ROUNDTABLE 00664 Grades 7-8 Semester
    This elective course introduces students to models of writing and emphasizes a variety of types of writing, including expository, narrative, and persuasive. Students in this course may produce school publications.

[^1]:    *Weighted Course

