

2017-2018
Middle and High School
PROGRAM OF STUDIES



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Isle of Wight County Schools

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GENERAL INFORMATION

Purpose

The *Program of Studies* is designed to provide students and their parents with information that will assist them in making prudent educational decisions in preparing for the 21st century.

This guide includes information on graduation requirements, career planning, instructional programs and courses offered in the middle and high schools in Isle of Wight County Schools (IWCS).

It is important that students consider the course descriptions and prerequisites, keeping in mind their personal abilities and interests. Parents are asked to review the *Program of Studies* 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.

Graduation Requirements

The Virginia Board of Education establishes graduation requirements for all students in public schools. Isle of Wight County Schools bases requirements on the Virginia Board of Education requirements. To receive a high school diploma, students must meet the minimum requirements for Advanced Studies Diploma, Standard Diploma, or Applied Studies Diploma. These diploma programs are designed to ensure that students have the skills and knowledge necessary to continue educational options after high school or to enter the work place. Through elective choices, students have the opportunity to design a course of study that best prepares them for different goals. Students are encouraged to consider both educational and career goals in selecting courses. The requirements for a student to earn a diploma shall be those in effect when that student enters the ninth grade for the first time. When students below the ninth grade successfully complete courses offered for credit in grades nine through twelve, credit is counted toward meeting the standard units required for graduation. To earn a verified unit of credit for the courses that have Standards of Learning (SOL) tests, students must pass the course and achieve a passing score on the end-of-course or an identified substitute test as approved by the Virginia Board of Education.

Class Rank, Grade Point Average and Honor Graduates

Class rankings will be provided for students in grades nine through twelve. Grade point averages will be provided for students in grades 9-12. Grade point average and class ranking will be based upon the grades the student has earned in courses for which high school credit is awarded (including failing grades, repeated courses, summer school, and high school credit courses taken prior to grade nine). Rank in class will be computed to the thousandth place truncated and no rounding imposed. For purpose of designation of student honors and for college admission information, the end of the first semester of the senior year will serve as the cutoff date

for computation of class rank. Grade Point Average (GPA) at the completion of the first semester of the senior year will be used to determine honor graduates. A student with a minimum 3.500 average is considered an honor graduate. GPAs will not be recalculated to determine honor graduate status based on second semester senior year grades.

Verified Unit of Credit

A verified unit of credit for graduation is based on a minimum of 140 clock hours of instruction, successful completion of the requirements of the course, and a passing score on the end-of-course Standards of Learning test for that course. A state-approved substitute test may be used for specified SOL tests. (See the Substitute Tests section in Appendix A.)

Student-Selected Test

Student-selected tests may also come from the successful completion of a career and technical education course in combination with a passing score on a Virginia Board of Education approved industry credential. Two student-selected verified credits will be awarded for passing an industry credential; and

- The student meets the career technical education concentration or specialization course requirements for program completer.
- The student earns at least two standard units of credit in the career and technical education concentration or specialization.
- The student may substitute one of these verified credits for a verified credit in either science or history/social science. (See Virginia Board of Education Approved Industry Certifications, Appendix B.)

Sequential Electives

Sequential electives means any series of courses that are used to fulfill the elective requirements for a standard diploma in which the content increases or expands in scope and sequence as students move through the various levels of the courses. To further assist local school divisions to ensure that students comply with the requirement, the following guidance is given:

1. The requirement for students to complete two sequential electives is effective with the graduating class of 2003 as stated in 8 VAC 20-131-50 of the accrediting standards.
2. The two sequential electives may be in any discipline in as long as the courses are not specifically required for graduation in 8 VAC 20-131-50 of the accrediting standards.
3. Notwithstanding item 2 above, courses used to satisfy the one unit of credit in a fine or practical art required for the standard diploma may be used to partially satisfy this requirement.
4. Guidelines for sequential electives in career and technical education programs are available from the Department of Education.
5. A sequence that includes an exploratory course followed by an introductory course cannot be used to satisfy this

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requirement; however, an introductory course followed by another level of the same course of study can be used.

6. Students may take the focused sequence of elective courses in consecutive years or any two years of high school.

Fine Arts/Career and Technical Education (CTE) Information

The following types of courses will meet the fine arts graduation requirement: all art courses, all band courses, all theater courses, and all chorus courses. The course taken to satisfy the fine arts requirement, may also serve as one of the two courses required to satisfy the sequential electives requirement. All career and technical education courses will meet the career technical education graduation requirement. The course taken to satisfy the fine arts or career technical education requirement may also serve as one of the two courses required to satisfy the sequential electives requirement.

Career and Technical Education Industry Credentialing

To encourage more students to work toward a selected industry credential or state license while pursuing a high school diploma, the Path to Industry Certification: High School Industry Credentialing program was developed.

A credential is defined as:

- State-Issued Professional License, required for entry into a specific occupation as determined by a Virginia state licensing agency (Licensed Practical Nurse (LPN), Cosmetology);
- Full Industry Certification, from a recognized industry, trade, or professional association validating essential skills of a particular occupation (A+ CompTIA, Microsoft Certified Professional (MCP));
- Pathway Industry Certification, which may consist of entry-level exams as a component of a suite of exams in an industry certification program leading toward full certification (Automotive Service Excellence, (ASE), Microsoft Office Specialist (MOS); or
- Occupational competency assessment, a national standardized assessment of skills/knowledge in a specific career and/or technical area, (NOCTI).

Academic and Career Plan

The Board of Education's Regulations Establishing Standards for Accrediting Public Schools in Virginia (SOA), includes provisions for each 7th and 8th grade middle school and 9th grade high school student to have a personal learning plan and course of study that aligns with the student's academic and career goals. Virginia acknowledges the importance of career and technical education to students by recognizing industry credentialing in its diploma requirements, and through the use of Career Pathways as an integral part of the newly required Academic and Career Plan.

The Academic and Career Plan must include but is not limited to:

- A program of study for high school graduation and a postsecondary career pathway based on the student's academic and career interests.
- A review and update, if necessary, before the student enters the ninth and eleventh grades.
- The signatures of the student, student's parent or guardian and school official(s) designated by the principal.

Note: The school shall have met its obligation for parental involvement if it makes a good faith effort to notify the parent or guardian of the responsibility for the development and approval of the Plan. The academic and career plan must be included in the student record.

Family Life Education (FLE)

The Family Life Education program is a comprehensive, age-appropriate, and sequential instruction in specific content areas. These areas include: growth and development; family development and emotions; safety at home and in the community; coping with feelings; sexually transmitted diseases; drug and alcohol influences on growth and development; & pregnancy and sexual relationships.

Virginia approved Standards of Learning Objectives for the Family Life Education Curriculum in 1992. Isle of Wight County School division adopted these objectives which covered grades K-12. The objectives were last revised in 2009 to align with the state Student Conduct Policy Guidelines regarding the appropriate use of electronic devices.

The more sensitive FLE program objectives are taught by trained staff members. Parents are sent a letter from the school with the dates for teaching the sex separate, sensitive lessons. Parents always have the right to call the school and ask about the curriculum lessons, review materials, and meet with the principal to fill out an opt-out form if they wish to have their child removed from the lessons.

Emergency Health Training

Entering Ninth-Grade Class of 2016-2017 and Beyond Training in Emergency First Aid, CPR, and Use of an AED - Beginning with first-time ninth grade students in the 2016-2017 school year, requirements for the standard and advanced diplomas shall include a requirement to be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation.

High School Test Requirements

The Virginia Board of Education has prescribed testing standards for graduation from high school.

The **Standards of Learning (SOL)** for Virginia Public Schools establish minimum expectations for what students should know and be able to do at the end of each grade or course in English, mathematics, science and history/social science. SOL tests are given in English 11 (reading and writing), Algebra I,

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Geometry, Algebra II, Earth Science, Biology, Chemistry, World History I, World History II, and Virginia and U.S. History that measure the success of students in meeting the Virginia Board of Education's expectations for learning and achievement. All items on SOL tests are reviewed by Virginia classroom teachers for accuracy and fairness and teachers also assist the state Board of Education in setting proficiency standards for the tests. Students must take all applicable end-of-course SOL tests following course instruction. Students who successfully complete a course and who achieve a passing score on an end-of-course SOL test or substitute test for that course shall be awarded a verified credit. Any student enrolled in a course that has an SOL test must take the test even if the student has met his/her verified credit requirement for that subject area.

Testing Accommodations

Testing accommodations may be available to students with disabilities who have IEPs or 504 plans, or students with limited English proficiency. Details of testing accommodations for the Standards of Learning Program are available at each school.

ACT Testing Accommodations

ACT is committed to serving students with documented disabilities by providing reasonable accommodations appropriate to the student's diagnosis and needs. ACT has established policies regarding documentation of an applicant's disability and the process for requesting accommodations. For details, see ACT Policy for Documentation to Support Requests for Test Accommodations on the ACT. If you currently receive accommodations in school due to a professionally diagnosed and documented disability, you **may** qualify for accommodations.

College Board Testing Accommodations

If you have a documented disability, you **may** be eligible for accommodations on SAT Program tests. Visit our [Services for Students with Disabilities \(SSD\) site](#) for information about accommodations, the request process, and required documentation. If you've already been approved by SSD to take the PSAT/NMSQT or AP Exams with accommodations, you don't need to submit a second request. College Board approval is required for every student — even those who receive accommodations at school. The College Board's request process can take up to seven weeks, so start early.

Credit Accommodations

Students with disabilities under IDEA or Section 504 may be eligible for credit accommodations. Credit accommodations provide alternatives for students with disabilities in earning the standard and verified credits required to graduate with a **Standard Diploma**. Credit accommodations for the **Standard Diploma** shall be determined by the student's Individualized Education Program (IEP) or Section 504 team, including the student where appropriate. The school must secure the informed written consent (**via the documents created by IWCS and VDOE**) of the parent/guardian and the student, as appropriate, to choose credit accommodations after review of the student's academic history and full disclosure of the student's options.

Students must meet the following criteria to be eligible to receive credit accommodations for the Standard Diploma:

- a. Student must have a current IEP or 504 plan with standards-based content goals.
- b. Student has a disability that precluded him or her from achieving and progressing commensurate with grade level expectations, but is learning on grade level content.
- c. Student needs significant instructional supports to access grade level Standards of Learning (SOL) content and to show progress.
- d. Based on multiple objective measures of past performance, student might not be expected to achieve the required standard and verified units of credit within the standard time frame.

Locally Awarded Verified Credits

Isle of Wight County Schools **may** award verified credits toward a standard diploma in science and history. Isle of Wight County Schools **may** also award verified credits toward a standard diploma in reading, writing and mathematics to a student with disabilities or a student who has a 504, if the student is found eligible for credit accommodations. To be eligible to earn locally awarded verified credits, a student must:

- Pass the high school course and not pass the related Standards of Learning test;
- Take the Standards of Learning test at least twice;
- Score within a 375-399 scale score range on two tests of the Standards of Learning test; and
- Demonstrate achievement in the academic content through the appeal process described below

Through the appeal process the division will be reviewing the documentation to ensure the students have participated in a required remedial program that may include, but is not limited to, results of classroom assignments, division-wide exams, grades, and additional academic assignments as the panel deems appropriate.

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Graduation Requirements and Diploma Options

Advanced Studies Diploma

The Advanced Studies diploma requires twenty-six (26) credits for students entering ninth grade in **2013-2014 and beyond**.

Students must also complete one virtual course. Of the twenty-six (26) credits, nine (9) must be verified credits as follows: two (2) English, two (2) math, two (2) science, two (2) social studies, and one (1) student-selected.

Standard Diploma

The Standard Diploma requires twenty-two (22) credits for students entering ninth grade in **2013-2014 and beyond**.

Students must complete one virtual course as well as earn a board-approved career and technical education credential.

Of the twenty-two (22) credits, six (6) must be verified credits as follows: two (2) English, one (1) math, one (1) science, one (1) social studies, and one (1) student-selected.

ADVANCED STUDIES DIPLOMA	
English 9, 10, 11, 12	4 credits
Mathematics (Courses completed to satisfy this requirement shall be at or above the level of algebra and shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Virginia Board of Education may approve additional courses to satisfy this requirement.)	4 credits
Laboratory Science (Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Virginia Board of Education may approve additional courses to satisfy this requirement.)	4 credits
History and Social Sciences (Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and two courses in either world history or geography or both. The Virginia Board of Education may approve additional courses to satisfy this requirement.)	4 credits
Foreign Languages (Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.)	3 credits
Health and Physical Education	2 credits
Fine Arts or Career & Technical Education	1 credit
Economics and Personal Finance	1 credit
Required Courses	23 CREDITS
Elective Courses	3 CREDITS
TOTAL	26 CREDITS

STANDARD DIPLOMA	
English 9, 10, 11, 12	4 credits
Mathematics (Courses completed to satisfy this requirement shall be at or above the level of algebra and shall include at least two course selections from among: Algebra I; Geometry; Algebra, Functions and Data Analysis; Algebra II or other mathematics courses above the level of Algebra II. The Virginia Board of Education may approve additional courses to satisfy this requirement.)	3 credits
Laboratory Science (Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines from among: earth sciences, biology, chemistry or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Virginia Board of Education may approve additional courses to satisfy this requirement.)	3 credits
History and Social Sciences (Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and one course in either world history or geography. The Virginia Board of Education may approve additional courses to satisfy this requirement.)	3 credits
Health and Physical Education	2 credits
Foreign Languages, Fine Arts or Career & Technical Education	2 credits
Economics and Personal Finance	1 credit
Required Courses	18 CREDITS
Elective Courses¹	4 CREDITS
TOTAL	22 CREDITS

¹Courses to satisfy this requirement must include at least two sequential electives.



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Applied Studies Diploma

The diploma is available to students with disabilities who complete the requirements of their Individualized Education Program (IEP) and who do not meet the requirements for other diplomas.

GED Certificate

In 2014, the GED 21st Century initiative changed the GED test. The new assessment measures high school equivalency and, in addition, career and college readiness through a new endorsement. The new test is delivered in a computer-based format only. The four tests measure the skills considered to be the major outcomes of a high school education. The tests focus on the major use of skills and concepts rather than upon recall of specific facts. The questions focus on the general abilities to analyze, evaluate, and draw conclusions. The subject areas are: Reasoning through Language Arts, Mathematical Reasoning, Science and Social Studies. To qualify for a Virginia GED Certificate, the following scores and performances must be met:

- 145-164: Pass/High School Equivalency
- 165-174: Pass/College Ready
- 175-200: Pass/College Ready + Credit

Transfer Information

Transfer grades and credit bearing courses from other school divisions will be accepted by Isle of Wight County Schools provided the courses are compatible with local and state regulations. For first-time transfers to a Virginia Public School, the graduation requirements must be in compliance with 8VAC 20-131-60. For a student transferring into a Virginia public school for the first time in grades 9-12, the graduation requirements depend on the grade the student is transferring into and when in the school year the student is transferring. A student is considered to have transferred at the beginning of the school year if 20 or fewer hours of instruction have been completed. A student is considered to have transferred during the school year if more than 20 hours of instruction has been completed.

Transfer Information for Active-Duty Military Families

Alternate provisions exist for students from **military** families transferring into Virginia as part of the Interstate Compact on Educational Opportunity for Military Children, under [§ 22.1-360](#) of the *Code of Virginia*. [Superintendent's Memo #091-11](#) includes information related to students in military families transferring into Virginia from another state.

- If the student transfers after meeting the sending state's testing requirements for graduation, the student is **not** required to pass any additional tests in order to graduate in Virginia. The transfer student is required, however, to complete any SOL tests associated with courses in which the student enrolls.
- If the sending state requires the student to take a test or tests but the state has not set a specified cut score or

passing score, the student must meet the same testing requirements as all other transfer students.

- If the sending state does not require students to pass end-of-course or exit tests in order to graduate, the student must meet the same testing requirements as all other transfer students.
- If the sending state administers content-based end-of-course tests required for graduation and the student achieved a passing score on any of those tests, the school division shall automatically accept the student's passing scores on the tests for the purpose of awarding verified credits in those subject areas. The test does not have to be comparable to a Virginia SOL test, so long as the test includes some content in the subject area.
- If the sending state administers a comprehensive subject area examination (e.g., exit test) as a testing requirement for graduation, the school division shall automatically accept the student's passing scores on the tests for the purpose of awarding verified credits in those subject areas. The test does not have to be comparable to a Virginia SOL test, so long as the test includes some content in the subject area. If the test includes some content from more than one subject, verified credits shall be awarded for **every** subject area covered by the test.
- If the sending state administers a national norm-referenced achievement test and that state agency has established a "cut score" or passing score for the purpose of graduation, the school division **shall** accept the test for the purpose of awarding a verified credit if the test includes some content in a subject for which a verified credit may be awarded. If that state education agency has not set a cut score for the norm-referenced test, the test **may not be used** for the purpose of awarding a verified credit or earning a high school diploma.
- If the student has taken any substitute test approved by the Virginia Board of Education for verified credit and achieved the required cut score, the school division shall accept the substitute test in lieu of the applicable SOL assessment.
- If the student has earned industry certifications, occupational competency assessments, and licensure assessments approved by the Virginia Board of Education, these shall be accepted for the student-selected verified credit.

The school division must consider each of these provisions in order to determine which SOL tests the transfer student from a military family should complete to meet the requirements for the desired diploma.

In all cases where students have earned a standard credit for coursework completed in another state but need to take the associated SOL test for verified credit, school divisions are encouraged to consider what supports should be made available to those students prior to testing. In order to aid preparation, efforts should be made to provide these students and their parent/guardian(s) sufficient notice of testing dates and information about the testing process, as well as options for remediation and retakes that may be available if needed.

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Placement of Home Instruction Students

When a middle school student enters Isle of Wight County Public Schools from a home instruction program, the principal shall determine grade placement based on evidence of achievement provided by the parent/guardian. If further evidence is necessary, parents will be contacted about scheduling a consultation with school staff or additional testing that may be required.

Any student requesting credit for high school courses taken in an approved home instruction program shall provide Isle of Wight County Schools with a list of courses taken, the objectives for the courses, and evidence of achievement. If the evidence of achievement is determined to be insufficient, the principal can require the student to take an examination in each course for which he or she wishes to earn credit. These examinations shall follow the state Standards of Learning (SOL) and locally approved developed pacing/curriculum guides for each course. In addition, students will be given direction in how to prepare for each examination. Any credit granted by Isle of Wight County Schools for courses taken under home instruction shall be designated on the student's scholastic record as credit transferred from home instruction.

Any credit granted by Isle of Wight County Schools for course(s) taken will result in credit(s) being awarded for all courses passed. Courses will be recorded on the permanent record of the student as P (Passing) or F (Failing). Credits awarded for home-schooled instruction will be so designed on the transcript by indicating "Home Instruction." The courses are NOT to be considered in the grade point average or class rank of the student. Grade level placement will be determined by the number of credits earned in accordance with established Isle of Wight County Public Schools School Board policy.

Once the student is enrolled and the principal has granted credit for a course, the student is now eligible to take the necessary SOL test(s) to earn verified credit for the course.

No students will be eligible for valedictorian/salutatorian honors who have not accumulated sixteen or more credits taught in classes at Smithfield High School and Windsor High School while enrolled as a full-time student.

Any student seeking a diploma from Isle of Wight County Public Schools must be officially enrolled in Isle of Wight County Public Schools as a full-time student. Students must meet all Isle of Wight County Public Schools requirements for admission and residency prior to enrollment.

Any parent wishing to appeal the principal's decision on grade placement or denial of credit may appeal the decision by sending a written request to the Executive Director of Secondary Education within fifteen calendar days of the

decision of the principal. The parent has the responsibility to provide written evidence of the inappropriateness of the grade placement or denial of credit. If the parent is not satisfied with the decision of the Executive Director of Secondary Education and the Assistant Superintendent, the next level of appeal is to the Superintendent. The Superintendent's decision may be appealed to the Isle of Wight County Public School Board. The decision of the Isle of Wight County School Board is final. This information can be found in School Board Policy LBD.

Verified Credit Requirements

Students entering high school at the beginning of the 9th grade		
Discipline Area	Standard Diploma	Advanced Diploma
English	2	2
Mathematics	1	2
Laboratory Science	1	2
History & Social Sciences	1	2
Student Selected	1	1
TOTAL:	6	9
Students transferring into a Virginia public school for the first time DURING 9th grade OR BEGINNING of 10th grade		
Discipline Area	Standard Diploma	Advanced Diploma
English	2	2
Mathematics	1	2
Laboratory Science	1	2
History & Social Sciences	1	2
Student Selected	1	1
TOTAL:	6	9
Students transferring into a Virginia public school for the first time DURING 10th grade OR BEGINNING of 11th grade		
Discipline Area	Standard Diploma	Advanced Diploma
English	1	2
Mathematics	1	1
Laboratory Science	1	1
History & Social Sciences	1	1
Student Selected		1
TOTAL:	4	6
Students transferring into a Virginia public school for the first time DURING 11th grade OR BEGINNING of 12th grade		
Discipline Area	Standard Diploma	Advanced Diploma
English	1	1
Student Selected	1	3
TOTAL:	2	4

During = After the first 20 hours of instruction

Beginning = First 20 hours of instruction

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Grading Scale

The chart below indicates the numerical scale approved by the School Board for Isle of Wight County Schools. Isle of Wight County School's grading scale will be used for transfer grades **(except when the previous school's grade scale is provided on the student's transcript)**.

A 93-100	B- 80-82	D 65-69
A- 90-92	C+ 77-79	F 64 and below
B+ 87-89	C 73-76	
B 83-86	C- 70-72	

Weighted Credit

The regular, honors and advanced numeric weighting scales are indicated below. They will be used for calculating grade point average and class rank. If a course receives additional weight, it is noted on the course description in course offerings. If a course is weighted in the Isle of Wight County School's Program of Studies course offerings and the weight is indicated on a transfer student's transcript, the student will receive the course weight designated below. The student will not receive the weight, if the course did not receive additional weight when earned. Students may retake a course in order to obtain a better grade in a course, but the two courses must be the **same** (i.e. course code). The original grade shall appear on the transcript and the retaken course grade shall also appear on the transcript. The higher grade shall be figured into the GPA. Students shall receive credit only once for a single course. The credit earned for the course shall appear on the transcript under the higher course grade. **NOTE: Regular, honors and advanced courses are not the same.**

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Letter Grade	Numeric Grade Range	GPA Weight
A	93-100	4.0
A-	90-92	3.7
B+	87-89	3.3
B	83-86	3.0
B-	80-82	2.7
C+	77-79	2.3
C	73-76	2.0
C-	70-72	1.7
D	65-69	1.0
F	64 and below	0.0

HONORS

Letter Grade	Numeric Grade Range	GPA Weight
A	93-100	4.5
A-	90-92	4.2
B+	87-89	3.8
B	83-86	3.5
B-	80-82	3.2
C+	77-79	2.8
C	73-76	2.5
C-	70-72	2.2
D	65-69	1.0
F	64 and below	0.0

ADVANCED

Letter Grade	Numeric Grade Range	GPA Weight
A	93-100	5.0
A-	90-92	4.7
B+	87-89	4.3
B	83-86	4.0
B-	80-82	3.7
C+	77-79	3.3
C	73-76	3.0
C-	70-72	2.7
D	65-69	1.0
F	64 and below	0.0

Level of Difficulty and Course Placement

Honors

All students are encouraged to take the most rigorous curriculum available. These courses are designed to provide a challenging curriculum to motivated students with strong interests in particular subject areas. The curriculum of an honors course is accelerated in both pace and content, is rigorous and relevant, assumes a mastery of the basic skills related to the subject area and has the expectation of high-quality student work.

Advanced

Isle of Wight County Schools is committed to ensuring that all students maximize their potential and acquire higher-order reasoning skills as well as life-long habits of mind. To achieve that goal, Isle of Wight County Schools offers several advanced academic programs to students. Students may choose to enroll in college-level courses through Dual Enrollment (DE), Advanced Placement (AP), The Governor's School of Arts (GSA) and The Governor's School of Science and Technology (GSST).

Each of the advanced-level programs is designed to provide a challenging curriculum to motivated students. The courses are taught at an accelerated pace and offer enhanced content. Students will receive more homework and reading in these courses. In addition, a focus will be placed on creativity, critical thinking, communication and collaboration. The advanced academic courses provide students with a stronger foundation for post-secondary education.

GENERAL INFORMATION

Special Education Program

In compliance with federal and state regulations and local procedures for managing the special education process, the Isle of Wight County School Division offers a comprehensive program of services for students with disabilities, ages 2 through 21 inclusive. This program includes services in the schools for the following special education categories identified in federal and state regulations: Autism, Deaf-Blindness, Developmental: age 5-6, Emotional Disability, Hearing Impairment/Deaf, Intellectual Disability, Learning Disability, Multiple Disabilities, Orthopedic Impairment, Other Health Impairment, Speech or Language Impairment, Traumatic Brain Injury, and Visual Impairment including blindness. Related services are provided if deemed appropriate by the Individualized Education Program (IEP) Committee. Vocational evaluations, training opportunities and post-secondary transition are provided beginning at age 14 if determined to be necessary by the IEP Committee.

The educational program for each student with a disability is determined by an Individualized Education Program (IEP). It is designed by the school-based IEP team that includes parents, educators, and related service providers. The IEP team develops goals and objectives/benchmarks to assist a student with a disability in accessing the general education curriculum or an alternate curriculum using special education services and supports at the frequency and duration deemed necessary.

Southeastern Cooperative Educational Program (SECEP)

The Southeastern Cooperative Educational Program (SECEP) is a regional, educational consortium that includes numerous programs. In addition to the programs provided for students without disabilities, SECEP offers programming for students with disabilities in the areas of Autism, Emotional Disability, Intellectual Disability (with accompanying significant behavioral deficits), and Multiple Disabilities, whose needs cannot be met in less restrictive settings. All screenings, referrals, evaluations, initial Individualized Education Programs (IEPs), and recommendations for placement are made by the Isle of Wight County School Division. Revisions are made to the initial placement IEP by the SECEP staff with parent and division input.

English-as-a-Second Language Program

The English-as-a-Second Language (ESL) program helps limited-English-proficient students achieve proficiency in English so they can make satisfactory achievement in the regular school program. Instruction is provided to help students succeed in the English Standards of Learning and other content areas. Emphasis is placed on the development of communication skills in English. Listening, speaking, reading, and writing are emphasized. All ESL students must take a language placement test when they initially enroll. Additionally, ESL students must take a federally-mandated English language proficiency test each spring. Required verified credits for graduation vary depending on the year in which the student first enters public high school in Virginia.

Students and their parents should consult the guidance department for specific information.

UpLift Academy (Grades 6 – 12)

The UPLIFT Concept: *A 21st Century focused Learning Model for Learners with Personalized Learning Environments and Needs*

UPLIFT Academy is a multi-faceted, alternative educational program aimed at providing students personalized learning experiences through blended instruction, behavioral awareness, and employment and community service opportunities to foster successful transition to continual pursuit of educational and lifelong goals.

Paul D. Camp Community College

Isle of Wight County Schools has an agreement for postsecondary degree attainment with Paul D. Camp Community College. Students can work on the completion of an associate's degree from the community college while working to fulfill the requirements of a high school diploma. The agreement specifies how credit will be awarded. Currently, Isle of Wight County Schools is offering the following core dual enrollment courses: DE English 12, DE Probability and Statistics, DE Math Analysis/Pre-Calculus, and DE Calculus.

GENERAL INFORMATION

Virginia Department of Education Graduation (Diploma) Seals of Achievement

Students meeting specific requirements for graduation and demonstrating exemplary performance may receive diploma seals for recognition. Virginia Department of Education (VDOE) makes available to local school divisions the following seals:

Name	Specific Requirements
Governor's Seal	Awarded to students who complete the requirements for an Advanced Studies Diploma with an "average grade of 83" or better, and successfully complete college-level coursework that will earn the student at least nine transferable college credits in Advanced Placement (AP), International Baccalaureate (IB), Cambridge, or dual enrollment courses.
Board of Education Seal	Awarded to students who complete the requirements for a Standard Diploma or Advanced Studies Diploma with an "average grade of 93" beginning with the ninth-grade class of 2006-2007 and beyond.
Board of Education's Career & Technical Education Seal	<p>Awarded to students who:</p> <ul style="list-style-type: none"> • earn a Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain an "average grade of 83" or better in each course • OR pass an examination or an occupational competency assessment in a career and technical education concentration or specialization that confers certification or occupational competency credential from a recognized industry, trade or professional association • OR acquire a professional license in that career and technical education field from the Commonwealth of Virginia. <p>The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.</p>
Board of Education's Advanced Mathematics & Technology Seal	<p>Awarded to students who earn either a Standard or Advanced Studies Diploma and satisfy all of the mathematics requirements for the Advanced Studies Diploma (four units of credit including Algebra II; two verified units of credit) with an "average grade of 83" or better in each course; and either</p> <ul style="list-style-type: none"> • pass an examination in a career and technical education field that confers certification from a recognized industry, or trade or professional association • OR acquire a professional license in a career and technical education field from the Commonwealth of Virginia • OR pass an examination approved by the board that confers college-level credit in a technology or computer science area. <p>The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.</p>
Board of Education's Excellence in Civics Education Seal	<p>Awarded to students who meet each of the following four criteria:</p> <ul style="list-style-type: none"> • Satisfy the requirement to earn a Modified Standard Diploma, a Standard Diploma or an Advanced Studies Diploma • Complete Virginia & United States History and Virginia & United States Government courses with an "average grade of 83" or higher in each course • 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; and 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. See IWCS Voluntary Community Service Document, Appendix C. • Have good attendance and no disciplinary infractions as determined by local school board policies.
Board of Education's Seal of Biliteracy	<p>Awarded to students who earn either a Board of Education-approved diploma: "foreign language" means a language other than English, and includes American Sign Language.</p> <ul style="list-style-type: none"> • Passes all required End-of-Course Assessments in English reading and writing at the proficient or higher levels • 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.

MIDDLE SCHOOL CURRICULUM

General Information

The information in this guide is designed to assist students and parents with the selection of courses for the sixth, seventh, and eighth grades and to provide information for long range planning. Students and parents are encouraged to read the Program of Studies and talk with school guidance counselors and teachers. Course choices in the sixth, seventh, and eighth grades may influence decisions in the high school program.

Isle of Wight County has two middle schools. Georgie D. Tyler Middle School has three grade levels 6 – 8. Smithfield Middle School has two grade levels 7 and 8. Middle school students are characterized by a need to explore a variety of interests. The flexible block schedule allows a wide variety of academic opportunities as well as programs and non-academic activities that support student growth and development. Each student is assigned to a grade level team of teachers. The team operates like a small school within a school. The students share a small number of teachers who provide academic instruction. The students will be enrolled in English, math, science, social studies, health/physical education, and electives. The electives offered at the middle school are exploratory courses that provide students with a variety of experiences. These courses are offered in varying lengths of instructional time. Eight grade students may have the opportunity to participate in high school credit bearing courses.

Academic Year

The regular academic year is divided into four nine-week periods. Core courses are generally one year in length. Exploratory/elective courses are offered at varied lengths of time (9 weeks, 18 weeks and 36 weeks). Students receive a final grade at the end of the course.

Courses

Core courses include English, mathematics, science and social studies. These courses are normally taught all year or on A/B Block schedule. Elective courses include art, music, exploratory foreign languages, technology education, and health/physical education. Elective courses for high school credit include foreign languages and Algebra I.

Registration

At registration time, students will be given information concerning course selection for the coming year. The courses listed in this document will be offered, if there is sufficient enrollment and available staff. Grade levels listed for exploratory/elective courses indicate the grade(s) in which the course may be taken.

Grading Procedures

Middle School Courses

Middle school teachers are expected to provide a final letter grade in academic subjects and exploratories taught during the nine (9) weeks grading period. Middle school teachers are expected to have at least thirteen grades (three grades for tests/projects/essays, five grades for quizzes/labs/presentations, and five classwork/learning

activities/reflections) in PowerSchool for each student in every course taught during the nine (9) weeks grading period.

Grades will be calculated based on the categories and weighted values below:

Category Weighted Value

- Test/Projects/Essays-----33.3%
- Quizzes/Labs/Presentations-----33.3%
- Classwork/Learning Activities/Reflections-----33.3%
- Students will be required to complete a culminating activity for each course.

Semester and final year grades shall be given in middle school. The two nine (9) weeks grades shall be averaged together to determine the final grade in a semester course. The four nine week's grades shall be averaged to determine the final grade for yearlong course. Letter grades shall be used to record student achievement on report cards. Letter grades shall be used to identify honor roll students.

High School Courses

State standards require that when students below the ninth grade successfully complete courses offered for credit in grades 9 through 12, credit shall be counted toward meeting the standard units required for graduation provided the courses are equivalent in content and academic rigor as those courses offered at the secondary level. Therefore, these high school credit bearing courses will use the categories and weighted values established below:

Category Weighted Value

- Test/Culminating Project-----45%
- Classwork/Lab/Quiz/Essay/Project--25%
- Homework-----10%
- Exam-----20%

Purging/Expunging Grades

High school credit bearing courses taken in middle school will count toward meeting the credits required for graduation. Based on School Board IKEB-E, High School Credit Waiver Request, see Appendix G, the grades of middle school students who take credit bearing courses can be purged if certain procedures are followed.

- The parent/guardian of a middle school student taking a high school credit bearing course(s) may request that the grade for such course or courses be purged from the student's transcript and that the student not earn high school credit for the course
- A written request via the form, IKEB-E, for purging/expunging of grades pursuant to this regulation must be presented to the middle school building principal **on or before July 15 of the school year immediately following completion of the course.**
- Once the middle school principal receives a request for the purging of such grade and credit, the middle school will alter the student's grade in PowerSchool, so the course, grade and credit are not reflected and

MIDDLE SCHOOL CURRICULUM

a note is added to the historical grade indicating the reason. The completed form should be retained in the student's cumulative file.

- A student dropping a course pursuant to this exhibit is still required to meet the prescribed graduation requirements set forth in policy; where a course has been dropped, a course fulfilling the graduation requirement must be successfully completed at the middle school or high school level.
- A student who has a grade purged from his/her record, but passes the related end-of-course SOL test, will not be required to retake the SOL test to earn verified credit if he/she successfully repeats the related course.

Athletic Program

Eight graders are eligible to participate in interscholastic competition, practices or travel. Students entering the eighth grade for their first semester are automatically eligible for junior varsity athletic activities only. They must be enrolled in four core courses (i.e., math, English, science and social studies) and at least one exploratory course. To remain eligible for the second semester the student must pass three of four core courses and have an *overall* grade point average of 2.00 or better. All eligible students must also comply with the attendance policy and be in good standing thus meeting the bona fide student rule of the VHSL. For more information, please see the high school curriculum section **Athletic/Activity Participation**.

Test Requirements

The Virginia Board of Education has prescribed testing standards for middle school.

The **Standards of Learning (SOL)** for Virginia Public Schools establish minimum expectations for what students should know and be able to do at the end of certain grades in English, mathematics, science, and history/social science. SOL tests are given in English 6 (reading), Math 6, English 7 (reading), Math 7, English 8 (reading and writing), Math 8, Physical Science, and Civics/Economics that measure the success of students in meeting the Virginia Board of Education's expectations for learning and achievement. All items on SOL tests are reviewed by Virginia classroom teachers for accuracy and fairness and teachers also assist the state Board of Education in setting proficiency standards for the tests. Students must take all applicable SOL tests following course instruction.

Testing Accommodations

Testing accommodations may be available to students with disabilities who have IEPs or 504 plans, or students with limited English proficiency. Details of testing accommodations for the Standards of Learning Program are available at each middle school.

Promotion Standards

Promotion is based on student achievement and attendance in school. Each student is expected to achieve grade level and content area skills and knowledge. If expectations for student

achievement are not being met by a student in the middle school, a conference will be held with the parent or guardian. Notice of promotion and retention will be given to the parent or guardian on the final report card at the end of the school year.

In addition, a student must meet attendance requirements to be considered for promotion. [See School Board policy JED] A student's parent or guardian may appeal a retention decision based on a violation of the attendance policy. Appeals are made to the principal as outlined in JED-R.

The final decision regarding promotion, retention, and the use of other instructional interventions designed to promote student learning, rests with the principal. All decisions will be based on what is in the best interest of each child and in accordance with Regulations Establishing Standards for Accrediting Public Schools in Virginia.

Promotion Requirements for Grades 6-8 (JECC-R)

A student who does not pass the English or Mathematics class or the English or Mathematics Standards of Learning tests may be required by the principal and/or the Student Assessment Team to participate in interventions that may include, but are not limited to:

- A summer school/enrichment program
- Before and after school tutoring
- Remediation during regular instructional day
- Retention in grade
- Next grade placement with remediation indicated

Homebound Services

The School Board shall maintain a program of homebound instruction for students who are confined at home or in a health care facility for periods that would prevent normal school attendance based upon certification of need by a licensed physician, physician assistant, nurse practitioner, or clinical psychologist. Credit for the work shall be awarded when it is done under the supervision of a licensed teacher, a person eligible to hold a Virginia license, or other appropriately licensed professional employed by the School Board, and there is evidence that the instructional time requirements or alternative means of awarding credit adopted by the School Board have been met. The principal is responsible for the provisions of homebound instruction – securing the homebound instructor, screening assignments, gathering work from the homebound instructor, and securing approval for providing homebound instruction from the homebound instruction coordinator.

The following procedures should be followed to implement policy IGBG, Homebound Instruction:

1. Parents who want homebound instruction for a child should have a Homebound Instruction Medical Certification of Need (IGBG-E1) and an original prescription completed by a licensed physician, psychiatrist, or clinical psychologist. The forms must be completed by a professional authorized to treat the illness for which homebound services are being requested.
2. The principal employs a certified teacher when a Homebound Instruction Medical Certification of Need and an

MIDDLE SCHOOL CURRICULUM

original prescription are returned with a recommendation for homebound instruction, and the request has been approved by the homebound instruction coordinator. A copy of the Homebound Instruction Medical Certification of Need and an original prescription is forwarded to the homebound instruction coordinator.

3. The principal submits the homebound instructor's time sheet (IGBG-E2) with the necessary signatures to the homebound instruction coordinator two (2) days before the payroll due date.

4. The homebound instruction coordinator submits the homebound instructor's time sheet (IGBG-E2) with the necessary signatures to the finance department by the payroll due date.

5. Students on homebound instruction are considered present in school for the period of approved homebound instruction.

6. Extensions of homebound service require the completion and approval of the Homebound Instruction Medical Certification of Need Reauthorization Form (IGBG-E3).

7. Receipt of Homebound Instruction does not guarantee passing of courses, promotion to the next grade, or on-time graduation.

Summer Program

The middle school summer program is designed for students in grades six, seven and eight, as an enrichment program which also addresses student academic deficiencies. IWCS promotion standard requires that students are promoted to the next grade on the basis of earning passing final grades in the core subjects of English, mathematics, science and social studies. If a student needs to successfully repeat one or two of the required courses to be eligible for promotion to the next grade level, the student should attend the summer program. Students who have not met promotion standards or have not passed a state assessment may be recommended by the principal to attend the summer enrichment program as an intervention to help improve academic achievement. All middle school summer programs are subject to sufficient enrollment and availability of certified teaching staff.

Gifted Education

Intellectually gifted students attending middle schools have pull out and push in gifted instruction through the collaborative work of cluster teachers and the gifted resource teacher. Either option allows gifted students to work to their potential through curricular opportunities emphasizing differentiated curriculum and instruction and the use of strategies designed especially to raise the level of challenge. The resource-cluster program promotes optimum understanding of the needs of gifted children for all school staff. Gifted students interact with their teachers, classmates, and gifted peers in a heterogeneous grouping, while attaining benefits through the modification of content, process, product, and learning environment.

MIDDLE SCHOOL COURSES

ENGLISH

Course Name: English 6

Local Code: 110906

Grade Level: 6

Course Description:

In this course the student will read both fiction and nonfiction for comprehension and appreciation. Textbooks and novels will be used to support learning in other disciplines and to develop critical reading and reasoning skills. Writing will also be a major focus. The student will plan, draft, revise, and edit narratives, descriptions, and explanations, focusing on composing, style, sentence formation, usage, and mechanics.

Course Name: English 7

Local Code: 111007

Grade Level: 7

Course Description:

In this course the student will continue to develop and refine reading skills through the use of fiction, nonfiction, and including poetry. The student will also continue to develop writing skills with emphasis on persuasive and technical writing. Proficiency in communication, both verbal and nonverbal, will be further developed and expanded.

Course Name: English 8

Local Code: 112008

Grade Level: 8

Course Description:

In this course the student will learn the characteristics of various types of literature and apply that knowledge in analyzing, discussing, and writing about literature. The student will continue to develop critical reading skills and writing skills, both of which will be applied in the study of other subjects.

Course Name: Language Arts K-8

Local Code: 51037S

Grade Level: 6, 7, and 8

Course Description:

This individualized instructional course for identified students with disabilities emphasizes basic reading, listening, speaking, spelling, vocabulary, grammar, and writing as outlined on the student's IEP. The course may be continued.

MATHEMATICS

Course Name: Math 6

Local Code: 311006

Grade Level: 6

Course Description:

The course emphasizes rational numbers. Students will use ratios to compare data sets; recognize decimals, fractions, and percents as ratios; solve single-step and multistep problems, using rational numbers; and gain a foundation

in the understanding of integers. Students will solve linear equations and use algebraic terminology. Students will solve problems involving area, perimeter, and surface area, work with π (pi), and focus on the relationships among the properties of quadrilaterals. In addition, students will focus on applications of probability and statistics.

Course Name: Math 7

Local Code: 311107

Grade Level: 7

Course Description:

The course emphasizes the foundations of algebra. Topics in grade seven include proportional reasoning, integer computation, solving two-step linear equations, and recognizing different representations for relationships. Students will apply the properties of real numbers in solving equations, solve inequalities, and use data analysis techniques to make inferences, conjectures, and predictions. After completing this course, screening process will be used to determine placement into Math 8 or Algebra I.

Course Name: Math 8

Local Code: 311208

Grade Level: 8

Course Description:

The course provides students additional instruction and time to acquire the concepts and skills necessary for success in Algebra I. Students will gain proficiency in computation with rational numbers and will use proportions to solve a variety of problems. New concepts include solving multistep equations and inequalities, graphing linear equations, visualizing three-dimensional shapes represented in two-dimensional drawings, and applying transformations to geometric shapes in the coordinate plane. Students will verify and apply the Pythagorean Theorem and represent relations and functions, using tables, graphs, and rules.

Course Name: Mathematics K-8

Local Code: 51039S

Grade Level: 6, 7, and 8

Course Description:

This individualized instructional course for identified students with disabilities continues those mathematics reasoning and calculations skills introduced/mastered in elementary school as outlined on the student's IEP. This course may be continued.

Course Name: Algebra I

Local Code: 31300G

Course Description:

The course requires students to use algebra as a tool for representing and solving a variety of practical problems. Tables and graphs will be used to interpret algebraic expressions, equations, and inequalities and to analyze behaviors of functions. Graphing calculators, computers,

MIDDLE SCHOOL COURSES

and other appropriate technology tools will be used to assist in teaching and learning. Graphing utilities enhance the understanding of functions; they provide a powerful tool for solving and verifying solutions to equations and inequalities. Throughout the course, students will be encouraged to engage in discourse about mathematics with teachers and other students, use the language and symbols of mathematics in representations and communication, discuss problems and problem solving, and develop confidence in themselves as mathematics students. Instruction will focus on sequential development of concepts and skills using concrete materials to assist in the transition from the arithmetic to the symbolic. **High school credit is awarded and the grade becomes a part of the high school Grade Point Average (GPA).**

SCIENCE

Course Name: Science 6

Local Code: 410506

Grade Level: 6

Course Description:

The course integrates scientific investigation, reasoning, and logic to develop student understanding of the interrelationship of force, motion, and energy; the description, physical properties, and basic structure of matter; the health of ecosystems and the abiotic factors of a watershed; the interrelationship and interaction of Earth systems with the solar system; and the importance of Earth's natural resources, and resource management in terms of costs, benefits, and conservation policies.

Course Name: Life Science

Local Code: 411507

Grade Level: 7

Course Description:

The living world is emphasized in this course by studying change, life cycles, patterns, and relationships. Students gain an understanding of these principles through the following: a study of organization and classification of organisms; the relationships among organisms, populations, communities, and ecosystems, and change due to the transmission of genetic information from generation to generation. Students will study data analysis, manipulation of variables in experimentation, and identify sources of experimental error.

Course Name: Physical Science

Local Code: 412508

Grade Level: 8

Course Description:

The course emphasizes the nature and structure of matter and the characteristics of energy. Areas of study will include the following: the periodic table, physical and chemical changes, nuclear reactions, temperature and heat, sound, light, electricity, magnetism, work, force, and motion. Research, experimentation, and the manipulation of variables to validate conclusions will be included.

Students will share their work through written and oral presentations.

Course Name: Science K-8

Local Code: 532395

Grade Level: 6, 7, and 8

Course Description:

This individualized instructional course for identified students with disabilities introduces/enhances practical science knowledge using a hands-on approach as outlined on the student's IEP. This course may be continued.

SOCIAL STUDIES

Course Name: U. S. History I

Local Code: 235306

Grade Level: 6

Course Description:

The course covers United States history up to the year of 1865. Areas of study include change and continuity in our history and the study of historical documents and speeches that comprise the foundation of American ideals and institutions. Simulations, class debates, projects, primary sources will be the cornerstones of the class. Map and globe skills are used to interpret information, and think in historical terms.

Course Name: U. S. History II

Local Code: 235407

Grade Level: 7

Course Description:

The course covers United States history from 1865 to present day. The end of the Reconstruction Period to the present day is emphasized. Primary Sources, discussion, debate, historical analysis, and persuasive writing are used to study historical events.

Course Name: Civics and Economics

Local Code: 235708

Grade Level: 8

Course Description:

This course examines the structure and functions of government at national, state, and local levels. The study of historical documents, such as the Declaration of Independence, the Articles of Confederation, and the Virginia Statute of Religious Freedom are used to provide an understanding of the law, a sense of civic duty, and patriotism. Emphasis is on the study of the United States and Virginia constitutions. A basic knowledge of the American economic system is developed by studying its structure and free market concepts.

Course Name: Social Studies K-8

Local Code: 544395

Grade Level: 6, 7, and 8

Course Description:

This individualized instructional course for identified students with disabilities emphasizes the major content

MIDDLE SCHOOL COURSES

components of history/social science and stresses citizenship and awareness needed for adult functioning as outlined on the student's IEP. This course may be continued.

HEALTH/PHYSICAL EDUCATION

Course Name: Health and Physical Education

Local Code: 711006

Grade Level: 6

Local Code: 712007

Grade Level: 7

Local Code: 720008

Grade Level: 8

Course Description:

In this course students will develop more sophistication in understanding health issues and practicing health skills. They will apply physical, emotional, social, and environmental health skills and strategies to improve or maintain personal and family health. Students will begin to understand adolescent health issues and concerns and the relationship between choices and consequences. They will be taught how to be a positive role model and the impact of positive and negative peer pressure. Students will demonstrate injury-prevention behaviors at school and in their community. Students will experience a variety of activities to learn and apply movement concepts to understand how and why the body moves. Activities are used to build movement competence and confidence through acquisition, performance, and refinement of skills. Students will explain the importance of and exhibit the ability to be safe in a variety of movement activities. They will apply knowledge of types of joints to explain a variety of movements. Students will explain the connection between energy balance and nutrition guidelines, meal planning, and heart rate. They will apply skills of measurement, analysis, goal setting, problem solving, and decision making to create and implement a basic personal fitness plan to improve or maintain the health-related components of fitness. Students will demonstrate and apply skills of communication, conflict resolution, appreciation of the contribution of others, and cooperation to achieve individual and group goals in the physical activity setting. Students will identify and apply skills of focus and self-control, making connections, critical and creative thinking, taking on challenges, and self-directed engaged learning.

WORLD LANGUAGES

Course Name: Foreign Language Exploratory (FLEX)

Local Code: 570006

Grade Level: 6

Course Description:

This nine-week foreign language introductory course investigates human languages and how they have developed to meet changing cultural needs. A rationale

for studying foreign languages is explored along with career opportunities related to fluency in more than one language. Students will be introduced to the development of English and the influences (history, geography, and cultural) that contributed to the language we speak today. Families of languages will also be taught so that students will see how they are interrelated. Comparisons of words will help students prepare for exploring specific languages in 7th grade.

Course Name: Foreign Language Exploratory (FLEX)

Local Code: 570007

Grade Level: 7

Course Description:

In this course the student will explore two or more of the following languages: Latin, German, Japanese, French, and Spanish. Students learn basic greetings, numbers, days, months, family, and other essential vocabulary, along with alphabetical and phonetic systems of these languages. Students also study the culture of countries in which each language is spoken, and the historical/geographical influences that shaped them.

Course Name: Latin I

Local Code: 53100G

Prerequisite: Earned an A or B in English 7

Course Description:

The course focuses on the primary elements of grammar, analysis and interpretation of syntax in a given sentence, and reading aloud with standard classical pronunciation and accent. Major geographical, mythological, and cultural derivative study begins. **Students successfully completing this course will be awarded high school credit and the grade becomes a part of the high school Grade Point Average (GPA).**

Course Name: Spanish I

Local Code: 55100G

Prerequisite: Earned an A or B in English 7

Course Description:

The course incorporates an understanding of words and expressions in varied contexts, the use of acceptable Spanish in daily classroom communications, association of written with spoken forms of the language, and written responses to questions and directed statements. The geography of Spanish-speaking countries and comparative lifestyles are also studied. **Students successfully completing this course will be awarded high school credit and the grade becomes a part of the high school Grade Point Average (GPA).**

MIDDLE SCHOOL COURSES

FINE ARTS

Course Name: Art
Local Code: 910306
Grade Level: 6

Course Description:

The focus of this nine-week art course is exploration. Students will be introduced to multiple art concepts and experiences using a variety of art media in both two-dimensional and three-dimensional works. Emphasis will be on the elements and principles of design. Students will distinguish various art styles including the influence of the American culture on art. The role of art and artists in society will be examined. Critical analyses and aesthetics, and using appropriate art vocabulary, will be incorporated into studio work.

Course Name: Art
Local Code: 910507
Grade Level: 7

Course Description:

This course will continue to develop and apply the elements and principles of design. Both two-dimensional and three-dimensional design will be explored with emphasis on realistic representation. The student will utilize the design processes artists use to create a final art product. Students will develop technical skills, inquiry skills and art vocabulary, which will enable them to communicate ideas both visually and verbally. Various art careers and use of technology will also be investigated. The use of simple and linear perspectives will be explored during the course of study. Students will compare and contrast art styles using personal responses and/or formal analysis based on the elements and principles of design.

Course Name: Art Exploratory
Local Code: 910608
Grade Level: 8

Course Description:

This course will further expand and develop the use of the elements of art and the principles of design in this 18-week course. Students will develop skills needed for rendering realistic representation as well as exploring the nature of expressionism and abstraction. Perspective, color theory, and technology are among the concepts to be explored. Art production will include both two-dimensional and three-dimensional design. Students will critique personal works and the works of others using appropriate art vocabulary. Select students may be eligible to participate in the Visions Art course based on a portfolio assessment and teacher recommendation.

Course Name: Art 8 (Visions Art)
Local Code: 911508
Grade Level: 8

Course Description:

This is a year-long course, advanced art program designed for 8th grade students who may wish to pursue art as a

career. Students will focus on creating a portfolio or work that would assist them in applying to an advanced art program, such as Advanced Placement Art or the Governor's School for The Arts. Art projects are an extended version of Art 8 semester art, with additional requirements in art history and keeping a sketchbook. Students are allowed to enroll in this course through recommendation from the art teacher, and performance in 7th grade art and/or portfolio entry.

Course Name: Chorus
Local Code: 927007
Grade Level: 7

Course Description:

This course is designed to work with those students interested in developing their vocal musical talents and abilities. Students will sing in unison, rounds, two parts, and partner songs. Students will work on intonation, expression, and reading musical notation. Performances are an essential and required element of the class and will impact a student's grade. Students will perform for school events and various district events.

Course Name: Chorus
Local Code: 929608
Grade Level: 8

Course Description:

This course works on expanding and developing the student's vocal range and musical capabilities using difficult music and sight-reading. Students will sing in unison, rounds, two and three parts, and partner songs. Performances are an essential and required element of the class and will impact a student's grade. Students will perform for school concerts and various district events.

Course Name: Intro to Guitar I
Local Code: 924507
Grade Level: 7

Course Description:

In this course students will receive beginning instruction on acoustic guitar. Students will learn basic positions, right and left hand techniques and tone production. Proper care of the guitar will be taught as well as counting, reading and performing music of various levels of difficulty.

Course Name: Intro to Guitar II
Local Code: 924508
Grade Level: 8

Prerequisite: Student needs a recommendation from Guitar teacher

Course Description:

In this course students will learn basic guitar skills including the history of guitar, identifying parts of the guitar, and how to tune by ear. The students will begin to read music, learn basic strumming techniques, and how to play open chords.

MIDDLE SCHOOL COURSES

Course Name: Beginning Band**Local Code: 923006****Grade Level: 6****Course Description:**

This course will enable students to begin receiving instruction on traditional band instruments. The students will focus on mastering basic skills such as correct breathing techniques, posture, embouchure, and hand/fingering positions. Students will start by playing simple rhythmic patterns and basic expressive elements. Students will count, read and perform music as well as opportunities to participate in local events.

Course Name: Concert Band**Local Code: 923107****Grade Level: 7**

Prerequisite: Students must have prior playing experience such as formal instruction in a band program, knowledge of note names (A-G), and counting of basic rhythms (whole, half, quarter, and eighth).

Course Description:

In this yearlong course students will focus on continuing to develop basic musicianship and music literacy. Students will explore greater use of articulations, scales, key signatures and repertoire representative of Grade Levels 1-3 in accordance of the Virginia Band and Orchestra Directors Association (VBODA). Students will also study aspects of basic composing, music theory, and historical periods, musical styles, composers and career options in music. Performances are an essential and required element of the course and will impact a student's grade. Students will perform for school events, district events, and a local parade. Some after-school practice is involved to prepare for performances as well as local, district and regional events.

Course Name: Concert Band**Local Code: 924008****Grade Level: 8****Course Description:**

In this course students should have prior playing experience such as formal instruction in a school band program. Students should have mastered basic skills and will focus on acquiring more advanced technical and expressive skills and demonstrate a mature level of musicianship. Students will demonstrate advanced articulations, fingerings, scales and arpeggios, rudiments and complex rhythmic patterns and literature representative of Grade Levels 2-4 of the Virginia Band and Orchestra Directors Association (VBODA). Students will also study aspects of basic composing, music theory, history, and career options in music. Performances are an essential and required element of the course and will impact a student's grade. Students will perform for school events, district events, and a local parade. Some after-school practice is involved to prepare for performances as well as local, district and regional events.

Course Name: Jazz Band**Local Code: 926007****Grade Level: 7****Local Code: 925008****Grade Level: 8**

Prerequisite: Audition with criteria set by the band director

Course Description:

In this course members of the jazz band will be expected to participate in concert band performances. Students will perform a variety of jazz music from different styles. Students will study some jazz theory and history. Students will also study aspects of basic composing, music theory, and history. Performances are an essential and required element of the class and will impact a student's grade. Students will perform for school, community, and district events. There is some after-school practice involved to prepare for performances.

CAREER AND TECHNICAL EDUCATION

Course Name: Design and Modeling**Local Code: 847601****Course Description:**

Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They work in teams to design a playground and furniture, capturing research and ideas in their engineering notebooks. Using Autodesk® design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

Course Name: Automation and Robotics**Local Code: 847602****Course Description:**

Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics® platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms.

Course Name: Introduction to App Coding**Local Code: 664000****Grade Level: 7, 8****Course Description:**

In this course, students will use iPads and the iOS operating system to explore the fundamentals of Swift, the programming language used to create apps for Apple products. Students will progress from writing simple commands to developing a wide variety of algorithms.

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General Information

The information in this guide is designed to help students and parents with the selection of courses for ninth through twelfth grades. Students should study this publication and consult with their parents, school counselors, and teachers in planning their individual program of study. School guidance counselors can help with planning process by reviewing test scores and records of past achievements and by discussing current interests and long-term goals. School guidance counselors also have up-to-date information available about various training programs, schools, colleges, universities, and employment possibilities.

Academic Year

The regular academic year is divided into two semesters.

Registration

All students will be expected to maintain the full-day schedule of classes required to meet the minimum standards necessary for graduation established by the Virginia Board of Education. Seniors may request a late arrival or early release, but the request must be approved by the principal.

Access to Courses

Courses are offered at each high school based on student selection and interest. Therefore, all courses may not be offered at each site. School guidance counselors will work very closely with students and parents to develop academic and career plans.

Schedule Changes

The division encourages students to give serious consideration to the selection of courses during the scheduled registration period. Course changes are discouraged. All requests for schedule changes must be submitted in writing to the guidance office and signed by a parent. **All schedule changes are subject to the approval of the principal and will be made on a space available basis.** Students receiving a grade below a "C-" at the end of the first nine weeks may move to a lower level course in the same subject area, where such courses are available. The student's current grade will transfer forward to the new course.

Alternative Methods for Granting Standard Units of Credit

Students seeking high school credit for courses not offered by Isle of Wight County Schools must receive prior written approval from the principal before enrolling in a course desiring credit. In requesting alternative methods for credit the following guidelines have been established:

1. A parent/guardian meets with the student's school counselor prior to requesting permission to enroll in

other accredited secondary schools or programs of study if credit for these courses is desired. The purpose of this meeting is to review the student's academic plan and discuss alternative methods for receiving credit for courses not offered by Isle of Wight County Schools.

2. A parent/guardian must submit in writing thirty (30) days prior to enrollment a request to the principal to enroll in another program of study outside of Isle of Wight County Schools for which an alternative method for receiving credit is desired.
3. In the letter the parent/guardian must include (1) the reason(s) for enrolling in this program of study, (2) course description including time allotment and (3) provide copies of the course or program of study objectives and table of contents of text book or other resources to be used for instruction.
4. The principal will respond in writing to the parent/guardian within ten (10) working days of receiving the request for an alternative method for credit as to whether or not approval will be given for the student to enroll in the program of study. If the enrollment request is denied, the principal will state the reason(s) for denying the request.
5. The parent/guardian may appeal the decision of the principal to the assistant superintendent within five (5) days of receiving the principal's decision. The assistant superintendent will render a written decision within 10 working days of the parent or guardian's appeal. This decision is final.

Placement/Promotion Procedure

Recommendations concerning instructional placement of students are the responsibility of the teacher and other professional staff directly involved with the students. The final decision concerning placement, however, rests with the principal. Promotion at the high school level is based on the guidelines listed:

- Students who are promoted from grade 8 will be placed in grade 9.
- Students in high school progress toward graduation on a course-by-course basis. Students take courses based upon academic performance, academic needs, graduation requirements, and previous credits earned.
- Graduation requirements for students shall be those in effect at the time the student entered the ninth grade for the first time.
- Assignment of class standing is made on the following basis: (Core academic courses include those taught in the areas of English, mathematics, science, and history/social science.)

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- ✓ Six (6) units of credit with a total of three (3) core academic courses including English are required for promotion to the tenth grade.
- ✓ Twelve (12) units of credit, with a total of six (6) core academic courses, including English 9 and 10, are required for promotion to the eleventh grade.
- ✓ Fourteen (14) units of credit, with a total of nine (9) core academic courses including English 9, 10, and 11, are required for promotion to the twelfth grade. All twelfth grade students must be in position to graduate in June of the academic year in which they are classified as seniors.

Grades for the first half and the second half of a semester or yearlong course are determined by averaging the nine weeks grade(s) and the examination grade. The nine weeks grade(s) shall count 80% and the examination grade shall count 20%. Learning activities shall count 100% of the nine weeks or semester grade in the event of exam exemption (see IKG). The grades for the first half and second half of the course are averaged to determine the final grade. Numerical grades shall be used to report student achievement.

Students may retake the same course when the student wishes to obtain a better grade in a course. The original grade shall appear on the transcript and the retaken course grade shall also appear on the transcript. The higher grade shall be figured into the GPA. Students shall receive credit only once for a single course. The credit earned for the course shall appear on the transcript under the higher course grade.

High School Grading Policy

High school teachers are expected to record at least two grades per category every four and one-half weeks. A student's high school grade shall consist of an 80% / 20% split. Learning activities shall count 80% while the mid-term/final exam shall count 20%. The learning activities are included in the different types of courses below.

Grades will be calculated based on the categories and weighted values below:

All Courses

(except for Advanced, Honors, CTE and Foreign Language courses)

<u>Category</u>	<u>Weighted Value</u>
Test/Culminating Project	55%
Classwork/Lab/Quiz/Essay/Project	30%
Homework	15%

AP and Honors Courses

<u>Category</u>	<u>Weighted Value</u>
Test/ Culminating Project	60%
Classwork/Lab/Quiz/Essay/Project	30%
Homework	10%

Career and Technical Education (CTE) Courses

<u>Category</u>	<u>Weighted Value</u>
Test/Project	40%
Classwork, Journal, Lab	30%
Quiz, Sub-unit	20%
Homework	10%

Foreign Language Courses

<u>Category</u>	<u>Weighted Value</u>
Test/Project	45%
Quiz/Language Skills	30%
Homework/Classwork	25%

Athletic/Activity Participation Interscholastic Competition

High schools shall be members of the Virginia High School League and shall abide by its rules and regulations. In addition to Virginia High School League eligibility requirements, a student who participates in interscholastic competition, practices, or travel must pass three of four subjects and have a 2.00 grade point average in the semester preceding participation, or maintain a 2.00 or better cumulative grade point average. Interscholastic activities approved by the school board shall be available for participation by high school students. Participation in interscholastic activities such as forensics, dramatics, literary competition, and other Virginia High School League is encouraged.

Transportation to and from Virginia High School League activities may be provided by school bus, provided proper arrangements are made and approved by the principal and the superintendent or the superintendent's designee.

Eighth graders entering the eighth grade for their first semester are automatically eligible for junior varsity athletic activities only. They must be enrolled in four core courses, i.e., math, language arts, science, social studies and at least one exploratory course. To remain eligible for the second semester the student must pass three of four core courses and have an *overall* grade point average of 2.00 or better.

All eligible students must also comply with the attendance policy and be in good standing thus meeting the bona fide student rule of the VHSL. Any student who is under penalty of suspension or pending disciplinary action, or is under any criminal charges or pending charges is not considered in good standing. A student charged with a felony criminal offense, will be suspended from athletic or any VHSL activities until final court disposition. Once the

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final disposition has been rendered on the charge(s), the incident will be reviewed by the principal and athletic director. A student convicted of a felony offense, will be immediately suspended from all athletic participation for a minimum of one calendar year. After the calendar year suspension has been served, the student or his/her parent may petition the principal or athletic director for future consideration in extra-curricular activities. The student must inform his/her principal of **any** criminal charges against them as soon as practicable, but no later than the student's next practice/game in any athletic activity. Failure to inform the principal of the criminal charges will result in immediate dismissal from any athletic activity for a minimum of one calendar year. Based on the nature of the criminal offense or disciplinary action, principals have the authority to sanction a member of their school's athletic teams through loss of playing time, temporary removal from participation in practice(s) and or game(s) for a designated period of time, including complete removal from the team.

You can find additional information pertaining to Virginia High School League rules and regulations in the student handbook at <http://www.vhsl.org/about.vhsl-handbook>.

NCAA Eligibility

Students planning to participate in intercollegiate athletics at an NCAA Division I or II institution must have their academic and amateurism status certified by the NCAA Eligibility Center. Only core courses that appear on the high school's List of NCAA Courses on the NCAA Eligibility Center's website will be used to calculate the student's core-course grade point average (GPA). The web site is www.eligibilitycenter.org. The SAT score used includes only the critical reading and math sections. The ACT score used is a sum of the four sections on the ACT: English, mathematics, reading and science. All SAT and ACT scores must be reported directly to the NCAA Eligibility Center by the testing agency. Test scores that appear on transcripts will **not** be used. When registering for the SAT or ACT, use the Eligibility Center code of 9999 to make sure the score is reported.

Division I Information and Core Academic Requirements

NCAA Division I requires 16 core courses. Ten (10) core courses must be completed before the seventh semester; seven (7) of the 10 must be in English, math or natural/physical science. The courses/grades are "locked in" at the start of the seventh semester (cannot be repeated for GPA improvement to meet initial-eligibility requirements for competition). Students who do not meet core-course progression requirements may still be eligible to receive athletics aid and practice in the initial year of enrollment by meeting academic redshirt requirements. Please visit the eligibility website above for more information. See Appendix D, for the corresponding test score and core-course GPA sliding scale.

- 4 years English

- 3 years mathematics (at Algebra I level or higher)
- 2 years social science
- 2 years natural or physical science (1 year of lab if offered at any high school attended)
- 1 year additional English, mathematics, or natural/physical science
- 4 years of additional courses (from any area above, foreign language or comparative religion/philosophy)

Division II Information and Core Academic Requirements

Beginning August 1, 2018, to become a full or partial qualifier for Division II, all college-bound student-athletes must complete the 16 core-course requirement. Division II currently requires a minimum SAT score of 820 or an ACT sum of 68. Beginning August 1, 2018, Division II will use a sliding scale to match test scores and core-course GPA. See Appendix E, for the sliding scale requirements.

- 3 years English
- 2 years mathematics (Algebra I or higher)
- 2 years social science
- 2 years natural/physical science (1 year of lab if offered by high school)
- 3 years additional courses in English, mathematics, or natural or physical science
- 4 years of additional courses (from an area above, foreign language or comparative religion/philosophy).

The NCAA rules are complex, so students should ask coaches, student activities coordinators, and school guidance counselors for help. It is important to let the counselor know if a student plans to seek an athletic scholarship. More detailed information is available on the NCAA website at <http://www.ncaa.org/>.

Division III does not use the NCAA Eligibility Center. Contact your Division III College regarding policies on amateurism and eligibility requirements for sports.

Homebound Services

The School Board shall maintain a program of homebound instruction for students who are confined at home or in a health care facility for periods that would prevent normal school attendance based upon certification of need by a licensed physician, physician assistant, nurse practitioner, or clinical psychologist. Credit for the work shall be awarded when it is done under the supervision of a licensed teacher, a person eligible to hold a Virginia license, or other appropriately licensed professional employed by the School Board, and there is evidence that the instructional time requirements or alternative means of awarding credit adopted by the School Board have been met. The principal is responsible for the provisions of homebound Instruction – securing the homebound instructor, screening assignments, gathering work from the homebound instructor, and securing approval for

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providing homebound instruction from the homebound instruction coordinator.

The following procedures should be followed to implement policy IGBG, Homebound Instruction:

1. Parents who want homebound instruction for a child should have a Homebound Instruction Medical Certification of Need (IGBG-E1) and an original prescription completed by a licensed physician, psychiatrist, or clinical psychologist. The forms must be completed by a professional authorized to treat the illness for which homebound services are being requested.
2. The principal employs a certified teacher when a Homebound Instruction Medical Certification of Need and an original prescription are returned with a recommendation for homebound instruction, and the request has been approved by the homebound instruction coordinator. A copy of the Homebound Instruction Medical Certification of Need and an original prescription is forwarded to the homebound instruction coordinator.
3. The principal submits the homebound instructor's time sheet (IGBG-E2) with the necessary signatures to the homebound instruction coordinator two (2) days before the payroll due date.
4. The homebound instruction coordinator submits the homebound instructor's time sheet (IGBG-E2) with the necessary signatures to the finance department by the payroll due date.
5. Students on homebound instruction are considered present in school for the period of approved homebound instruction.
6. Extensions of homebound service require the completion and approval of the Homebound Instruction Medical Certification of Need Reauthorization Form (IGBG-E3).
7. Receipt of Homebound Instruction does not guarantee passing of courses, promotion to the next grade, or on-time graduation.

Driver Education Program

The classroom driver education course is offered as part of the tenth grade health education curriculum in all high schools following guidelines set forth in Virginia code §22.1-205. When students successfully complete the classroom phase and have secured a learner's permit, they then may take behind-the-wheel driver instruction. The behind-the-wheel driver instruction is **not** offered in the division.

Advanced Placement (AP) Program

Advanced Placement is a College Board program that offers students the opportunity to take college-level courses while they are enrolled in high school. Students have the opportunity to learn a subject in greater depth, develop analytical reasoning skills, and develop study skills necessary for success at the college level. Both high schools in Isle of Wight County Schools participate in the Advanced Placement program. Students and parents may contact the guidance department of the respective high

school to obtain additional information and a list of the AP courses that are offered. Parents are strongly encouraged to assist their student with AP course selections.

AP teachers are available to answer course content and requirement questions. The College Board also publishes a booklet, Advanced Placement Course Description, for each course. This booklet describes the content of the AP course and provides sample examination questions. Additional information is available at www.collegeboard.org. Students may gain advanced standing and/or earn college credit through their performance on the AP examinations that are given each year in May. Students registering for AP courses should review their selections with the school guidance counselor to be sure the proper credit will be awarded. A limited number of AP courses serve as replacements for high school courses; therefore, credit would not be given for both. All AP examinations (except Studio Art and Music Theory) contain both multiple choice and free response questions that require essay writing and problem solving. In Studio Art, students submit portfolios of their work instead of taking an exam. In Music Theory, a competency examination in music theory is given. In administering the AP program, the following guidelines have been established:

1. AP courses prepare students to take the AP examinations in the spring. Students will only receive the weighted credit for the course, if he/she takes the AP exam. **If the student does not take the AP exam, he/she will receive honors weight for the course.** The exams serve as a nationally accepted standard for rigorous college-level courses.
2. The student is responsible for the cost of an AP examination fee. Funds may be made available to qualified students enrolled in an AP course who wish to take the AP examination and need financial assistance with the examination fee.
3. Students are responsible for verifying granting of college credit for successful completion of any course with the colleges or universities they choose to attend. Some information on a school's AP credit policy can be found at <http://collegesearch.collegeboard.com/apcreditpolicy/index.jsp>.
4. Some AP courses may require the completion of summer assignments.

Advanced Placement Examinations

Advanced Placement examinations are offered in the following subjects:

Art

History of Art

Studio Art – Drawing, 2-D Design, or 3-D Design

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World Languages

French Language and Culture
German Language and Culture
Japanese Language and Culture
Latin
Spanish Language
Spanish Literature and Culture

Language Arts

English Language and Composition
English Literature and Composition

Mathematics

Calculus AB
Calculus BC
Computer Science A
Statistics

Music

Music Theory

Science

Biology
Chemistry
Environmental Science
Physics 1
Physics C (Mechanics)
Physics C (Electricity and Magnetism)

Social Studies

European History
Human Geography
Comparative Government
Psychology
United States Government and Politics
United States History
World History

Dual Enrollment Program

All students are encouraged to participate in dual enrollment courses. The division offers qualified students the opportunity to begin post-secondary education prior to high school graduation through agreements with Paul D. Camp Community College. Currently dual enrollment courses are offered to 11th and 12th grade students; some 10th graders may enroll in certain dual enrollment courses with a waiver request from the principal to PDCCC. Students may take college courses and simultaneously earn credit towards high school graduation and college degree requirements. Students attend classes taught on the high school campus by an approved instructor. Course offerings will be reviewed with students during the registration process. Grades earned will be reflected on the student's high school and college transcript. PDCCC grades are awarded according to the policies of the college, including grading scale. All dual enrollment students are required by the college to take the final exam. Credit earned for the courses taken may sometimes be transferred to other public colleges in Virginia. Students are responsible for verifying granting of college credit for successful completion of any course with the

colleges or universities they choose to attend. English and math dual enrollment courses will receive advanced weight. Dual enrollment courses may be used in lieu of Advanced Placement courses for the Governor's Seal. Any adds, drops, or withdrawals for dual enrollment courses will be considered only according to the timelines of the college. Students interested in taking other non-dual enrollment college courses for high school credit need to secure prior approval from their principal.

PDCCC Admission Requirements for Dual Enrollment Courses

Dual enrollment applicants must:

- Be prepared for demands of a college course,
- Complete the required college application materials,
- Take required VPT placement tests prior to admission in a course, and
- Meet college and university prerequisites for course enrollment

Summer Program

Students who have not passed the SOL assessment and need the verified credit may retake the test during the summer administration. It is the responsibility of the student to obtain written permission from the principal prior to enrolling in summer school courses to determine the acceptability of courses or credits earned in summer school outside Isle of Wight County Schools.

Virtual Virginia Program

Virtual Virginia, sponsored by the Virginia Department of Education, provides online courses to students across the Commonwealth. With Advanced Placement (AP) courses and non-AP courses, students have the opportunity to enroll in courses that they may not be able to fit into their regular school day or take advantage of courses that are not currently available in their schools. Most courses are available in a yearlong format and/or a 4X4 block schedule. While students may earn high school credits through the Virtual Virginia program, Virtual Virginia credits may not take students beyond the ten credits per year limit for Isle of Wight County students. Each course is taught by a licensed Virginia teacher who maintains online and telephone office hours. Each student is also supported by a school-based mentor, who provides guidance and information to help ensure student success. Required materials are either integrated within the course or are provided by Isle of Wight County Schools. While some courses require tuition, any students participating in the Early College Scholars Program have their AP course tuition covered by the Virginia Department of Education. Students are required to take the AP exam in order to receive advanced weight for the course. Students who enroll in a Virtual Virginia course and choose to drop the course twenty-one days after the start date will be assessed a \$75.00 fee. Students who are successful in online classes are generally skilled in the use of

technology, are self-disciplined, very motivated, have good communication skills (reading and writing), and have an interest in interacting with others in an online course environment. To learn more about Virtual Virginia opportunities, please visit their web site at <http://www.virtualvirginia.org/>. You should also contact your school guidance counselor for further information and registration information. Additional information about online learning and virtual classes can be found in Isle of Wight School Board Policy IGBGA.

Governor's Early College Scholars Program

Students, who meet the terms of the Early College Scholars agreement, see Appendix F, are recognized and receive a certificate of recognition from the Governor. The benefits are a more productive senior year and could reduce the cost spent for college tuition. Students earning a college degree in seven semesters instead of eight can save an average of \$5,000 in expenses. The Early College Scholars Program criteria are below.

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

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

Early College Scholars are supported by the Virginia Virtual Advanced Placement School and the Commonwealth College Course Collaborative. The Virginia Virtual Advanced Placement School provides statewide access to college-level courses while the Commonwealth College Course Collaborative defines the subjects high school students can complete and receive college degree credit from participating public and private colleges and universities. Participating students sign an Early College Scholars Agreement, which is also signed by the student's parents or guardians, principal, and school counselor. Please contact the school guidance counselor for additional information and registration. (Information about the Early College Scholars initiative of the Virginia Department of Education can be obtained by each school's guidance department or at http://www.doe.virginia.gov/instruction/graduation/early_college_scholars/index.html).

Academic Enrichment Program

The Academic Enrichment Program is a 25 minute period assigned for no credit. Academic Enrichment is used to enhance and protect classroom instruction through remediation, study time, assemblies, administrative tasks, and club meetings. When implemented in a school, all students are enrolled in Academic Enrichment and it does not take the place of courses for credit.

Individual Student Alternative Education Plan (ISAEP)

The Individual Student Alternative Education Plan (ISAEP) is a Commonwealth of Virginia initiative to provide an opportunity for students ages 16-17 to work toward a General Education Development (GED®) Certificate and a vocational or career skill without dropping out of school. Students must be referred and must qualify to be admitted to this program. ISAEP will only be considered for students after all measures to maintain students in a diploma program have been exhausted. For more information on the referral process, contact your student's school guidance counselor.

Gifted Education Programs

The Governor's School for the Arts

The Governor's School for the Arts is a regional, secondary visual and performing arts school sponsored by the Virginia Department of Education and the public school divisions of Chesapeake, Franklin, Isle of Wight, Norfolk, Portsmouth, Southampton, Suffolk, and Virginia Beach. The Governor's School for the Arts is located in Norfolk. In order to attend, students must be enrolled in the ninth, tenth, eleventh, or twelfth grade in a public school in one of the participating school divisions. The Governor's School for the Arts is one of the specialized Virginia public schools designated as "Governor's Schools" whose mission is to provide intense educational opportunities for gifted and talented students in grades 9-12. Classes are held at the campus of Old Dominion University and in Downtown Norfolk. **The school division provides tuition and transports students between the schools and the Governor's School for the Arts only.**

The Governor's School for the Arts provides pre-professional, individualized, and focused instructional programs in dance, instrumental and vocal music, musical theater, theater, and visual arts for students with a high degree of artistic talent and potential for growth. Students must be committed to developing their talents and interested in pursuing careers in the arts.

Students take academic courses at their regular high schools in the morning and attend the Governor's School for the Arts in the afternoon for three hours daily during the regular academic year. Classes may be individualized lessons, small or large group instruction, or rehearsals. The average class size is 12 students. Students may earn four credits for each year they attend the Governor's School for the Arts. These courses are given honors weight. Students earn four (4) credits per year.

There are two steps in the application process. Interested students, in grades 8-11, must complete and mail an application for an audition. (Applications may be secured from guidance offices.) Applicants who pass the audition

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must provide teacher references and additional forms for review.

Students who are accepted by the Governor's School for the Arts should carefully weigh all options and discuss them with their parents. While this specialized training represents outstanding opportunities for aspiring artists, it may also lead to difficult choices. **Some course options within the home school will be precluded by the scheduling demands of the Governor's School for the Arts.** (Additional information can be obtained from the guidance department.)

The Governor's School for Science and Technology

The Governor's School for Science and Technology, located in Hampton, Virginia, serves students enrolled in high schools from the Hampton Roads area. The Governor's School for Science and Technology is a two-year, half-day program for 11th and 12th grade students. Admission is highly competitive and based on previous math and science course selection and grades, teacher recommendations, and standardized achievement scores. Students accepted to attend the Governor's School for Science and Technology will be expected to enroll in one of the following designated strands: engineering, biological science, or scientific programming.

The **Engineering Strand** provides an intense, rigorous study of fundamental principles of engineering and calculus-based physics. Students develop a passion for calculus and physics during their junior year. Building a robot, constructing a fuel cell, and then proceeding to on-line technology that studies air-bag deployment principles in automobiles are just a few of the engineering activities students experience in the course. The ideas of Maxwell and Hawking are studied during the senior year. Understanding the physics behind such inventions as the TV, computers, and magnetic resonance imaging technology round out the senior year. In addition, senior year includes the study of modern physics exploring relativity, quantum mechanics, and nuclear physics.

The **Biological Science Strand** provides insights into organic and inorganic chemistry in conjunction with cell and molecular biology by employing advanced technologies utilized in medicine, forensic science, and research labs. An advanced level understanding of biology and chemistry sets the stage for senior students to argue controversial topics concerning the environment. Analyze water quality and biodiversity during monthly sampling of a nearby pond. Extensive field work and laboratory analysis generates a nine-month database for a more comprehensive understanding of our local environment.

The **Scientific Programming Strand** provides a detailed study of the fundamental concepts of Computer Science

(using Java) and non-calculus based physics. In the junior year, students study the fundamentals of object-oriented programming, Newtonian mechanics and thermodynamics. The senior year will provide an exhaustive study of data structures, algorithms and simulations of continuous and discrete systems.

With small class sizes and advanced-degreed faculty, the learning environment at the Governor's School is truly unique. Each course has been specifically structured to incorporate best practices for gifted students. Each strand requires completion of one year high school biology, one year of high school chemistry, and Algebra II/Trig prior to admission. For the engineering strand, students must have successfully completed Math Analysis (Pre-Calculus) prior to admission. All strands encompass a math course during both the junior and senior year. Placement in the appropriate math course will be determined upon admission at the end of the 10th grade. In addition, each strand will foster research through a Research Methods and Ethics course the junior year and an Honors Research and Mentorship placement the senior year. In total, students will spend approximately 3 hours at the Governor's School, taking three courses each year during the two-year program.

Scientific Research Experience

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

- various aspects of research methodology,
- ethics and statistics,
- critical thinking skills,
- scientific writing and communication skills,
- a research project for submission to Tidewater Science Fair.

During the senior year, students participate in an Honors Research and Mentorship experience with a professional. Final projects are presented to the local scientific and professional community as a culminating experience in May. The opportunity to work with a professional in research is an invaluable experience toward career pursuits.

The Isle of Wight County School Division purchases slots in this regional program in an effort to expand educational offerings for eligible students in the 11th and 12th grades. **The school division provides tuition and transports students between the schools and the Governor's School for Science and Technology only.**

Career and Technical Education Program

This program is for students who wish to prepare themselves for post-secondary education in a two or four year college, in a technical institution, and/or in the workforce.

HIGH SCHOOL COURSES

ENGLISH

Course Name: Local English

Local Code: 15151S

Grade Level: 9, 10, 11, 12

Course Description:

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 student's IEP. This course may be continued.

Course Name: English I Skills Seminar

Local Code: 11305G

Course Description:

Students are recommended for placement in this course based on multiple criteria, which include results from prior Standards of Learning assessments and other standardized testing. Students will receive instruction in the use of word recognition and context to build vocabulary; conventions of print and non-print to increase understanding and comprehension of text; strategic reading to increase comprehension and enhance learning and retention; and writing in response to text. Nonfiction selections will be used extensively to assist students in building success in reading content-area textbooks. Independent reading will be incorporated into the class to build fluency, expand vocabulary, provide practice, and increase the enjoyment of reading.

Course Name: English 9 (Paired w/ Skills Seminar)

Local Code: 11306G

Prerequisite: English I Skills Seminar

Course Description:

In this course students will build on their knowledge in key areas of reading such as word study, vocabulary, fluency, and comprehension, while following along with the English 9 curriculum. Data assessments are conducted periodically to monitor skills in reading, allowing for personalization of the curriculum and skills.

Course Name: English 9

Local Code: 11300G

Prerequisite: Pass Eighth Grade English SOL Test

Course Description:

Classroom instruction focuses on the presentation and critique of dramatic readings from literary selections and continues the development of proficiency in making planned oral presentations. Knowledge of literary terms and forms is applied in student writing and in the analysis of literature. English 9 introduces significant literary works from a variety of cultures and eras, which span 1000 A.D. to the present. Writing encompasses narrative, literary, expository, and technical forms with attention to analysis and mastery of grammar, mechanics, sentence structure, and the writing process.

Course Name: Honors English 9

Local Code: 11300H

Prerequisite: Pass Eighth Grade English SOL Test and Teacher Recommendation

Course Description:

This course is designed for students who have demonstrated ability and interest in English and helps students prepare for the Advanced Placement course work. The course focuses on oral and written communication in the areas of research, literary analysis, and technical forms. Knowledge of literary forms, oral presentation, and interdisciplinary approaches are incorporated into literature instruction. Summer assignments are required. This course receives **honors** weighted credit.

Course Name: English II Skills Seminar

Local Code: 11405G

Course Description:

Students are recommended for placement in this course based on multiple criteria, which include results from prior Standards of Learning assessments and other standardized testing. Students will receive instruction in the use of word recognition and context to build vocabulary; conventions of print and non-print to increase understanding and comprehension of text; strategic reading to increase comprehension and enhance learning and retention; and writing in response to text. Nonfiction selections will be used extensively to assist students in building success in reading content-area textbooks. Independent reading will be incorporated into the class to build fluency, expand vocabulary, provide practice, and increase the enjoyment of reading.

Course Name: English 10 (Paired w/Skills Seminar)

Local Code: 11406G

Prerequisite: English II Skills Seminar

Prerequisite: English 9

Course Description:

In this course students will build on their knowledge in key areas of reading such as word study, vocabulary, fluency, and comprehension, while following along with the English 10 curriculum. Data assessments are conducted periodically to monitor student growth in reading comprehension, spelling/word study, vocabulary development and writing.

Course Name: English 10

Local Code: 11400G

Prerequisite: English 9 or Honors English 9

Course Description:

This course stresses reading from a variety of worldwide cultures and eras. Readings include various literary forms and consumer materials. Students use writing for evaluation and interpretation of ideas obtained through the readings. Small-group learning activities are used for the student to present and critique oral reports. In both

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reading and writing activities, including research, students gather information through the use of technology. Attention is given to analysis of printed consumer information, such as labels, owners' manuals, warranties, and contracts.

Course Name: Honors English 10

Local Code: 11400H

Prerequisite: English 9 and teacher recommendation; or Honors English 9

Course Description:

This course is designed for students who have demonstrated ability and interest in English and helps students prepare for the Advanced Placement course work. Students will engage in writing experiences including business letters, essays, and creative writing projects. Oral presentations are required. World literature and language through reading and the development of analytical oral and written expression are emphasized. This course receives **honors** weighted credit.

Course Name: English 11

Local Code: 11500G

Prerequisite: English 10 or Honors English 10

Course Description:

This course incorporates a study of American literature with interdisciplinary aspects of United States History. Emphasis is on written and oral communication encompassing expository, persuasive, and technical skills. Literary analysis, research, and technical writings are included.

Course Name: Honors English 11

Local Code: 11500H

Prerequisite: English 10 and teacher recommendation; or Honors English 10

Course Description:

This course will serve as an introduction to American literature. Selections are organized within a chronological framework. Various authors and their works will be studied with emphasis on the short story, essay, poetry, drama, and novel. Emphasis is also placed on vocabulary development, study and research, grammar usage, listening and speaking skills, and all aspects of composition, culminating in writing and orally presenting a research project. Reading novels is required. This course receives **honors** weighted credit.

Course Name: AP Language & Composition

Local Code: 11960AP or 11960VA

Prerequisite: English 10 and teacher recommendation; or Honors English 10

Course Description:

This is a yearlong course and may replace English 11. The purpose of the course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. The course engages

students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Through their writing and reading, the course will emphasize the expository, analytical, and argumentative writing that forms the basis of academic and professional communication. Students will learn to read primary and secondary sources carefully, to synthesize material from these texts in their own compositions, and to cite sources using conventions recommended by professional organizations such as the Modern Language Association (MLA), the University of Chicago Press (The Chicago Manual of Style), the American Psychological Association (APA), and the Council of Biology Editors (CBE). This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: English 12

Local Code: 11600G

Prerequisite: English 11 or Honors English 11

Course Description:

In this course the emphasis is on the cultural development of English (British) literature and literature of other cultures by stressing major literary forms, themes, and techniques in an interdisciplinary approach. The student develops expository and technical writings. Comprehensive oral presentations and research projects reflect organizational skills, audience awareness, and appropriate vocabulary/grammar.

Course Name: DE English 12

Local Code: 11600DE

Prerequisite: Honors English 11 or AP English 11

Course Description:

In this course Language Arts will be taught with added emphasis on vocabulary, composition, and English literature, as well as multicultural classic and contemporary selections. Literary works are organized within a chronological framework, providing further opportunities for making literary connections. Students are motivated to make connections between the literature they read and their own lives. Emphasis is on critical thinking. Each student will write a documented informational paper and present it orally to a group, write analyses of literary works, and participate in a variety of other written and oral projects. Reading novels is required. This PDCCC dual enrollment course aligns with ENG 111 and ENG 112. **Student must complete the VPT for Math and English and/or meet the criteria established by PDCCC to enroll in course.** This course receives **advanced** weight. Please read all the details about dual enrollment programs on page 23.

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Course Name: AP English Literature & Composition
Local Code: 11950AP or 11950VA
Prerequisite: English 11 and teacher recommendation; or Honors English 11; or AP English Language and Composition; and passed English 11 SOL tests
Course Description:

This is a yearlong course and may replace English 12. The instructional objectives are based on the College Board's Advanced Placement Program. The course prepares students for the AP examination in English Literature and Composition. Students are required to complete reading and writing assignments before entering the class. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: Capstone English Course
Local Code: 11760G
Co-requisite: English 12
Prerequisite: English 11; and minimum proficiency on English 11 Reading and Writing SOL Test

Course Description:
Virginia's College and Career Ready English Performance Expectations grade 12 capstone course contains high-interest contextualized content designed to give certain students an additional boost for competent and successful entry into college and careers. The course will add to students' preparation for critical reading, college and workplace writing, and career-ready communications by enhancing skills in reading, the writing process, and creation of effective texts, and effective communications (speaking, listening, and collaborating).

Course Name: Creative Writing
Local Code: 11710G
Prerequisite: English 9 or Honors English 9
Course Description:
This course extends students' prose writing techniques. Emphasis is placed on a variety of prose models that include short stories, essays, and dramatic scripts.

Course Name: Photo-Journalism I
Local Code: 12150G
Prerequisite: English 10 or Honors English 10
Course Description:
This course provides students with the opportunity to work on the production/publication of a school yearbook. Students will study aspects of journalistic writing including writing body copy, captions, and headlines. Layout and design as well as salesmanship are essential areas of the class. Students will study the guidelines of photographic composition and are expected to apply the guidelines to class assignments.

Course Name: Photo-Journalism II
Local Code: 12160G
Prerequisite: Photo-Journalism I
Course Description:

This course focuses on advanced mechanics of journalism, photography, layout design, copywriting, proofreading, and salesmanship. This class produces the yearbook.

Course Name: Photo-Journalism III
Local Code: 12170G
Prerequisite or Grade Level: Photo-Journalism II
Course Description:

This course focuses on advanced mechanics of journalism, photography, layout design, copywriting, proofreading, and salesmanship. Students will be assigned leadership roles as section editors and business managers, and will help in choosing themes and covers, proofreading, and selecting and cropping photographs. This class produces the yearbook.

Course Name: Photo-Journalism IV
Local Code: 12200G
Prerequisite or Grade Level: Photo-Journalism III
Course Description:

This course focuses on advanced mechanics of journalism, photography, layout design, copywriting, proofreading, and salesmanship. Students will be assigned leadership roles as editors of sections of the yearbook. This class produces the yearbook.

Course Name: Journalism I
Local Code: 12001G
Course Description:
This course is designed to teach practical applications of journalistic concepts in ethics, layout, staffing, and reporting. This class produces the school newspaper and other media assignments.

Course Name: Journalism II
Local Code: 12102G
Prerequisite or Grade Level: Journalism I
Course Description:
This course is designed to teach practical applications of journalistic concepts in ethics, layout, staffing, and reporting. This class produces the school newspaper and other media assignments.

Course Name: Journalism III
Local Code: 12113G
Prerequisite or Grade Level: Journalism II
Course Description:
This course is designed to teach practical applications of journalistic concepts in ethics, layout, staffing, and reporting. This class produces the school newspaper and other media assignments.

Course Name: Journalism IV
Local Code: 12124G
Prerequisite or Grade Level: Journalism III
Course Description:
This course is designed to teach practical applications of journalistic concepts in ethics, layout, staffing, and

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reporting. This class produces the school newspaper and other media assignments.

Course Name: Speech Fundamentals /Public Speaking

Local Code: 1300G

Prerequisite or Grade Level: English 9 or Honors English 9

Course Description:

This course covers the theory and practice of public speaking. The course guides students through topic selection, organization, language, and delivery. Students will be actively involved in every step of the process of public speaking preparation and execution. Students will work independently and in small groups. Assignments include formal speeches (to inform, to persuade, and to pay tribute), brief extemporaneous speeches, speech analyses and evaluations, nonverbal communication, debate, mass media, and parliamentary procedures.

Course Name: Reading Across the Curriculum

Local Code: 01161G

Prerequisite or Grade Level: Approved Participation

Course Description:

In this course the student will build on their knowledge in key areas of reading such as word study, vocabulary, fluency, and comprehension. The student will learn to analyze the sound, pattern, and meaningful relationships among words through interactive learning and activities. Fluency will be targeted to improve reading rate, accuracy, and expression. Vocabulary and comprehension strategies will be taught through a variety of genre (fiction and non-fiction). Writing will incorporate the use of graphic organizers. This course will consist of direct instructional (whole group) and differentiated instructional (small group) activities.

MATHEMATICS

Course Name: Local Mathematics

Local Code: 32001S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized instructional course for identified students with disabilities is designed to teach and reinforce basic mathematical concepts needed for independent living as outlined on the student's IEP. This course may be continued. NOTE: Local Mathematics does not count as a mathematics credit for a Standard or Modified Standard Diploma.

Course Name: Algebra I

Local Code: 31300G

Course Description:

The course is designed to build relationships among algebra and arithmetic, geometry, and probability and statistics. Connections are made with other subject areas through practical applications. Students will use algebra as a tool for representing and solving a variety of practical

problems. Tables and graphs are used to interpret algebraic expressions, equations, and inequalities, and to analyze behaviors of functions. Graphing calculators, computers, and other appropriate tools will be used to assist in teaching and learning. Students are encouraged to talk about mathematics, to use the language and symbols of mathematics to communicate, to discuss problems and problem-solving, and to develop their confidence in mathematics. Instruction will focus on sequential development of concepts and skills using concrete materials to assist in the transition from the arithmetic to the symbolic.

Course Name: Algebra I – Part 1

Local Code: 31310G

Course Description:

The course requires students to use algebra as a tool for representing and solving a variety of practical problems. Tables and graphs will be used to interpret algebraic expressions, equations, and inequalities and to analyze behaviors of functions. Graphing calculators, computers, and other appropriate technology tools will be used to assist in teaching and learning. Graphing utilities enhance the understanding of functions; they provide a powerful tool for solving and verifying solutions to equations and inequalities. Throughout the course, students will be encouraged to engage in discourse about mathematics with teachers and other students, use the language and symbols of mathematics in representations and communication, discuss problems and problem solving, and develop confidence in them as mathematics students. This class covers objectives at a more relaxed pace to better ensure mastery of skills.

Course Name: Algebra I – Part 2

Local Code: 31320G

Course Description:

The course requires students to use algebra as a tool for representing and solving a variety of practical problems. Tables and graphs will be used to interpret algebraic expressions, equations, and inequalities and to analyze behaviors of functions. Graphing calculators, computers, and other appropriate technology tools will be used to assist in teaching and learning. Graphing utilities enhance the understanding of functions; they provide a powerful tool for solving and verifying solutions to equations and inequalities. Throughout the course, students will be encouraged to engage in discourse about mathematics with teachers and other students, use the language and symbols of mathematics in representations and communication, discuss problems and problem solving, and develop confidence in them as mathematics students.

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Course Name: Geometry**Local Code: 31430G****Prerequisite: Algebra I & verified math credit in Algebra I or AFDA****Course Description:**

This course is designed for students who have successfully completed the Algebra I standards. It focuses on properties of geometric figures, trigonometric relationships, and reasoning to justify conclusions. The standards emphasize two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems.

Course Name: Geometry - Part 1**Local Code: 31440G****Prerequisite: Algebra I & verified math credit in Algebra I or AFDA****Course Description:**

This course is designed for students who have successfully completed the Algebra I standards. It focuses on properties of geometric figures, trigonometric relationships, and reasoning to justify conclusions. The standards emphasize two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. This class covers objectives at a more relaxed pace to better ensure mastery of skills.

Course Name: Geometry - Part 2**Local Code: 31450G****Prerequisite: Algebra I & verified math credit in Algebra I or AFDA****Course Description:**

This course is designed for students who have successfully completed the Algebra I standards. It focuses on properties of geometric figures, trigonometric relationships, and reasoning to justify conclusions. The standards emphasize two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. This class covers objectives at a more relaxed pace to better ensure mastery of skills.

Course Name: Honors Geometry**Local Code: 31430H****Prerequisite: Algebra I & verified math credit in Algebra I****Course Description:**

This course is designed for the student who has mastered the Algebra I standards and excels in mathematics. The standards emphasize two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. It focuses on properties of geometric figures, trigonometric relationships, and reasoning to justify conclusions. Accelerated pacing will allow the student to apply logic skills by proving more complex theorems to

increase higher-level thinking skills. This course receives **honors** weighted credit.

Course Name: Algebra II**Local Code: 31350G****Prerequisite: AFDA or Geometry; 1 verified credit in math****Course Description:**

This course focuses on advanced algebraic concepts through the study of functions, "families of functions," equations, inequalities, systems of equations and inequalities, polynomials, rational and radical equations, complex numbers, and sequences and series. Emphasis is placed on practical applications and modeling. Written and oral communication concerning the language of algebra, logic of procedures, and interpretation of results are taught. This course emphasizes a transformational approach to graphing functions. It builds a strong connection between algebraic and graphic representations of functions. Students vary the coefficients and constants of an equation, observe the changes in the graph of the equation, and make generalizations that can be applied to many graph. Graphing calculators will be used.

Course Name: Honors Algebra II**Local Code: 31350H****Prerequisite: Geometry; 2 verified math credits****Course Description:**

The standards for this combined course in Algebra II and Trigonometry include all of the standards listed for Algebra II and Trigonometry. Topics include, but are not limited to, complex numbers; functions and graphs; systems of equations and inequalities; polynomial, logarithmic, and exponential functions and equations; and sequences and series. Topics from trigonometry include circular functions, graphs, and applications. Graphing calculators are used to enhance the understanding of realistic applications through mathematical modeling and to aid in the investigation and study of functions, equations, and inequalities. This course is designed for advanced students who are capable of a more rigorous course at an accelerated pace. The standards listed for this course provide the foundation for students to pursue a sequence of advanced mathematical studies from Mathematical Analysis to Advanced Placement Calculus. This course receives **honors** weighted credit.

Course Name: Algebra, Functions, and Data Analysis**Local Code: 31340G****Prerequisite: Algebra I****Course Description:**

This course is designed for the student who has successfully completed Algebra I. Students will study functions and their behaviors, systems of inequalities, probability, experimental design and implementation, and analysis of data generated by practical applications arising from real-life situations. Students will solve problems that

HIGH SCHOOL COURSES

require the formulation of linear, quadratic, exponential, or logarithmic equations or a system of equations. The standards for this course also focus on a transformational approach to graphing functions and writing equations when given the graph of the equation. The Standards of Learning for this course build a strong connection between algebraic and graphic representations of functions, as well as algebra and statistics overall.

Course Name: DE Probability and Statistics

Local Code: 31900DE

Prerequisite: Math Analysis/Pre-Calculus

Course Description:

The purpose of this course is to present basic concepts and techniques for collecting and analyzing data, drawing conclusions, and making predictions. Graphing calculators and other technologies will be used to enhance the understanding of mathematical concepts. The course is designed for students who are capable of more rigorous content at an accelerated pace. This PDCCC dual enrollment course aligns with MTH 245. **Student must complete the VPT for Math and English and/or meet the criteria established by PDCCC to enroll in course.** Please read all the details about the dual enrollment program on page 23. This course receives **advanced** weight.

Course Name: Functions Trigonometry

Local Code: 31610H

Prerequisite: Algebra II

Course Description:

This course provides students with a solid foundation in algebra and trigonometry, shows students how algebra and trigonometry can be used to model real-world problems, and enables students to develop critical-thinking skills. Several topics introduced in Algebra II will be studied in more detail while new topics on trigonometric functions, identities, equations and triangles will be explored. This course receives **honors** weighted credit.

Course Name: DE Math Analysis/Pre-Calculus

Local Code: 31625DE

Prerequisite: Functions Trigonometry or Algebra II /

Trigonometry

Course Description:

This course develops students' understanding of algebraic and transcendental functions, parametric and polar equations, sequences and series, and vectors. The content of this course serves as appropriate preparation for a calculus course. In addition, the course includes an overview of some aspects and applications of calculus: limits of functions, derivatives, anti-derivatives of polynomial functions, definite integrals, and the Fundamental Theorem of Calculus. This PDCCC dual enrollment course aligns with MTH 161 and MTH 162. **Student must complete the VPT for Math and English and/or meet the criteria established by PDCCC to enroll in course.** Please read all details about the dual

enrollment program on page 23. This course receives **advanced** weight.

Course Name: DE Calculus

Local Code: 31995DE

Prerequisite: Four units of high school mathematics including Algebra I, Algebra II, Geometry and Functions Trigonometry (w/teacher recommendation) or Math Analysis/Pre-Calculus.

Course Description:

The course presents topics in differential calculus of one variable including the theory of limits, derivatives, differentials, definite and indefinite integrals and applications to algebraic and transcendental functions. This course is designed for mathematical, physical and engineering science programs. This PDCCC dual enrollment course aligns with Math 263. **Student must complete the VPT for Math and English and/or meet the criteria established by PDCCC to enroll in course.** Please read all details about the dual enrollment program on page 23. This course receives **advanced** weight.

Course Name: Calculus

Local Code: 31990H

Prerequisite: Functions Trigonometry (w/teacher recommendation) or Math Analysis/Pre-Calculus

Course Description:

The course instruction focuses on limits, differentiation, and integration. Solutions of differential equations by separation of variables, analysis of word problems, and use of graphing calculators in their solutions are emphasized. This course receives **honors** weight.

Course Name: AP Calculus AB

Local Code: 31770AP or 31770VA

Prerequisite: Calculus or Math Analysis

Course Description:

This is a yearlong course. This course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Broad concepts and widely applicable methods are emphasized. The focus of the course is neither manipulation nor memorization of an extensive taxonomy of functions, curves, theorems, or problem types. Thus, although facility with manipulation and computational competence are important outcomes, they are not the core of these courses. Technology will be used regularly by students and teachers to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. Through the use of the unifying themes of derivatives, integrals, limits, approximation, and applications and modeling, the course becomes a cohesive whole rather than a collection of unrelated topics. These themes are developed using all the functions listed in the prerequisites. The learning

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objectives for the course can be found on the College Board website. This course prepares students for the AP examination in Calculus AB. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: AP Calculus BC

Local Code: 31775AP or 31775VA

Prerequisite: Calculus (with teacher recommendation) or AP Calculus AB

Course Description:

This is a yearlong course. Calculus BC is an extension of Calculus AB rather than an enhancement; common topics require a similar depth of understanding. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

LABORATORY SCIENCE

Course Name: Local Science

Local Code: 46101S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized instructional course for identified students with disabilities is designed to teach and reinforce basic science concepts and to develop science knowledge needed for independent living and that leads to responsible participation in the world of work as outlined on the student's IEP. This course may be continued.

Course Name: Earth Science

Local Code: 42100G

Course Description:

This course is primarily a study of the earth's composition, structure, processes, and history, its atmosphere, fresh water, and oceans, and its environment in space. The class teaches historical contributions to the development of scientific thought about earth and space. Major topics of study include plate tectonics, the rock cycle, Earth history, the oceans, the atmosphere, weather and climate, and the solar system and universe.

Course Name: Honors Earth Science

Local Code: 42100H

Course Description:

This course is the study of Earth Science focuses on the interactions of Earth systems with resulting changes on crustal materials, landforms, rock structures, air, water, and life itself. The study of the earth is extended into the cosmos through an investigative exploration of the universe. Disciplines that will be studied are geology, astronomy, meteorology, and oceanography. Higher levels of thinking and reasoning are taught, including analysis and synthesis. Time will be allocated for independent research. This course receives **honors** weighted credit.

Course Name: Oceanography (Earth Science Discipline)

Local Code: 42500G

Prerequisite: Earth Science

Course Description:

This course is a study of the physical, chemical, geological, and biological aspects of the oceans. Topics include life in oceans, waves, tides and currents, chemistry of seawater, and weather and climate. Students will investigate issues of local, regional, national, and global concern, and will explore possible solutions. Career opportunities in oceanography will be studied.

Course Name: Biology I

Local Code: 43100G

Course Description:

This course is designed to provide a detailed understanding of living systems and to emphasize alternative scientific explanations related to controlled experiments, analysis and communication of information, and use of scientific literature. Biology I explores the history of biological thought and the evidence that supports it. It provides the foundation for investigating biochemical life processes, cellular organization, mechanisms of inheritance, dynamic relationships among organisms, and change in organisms. The importance of scientific research that validates or challenges ideas is emphasized.

Course Name: Honors Biology I

Local Code: 43100H

Course Description:

This course is designed to give students an understanding of plant and animal morphology and physiology, as well as nature study, civic biology (ecology), health education, and basic principles of biology. Students are required to read selected articles from an approved list. Experiments are performed, and students build equipment from raw materials to test scientific principles. Higher levels of thinking and reasoning are taught that include analysis and synthesis. Time will be allocated for independent research. This course receives **honors** weighted credit.

Course Name: AP Biology

Local Code: 43700AP or 43700VA

Prerequisite: Biology I or Honors Biology I; Honors Chemistry; (Honors Anatomy/Physiology is highly recommended)

Course Description:

This is a yearlong course. The key concepts and related content that define the course are organized around a few underlying principles called the big ideas, which encompass the core scientific principles, theories and processes governing living organisms and biological systems. It is intended for students who have the conceptual framework, factual knowledge, and analytical skills to critically evaluate biological issues. Topics covered include molecules and cells, heredity and evolution, and organisms and populations. The learning

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objectives for the course can be found on the College Board website. The course will prepare students for the AP examination in Biology. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: Biology II: Ecology

Local Code: 43400G

Prerequisite: Biology

Course Description:

This course is designed to provide students with an understanding of the cause-effect relationships existing among/between organisms and their environment. Emphasis is placed on mankind's impact on the environment and its ecosystems, and on future environmental and ecological needs. Students study a variety of environmental and ecological topics comprising environmental systems, including: global warming; the ozone layer; water pollution; alternative energy sources; interrelationships among resources and an environmental system; biodiversity; biotic and abiotic factors in habitats; ecosystems and biomes; sources and flow of energy through an environmental system; relationships between carrying capacity and changes in populations and ecosystems. Lab work, the use of multimedia and computer simulations, and laboratory and field investigations are important components of this course.

Course Name: Anatomy and Physiology

Local Code: 43305H

Prerequisite: Biology I or Honors Biology I; (Honors Chemistry is highly recommended)

Course Description:

This course enables students to effectively link structures of the human body with their functions. Focuses of this course will include anatomical terminology, maintenance of homeostasis, and detailed analysis of the following organ systems: Integumentary, Skeletal, Muscular, Nervous, Cardiovascular, Respiratory, Digestive, Urinary, and Reproductive. Students will research and discuss abnormalities that occur during development, throughout life, and changes specifically associated with cancers and genetic disorders. This course receives **honors** weighted credit.

Course Name: Chemistry

Local Code: 44105H

Prerequisite: Biology I or Honors Biology I; Algebra II or Honors Algebra II

Course Description:

This course is designed for students who wish to acquire a strong foundation in chemistry and are interested in taking higher-level high school science courses. Quantitative aspects of chemistry are stressed, and there is heavy emphasis on problem-solving. Honors Chemistry includes an in-depth study of quantitative relationships of energy and matter, molecular structure, kinetic theory, thermodynamics, solution chemistry, and organic

chemistry are included in this course. Development of students' analytical abilities is emphasized through both laboratory experience and discussions in the classroom. This course receives **honors** weighted credit.

Course Name: AP Chemistry

Local Code: 44700AP or 44700VA

Prerequisite: Chemistry or Honors Chemistry; Algebra II or Algebra II/Trigonometry

Course Description:

This yearlong course is designed to be the equivalent of a college introductory general chemistry course. It is designed to enable students to attain a depth of understanding of the fundamentals of chemistry and a reasonable competence in dealing with chemical problems. Upon successful completion of the course students will be able to comprehend the development of principles and concepts, to demonstrate application of principles, to relate fact to theory and properties to structure, and to understand systematic nomenclature. The course will emphasize experimental procedures, observations of chemical substances and reactions, recording of data, and calculation and interpretation of results based on quantitative data. The course follows an outline proposed by the College Board Advanced Placement Program. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: Physics

Local Code: 45105H

Prerequisite: Algebra I; Biology I or Honors Biology I

Course Description:

The course presents a complex study in the areas of force and motion, energy transformations, wave phenomena and the electromagnetic spectrum, light, electricity, fields and non-Newtonian physics. The use of mathematics, including algebra and trigonometry, is important, but conceptual understanding of physics systems remains a primary concern. Topics are presented in depth and at a fast pace. Independent practice and dependence on previous learning is routine. Advanced skills in reading comprehension and mathematics proficiency are absolutely essential to student success. Laboratory experiments will be conducted so that students can experience the principles of physics in action. The course receives **honors** weighted credit.

Course Name: AP Physics 1: Algebra-Based

Local Code: 45707AP or 45707VA

Prerequisite: Algebra II

Course Description:

This yearlong course is a non-calculus based physics course that is equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It also introduces electric circuits.

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Hands-on lab experiments are an important part of the course. Most of the labs are open-ended with students given an objective and a list of equipment. Students design their own procedure, data gathering, and data analysis. Each experiment requires a written lab report, which students maintain in individual portfolios. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: AP Physics 2: Algebra-Based

Local Code: 45708AP or 45708VA

Prerequisite: AP Physics 1: Algebra-Based

Course Description:

This yearlong course is a non-calculus based physics course that is equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. Hands-on lab experiments are an important part of the course. Most of the labs are open-ended with students given an objective and a list of equipment. Students design their own procedure, data gathering, and data analysis. Each experiment requires a written lab report, which students maintain in individual portfolios. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

SOCIAL STUDIES

Course Name: Local History

Local Code: 29961S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized instructional course for identified students with disabilities is designed to teach and reinforce basic history/social science concepts and to develop history/social science knowledge needed for independent living and that leads to responsible participation in the world of work as outlined on the student's IEP. This course may be continued.

Course Name: World History I (World History and Geography to 1500 A.D.)

Local Code: 22150G

Course Description:

In this course, students will explore the historical development of people, places, and patterns of life from ancient times until circa 1500 A.D. The course requires students to describe and compare selected civilizations in Asia, Africa, Europe, and the Americas in terms of chronology, location, geography, social structures, forms of government, economy, religion, and contributions to later civilizations. Geographic content and skills will be emphasized in addition to historical content and skills.

Course Name: Honors World History I (World History and Geography to 1500 A.D.)

Local Code: 22150H

Course Description:

This course will require students to explore in depth the civilizations which developed in Asia, Europe, Africa, and the Americas from ancient times until 1500 A.D. Students will apply skills in inquiry/research, technology, geographic knowledge, and historical content in order to compare and contrast selected civilizations. Students will be expected to describe, analyze, and evaluate orally and in written research papers, the patterns and networks of geography, religion, social structures, government, economy, location, and historical cause and effect of people and events on ancient civilizations. Students will compare extensive supplementary readings and analytical papers. The course will help prepare students for the expectations and skill sets required to be successful in an AP course. This course receives **honors** weighted credit.

Course Name: World History II (World History and Geography: 1500 A.D. to Present)

Local Code: 22160G

Course Description:

This course covers history and geography from the late Middle Ages 1500 A.D. to the present with emphasis on Western Europe. Geographic influences on history continue to be explored, with increasing attention given to political boundaries that developed with the evolution of nation-states. Significant attention is given to the ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. The people and events of the 19th and 20th centuries are emphasized for their strong connections to contemporary issues. The course strikes a balance between the broad themes of history and specific historic events, ideas, issues, persons, and documents. Using texts, maps, pictures, stories, diagrams, charts, and a variety of chronological, inquiry/research, and technological skills, students develop competence in chronological thinking, historical comprehension, and historical analysis.

Course Name: Honors World History II (World History and Geography: 1500 A.D. to Present)

Local Code: 22160H

Prerequisite or Grade Level: World History I or Honors World History I

Course Description:

In this course the origin of western civilization and the impact of non-western civilization upon the West and upon world cultures from 1500 A.D. to present are central themes of this course. Through study of cultures, geography, and historical development, the course leads to a deeper understanding of contemporary global issues. Distinguishing characteristics found within each of the cultures are examined through literature, art, architecture, music, religion, and philosophy. Historical

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emphasis is placed upon such areas as comparative political, economic, and social systems. Emphasis is placed upon current crises, international relations, and the increasing interdependence of nations. Concepts and techniques employed by historians, archaeologists, and other social scientists are explored and practiced. The course demands outside readings, analysis of primary source material, and application and evaluation of research. The course will help prepare students for the expectations and skill sets required to be successful in an AP class. This course receives honors weighted credit.

Course Name: Virginia and U.S. History

Local Code: 23600G

Course Description:

This course covers the development of American ideas and institutions from the Age of Exploration to the present. It focuses on political and economic history, and provides students with a basic knowledge of American culture through a chronological survey of major issues, movements, people, and events in United States and Virginia history.

Course Name: Honors Virginia and U.S. History

Local Code: 23600H

Course Description:

This course covers the development of American ideas and institutions from the Age of Exploration to the present. It focuses on political and economic history and provides students with a basic knowledge of American culture through a chronological survey of major issues, movements, people, and events in United States and Virginia history. Higher levels of thinking and reasoning are taught which include analysis and synthesis. Time will be allocated for independent research. The course will help prepare students for the expectations and skill sets required to be successful in an AP class. This course receives honors weighted credit.

Course Name: AP United States History

Local Code: 23190AP or 23190VA

Prerequisite: World History I and II; Honors World History II is highly recommended

Course Description:

This is a yearlong course and may replace Virginia and U.S. History. It prepares students for the AP examination in United States History. AP United States History covers the historical development of American ideas and institutions from the Age of Exploration to the present. The course focuses on political and economic history and provides students with a basic knowledge of American culture through a chronological survey of major issues, movements, people, and events in United States and Virginia history. The course demands outside reading, analysis of primary source material, and research application and evaluation technologies that enhance student learning. Summer work will be assigned in June and the work will be collected during the first week of

school. This course receives advanced weighted credit, if the student sits for the corresponding College Board exam.

Course Name: Virginia and U.S. Government

Local Code: 24400G

Course Description:

This course focuses on an understanding of the origins and workings of the American and Virginian political systems. It focuses on the United States and Virginia constitutions, the structure and operation of United States and Virginia governments, and the process of policy-making, with emphasis on economics, foreign affairs, and civil rights issues. Course objectives include the impact of the general public, political parties, interest groups, and the media on policy decisions. United States' political and economic systems are compared with those of other nations, with emphasis on the relationships between economic and political freedoms.

Course Name: Honors Virginia and U.S. Government

Local Code: 24400H

Course Description:

This course focuses on understanding the origins and workings of the American and Virginian political systems. It focuses on the United States and Virginia constitutions, the structure and operation of United States and Virginia governments, and the process of policy-making, with emphasis on economics, foreign affairs, and civil rights issues. Course objectives include the impact of the general public, political parties, interest groups, and the media on policy decisions. United States' political and economic systems are compared with those of other nations, with emphasis on the relationships between economic and political freedoms. Higher levels of thinking and reasoning are taught which include analysis and synthesis. Time will be allocated for independent research. This course receives honors weighted credit.

Course Name: AP United States Government and Politics

Local Code: 24450AP or 24450VA

Prerequisite: Honors Virginia and U. S. History; AP U. S. History is highly recommended

Course Description:

This is a yearlong course and may replace Virginia and U.S. Government. The course prepares students for the AP United States Government and Politics examination. It is designed to give students an analytical perspective on government and politics in the United States, including both the study of general concepts used to interpret U. S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U. S. politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes. Discussion topics that may be explored throughout this course are: constitutional underpinnings of United States Government; political beliefs and

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behaviors; political parties, interest groups, and mass media; institutions of national government; and public policy. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: AP United States Government/Politics and AP Comparative Government

Local Code: 24455AP

Prerequisite: Honors Virginia and U. S. History; AP U. S. History is highly recommended

Course Location: SHS Only

Course Description:

This is a yearlong course and covers the material from two AP government courses. The course prepares students for the AP United States Government/Politics and AP Comparative Government examinations. It is designed to give students an analytical perspective on government and politics in the United States, including both the study of general concepts used to interpret U. S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U. S. politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes. Discussion topics that may be explored throughout this course are: constitutional underpinnings of United States Government; political beliefs and behaviors; political parties, interest groups, and mass media; institutions of national government; and public policy. The AP course in Comparative Government and Politics introduces students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. The course aims to illustrate the rich diversity of political life, to show available institutional alternatives, to explain differences in processes and policy outcomes, and to communicate to students the importance of global political and economic changes. Comparison assists both in identifying problems and in analyzing policymaking. For example, we only know that a country has a high population growth rate or serious corruption when we compare it to other countries. Careful comparison of political systems produces useful knowledge about the policies countries have effectively initiated to address problems, or, indeed, what they have done to make things worse. We can compare the effectiveness of policy approaches to poverty or overpopulation by examining how different countries solve similar problems. Furthermore, by comparing the political institutions and practices of wealthy and poor countries, we can begin to understand the political consequences of economic wellbeing. Finally, comparison assists explanation. Why are some countries stable democracies and not others? Why do many democracies have prime ministers instead of presidents?

In addition to covering the major concepts that are used to organize and interpret what we know about political

phenomena and relationships, the course should cover specific countries and their governments. Six countries form the core of the AP Comparative Government and Politics course. China, Great Britain, Mexico, Nigeria, and Russia are all regularly covered in college-level introductory comparative politics courses. The inclusion of Iran adds a political system from a very important region of the world and one that is subject to distinctive political and cultural dynamics. By using these six core countries, the course can move the discussion of concepts from abstract definition to concrete example, noting that not all concepts will be equally useful in all country settings. This course receives **advanced** weighted credit, if the student sits for **both** of the corresponding College Board exams.

Course Name: AP Psychology

Local Code: 29020AP or 29020VA

Course Description:

This yearlong course is an introduction to the scientific study of behavioral and mental processes of humans and other animals. The major principles of psychology, including ethics and the methods of psychologists, will be examined. Students will receive an elective credit for this course. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: Sociology

Local Code: 25000G

Course Description:

This course is designed to examine the principles of sociology, the individuals in a group, social institutions, social control, and the use of research methods to examine social problems and issues. The course provides opportunities for students to develop critical thinking, decision-making and social skills concerning human relationships.

Course Name: AP European History

Local Code: 23990AP or 23990VA

Course Description:

This is a yearlong AP course that may be taken in place of World History II. **Students will be required to take the World History II EOC SOL test, if the student has not previously passed the assessment.** Students will develop an understanding of the main themes in the study of modern European history. The themes cover political, diplomatic, intellectual, cultural, social, and economic history from 1450 to the present. The students will learn four types of skills: chronological reasoning, comparison and contextualization, crafting historical arguments from historical evidence, and historical interpretation and synthesis. Special focus will be paid to causes and effects of events from short to long term, the interaction of multiple causes and effects, and “turning point” events that led to major shifts in European history. Geography skills will be developed through the analysis of a country’s

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location in a geopolitical context. The course will utilize a college-level textbook and prepare students for college readiness and success. This course receives advanced weighted credit, if the student sits for the corresponding College Board exam.

HEALTH/PHYSICAL EDUCATION

Course Name: Adaptive Physical Education I

Local Code: 77001S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized course for students with disabilities represents an orientation period in which students are exposed to a wide variety of physical education activities. Skills are taught through various games and sports where students may participate. Adaptive Physical Education is a modified program of developmental activities, games, sports, and rhythms designed to provide each student with opportunities to develop organic vigor, muscular strength, and endurance within the limits of the individual's abilities. The skills taught will depend on the individual's abilities and medical advice. The IEP/504 team determines participation in Adaptive Physical Education.

Course Name: Adaptive Physical Education II

Local Code: 77002S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized course for students with disabilities represents the continuation of skills acquisition in a variety of competitive learning situations in various games and sports as well as overall fitness. Adaptive Physical Education is a modified program of developmental activities, games, sports, and rhythms designed to provide each student with opportunities to develop organic vigor, muscular strength, and endurance within the limits of the individual's abilities. The skills taught will depend on the individual's abilities and medical advice. The IEP/504 team determines participation in Adaptive Physical Education.

Course Name: Health and Physical Education 9

Local Code: 73000G

Grade Level: 9

Course Description:

In this course the student will integrate a variety of health concepts, skills, and behaviors to plan for their personal, lifelong health goals. These include awareness and consequences of risky behaviors, disease prevention, overall wellness, and identification of community health resources. The students will apply concepts and principles of mechanics and anatomy in relation to human movement and apply the concepts and principles of the body's metabolic response to short-term and long-term physical activity. Movement experiences will enable the student to demonstrate competent and confident

movement in a variety of categories. Student will explain the structures and functions of the body and how they relate to and are affected by human movement. Student will explain the importance of energy balance and nutritional needs of the body to maintain optimal health and prevent chronic disease. The student will demonstrate the social competencies needed to be a contributing member of society. Seeing them self as having an active role in creating a healthy lifestyle for them self as an individual, for his/her family, and for the larger community. A student with an IEP or 504 plan may substitute **Adaptive Physical Education** for this course, upon the recommendation of the IEP or 504 team.

Course Name: Health, Physical Education 10, and Driver's Education (with NO behind-the-wheel component)

Local Code: 74050G

Grade Level: 10

Course Description:

In this course the student will understand detailed fundamentals of driving which will foster responsible driving attitudes and behaviors. The student will learn that driver literacy has a far-reaching effect on public safety, public health and quality of life. Learning safe driving in the classroom is an essential school-to-work transitional skill. The student will demonstrate comprehensive health and wellness knowledge and skills. The student will reflect their behavioral conceptual understanding of the issues associated with maintaining good personal health. The student will apply concepts and principles of mechanics and anatomy in relation to human movement and apply the concepts and principles of the body's metabolic response to short-term and long-term physical activity. The student will explain the structures and functions of the body and how they relate to and are affected by human movement. The student will explain the importance of energy balance and nutritional needs of the body to maintain optimal health and prevent chronic disease. The student will create and implement a health-enhancing personal health plan for personal fitness and prevention of chronic disease. The intent of the standard is to evaluate personal fitness levels and create an appropriate plan with goals, activities, and timelines that will maintain and improve level of physical fitness for the present and for post-secondary (college and career). The student will demonstrate the aptitude, attitude, and skills to lead responsible, fulfilling, and respectful lives.

Course Name: Advanced PE I

Local Code: 76400G

Prerequisite: Health, Physical Education 10 and Driver Education

Course Description:

In this course elective physical education provides students with the opportunity to participate in physical activities for specific purposes. Students should be offered the opportunity to self-select activity throughout

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the course. Students will select areas of concentration to study. Examples of possible choices are: individual sports, lifelong activities, outdoor pursuits, Pilates, self-defense, skating, team sports, weight management, weight training/conditioning. Students in grades eleven and twelve demonstrate the knowledge and understanding necessary to analyze movement performance in an activity of choice using scientific principles, and implement effective practice procedures for skillful performance in specialized movement forms. Students apply advanced movement-specific information so that they develop the ability to learn, self-assess, and improve movement skills independently.

Course Name: Advanced PE II

Local Code: 76500G

Prerequisite: Advanced PE I

Course Description:

In this course elective physical education provides students with the opportunity to participate in physical activities for specific purposes. The student can continue the programs previously established in Advanced PE I or choose to use new programs to expand his/her personal training ONLY after teacher approval. Students should be offered the opportunity to self-select activities throughout the course. Students will select areas of concentration to study. Examples of possible choices are: individual sports, lifelong activities, outdoor pursuits, Pilates, self-defense, skating, team sports, weight management, weight training/conditioning. Students in grades eleven and twelve demonstrate the knowledge and understanding necessary to analyze movement performance in an activity of choice using scientific principles, and implement effective practice procedures for skillful performance in specialized movement forms. Students apply advanced movement-specific information so that they develop the ability to learn, self-assess, and improve movement skills independently.

WORLD LANGUAGES

NOTE: All levels of Spanish emphasize the skills of listening, speaking, reading, writing, and culture. Emphasis in Latin is placed on components, language processes, literature, and culture.

Course Name: Latin I

Local Code: 53100G

Course Description:

The course focuses on the primary elements of grammar, analysis and interpretation of syntax in a given sentence, and reading aloud with standard classical pronunciation and accent. Major geographical, mythological, and cultural derivative study begins.

Course Name: Latin II

Local Code: 53200G

Prerequisite: Latin I

Course Description:

In this course second-year students expand their understanding of the elements of grammar, and read and comprehend passages of appropriate difficulty. The major geographical features of the Roman world and a history of Rome during the Regal and Republican periods are taught. Continued emphasis is placed on the culture and mythology of Rome and Latin derivatives.

Course Name: Latin III

Local Code: 53300G

Prerequisite: Latin II

Course Description:

In this course third-year students develop an increased knowledge of derivatives, study Latin authors and their works, and use critical analysis in reading and comprehending selected passages. The cultural and historical contexts of classical works are presented. Students strengthen speaking and cultural appreciation skills.

Course Name: Latin IV

Local Code: 53400G

Prerequisite: Latin III

Course Description:

In this course the fourth year students examine the elements of grammar within the context of written literary works and become increasingly skilled in syntax. Selected Latin passages are studied through critical analysis, and students appraise the literary value of works being studied.

Course Name: Latin V

Local Code: 53500G

Prerequisite: Latin IV

Course Description:

In the advanced level course the students assume more responsibility for developing grammatical and syntactical skills. More in-depth consideration of classical Latin writings is studied within their historical contexts. This course receives **honors** weighted credit.

Course Name: AP Latin: Vergil

Local Code: 53700AP or 53700VA

Prerequisite: Latin IV

Course Description:

This is a yearlong course. The objectives for this course duplicate the College Board Advanced Placement Program. This course prepares students for the AP examination in AP Latin: Vergil. Students of AP Latin: Vergil will be expected to accurately read and translate selections from Vergil's Aeneid, demonstrate a grasp of the epic's grammatical structures and vocabulary, comprehend, analyze and interpret Latin prose and poetry, and to gain knowledge of the cultural, social, and

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political context of the Aeneid. Students will be introduced to advanced Latin literary techniques and devices, as well as to poetic meter. It is intended for students who have a thorough knowledge of the Latin language. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: Spanish I

Local Code: 55100G

Course Description:

The course incorporates an understanding of words and expressions in varied contexts, the use of acceptable Spanish in daily classroom communications, association of written with spoken forms of the language, and written responses to questions and directed statements. The geography of Spanish-speaking countries and comparative lifestyles are also studied.

Course Name: Spanish II

Local Code: 55200G

Prerequisite: Spanish I

Course Description:

In this course the students focus on understanding and retaining familiar material in new contexts, refining pronunciation, stress, and intonation, reading for functional purposes, and writing guided paragraphs and dialogues. The class explores current events in Spanish-speaking countries.

Course Name: Spanish III

Local Code: 55300G

Prerequisite: Spanish II

Course Description:

In this course the third-year skills include dealing with increasingly advanced materials, communication of complex ideas and information in directed activities, expansion of vocabulary, and writing short compositions on assigned topics. Historical events in Spanish-speaking countries and the contributions of these people to American life are considered.

Course Name: Spanish IV

Local Code: 55400G

Prerequisite: Spanish III

Course Description:

In this course objectives stress more formal presentations, the use of tone, mood, and inflection as they relate to communications, developing reading skills, and written reports on assigned topics. Students also study Spanish culture in some detail.

Course Name: Spanish V

Local Code: 55500G

Grade Level: Spanish IV

Course Description:

In this advanced level course the students assume more responsibility for refining their communication skills, both

spoken and written, practice reading with greater comprehension, and develop pronunciation skills. The study of Spanish culture is continued. This course receives **honors** weighted credit.

Course Name: AP Spanish Language

Local Code: 55700AP or 55700VA

Prerequisite: Spanish IV

Course Description:

This yearlong course covers the equivalent of a third-year college course in advanced Spanish writing and conversation. Emphasizing the use of Spanish for active communication, it encompasses aural/oral skills, reading comprehension, grammar, and composition. Students in this course develop language skills that are useful in themselves and that can be applied to various activities and disciplines, rather than to the mastery of any specific subject matter. Students should receive extensive training in the organization and writing of compositions as an integral part of this course. The objectives for this course are based on the College Board Advanced Placement Program and prepare students for the AP examination in Spanish. It is intended for students who have a thorough knowledge of the Spanish language. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

FINE ARTS

Note: Most performing arts courses, (Theatre, Band, and Chorus) have **mandatory** performance requirements that include out-of-school hours and appropriate apparel.

Students who have other commitments which would prohibit meeting these expectations should not enroll in these particular courses.

Course Name: Theater Arts I: Introduction to Theatre

Local Code: 14100G

Course Description:

This course is designed to provide students with a survey of theatre arts. Students are provided opportunities to experience and appreciate dramatic literature and participate in the creative processes of performance and production. The course emphasizes skill development and provides theatrical opportunities that enable students to determine areas of interest.

Course Name: Technical Theatre (Performance Based)

Local Code: 14350G

Prerequisite: Theater Arts I or Art I

Course Description:

This course focuses on the skills of technical production work for theatrical performances, including state management, set construction, lighting and sound operation and design, backstage running crews, and house management. The students will be responsible for serving as the technical crew for productions of the

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theater arts classes; therefore, additional after-school rehearsals and performances are required of all students.

Course Name: Theater Arts II: Dramatic Literature and Theatre History (Performance Based)

Local Code: 14200G

Prerequisite: Theater Arts I

Course Description:

This course is designed to help students integrate and build upon concepts and skills acquired in Theatre Arts I. Students will investigate dramatic literature, theatrical styles, and historical periods through various modes of expression and performance. Students will study and respond to a variety of theatre experiences that will refine communicative, collaborative, analytical, interpretive, and problem-solving skills. Students will expand artistic abilities and appreciation of theatrical arts.

Course Name: Theater Arts III: Intermediate Acting and Playwriting (Performance Based)

Local Code: 14230G

Prerequisite: Theater Arts II

Course Description:

This course is designed to help students integrate and build upon concepts and skills acquired in Theatre Arts II. Students will investigate acting styles and the process of playwriting, which includes character development, research, dramatic structure, conflict, and resolution. Students will study and respond to a variety of theatre experiences that will refine collaborative, analytical, interpretive, and problem-solving skills. Students will expand artistic abilities and appreciation of the theatrical arts.

Course Name: Theater Arts IV: Advanced Acting and Directing (Performance Based)

Local Code: 14260G

Prerequisite: Theater Arts III

Course Description:

This course is designed to help students refine the concepts and skills acquired in Theatre Arts III while reinforcing the principles learned in Theatre Arts I and II. Students will use research, performance, and evaluation to develop artistic criteria that will be applied to performance and directing. Students will study and respond to a variety of theatre experiences, showcasing collaborative, analytical, interpretive, and problem-solving skills.

Course Name: Theatre Movement

Local Code: 93190G

Prerequisite: Theater I or Tryout/Audition

Course Description:

This course is designed to help students integrate movement and dance in order to build upon concepts and skills acquired in Theatre Arts I to develop the student actor. Students will study ballet, modern and American jazz styles and incorporate them in theatrical

presentations. Students will study and analyze the ways in which dance enhances theatrical presentation. Students will showcase collaborative efforts that help them to enhance characterization, conflict, and production style.

Course Name: Art I (Foundations)

Local Code: 91200G

Course Description:

In this course the students will study the elements of art and the principles of design. They will develop skills using a variety of media. The students will expand their imagination and work on observational drawing skills. Students will learn to analyze and critique artwork, in addition to exploring art history and aesthetics. Students will be required to maintain an art sketchbook.

Course Name: Art II (Intermediate)

Local Code: 91300G

Prerequisite: Art I (Foundations)

Course Description:

This course will focus on two dimensional art. Prior knowledge of the elements of art and the principles of design is expected. The students will expand their technical drawing skills, while using a wide variety of two-dimensional media. There will be an emphasis on applying and developing compositional skills while creating and using a variety of styles and techniques. Students will expand their art vocabulary and writing skills to enhance their abilities to critique works of art. They will develop interpretive skills as they study art history and analyze historical artwork. The students will begin to create a body of artwork for a portfolio. The students in this class will be required to maintain an art sketchbook.

Course Name: Art III (Advanced Intermediate)

Local Code: 91400G

Prerequisite: Art II (Intermediate)

Course Description:

This course will focus on three-dimensional art. Prior knowledge of the elements of art and the principles of design is expected of the students. There will be an emphasis on applying the design principles to further develop compositional skills in creating three-dimensional artwork. The students will explore a variety of three-dimensional art media. They will further expand their vocabulary and writing skills through the exploration of art history and three-dimensional artists. They will create three-dimensional artwork suitable for a portfolio. This class will require maintaining an art sketchbook.

Course Name: Art IV (Advanced)

Local Code: 91450G

Prerequisite: Art III (Advanced Intermediate)

Course Description:

In the course the students should be motivated to prepare a body of work for a college portfolio or to prepare for AP Studio Art. There should be a commitment

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to rigorous completion of quality artwork and to create artwork outside of the class. Students will determine and explore an area of concentration focusing on a personal visual interest or problem. The students will be expected to demonstrate a proficiency in formal, technical, and expressive means within the artwork. They will expand vocabulary and writing skills, while applying analytical skills. This class will require maintaining an art notebook. In addition, the students will create and maintain a body of work for a portfolio.

Course Name: Art V (Studio Art)

Local Code: 91470G

Prerequisite: any three art classes

Course Description:

This course is designed as an independent study in which students continue to reinforce competence and confidence in their artwork. Students will be required to demonstrate mastery through a portfolio that shows concentration, breadth of experience, and technical skills. Students who enroll in Art V are generally planning to pursue visual arts as a major in college. This class will provide the students an opportunity to build a portfolio that includes some of the expectations of the college or university which they plan to attend.

AP Studio Art:

The courses are yearlong and designed to provide students with a learning experience equivalent to that of an introductory college course in studio art foundation. Each course enables students to develop a body of work investigating a strong underlying visual idea in Drawing, 2-D Design, or 3-D Design that grows out of a coherent plan of action or investigation (i.e., a “concentration”). Students should be aware that these classes require advanced artistic technical knowledge and skills. There should be a commitment to rigorous completion of quality artwork inside and outside of class. Students will explore areas of personal quality within the artwork. They will determine and explore an area of concentration focusing on a personal visual interest or problem. The students will be expected to demonstrate a proficiency in formal, technical, and expressive means within the artwork. They will expand vocabulary and writing skills, while applying analytical skills. The classes will require maintaining an art notebook. In addition, the students will complete a body of work for the required AP Portfolio. Students will submit a portfolio to the College Board that demonstrates mastery of the skills and concepts in the area of concentration.

Course Name: AP Studio Art: 2-D Design Concentration

Local Code: 91480AP or 91480VA

Prerequisite: Art IV

Course Description:

This portfolio is intended to address two-dimensional (2-D) design issues. Design involves purposeful decision making about how to use the elements and principles of

art in an integrative way. The principles of design (unity/variety, balance, emphasis, contrast, rhythm, repetition, proportion/scale, figure/ground relationships) can be articulated through the visual elements (line, shape, color, value, texture, space). They help guide artists in making decisions about how to organize an image on a picture plane in order to communicate content. Effective design is possible whether one uses representational or abstract approaches to art. For this portfolio, students are asked to demonstrate mastery of 2-D design through any two-dimensional medium or process, including, but not limited to, graphic design, digital imaging, photography, collage, fabric design, weaving, fashion design, fashion illustration, painting and printmaking. Video clips, DVDs, CDs and three-dimensional works may not be submitted. However, still images from videos or films are accepted. Links to samples of student work in the 2-D Design portfolio can be found at apcentral.collegeboard.com/studio2D. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: AP Studio Art: 3-D Design Concentration

Local Code: 91490AP or 91490VA

Prerequisite: Art IV

Course Description:

This portfolio is intended to address sculptural issues. Design involves purposeful decision making about using the elements and principles of art in an integrative way. In the 3-D Design Portfolio, students are asked to demonstrate their understanding of design principles as they relate to the integration of depth and space, volume and surface. The principles of design (unity/variety, balance, emphasis, contrast, rhythm, repetition, proportion/scale, and occupied/unoccupied space) can be articulated through the visual elements (mass, volume, color/light, form, plane, line, texture). For this portfolio, students are asked to demonstrate mastery of 3-D design through any three-dimensional approach, including, but not limited to, figurative or nonfigurative sculpture, architectural models, metal work, ceramics, glass work, installation, assemblage and 3-D fabric/fiber arts. There is no preferred (or unacceptable) style or content. Links to samples of student work in the 3-D Design portfolio can be found at apcentral.collegeboard.com/studio3D. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: AP Studio Art: Drawing Portfolio

Local Code: 91500AP or 91500VA

Prerequisite: Art IV

Course Description:

The Drawing Portfolio is intended to address a very broad interpretation of drawing issues and media. Line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth and mark-making are drawing issues that can be addressed through a variety of means, which could include painting, printmaking, mixed

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media, etc. Abstract and observational works may demonstrate drawing competence. The range of marks used to make drawings, the arrangement of those marks, and the materials used to make the marks are endless. There is no preferred (or unacceptable) style or content. Any work submitted in the Drawing Portfolio that incorporates digital or photographic processes must address issues such as those listed above. Using computer programs merely to manipulate photographs through filters, adjustments or special effects is not appropriate for the Drawing Portfolio. Links to student work in the Drawing portfolio can be found at apcentral.collegeboard.com/studio-drawing. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: AP Art History
Local Code: 91510AP or 91510VA
Course Description:

This yearlong course exposes students to a comprehensive study of the history of art. The course includes study of architecture, painting, sculpture, and other art forms, within cultural and historical contexts. Students will examine the major forms of artistic expression in the past and present, including our own and that of other cultures. Students will learn to express opinions, conduct research, and to compare and contrast styles verbally and in writing. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: Concert Band I (Performance Based)
Local Code: 92320G
Prerequisite: Middle School Band or Audition
Course Description:

In this course students will continue to develop their musicianship and music literacy. Students will perform ascending and descending scales in various key signatures and develop ensemble skills. Students will refine ability to produce a controlled tonal quality, and broaden their knowledge of musical terms.

Course Name: Concert Band II (Performance Based)
Local Code: 92330G
Prerequisite: Concert Band I or Audition
Course Description:

In this course students will continue to refine individual and ensemble skills and perform a variety of musical works. Students will practice expressive elements of phrasing and style in individual and group performances. Students will demonstrate expanded technical proficiency, discuss interpretations of musical selections, and identify career and vocational choices in music.

Course Name: Concert Band III (Performance Based)
Local Code: 92340G
Prerequisite: Concert Band II or Audition
Course Description:

Students will continue to refine individual and ensemble skills and perform a variety of musical works. Students will practice expressive elements of phrasing and style in individual and group performances. Students will demonstrate expanded technical proficiency, discuss interpretations of musical selections, and identify career and vocational choices in music.

Course Name: Concert Band IV (Performance Based)
Local Code: 92440G
Prerequisite: Concert Band III or Audition
Course Description:

In this course students will continue to refine individual and ensemble skills and perform a variety of musical works. Students will practice expressive elements of phrasing and style in individual and group performances. Students will demonstrate expanded technical proficiency, discuss interpretations of musical selections, and identify career and vocational choices in music.

Course Name: Symphonic Band I (Performance Based)
Local Code: 92370G
Prerequisite: Concert Band I or Audition
Course Description:

In this course students will develop ensemble skills and develop fluency in tone quality with a variety of articulations at various tempos. Students will perform complex meters and rhythmic patterns. Students will be provided opportunities to participate in local, district, regional and state events.

Course Name: Symphonic Band II (Performance Based)
Local Code: 92380G
Prerequisite: Symphonic Band I or Audition
Course Description:

In this course students will develop individual skills through all major scales. Percussion students will play 26 drumming rudiments. Students will identify key signatures and apply to all music being performed. Students will play with accurate melodic and harmonic intonation. Students will be provided opportunities to participate in local, district, regional and state events.

Course Name: Symphonic Band III (Performance Based)
Local Code: 92390G
Prerequisite: Symphonic Band II or Audition
Course Description:

In this course students will experience music literature of various styles, composers and compositional techniques congruent with the Virginia Band and Orchestra Directors Association (VBODA) Grade levels 5 and 6 Literature. Students will interpret music within a historical perspective and style and demonstrate sight-reading skills in moderately advanced rhythmic structures and keys. Students will play with accurate melodic and harmonic intonation. Students will be provided opportunities to participate in local, district, regional and state events.

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Course Name: Symphonic Band IV (Performance Based)**Local Code: 92420G****Prerequisite: Symphonic Band III or Audition****Course Description:**

In this course students will exhibit artist level technical and expressive skills. Students will experience music literature of various styles, composers and compositional techniques congruent with the Virginia Band and Orchestra Directors Association (VBODA) Grade levels 5 and 6 Literature. They will contribute to ensemble rehearsals by discussing solutions for musical problems encountered. Students will demonstrate a positive attitude toward music, self-discipline, group cooperation and the highest levels of leadership. Students will be provided opportunities to participate in local, district, regional and state events.

Course Name: Jazz Band I (Performance Based)**Local Code: 92500G****Course Description:**

In this course the primary focus is the preparation and performance of the finest jazz and popular literature. The further advancement of musical skills, both individual and ensemble, will be paramount to the success of the student and the organization. Great emphasis is placed on individual musical responsibility and the development of the jazz idiom and improvisation. Members of the Jazz Band are expected to prepare and perform as the pit orchestra for the school musical. Students in this class are expected to perform with all other performing groups as needed. There will be out-of-school time required for rehearsals and performances. Course goals will include public performances and students will be provided opportunities to participate in local, district, regional and state events.

Course Name: Jazz Band II (Performance Based)**Local Code: 92520G****Course Description:**

In this course the primary focus is the preparation and performance of the finest jazz and popular literature. The further advancement of musical skills, both individual and ensemble, will be paramount to the success of the student and the organization. Great emphasis is placed on individual musical responsibility and the development of the jazz idiom and improvisation. Members of the Jazz Band are expected to prepare and perform as the pit orchestra for the school musical. Students in this class are expected to perform with all other performing groups as needed. There will be out-of-school time required for rehearsals and performances. Course goals will include public performances and students will be provided opportunities to participate in local, district, regional and state events.

Course Name: Guitar I**Local Code: 92450G****Course Description:**

In this course the students will learn basic guitar skills including identifying parts of the guitar, the history and how to tune by ear. They will begin to read music and learn basic strumming techniques with a pick. Students will learn to play open chords and arpeggios using just their fingers.

Course Name: Guitar II**Local Code: 92470G****Prerequisite: Guitar I or instructor approval by audition****Course Description:**

In this course the students will continue to develop guitar skills in playing chords, scales, and music theory. Additional scales, chords, and playing styles will be explored. Students will have the opportunity for more solo and ensemble performances in and outside of class.

Course Name: AP Music Theory**Local Code: 92260AP or 92260VA****Prerequisite: Intermediate Band II; strong background in musical concepts, entry exam, and audition****Course Description:**

This is a yearlong course. The ultimate goal of an Advanced Placement Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. The achievement of this goal may be best promoted by integrated approaches to the student's development of: aural skills listening exercises, sight-singing skills performance exercises, written skills through written exercises, compositional skills creative exercises, and analytical skills analytical exercises. The course should seek first to instill mastery of the rudiments and terminology of music, including hearing and notating: pitches, intervals, scales and keys, chords, meter, and rhythm. Students will learn these basic concepts through listening to a wide variety of music, including not only music from standard Western tonal repertoire but also twentieth-century art music, jazz, popular music, and the music of non-Western cultures. Students will work on the acquisition of correct notational skills, as well as developing speed and fluency with basic materials. Students will be required to read, notate, write, sing, and listen to music. Performance – using singing, keyboard, and students' primary performance media – will also be a part of the learning process. This course receives **advanced** weighted credit, if the student sits for the corresponding College Board exam.

Course Name: Beginning Chorus I (Performance Based)**Local Code: 92601G****Course Description:**

This course focuses on beginning vocal techniques, reading and writing basic musical notation, critiquing musical events, following conducting, and singing unison

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and harmony. Students will perform selections representing contrasting periods and styles.

Course Name: Beginning Chorus II (Performance Based)

Local Code: 92602G

Prerequisite: Beginning Chorus I or audition

Course Description:

In this course the study of beginning vocal techniques is continued. Students also incorporate expressive qualities into their singing, and learn the importance of contributing to group goals.

Course Name: Intermediate Chorus I (Performance Based)

Local Code: 92851G

Prerequisite: Beginning Chorus II or audition

Course Description:

In this course students will develop tone quality and intonation, and will read and sight-sing notation of simple patterns. They will demonstrate expected rehearsal decorum and appropriate attitude. Students will use expressive qualities of dynamics, tempo, blend, and balance in group performance. Placement in this course will be based on skill level and teacher recommendation.

Course Name: Intermediate Chorus II (Performance Based)

Local Code: 92852G

Prerequisite: Intermediate Chorus I or audition

Course Description:

In this course students will sing music containing three or more parts. They will identify phonal textures, basic musical terms, and simple structural forms. Students will demonstrate improvisational skills and develop an awareness of career and vocational opportunities in music. Placement in this course will be based on skill level and teacher recommendation.

Course Name: Advanced Chorus I (Performance Based)

Local Code: 92891G

Prerequisite: Intermediate Chorus II or audition

Course Description:

In this course students will develop a command of vocal production and intonation appropriate for the level of music being studied. They will refine expression and interpretive skills. Students will demonstrate appropriate posture and breathing techniques.

Course Name: Advanced Chorus II (Performance Based)

Local Code: 92892G

Prerequisite: Advanced Chorus I or audition

Course Description:

In this course students will sight-sing in a variety of keys and meters. They will write pitch and rhythmic notation of melodies of two or more phrases. Students will sing music containing four or more parts.

Course Name: Advanced Chorus III (Performance Based)

Local Code: 92893G

Prerequisite: Advanced Chorus II or audition

Course Description:

In this course students will respond to complex conducting patterns and interpretive gestures. They will name various compositional devices in music. Students will perform selections of all major periods and make informed choices of music from varied cultural and ethnic origins. Placement in this course will be based on skill level and teacher recommendation.

Course Name: Advanced Chorus IV (Performance Based)

Local Code: 92894G

Prerequisite: Advanced Chorus III or audition

Course Description:

In this course students will use appropriate musical vocabulary, and critique a variety of musical performances. They will demonstrate knowledge of form and structure in a given choral score. Students will explore and discuss careers and vocational opportunities in music. Placement in this course will be based on skill level and teacher recommendation.

CAREER AND TECHNICAL EDUCATION

***For any course listed with a grade level of 9, 10, and 11, a 12th grade student may enroll in the course, if the student will complete a concentration sequence during the current school year.*

AGRICULTURAL EDUCATION

Course Name: Introduction to Plant Systems

Local Code: 80070G

Grade Level: 9, 10, 11, **

Course Location: WHS (maximum enrollment is 20)

Concentration Sequence: 8010, 8012, 8034, 8035

Course Description:

Students develop competencies in each of the major areas of the Plant Systems career pathway including applied botany, plant propagation, plant care and selection. Instructional content also includes an introduction to the various divisions of the plant systems industry. Students learn agricultural mechanics applicable to plant systems. As with all agriculture courses, students will be exposed to principles of leadership and opportunities within student organizations along with Supervised Agricultural Experiences opportunities.

Course Name: Horticulture Sciences

Local Code: 80340G

Grade Level: 9, 10, 11, **

Course Location: WHS (maximum enrollment is 20)

Concentration Sequence: 8007, 8035

Course Description:

In this course, students develop the necessary knowledge, skills, habits, and attitudes for entry-level employment

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and advancement in areas such as floriculture, landscape design, greenhouse operation, nursery plant production, and turf management. They receive instruction in using soil and other plant-growing media and in identifying, propagating, and growing horticultural plants in the greenhouse and land laboratory. Instruction is provided in safety practices and leadership development.

Course Name: Greenhouse Plant Production and Management

Local Code: 80350G

Grade Level 10, 11, 12

Course Location: WHS (maximum enrollment is 20)

Concentration Sequence: 8007, 8034

Course Description:

Students are taught the operating procedures for a greenhouse. Units of instruction include developing plant production facilities, science application in plant production, and identification of plants. Business management, leadership development, and marketing skills are emphasized to prepare students for careers in the greenhouse plant production and management industry.

Course Name: Introduction to Power, Structural, and Technical Systems

Local Code: 80160G

Grade Level: 9, 10, 11, 12

Course Location: WHS

Concentration Sequence: 8010, 8012,

Course Description:

Throughout this introductory level Agricultural Power course, students will receive instruction in the areas of basic engine principles, power trains, hydraulics, and electrical systems. The course will also address the areas of building structures, metal fabrication, and precision agricultural management.

Course Name: Agriculture Production Technology

Local Code: 80100G

Course Location: WHS (maximum enrollment is 20)

Concentration Sequence: 8007, 8012, 8016

Grade Level: 10, 11 **

Course Description: This course emphasized one or more areas of plant science, animal science, soil science, agricultural business management, and agricultural mechanization, based upon the student's employment objective. Local school divisions should select one of the following livestock enterprises: beef cattle, dairy cattle, swine, horses, or sheep. The competencies for the selected livestock enterprise are considered essential for the course. Supervised occupational experience programs and leadership training are important parts of the course. When only single periods are provided, greater emphasis is placed on individualized instruction and supervised occupational experience programs. **This course will be double blocked.**

Course Name: Agricultural Production Management

Local Code: 80120G

Course Location: WHS (maximum enrollment of 20)

Concentration Sequence: 8007, 8010, 8016

Grade Level: 11, 12

Course Description:

This course includes instruction in agricultural mechanics, with emphasis placed on the application of mechanical skills to farm power and machinery, soil and water management, supervised farming programs, and leadership training. **This course will be double blocked.**

BUSINESS AND INFORMATION TECHNOLOGY

Any two of the following occupational classes will constitute a business completer and/or concentrator. Participation in the student organization Future Business Leaders of America (FBLA) is an expectation.

Course Name: Information Technology (IT)

Fundamentals Local Code: 66700G

Grade Level: 9, 10, **

Concentration Sequence: 6640, 6641, 6660, 6661

Course Description:

In this course students investigate career opportunities and technologies in four major IT areas: Information Services and Support, Network Systems, Programming and Software Development, and Interactive Media. Students will evaluate the impact of IT on other career clusters. The focus of the IT Fundamentals course is the introduction of skills related to information technology basics, Internet fundamentals, network systems, computer maintenance/upgrading/troubleshooting, computer applications, programming, graphics, Web page design, and interactive media.

Course Name: Programming

Local Code: 66400G

Grade Level: 9, 10, 11, 12

Concentration Sequence: 6660, 6661, 6641, 6670

Course Description:

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

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Course Name: Advanced Programming**Local Code: 66410G****Grade Level: 10, 11, 12****Prerequisite: Programming****Concentration Sequence: 6640, 6660, 6661, 6670****Course Description:**

Building on their foundation of programming skills, Advanced Programming students use object-oriented programming to develop database applications, interactive multimedia applications including game applications, mobile applications, and Web applications. Students continue to develop their employability skills as they research pathways for continuing education and careers in the information technology industry and engage in various career-building activities.

Course Name: Database Design and Management**Local Code: 66600G****Grade Level 10, 11, 12****Concentration Sequence: 6640, 6641, 6661, 6670****Prerequisite: (Recommended by VDOE) IT Fundamentals****Course Description:**

This course includes database design and Structured Query Language (SQL) programming. Students study database fundamentals, including database development, modeling, design, and normalization. In addition, students are introduced to database programming. Students gain the skills and knowledge needed to use features of database software and programming to manage and control access to data. Students will prepare for the first of two certification exams.

Course Name: Advanced Database Design and Management**Local Code: 66618G****Grade Level: 11, 12****Concentration Sequence: 6640, 6641, 6660, 6670****Prerequisite: Database Design and Management****Course Description:**

Students study Java, a widely used object-oriented, class-based, general-purpose programming language, to create and manipulate database applications. Instruction will emphasize preparation for industry certification.

Course Name: Economics and Personal Finance:**Independent Study****Local Code: 61200IV****Course Description:**

In this course students learn how to navigate the financial decisions they must face and to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career. Student will complete the W!SE Financial Literacy Certification Test.

This course will be completed online outside the**traditional school day (i.e., student's home) using an online program. This course is graded on a Pass/Fail scale.****Course Name: Economics and Personal Finance: School Day****Local Code: 61200SV****Grade Level: 12****Course Description:**

In this course students learn how to navigate the financial decisions they must face and to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career. Student will complete the W!SE Financial Literacy Certification Test. **This course will be completed online at school with a mentor using an online program. This course is graded on a Pass/Fail scale.**

Course Name: Economics and Personal Finance: Virtual Virginia Program**Local Code: 61200VA****Grade Level: 12****Course Description:**

In this course students learn how to navigate the financial decisions they must face and to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career. Student will complete the W!SE Financial Literacy Certification Test. **This course will be completed online at school with a mentor using an online program. The student must receive permission to enroll in this course. This course is graded on a Pass/Fail scale.**

CAREER CONNECTIONS

Career Connections is the area designed to help students prepare for careers and continuing education in a challenging and rapidly changing workplace. This service area provides connecting links for students in pursuit of career development and related career information resources.

Course Name: Virginia Teachers for Tomorrow I**Local Code: 90620DE or 90620G****Grade Level: 11****Concentration Sequence: 9072****Course Description:**

The Virginia Teachers for Tomorrow course introduces juniors and seniors to a career in teaching and education.

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The primary elements of the curriculum components are *the learner, the school, and the teacher and teaching*. The components are intentionally broad in scope and provide a great deal of flexibility based on the career interest of a student. In addition to the fundamental curriculum components, all students are required to participate in an internship outside the teacher cadet classroom. The internship may involve the pre-school level through grade 12. This course has a dual enrollment option. **To enroll in the dual enrollment course, the student must complete the VPT for Math and English and meet the criteria established by PDCCC.** The dual enrollment course will use the **PDCCC grading scale**.

Course Name: Virginia Teachers for Tomorrow II
Local Code: 90720DE or 90720G
Grade Level: 12
Concentration Sequence: 9062
Prerequisite: Virginia Teachers for Tomorrow I
Course Description:

In this course 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. This course has a dual enrollment option. **To enroll in the dual enrollment course, the student must complete the VPT for Math and English and meet the criteria established by PDCCC.** The dual enrollment course will use the **PDCCC grading scale**.

FAMILY AND CONSUMER SCIENCE

Participation in the student organization Family, Career, and Community Leaders of America (FCCLA) is an expectation.

Course Name: Culinary Arts I
Local Code: 82758G
Grade Level: 9, 10, 11 **
Course Location: SHS (maximum enrollment is 20)
Concentration Sequence: 8276
Course Description:

The Culinary Arts I curriculum provides students with the foundations for a comprehensive knowledge of the food service industry and with opportunities to build technical skills. Students examine and practice basic rules and procedures related to kitchen and food safety, kitchen sanitation procedures, and emergency measures. Students explore the purchasing and receiving of goods and study fundamental nutritional principles and guidelines. As they explore food-preparation techniques, students practice applying these techniques to the preparation and serving of basic food products. The curriculum places a strong emphasis on science and mathematics knowledge and skills. **This course will be double blocked.**

Course Name: Culinary Arts II
Local Code: 82768G
Grade Level: 10, 11, 12
Course Location: SHS (maximum enrollment is 20)
Concentration Sequence: 8275
Prerequisite: Culinary Arts I
Course Description:

The Culinary Arts II curriculum provides students with continuing opportunities to acquire a comprehensive knowledge of the food service industry as well as to expand their technical skills. Students practice kitchen safety and sanitation, apply nutritional principles to food preparation and storage, perform a wide range of more advanced food-preparation techniques including garde manger and baking, refine their dining room serving skills, develop menus, perform on-site and off-site catered functions, and strengthen their business and math skills. The curriculum continues to place a strong emphasis on science and mathematics knowledge and skills. **This course will be double blocked.**

MARKETING

Course Name: Sports, Entertainment, and Recreation Marketing
Grade Level: 9, 10, 11 **
Local Code: 81750DE or 81750G
Course Location: SHS
Concentration Sequence: 8177
Course Description:

This introductory course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports, entertainment, and recreation industries. Students will investigate the components of branding, sponsorships and endorsements, as well as promotion plans needed for sports, entertainment and recreation events. The course also supports career development skills and explores career options. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. This PDCCC dual enrollment course aligns with MKT 100. **Student must complete the VPT for Math and English and/or meet the criteria established by PDCCC to enroll in course. The student must be 16 years old to complete CTE certification.**

Course Name: Advanced Sports, Entertainment, and Recreation Marketing
Grade Level: 10, 11, 12
Local Code: 81770DE or 81770G
Course Location: SHS
Concentration Sequence: 8175
Prerequisite: Sports, Entertainment, and Recreation Marketing
Course Description:

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Students will build on prior knowledge of sports, entertainment, and recreation marketing. This course focuses on the principles of management and planning supported by research, financial, and legal concepts. Students will be able to plan and execute an event, develop a career plan, and establish a sports, entertainment, or recreation marketing product/business. Academic skills (mathematics, science, English and history/social science) related to the content are a part of this course. Computer/technology applications supporting the course are studied. This PDCCC dual enrollment course aligns with MKT 209. **Student must complete the VPT for Math and English and/or meet the criteria established by PDCCC to enroll in course.**

Course Name: Marketing Co-op

Local Code: 81991G

Grade Level: 11, 12

Prerequisite: Approved participation by teacher and principal

Course Description:

This is supervised on-the-job instruction course that requires a minimum of 396 co-op hours. A training agreement must be signed by the student, parent, employer, and teacher. Students must pass Marketing to receive credit for Co-op.

Course Name: Advanced Marketing Co-op

Local Code: 81992G

Grade Level: 12

Prerequisite: Approved participation by teacher and principal

Course Description:

This is supervised on-the-job instruction course that requires a minimum of 396 co-op hours. A training agreement must be signed by the student, parent, employer, and teacher. Students must pass Advanced Marketing to receive credit for Co-op.

MEDICAL AND HEALTH SCIENCES

Course Name: Nurse Aide I

Local Code: 83608G

Grade Level: 11

Course Location: SHS (maximum enrollment is 20)

Concentration Sequence: 8362

Course Description:

Nurse Aide I, offered as an occupational preparation course beginning at the 11th-grade level, emphasizes the study of nursing occupations as related to the health care system. Students study normal growth and development, simple body structure and function, and medical terminology and are introduced to microbes and disease. They receive elementary skill training in patient-nursing assistant relationships; taking and recording of vital signs; cardiopulmonary resuscitation; and bathing, feeding, dressing, and transporting of patients in hospitals and

nursing homes. Limited on-the-job instruction in nursing homes and hospitals is part of the course. This course can be used as an introduction to practical nursing or to prepare the student for Nurse Aide II so that all competencies for a certified nursing assistant are met. **This course will be double blocked.**

Course Name: Nurse Aide II

Local Code: 83628G

Grade Level: 12

Course Location: SHS (maximum enrollment is 20)

Prerequisite: Nurse Aide I

Concentration Sequence: 8360

Course Description:

Nurse Aide II is an occupational preparation course, emphasizing advanced skill training in areas such as catheter care, range of motion, bowel and bladder training, care of the dying, selected procedures for maternal and infant care, and admission and discharge procedures. Students learn diseases and body systems as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. On-the-job instruction in a licensed nursing home is part of the course. Upon completion of the nurse aide program, the student is eligible to take the nurse aide certification exam that leads to employment as a certified nurse aide in hospitals and nursing homes. **This course will be double blocked.**

TECHNOLOGY EDUCATION

Course Name: Engineering Explorations I

Local Code: 84500G

Grade Level: 9, 10, 11 **

Concentration Sequence: 8451, 8452

Course Description:

In this course Engineering Explorations will enable students to examine technology and engineering fundamentals related to solving real-world problems. Students will be exposed to a variety of engineering specialty fields and related careers to determine whether they are good candidates for postsecondary educational opportunities in engineering. Students will gain a basic understanding of engineering history and design, using mathematical and scientific concepts. Students will participate in hands-on projects in a laboratory setting as they communicate information through team-based presentations, proposals, and technical reports.

Course Name: Engineering Analysis and Applications II

Local Code: 84510G

Grade Level: 10, 11, 12

Concentration Sequence: 8450, 8452

Prerequisite: Engineering Explorations I

Course Description:

Engineering Analysis and Applications II is the second of a possible four-course sequence that will allow students to apply the engineering design process to areas of the

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designed world, explore ethics in a technological world, and examine systems in civil, mechanical, electrical, and chemical engineering. Students will participate in STEM-based, hands-on projects as they communicate information through team-based presentations, proposals, and technical reports.

Course Name: Engineering Concepts and Processes III

Local Code: 84520G

Grade Level: 11, 12

Concentration Sequence: 8450, 8451, 8453

Prerequisite: Engineering Analysis and Applications II

Course Description:

Engineering Concepts and Processes III is the third course of a four-course sequence that will enable students to solve real-world problems. This course focuses on building an engineering team, working with case studies, managing projects, applying logic and problem-solving skills, delivering formal proposals and presentations, and examining product and process trends. In addition, students continue to apply their engineering skills to determine whether they are good candidates for post-secondary educational opportunities in engineering. Students will participate in STEM-based, hands-on projects as they communicate information through team-based presentations, proposals, and technical reports.

Course Name: Engineering Practicum IV

Local Code: 84530G

Concentration Sequence: 8452

Grade Level: 11, 12

Prerequisite: Engineering Concepts and Processes III

Course Description:

This course will enable students to examine technology and engineering fundamentals related to solving real-world problems. Students examine ethics and intellectual property and design a practicum project, a culmination of knowledge and skill gained in the previous engineering courses. In addition, students continue to investigate a variety of engineering specialty fields and related careers to determine whether they are good candidates for post-secondary educational opportunities in engineering.

Course Name: Manufacturing Systems Technology I: Maker Space

Local Code: 84250G

Grade Level: 9, 10, 11 **

Course Location: SHS (maximum enrollment is 20)

Concentration Sequence: 8427

Course Description:

This course provides an orientation to careers in various fields of manufacturing. Emphasis will be placed on manufacturing systems, safety, materials, production, business concepts, and the manufacturing process. Students participate in individual and team activities to create products that demonstrate critical elements of manufacturing.

Course Name: Manufacturing Systems Technology II: Maker Space

Local Code: 84270G

Grade Level: 10, 11, 12

Course Location: SHS (maximum enrollment is 20)

Concentration Sequence: 8425

Prerequisite: Manufacturing Systems Technology I

Course Description:

Students develop an in-depth understanding of automation and its applications in manufacturing. Activities center on flexible manufacturing processes and computer integrated manufacturing (CIM). Students work in teams to solve complex interdisciplinary problems that stem from the major systems in automated manufacturing.

TRADE AND INDUSTRIAL EDUCATION

Course Name: Cosmetology I

Local Code: 85278G

Course Location: WHS (maximum enrollment is 20)

Concentration Sequence: 8528

Grade Level: 10, 11

Course Description:

In this introductory course, students study hair, skin, and nails and their related care. Students are grounded in theory as they prepare to practice procedures in a clinical lab setting or classroom, using manikins for manipulative skill practice. The first-year course emphasizes personal safety, professionalism, and sanitation and disinfection of equipment and facilities. Students develop skills in shampooing and conditioning hair, as well as styling and cutting hair. They are introduced to chemical texture services and develop skills in manicure and pedicure procedures. **This course will be double blocked.**

Course Name: Cosmetology II

Local Code: 85288G

Course Location: WHS (maximum enrollment is 20)

Concentration Sequence: 8527

Grade Level: 11, 12

Prerequisite: Cosmetology I

Course Description:

In this continuing course, students build on their theoretical foundation of general sciences and practices in cosmetology to increase proficiency in hair cutting and styling on live models, with attention to professionalism, client consultation, safety, and infection control. Students are trained in safe chemical processes related to permanent waves, relaxers, lightening, and coloring hair. In addition, students learn to care for skin, hands, and feet, developing experience in providing facials, manicures, pedicures and nail enhancements. Students will be introduced to a business management unit with a

HIGH SCHOOL COURSES

focus on managing the salon. **This course will be double blocked.**

Course Name: Welding I

Local Code: 86728G

Course Location: SHS (maximum enrollment is 20)

Concentration Sequence: 8673 will be available in 2018-2019

Grade Level: 10, 11

Course Description:

Students are taught to use manual welding, cutting, and electrical arc welding processes to fabricate and join metal parts according to diagrams, blueprints, and specifications. Students will also learn all safety-related practices and techniques, including earning the OSHA 10 card. **This course will be double blocked. This course will only be offered during Semester 2.**

Course Name: Building Trades I

Local Code: 85158G

Course Location: WHS (maximum enrollment is 20)

Concentration Sequence: 8516

Grade Level: 9, 10, 11 **

Course Description:

The course introduces students to skills in the four core areas of residential construction: masonry, carpentry, electricity, and plumbing. Students emphasize safety by preparing to earn the OSHA 10 card as they build or repair entire residential structures, using a variety of materials and tools. **This course will be double blocked.**

Course Name: Building Trades II

Local Code: 85168G

Course Location: WHS (maximum enrollment is 20)

Concentration Sequence: 8515

Grade Level: 11 and 12

Prerequisite: Building Trades I

Course Description:

The course will provide students advanced skills in masonry, carpentry, electricity, and plumbing. The class prepares students to synthesize these valuable skills to build or repair complete residential structures, using a variety of materials and tools. **This course will be double blocked.**

MILITARY SCIENCE

Windsor High School students may participate by enrolling at Smithfield High School. Transportation must be provided by the student/parent.

Course Name: Military Science I - (Army JROTC I)

Local Code: 79130G

Course Description:

This course emphasized knowledge of the structure of the Army, basic military skills in drill and ceremonies, the ability to think logically, leadership characteristics, and

American military history. JROTC objectives are taught and tested.

Course Name: Military Science II - (Army JROTC II)

Local Code: 79160G

Prerequisite: Military Science I

Course Description:

This course focuses on leadership theory, drill and ceremonies, hygiene and first aid, and map reading skills. It emphasizes citizenship, communication skills, and self-image.

Course Name: Military Science III - (Army JROTC III)

Local Code: 79180G

Prerequisite: Military Science II

Course Description:

This course emphasizes military life and staff responsibility, leadership assessment principles, counseling and the federal and military systems of justice, physical fitness, good health, and appearance. JROTC objectives are taught and tested.

Course Name: Military Science IV - (Army JROTC IV)

Local Code: 79190G

Prerequisite: Military Science III

Course Description:

This course is recommended for students with an above-average JROTC history who plan to pursue college-level ROTC or military service. JROTC objectives are taught and tested.

Course Name: Military Science V – Leadership

Local Code: 79200G

Prerequisite: Military Science IV

Course Description:

This course is recommended for juniors and seniors with an above-average JROTC history who plan to pursue college-level ROTC or military service. JROTC objectives are taught and tested. This expanded curriculum concentrates in the areas of leadership development and advanced staff development, with most of the contact hours devoted to the development of advanced leadership technique.

Course Name: Military Science VI – Leadership

Local Code: 79220G

Prerequisite or Grade Level: Military Science V - Leadership

Course Description:

This course is recommended for juniors and seniors with an above-average JROTC history who plan to pursue college-level ROTC or military service. JROTC objectives are taught and tested. This expanded curriculum concentrates in the areas of leadership development and advanced staff development, with most of the contact hours devoted to the development of advanced leadership technique.

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Course Name: Military Science VII -Leadership

Local Code: 79240G

Prerequisite or Grade Level: Military Science VI

Course Description:

This course is recommended for seniors with an above-average JROTC history who plan to pursue college-level ROTC or military service. JROTC objectives are taught and tested. This expanded curriculum concentrates in the areas of leadership development, advanced staff development, service learning, drill and ceremony, etiquette, and customs and courtesies with most of the contact hours devoted to the development of advanced leadership technique.

Course Name: Military Science VIII – Leadership

Local Code: 79260G

Prerequisite: Military Science VII

Course Description:

This course is recommended for seniors only with an above-average JROTC history who plan to pursue college-level ROTC or military service. JROTC objectives are taught and tested. This expanded curriculum concentrates in the areas of leadership development, advanced staff development, service learning, drill and ceremony, etiquette, and customs and courtesies with most of the contact hours devoted to the development of advanced leadership technique.

OTHER COURSES

Course Name: Occupational Orientation I

Local Code: 78881S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized instructional course for identified students with disabilities is designed to teach/reinforce work adjustment and other skills needed for career awareness that leads to responsible participation in the world of work as outlined on the student's IEP. This course may be continued.

Course Name: Occupational Orientation II

Local Code: 78882S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized instructional course for identified students with disabilities is designed to assist in understanding, changing, and improving specific work behaviors that will assist them achieve success in a vocational training program or in the Job Coach Program. Related functional academic skills are taught in the classroom to support attainment of the work behaviors. This course may be continued.

Course Name: Independent Living Skills I

Local Code: 78961S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized instructional course for students with disabilities is designed to develop, strengthen, or reinforce basic adaptive skill areas as outlined on the student's IEP. This course may be continued.

Course Name: Independent Living Skills II

Local Code: 78962S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualize course for students with disabilities is designed to reinforce basic adaptive skill areas needed for independent living as outlined on the student's IEP. This course may be continued.

Course Name: Study Skills I

Local Code: 22061S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized instructional course for identified students with disabilities 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. In addition to academic, behavior, social and transition skills are addressed. This course may be continued.

Course Name: Study Skills II

Local Code: 22063S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized instructional course for identified students with disabilities further 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. In addition to academic, behavior, social and transition skills are addressed. This course may be continued.

Course Name: Academic Skills I

Local Code: 22062S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized instructional course provides direct reading or math instruction designed for students with disabilities who are working toward a standard diploma. The course develops, strengthens, or reinforces the skills which have been shown to be areas of concern through curriculum-based and/or standard assessments and which are outlined on the student's IEP. The IEP team determines participation in Academic Skills. This course may be continued.

Course Name: Academic Skills II

Local Code: 22064S

Grade Level: 9, 10, 11 and 12

Course Description:

This individualized instructional course provides direct reading or math instruction designed for students with disabilities who are working toward a standard diploma. The course develops, strengthens, or reinforces the skills which have been shown to be areas of concern through curriculum-based and/or standard assessments and which are outlined on the student's IEP. The IEP team determines participation in Academic Skills. This course may be continued.

The Governor's School for the Arts

Course Name: Dance

Local Code: 93150A

Course Description:

The Dance Department offers professional training while encouraging the student's personal development and artistic expression. The primary focus of the program is ballet and modern dance. This department offers comprehensive studies in ballet, modern dance and jazz techniques as well as dance composition, character, partnering, somatics & Pilates conditioning, pointe, with areas of focus in contemporary repertory and contemporary & classical ballet repertory. The program is designed to prepare students for auditions to prestigious colleges and dance repertory schools for the career-minded dancer.

Course Name: Music

Local Code: 92890A

Course Description:

The Instrumental Music Department offers professional training in a variety of individualized, jazz and orchestral instrumental music. Opportunities in the department include: private instruction, chamber music / jazz combos, orchestral performances, big band performances, concert and cultural tours throughout the United States and abroad, music in medicine study and collaboration, formal recitals for individuals and small ensembles, ear training, sight reading, yoga, eurhythmics, keyboard skills, literature, improvisation, theory and audio engineering. The program is designed to provide the greatest benefits of passionate, disciplined and individualized music education for students with a variety of career interests. The GSA Orchestra presents three major concerts each year, modeling its programming after the traditions of the world's finest orchestras while staying ahead of the ever-evolving ways that orchestras can serve their loyal community of listeners. The GSA Orchestra orchestra was founded by Raymond Pancarowicz and has performed concerts internationally in Scotland, Germany, Italy, Poland, the Czech Republic, Canada and England. The Orchestra has also made debuts in some of the finest halls in the United States, including Carnegie Hall, Boston Symphony Hall and Davies

Symphony Hall in San Francisco. The orchestra currently performs in the historic Roper Performing Arts Center in downtown Norfolk, the Sandler Center for the Arts in Virginia Beach and other venues throughout the seven cities. The Music Director, Jeff Phelps, a 1995 Governor's School graduate, is honored to share the traditions that Raymond Pancarowicz set deeply into the soul and sound of the orchestra over his twenty years as director. The GSA Orchestra frequently features GSA student and guest soloists and has premiered works by GSA students. Recent repertoire has included: Prokofiev Symphony No. 5, Vaughan-Williams Symphony No. 2, Ives Three Places in New England, Shostakovich Symphony No. 12, Barber First Symphony, Marquez Danzon No. 2, Stravinsky Firebird and Dvorak Symphony No. 7. Jazz Studies is directed by Keith Philbrick and the Big Band is directed by Rob DeDominick. The Vocal Music Department is opera and classically based and is designed on pre-conservatory standards. The Vocal Music Department offers in-depth, comprehensive training in Voice, Theory, Sight Singing, and Diction. Classes include: Music History, Art Song Literature, Vocal Music Survey, Opera Workshop and Directing Opera Productions. The program is designed to prepare students for college and professional careers in singing opera and classical repertoire.

Course Name: Theater Arts

Local Code: 93200A

Course Description:

The goal for the Musical Theatre Department is to provide a challenging, intensive program of study designed to develop performance skills in voice, dance and acting to the advanced level necessary to compete in today's complex and ever-changing entertainment industry. The Department of Theatre and Film is designed to offer students a strong foundation in all aspects of the art of theatre and of film. Emphasis is placed on the rich cultural history of the art forms as well as practical applications in performance techniques for those on the Performance Track and design techniques for those on the Design/Tech Track. All students gain a strong background in theatre history and dramatic literature. Performance track students will study many performance techniques including classic acting styles as well as modern stage and film techniques. Design/Tech students will use state of the art equipment to explore stage lighting, scenic and sound design as well as costuming and stage projections. Students from both tracks are eligible to have a secondary focus on playwriting or filmmaking. Filmmaking students will learn all aspects of filmmaking including writing a screenplay, using cameras, light and sound equipment as well as editing. All filmmaking students will have several opportunities to create short films. Instructors include area professionals as well as visiting artists. Advanced students have the opportunity for internships with the Virginia Stage Company.

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Course Name: Visual Arts**Local Code: 91470A****Course Description:**

The goal of the Visual Arts Department is to provide a venue where students can explore their artistic interests and potential in various mediums of visual arts to ultimately find their own vision. The program provides intensive and challenging instruction and experiences designed to help students develop a strong conceptual basis as well as the technical skills necessary for creating and evaluating their own style and sophisticated works of art. The program is designed to prepare students for college and a career in their chosen visual art medium. The visual arts department encourages in-depth exploration and research in an array of studio courses in the field of printmaking, painting, photography, computer imaging, video imaging additive, subtractive, and constructed sculpture (as well as welding), design, and other areas such as medical illustration and fashion design. Additionally, students take continuing drawing and art history classes as well as classes which focus on conceptualization, analysis, and criticism. The schedule for Visual Arts students is based around two-hour elective studios which are taken daily, along with either art history, concepts and criticism. Each student chooses two elective studios from a variety offered each nine weeks. Portfolio development is an integral part of the visual arts program. With guidance from the department chair, students select two electives for each of the four nine week grading periods. In addition to the typical electives, advanced students may apply for independent study in a particular area.

The Governor's School of Science and Technology

Students have the opportunity to earn dual earn credit with Thomas Nelson Community College (Virginia Community College System).

Course Name: Advanced Chemical Analysis**Local Code: 44200DE****Course Description:**

This course focuses on the fundamental principles and laws of chemistry. Extensive laboratory work will serve as the basic tools for students to explore chemistry topics. The course will provide insights into inorganic and organic chemistry. The students will explore advanced concepts such as kinetics, acid/base chemistry, equilibrium, thermochemistry, and electrochemistry. The course will emphasize problem solving through chemical calculations. Advanced Chemical Analysis is a college-level course with a strong focus on laboratory work. It examines topics typically studied during the first year of college by science majors. *(2 advanced weighted high school science credits)*

Course Name: Advanced Biological Analysis**Local Code: 43200DE****Prerequisite: Advanced Chemical Analysis****Course Description:**

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

Course Name: Calculus-based Engineering Physics I & II:**Mechanics to ElectroMagnetism****Local Code: 45201DE****Co-requisite: College Calculus****Course Description:**

This is a mathematical rigorous course that investigates the principals of classical mechanics, gravitation, periodic motion, electric and magnetic field theory, AC and DC circuit theory, geometric optics through in-depth discussion, concept development, and inquiry-based experimental laboratory activities. The course also develops problem solving skills which emphasize the importance of inquiry in science and integrates the overarching themes of conservation and symmetry. Laboratory experiments use apparatuses such as dynamic tracks, ballistic pendulums, and different LabPro sensors to investigate fundamental physics theories and mathematical concepts. Computer data acquisition software is utilized to collect, analyze, and graph experimental data. The course encourages hands-on activities, class participation, and students taking responsibility for their own learning. Students will be provided many opportunities throughout the course to design and carry out investigations and to analyze and evaluate data. Learning fundamental principles, generalizations, model building and the ability to apply course material to improve thinking, problem solving, and decision making are essential general goals. Gaining factual knowledge and developing specific skills, competencies, and points of view needed by professionals are important general goals. *(2 advanced weighted high school science credits)*

HIGH SCHOOL COURSES

Course Name: Calculus-based Engineering Physics III and IV: Modern Physics and Applied Physics: Engineering Design Principles

Local Code: 45202DE

Prerequisite: Engineering Physics I & II, Calculus

Course Description:

Learning fundamental knowledge of engineering and physics disciplines and the requisite skills to problem-solve, be innovative, and create opportunities in the real world are the overarching goals of this course. Extending the first year physics material, the course includes investigations in modern physics topics such as relativity, quantum mechanics, and nuclear physics, including, for example, conceptual understanding and practical applications of the wave function, Schrodinger's Equation, and radiation and radioactivity. The course includes also a series of project-based engineering learning experiences to help the student acquire and apply the skills, tools, and best practices of the engineering profession. Learning tools include, for example, standard commercial research modeling and simulation software such as MATLAB and COMSOL, hands-on design and troubleshooting of solid state electronics and digital systems, and industry standard computer-aided-design and 3-D printer coupled fabrication systems. In a challenging capstone project, students are tasked to identify a real-world engineering problem or opportunity, to propose and seek approval for their unique solution or innovation, then to design, model, and build their final product. The capstone experience includes continuous professional advice and technical review with community business and government partners such as NASA, SNAME, and the Jefferson Labs. *(2 advanced weighted high school science credits)*

Computational Science

Local Code: 45200DE

Prerequisite: Algebra II/Trig

Course Description:

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

and the velocity at a later time, Newton's laws of motion to find the acceleration of the objects and to identify other forces in the system, the conservation laws (mechanical energy conservation, and momentum conservation, and angular momentum conservation) to compare the system before and after the interaction, find the solutions of problems involving rectilinear motion, parabolic motion, circular motion, & objects in equilibrium, apply the conservation laws to the solutions of problems involving collisions, conservative & non-conservative forces, understand the fluid mechanics, such as buoyant force and Bernoulli's equation, solve problems involving thermal expansion, heat transfer, thermodynamic processes & the behavior of ideal gases. Second semester course focuses on fundamental principles of physics covering mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics. *(2 advanced weighted high school science credits)*

Engineering Design Innovation & Entrepreneurial ship

Local Code: 47200DE

Prerequisite: Computational Science and Pre-Calculus

Course Description:

Learning fundamental knowledge of design innovation and science disciplines and the requisite skills to perform research, problem-solve, innovate, and create opportunities in the real world are the overarching goals of this course. The course includes also a series of project-based learning experiences to help the student acquire and apply the skills, tools, and best practices of the STEM profession. Learning tools include, for example, industry standards and research modeling and simulation software, hands-on design and troubleshooting of solid state systems, and industry standard computer-aided-design software, and additive manufacturing fabrication systems. In challenging keystone projects, students are tasked to identify real-world engineering problems or opportunities, to propose and seek client approval for their unique solutions or innovations, then to design, build, and demonstrate their final products. The keystone experiences include professional engagement with research leaders invited from community organizations such as NASA, SNAME, and the Jefferson Labs. *(2 advanced weighted high school science credits)*

Course Name: College Modern Pre-calculus

Local Code: 31620DE

Course Description:

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

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learning the properties of polar coordinates, vectors, matrices, parametrics, and sequences and series. The course concludes with an introduction to calculus. *(1 advanced weighted high school math credit)*

Course Name: College Calculus

Local Code: 31990DE

Course Description:

This course covers 2 semesters of university-level calculus for scientists and engineers, emphasizing understanding and application. The first semester covers limits and continuity of functions, techniques and applications of differentiation, and introduces integration. The second semester covers applications and advanced techniques of integration, differential equations, sequences and series, and analytical geometry. Upon completion of this course, student will understand both the geometric and rate of change analyses of differential and integral calculus. Students will apply their understanding of calculus to modeling real-world situations mathematically and be able to solve those mathematical models. Successful completion of this course will prepare students to enroll in multivariable calculus / linear algebra. *(1 advanced weighted high school math credit)*

Course Name: Statistical Research Methods

Local Code: 31902DE

Course Description:

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

Course Name: Multivariable Calculus/Linear Algebra

Local Code: 31780DE

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.

Course Description:

In multivariable calculus, students extend their study of calculus from the plane into 3-dimensional space and

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

Course Name: Differential Equations and Math Methods in Physics

Local Code: 32123DE

Prerequisite: Multivariable Calculus/Linear Algebra and permission of the instructor.

Course Description:

The first semester the emphasis will be on Ordinary Differential Equations (ODE). Partial Differential Equations (PDE) at the end of the first semester and conclude the second semester by looking at modeling the four fundamental forces and other applied topics. The construction of mathematical models to address real-world problems has been one of the most important aspects of each of the branches of science. It is often the case that these mathematical models are formulated in terms of equations involving functions as well as their derivatives. Such equations are called differential equations. These differential equations are the language in which the laws of nature can be expressed. Understanding the properties of solutions of differential equations is fundamental to much of contemporary science and engineering. If only one independent variable is involved, often time, the equations are called ordinary differential equations. The course will demonstrate the usefulness of ordinary differential equations for modeling physical and other phenomena. Complementary mathematical approaches for their solution will be presented, including analytical methods, graphical analysis and numerical techniques. This course also covers the classical partial differential equations of applied mathematics, physics, and engineering: diffusion, Laplace/Poisson, and wave equations. It also includes methods and tools for solving these PDEs, such as separation of variables, Fourier, Laplace, Legendre, Bessel series and transforms, eigenvalue problems, and Green's functions. Emphasis during the second semester will be placed on building and modeling the fundamental forces of nature. *(1 advanced weighted high school math credit)*

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Course Name: Research Methodology & Ethics**Local Code: 46100DE****Course Description:**

Students will study contemporary issues in scientific research while conducting independent research projects outside of class. Students are encouraged to select projects consistent with their strand or career goals. Course topics include research design strategies, data analysis and representation (with and without computer-assistance), norms of conduct for ethical research behavior, and the historical basis for current research regulations, among others. All students must conduct a review of the primary literature to support their research design assumptions, prepare and present a plan of their proposed research for institutional review and approval, conduct their studies and report their findings via formal technical paper as well as oral presentation. All students present posters in our junior science symposium, judged by professionals in various fields. All students complete application materials for the Tidewater Science and Engineering Fair, and participation in this, and other fairs, is highly encouraged. This course will serve as a preparatory course for the Honor Research and Mentorship Program. *(1 advanced weighted high school science credit)*

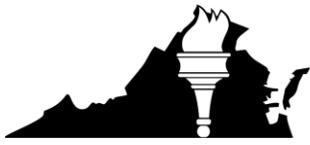
presentation and analysis of data. This course provides students with an opportunity to integrate theory, knowledge and application through a research experience. *(2 advanced weighted high school science credits)*

Course Name: Environmental Science: Research**Applications / Mentorship****Local Code: 46110DE****Course Description:**

In the fall semester, students integrate aspects of biology, chemistry, earth science, and physics in the study of the environment. Exploration of relationships between organisms and their biotic and abiotic environment at multiple levels of biological system hierarchy serves as the foundation for this course. Laboratory and fieldwork are integral components of the course. Students undertake repeated sampling of a nearby pond ecosystem for water quality and biotic components. While analyzing their own data, students will become familiar with concepts such as spatial and temporal variation in natural systems, species diversity, and community similarity indices. Critical thinking, risk analysis, and cost-benefit analysis will be emphasized as students identify and analyze alternative solutions to complex environmental problems. Current or on-going environmental issues and/or case histories will be emphasized. Spring semester will emphasize ecological principals from physiological ecology to ecosystem ecology. Mentorship involves students in concentrated research or project development in firms and laboratories throughout the Tidewater area. Students are supervised by mentors who are scientists, engineers, physicians and other professionals. Students will plan, implement, document and present research or projects chosen in consultation with their mentors. Students refine their research and presentation techniques, problem-solving, critical thinking and leadership skills. Students gain proficiency with Minitab statistical software for

Appendix A

SOL Substitute Tests for Verified Credit



VIRGINIA DEPARTMENT OF EDUCATION

Substitute Tests Approved for Awarding Verified Credit

Revised November 11, 2016

A change log is at the end of the document.

As permitted by the Standards for Accrediting Public Schools ([8VAC20-131-110](#)), the Virginia Board of Education has approved various “substitute” tests and set the minimum score that must be achieved for the purpose of awarding verified credit to students. The tests listed in this document are approved by the Virginia Board of Education as substitute tests, and verified credit can be awarded when the student achieves at least the minimum score required for a Pass/Proficient rating as shown for each test.

English Substitute Tests

SOL Test	Substitute Test	Pass/Proficient	Pass/Advanced
End-of-Course Writing	AP English Language and Composition +	2	3
End-of-Course Writing	International Baccalaureate® (IB) English Language A: Literature and Language (Standard Level) +	2	3
End-of-Course Writing	IB English Language A: Literature and Language (Higher Level) +	2	3
End-of-Course Writing	IB English Language A: Literature (Standard Level) +	2	3
End-of-Course Writing	IB English Language A: Literature (Higher Level) +	2	3
End-of-Course Writing	Test of English as a Foreign Language (TOEFL) Internet-based Test (iBT) Writing Subscore +	17	24
End-of-Course Writing	Cambridge International Examination: Cambridge International General Certificate of Secondary Education (IGCSE) First Language English	D	C
End-of-Course Writing	Cambridge International Examinations: English Language General Certificate of Education (GCE) Advanced Subsidiary-(AS) Level	E	D

+ Students may use this test to earn two verified credits in English.

English Substitute Tests (continued)

SOL Test	Substitute Test	Pass/Proficient	Pass/Advanced
End-of-Course Writing	ACT: English/Writing Combined Score	16	22
End-of-Course Writing	ACT WorkKeys <i>Writing</i> ++	3	4
End-of-Course Writing	ACT WorkKeys <i>Business Writing</i> (ACT will discontinue this test on June 1, 2018. See Superintendent's Memo No. 280-16, dated November 11, 2016 for details.)	3	4
End-of-Course Writing	AP English Literature and Composition +	2	3
End-of-Course Writing	SAT I Writing (Must have been administered prior to March 2016.)	400	500
End-of-Course Reading	AP English Literature and Composition +	2	3
End-of-Course Reading	IB English Language A: Literature and Language (Standard Level) +	2	3
End-of-Course Reading	IB English Language A: Literature and Language (Higher Level) +	2	3
End-of-Course Reading	IB English Language A: Literature (Standard Level) +	2	3
End-of-Course Reading	IB English Language A: Literature (Higher Level) +	2	3
End-of-Course Reading	Test of English as a Foreign Language (TOEFL) Internet-based Test (iBT) Reading Subtest +	16	21
End-of-Course Reading	Cambridge International Examinations: Literature in English (IGCSE)	E	C
End-of-Course Reading	Cambridge International Examination: English Language GCE-Advanced Subsidiary (AS) Level	E	D
End-of-Course Reading	Cambridge International Examination: Literature in English GCE Advanced (A) Level	E	D
End-of-Course Reading	ACT: Reading Subtest	17	22
End-of-Course Reading	AP English Language and Composition +	2	3
End-of-Course Reading	ACT WorkKeys <i>Reading for Information</i> +++	4	6

+ Students may use this test to earn two verified credits in English.

++ Available as a substitute test for the End-of-Course Writing test based on the 2002 SOL only.

+++ Effective beginning with the 2015-2016 school year.

Mathematics Substitute Tests

SOL Test	Substitute Test	Pass/Proficient	Pass/Advanced
Algebra I	CLEP College Algebra	30	40
Algebra I	IB Math Studies (Standard Level)++++	3	4
Algebra I	IB Mathematics (Standard Level)++++	3	4
Algebra I	IB Mathematics (Higher Level)++++	3	4
Algebra I	SAT I Mathematics Subtest (Must have been administered prior to March 2016.)	440	520
Algebra I	SAT II Math IC or SAT Subject Test in Mathematics Level 1	500	570
Algebra I	SAT II Math IIC or SAT Subject Test in Mathematics Level 2	590	660
Algebra I	AP Calculus +++++	2	3
Algebra I	Cambridge International Examinations: IGCSE Mathematics	E	D
Algebra I	Cambridge International Examinations: IGCSE Additional Mathematics	E	D
Algebra I	Cambridge International Examinations: IGCSE Extended Mathematics	D	C
Algebra I	Cambridge International Examinations: Mathematics (A Level)	E	D
Algebra I	Cambridge International Examinations: Further Mathematics (A Level)	E	D
Algebra I	ACT: Mathematics Subtest	18	26
Algebra II	IB Math Studies (Standard Level)++++	3	4
Algebra II	IB Mathematics (Standard Level)++++	3	4

++++ Students may use this test to earn two verified credits in mathematics.

Mathematics Substitute Tests (continued)

SOL Test	Substitute Test	Pass/Proficient	Pass/Advanced
Algebra II	IB Mathematics (Higher Level)++++	3	4
Algebra II	SAT II Math IC or SAT Subject Test in Mathematics Level 1	500	570
Algebra II	SAT II Math IIC or SAT Subject Test in Mathematics Level 2	590	660
Algebra II	AP Calculus++++	2	3
Algebra II	Cambridge International Examinations: IGCSE Additional Mathematics	E	D
Algebra II	Cambridge International Examinations: Mathematics (A Level)	E	D
Algebra II	Cambridge International Examinations: Further Mathematics (A Level)	E	D
Algebra II	CLEP College Algebra	50	63
Geometry	Cambridge International Examinations: IGSCE Mathematics	E	C
Geometry	Cambridge International Examinations: IGCSE Extended Mathematics	D	C
Geometry	ACT: Mathematics Subtest	20	27
Geometry	IB Math Studies (Standard Level)++++	3	4
Geometry	IB Mathematics (Standard Level)++++	3	4
Geometry	IB Mathematics (Higher Level)++++	3	4

++++ Students may use this test to earn two verified credits in mathematics.

Mathematics Substitute Tests (continued)

SOL Test	Substitute Test	Pass/Proficient	Pass/Advanced
Geometry	SAT II Math IC or SAT Subject Test in Mathematics Level 1	500	570
Geometry	SAT II Math IIC or SAT Subject Test in Mathematics Level 2	590	660
Geometry	AP Calculus++++	2	3

++++ Students may use this test to earn two verified credits in mathematics.

Science Substitute Tests

SOL Test	Substitute Test	Pass/Proficient	Pass/Advanced
Earth Science	Cambridge International Examinations: Environmental Science, GCE - AS Level	E	D
Earth Science	IB Environmental Systems and Society (Standard Level)	2	3
Earth Science	AP Environmental Science	2	3
Biology	AP Biology	2	3
Biology	SAT II Biology Ecological OR Molecular	350	450
Biology	CLEP General Biology	30	40
Biology	IB Biology (Higher Level)	2	3
Biology	IB Biology (Standard Level)	2	3
Biology	Cambridge International Examinations: Biology, GCE -A Level	E	D
Biology	Cambridge International Examinations: Biology, GCE- AS Level	E	D

Science Substitute Tests (continued)

SOL Test	Substitute Test	Pass/Proficient	Pass/Advanced
Chemistry	AP Chemistry	2	3
Chemistry	SAT II Chemistry	400	500
Chemistry	CLEP General Chemistry	33	43
Chemistry	IB Chemistry (Higher Level)	2	3
Chemistry	IB Chemistry (Standard Level)	2	3
Chemistry	Cambridge International Examinations: Chemistry, GCE- A Level	E	D
Chemistry	Cambridge International Examinations: Chemistry, GCE - AS Level	E	D

History and Social Science Substitute Tests

SOL Test	Substitute Test	Pass/Proficient	Pass/Advanced
VA & US History	AP US History	2	3
VA & US History	CLEP History of US I and II (total score for both tests)	60	80
VA & US History	SAT II American History	400	500
VA & US History	IB US History (Higher Level)	2	3
World History and Geography to 1500	SAT II World History	450	530
World History and Geography to 1500	AP World History	2	3
World History and Geography 1500-Present	SAT II World History	450	530
World History and Geography 1500-Present	AP World History	2	3
World History and Geography 1500-Present	AP European History	2	3
World History and Geography 1500-Present	IB History of Europe	2	3

History and Social Science Substitute Tests (continued)

SOL Test	Substitute Test	Pass/Proficient	Pass/Advanced
World Geography	AP Human Geography	2	3
World Geography	Cambridge International Examinations: IGCSE Geography	F	D
World Geography	Cambridge International Examinations: GCE -AS Level	E	C
World Geography	Cambridge International Examinations: GCE -A Level	E	D
World Geography	IB Geography Test	2	3

Document Change Log:

Date	Description of Change
02/25/2016	ACT WorkKeys <i>Reading for Information</i> test added as a substitute test.
08/19/2016	Updated <i>SAT I Writing</i> assessment and <i>SAT I Mathematics Subtest</i> . Due to changes in these assessments by the College Board, the tests must have been administered prior to March, 2016 to be valid for awarding verified credit.
08/19/2016	Updated <i>SAT II Math IC</i> assessment to reflect name change by the College Board to <i>SAT Subject Test in Mathematics Level 1</i> .
08/19/2016	Updated <i>SAT II Math IIC</i> assessment to reflect name change by the College Board to <i>SAT Subject Test in Mathematics Level 2</i> .
09/09/2016	Updated ACT WorkKeys <i>Business Writing</i> indicating that ACT will discontinue this test on June 1, 2017. See Superintendent’s Memo No. 222-16, dated September 9, 2016, for details.
11/11/2016	Updated ACT WorkKeys <i>Business Writing</i> indicating that ACT has extended the availability of this assessment until June 1, 2018. See Superintendent’s Memo No. 280-16, dated November 11, 2016, for details.

Appendix B

Board of Education Approved Industry Certifications, Occupational Competency Assessments,
and Licensure

**2016-2017 BOARD OF EDUCATION APPROVED INDUSTRY CERTIFICATIONS, OCCUPATIONAL COMPETENCY ASSESSMENTS,
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BOARD APPROVED / MAY 26, 2016

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
AGRICULTURAL EDUCATION	
Agribusiness Examination	New York State Department of Education (Cornell University)
Agricultural Biotechnology Assessment	National Occupational Competency Testing Institute (NOCTI)
Agricultural Mechanics and Technology Examination	New York State Department of Education (Cornell University)
Agriculture Mechanics Assessment	National Occupational Competency Testing Institute (NOCTI)
Animal Systems Assessment	National Occupational Competency Testing Institute (NOCTI)
Basic Canine Care & Handling - Level 1 Certification Examination	Continental Kennel Club, Inc.
Beef Quality Assurance Certification Assessment	National Beef Quality Assurance/ Virginia Cooperative Extension
Certified Veterinary Assistant Examination	American Allied Health (AAH)
Conservation Assessment	National Occupational Competency Testing Institute (NOCTI)
Equine Science Examination	New York State Department of Education (Cornell University)
Floriculture Assessment	National Occupational Competency Testing Institute (NOCTI)
Floriculture-Greenhouse Assessment	National Occupational Competency Testing Institute (NOCTI)
Food Safety & Science Certification Examination	American Meat Science Association (Exam is administered by iCEV)
Forestry Products & Processing Assessment	National Occupational Competency Testing Institute (NOCTI)
Fundamentals of Animal Science Certification Examination	Elanco (Exam is administered by iCEV)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Greenhouse Operators Certification Examination	Southeast Greenhouse Growers Association/ <u>Virginia Flower Growers Association</u>
Horticulture-Landscaping Assessment	National Occupational Competency Testing Institute (NOCTI)
Landscape Management Certification Examination	Green Industry Web Portal
Master Service Technician Examinations (Pass any one exam)	Briggs & Stratton Corporation
Meat Evaluation Certification Examination	American Meat Science Association (Exam is administered by iCEV)
Natural Resource Systems Assessment	National Occupational Competency Testing Institute (NOCTI)
Outdoor Power Equipment <u>Technician</u> Certification Tests (Pass any one test)	Equipment and Engine Training Council
Pet Sitters Certification Examination	National Association Professional Pet Sitters
Plant Science Certification Examination	Bayer CropScience (Exam is administered by iCEV)
Pork Quality Assurance Certification Assessment	National Pork Board/Virginia Cooperative Extension
Power Equipment Technology Examination	SkillsUSA
Principles of Floral Design Certification Examination	Benz School of Floral Design (Exam is administered by iCEV)
Principles of Livestock Selection and Evaluation Certification Examination	National Collegiate Livestock Coaches Association (Exam is administered by iCEV)
Production Agriculture Assessment	National Occupational Competency Testing Institute (NOCTI)
Professional Communications Certification Examination	Southwest Airlines (Exam is administered by iCEV)
Small Animal Care Examination	New York State Department of Education (Cornell University)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Small Animal Science and Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
Small Engine Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
Urban Forestry Certification Test	Green Industry Web Portal
Veterinary Medical Applications Certification Examination	Elanco (Exam is administered by iCEV)

BUSINESS AND INFORMATION TECHNOLOGY

Accounting—Basic Assessment	National Occupational Competency Testing Institute (NOCTI)
Accounting—Complete Assessment Accounting—Advanced Assessment	National Occupational Competency Testing Institute (NOCTI)
Administrative Assisting Assessment	National Occupational Competency Testing Institute (NOCTI)
Administrative Services Assessment	National Occupational Competency Testing Institute (NOCTI)
Adobe Certified Associate Examinations (Pass any one exam)	Adobe Systems Incorporated
Apple Pro-Certification Certified Pro Examinations (Pass any one exam)	Apple, Inc.
Banking and Related Services Assessment	National Occupational Competency Testing Institute (NOCTI)
Business Financial Management Assessment	National Occupational Competency Testing Institute (NOCTI)
Business Information Processing Assessment	National Occupational Competency Testing Institute (NOCTI)
Certified Electronic Health Record Specialist (CEHRS) Examination	National Healthcareer Association
Certified Internet Web (CIW) Professional Examinations (Pass any one exam)	ProsoftTraining Certification Partners, LLC

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Certified Medical Administrative Assistant (CMAA) Examination	National Healthcareer Association
Certified Novell Administrator (CNA) Examination	Novell
Computer Programming Assessment	National Occupational Competency Testing Institute (NOCTI)
Desktop Publishing Certification Tests (Pass any one test)	Brainbench
Financial and Investment Planning Assessment	National Occupational Competency Testing Institute (NOCTI)
Financial and Managerial Accounting Assessment	National Occupational Competency Testing Institute (NOCTI)
Fundamental Business Concepts Assessment	ASK Business Institute
General Management Assessment	National Occupational Competency Testing Institute (NOCTI)
Global Standard (GS4) Certification Examination	Certiport
Human Resources Management Assessment	National Occupational Competency Testing Institute (NOCTI)
Interactive Media Assessment	National Occupational Competency Testing Institute (NOCTI)
Intuit QuickBooks <u>Certified User</u> Certification Test	Certiport
Linux+ Examinations—Powered by Linux Professional Institute (LPI) (Must pass both exams)	CompTIA
Microsoft Certified Professional Examinations (Pass any one qualifying exam)	Microsoft
Microsoft Office Specialist (MOS) Examinations (Pass any one exam)	Microsoft
Microsoft Technology Associate (MTA) Examinations (Pass any one exam)	Microsoft

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Network Administration Certification Tests (Pass any one test)	Brainbench
Network Pro Certification Examination	Test Out Corporation
Network+ Certification Examination	CompTIA
Oracle Certification Examinations (Pass any one exam)	Oracle Corporation
Oracle Certified Junior Associate Examinations (Pass any one exam)	Oracle Corporation
PC Pro Certification Assessment	Test Out Corporation
Security Pro Certification Assessment	Test Out Corporation
Security+ Certification Examination	CompTIA
Software Development Certification Tests (Pass any one test)	Brainbench
Systems Administration Certification Tests (Pass any one test)	Brainbench
Technical Support Certification Tests (Pass any one test)	Brainbench
Virtual Enterprise Certification Assessment	Virtual Enterprise (Exam is administered by NOCTI)
WISE Financial Literacy Certification Test	Working in Support of Education (WISE)
Web Administration Certification Tests (Pass any one test)	Brainbench
Web Design and Development Certification Tests (Pass any one test)	Brainbench
Web Design Assessment	National Occupational Competency Testing Institute (NOCTI)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
CAREER READINESS CREDENTIALS	
College and Work Readiness Assessment (CWRA+)	Council for Aid to Education
National Career Readiness Certificate Assessment	ACT WorkKeys®
Workplace Readiness Skills for the Commonwealth Examination	Career and Technical Education Consortium of States (CTECS)
FAMILY AND CONSUMER SCIENCES EDUCATION	
ACF Culinary Arts Certification Assessment	American Culinary Federation, Inc. (Exam is administered by NOCTI)
ACF Retail Commercial Baking Certification Assessment	American Culinary Federation, Inc. (Exam is administered by NOCTI)
Broad Field Family and Consumer Sciences Assessment	American Association of Family and Consumer Sciences (AAFCS)
Child Development Associate (CDA) Assessment	Child Development Associates (CDA) Council
Commercial Baking Examination	SkillsUSA
Commercial Foods Assessment	National Occupational Competency Testing Institute (NOCTI) and Certipoint
Culinary Arts Assessment	American Association of Family and Consumer Sciences (AAFCS)
Culinary Arts Examination	SkillsUSA
Culinary Arts Level 1 Prep Cook Assessment	National Occupational Competency Testing Institute (NOCTI)
Culinary Arts Level 2 Cook Assessment	National Occupational Competency Testing Institute (NOCTI)
Early Childhood Education and Care—Advanced Assessment	National Occupational Competency Testing Institute (NOCTI)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Early Childhood Education and Care—Basic Assessment	National Occupational Competency Testing Institute (NOCTI)
Early Childhood Education Assessment	American Association of Family and Consumer Sciences (AAFCS)
Education and Training Assessment	National Occupational Competency Testing Institute (NOCTI)
Education Fundamentals Assessment	American Association of Family and Consumer Sciences (AAFCS)
Family and Community Services Assessment	American Association of Family and Consumer Sciences (AAFCS)
Fashion, Textiles, and Apparel Assessment	American Association of Family and Consumer Sciences (AAFCS)
Food Science Fundamentals Assessment	American Association of Family and Consumer Sciences (AAFCS)
Hospitality Management—Food and Beverage Assessment	National Occupational Competency Testing Institute (NOCTI)
Hospitality Management—Lodging Assessment	National Occupational Competency Testing Institute (NOCTI)
Housing and Furnishings Assessment	American Association of Family and Consumer Sciences (AAFCS)
Interior Design Fundamentals Assessment	American Association of Family and Consumer Sciences (AAFCS)
ManageFirst Credentialing Examinations (Pass any one exam)	Educational Foundation of the National Restaurant Association
Nutrition, Food, and Wellness Assessment	American Association of Family and Consumer Sciences (AAFCS)
ParaPro Assessment	Educational Testing Service
Personal and Family Finance Certification Assessment	American Association of Family & Consumer Sciences (AAFCS)
Praxis, Part 1 Examination	Educational Testing Service

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
ProStart Certification Examinations (Pass Level I and/or Level 2)	Education Foundation of the National Restaurant Association
Restaurant, Food and Beverage Services Assessment	National Occupational Competency Testing Institute (NOCTI)
Retail Commercial Baking Assessment	National Occupational Competency Testing Institute (NOCTI)
ServSafe Manager Certification Examination	Educational Foundation of the National Restaurant Association
Skills, Tasks and Results Training (START) Certification Examination	American Hotel and Lodging Association (AH&LA)
HEALTH AND MEDICAL SCIENCES EDUCATION	
AAPC Medical Coding Examinations (Pass any one exam)	American Academy of Professional Coders (AAPC)
Certified EKG Technician (CET) Examination	American Allied Health (AAH)
Certified Optometric Assistant (COA) Examination	American Allied Health (AAH)
Certified Patient Care Technician (CPCT) Examination	American Allied Health (AAH)
Certified Phlebotomy Technician (CPT) Examination	American Allied Health (AAH)
Certified Physical Therapy Aide (CPTA) Examination	American Allied Health (AAH)
Limited Licensed Radiology Technologist (LLRT) Examination	American Allied Health (AAH)
Medical Coding and Billing Specialist (MCBS) Examination	American Allied Health (AAH)
Registered Medical Assistant (RMA) Examination	American Allied Health (AAH)
Billing Coding Specialist Certification (BCSC) Examination	American Medical Certification Association (AMCA)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Dental Support Technician Certification (DSTC) Examination	American Medical Certification Association (AMCA)
Mental Health Technician Certification (MHTC) Examination	American Medical Certification Association (AMCA)
Patient Care Technician Certification (PCTC) Examination	American Medical Certification Association (AMCA)
Clinical Medical Assistant Certification (CMAC) Examination	American Medical Certification Association (AMCA)
Physical Therapy Aide Certification (PTAC) Examination	American Medical Certification Association (AMCA)
Medical Administration Assistant Certification (MAAC) Examination	American Medical Certification Association (AMCA)
Electronic Health Record Certification (EHRC) Examination	American Medical Certification Association (AMCA)
Certified Veterinary Assistant Examination	Animal Care Technologies
Certified Dental Assistant: Infection Control Examination (ICE)	Dental Assisting National Board, Inc.
Certified Dental Assistant: Radiation Health & Safety (RHS) Examination	Dental Assisting National Board, Inc.
Certified Emergency Telecommunicator Examination	International Academies of Emergency Dispatch (IAED)
Certified Registered Central Service Technician (CRCST) Examination	International Association of Central Service Materials Management (IAHCSMM)
Certified Personal Trainer Examination	National Academy of Sports Medicine (NASM)
Nationally Registered Certified Administrative Health Assistant (NRCAHA) Examination	National Association for Health Professionals (NAHP)
Nationally Registered Certified Billing and Coding Specialist (NRCBCS) Examination	National Association for Health Professionals (NAHP)
Nationally Registered Certified Coding Specialist (NRCCS) Examination	National Association for Health Professionals (NAHP)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Nationally Registered Certified EKG Technician (NRCEKGT) Examination	National Association for Health Professionals (NAHP)
Nationally Registered Certified Patient Care Technician (NRCPCT) Examination	National Association for Health Professionals (NAHP)
Nationally Registered Certified Pharmacy Technician (NRCPhT) Examination	National Association for Health Professionals (NAHP)
Nationally Registered Certified Phlebotomy Technician (NRCPT) Examination	National Association for Health Professionals (NAHP)
Nationally Registered Certified Surgical Technician (NRCST) Examination	National Association for Health Professionals (NAHP)
Nationally Registered Dental Assistant (NRDA) Examination	National Association for Health Professionals (NAHP)
Nationally Registered Certified Medical Assistant (NRCMA) Examination	National Association for Health Professionals (NAHP)
Certified Surgical Technologist (CST) Examination	National Board of Surgical Technology and Surgical Assisting (NBSTSA)
National Certified Insurance and Coding Specialist (NCICS) Examination	National Center for Competency Testing (NCCT)
National Certified Medical Assistant (NCMA) Examination	National Center for Competency Testing (NCCT)
National Certified Patient Care Technician (NCPCT) Examination	National Center for Competency Testing (NCCT)
National Certified Phlebotomy Technician (NCPT) Examination	National Center for Competency Testing (NCCT)
Tech in Surgery-Certified (TS-C) Examination	National Center for Competency Testing (NCCT)
National Health Science Assessment	National Consortium for Health Science Education
Certified Clinical Medical Assistant (CCMA) Examination	National Healthcareer Association (NHA)
Certified EKG Technician (CET) Examination	National Healthcareer Association (NHA)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Certified Phlebotomy Technician (CPT) Examination	National Healthcareer Association (NHA)
Dental Assisting Assessment	National Occupational Competency Testing Institute (NOCTI)
Diagnostic Services Assessment	National Occupational Competency Testing Institute (NOCTI)
Emergency Medical Services Assessment	National Occupational Competency Testing Institute (NOCTI)
Health Assisting Assessment	National Occupational Competency Testing Institute (NOCTI)
Health Informatics Assessment	National Occupational Competency Testing Institute (NOCTI)
Home Health Aide Assessment	National Occupational Competency Testing Institute (NOCTI)
Medical Assisting Assessment	National Occupational Competency Testing Institute (NOCTI)
Nursing Assisting Assessment	National Occupational Competency Testing Institute (NOCTI)
Practical Nursing Assessment	National Occupational Competency Testing Institute (NOCTI)
Therapeutic Services Assessment	National Occupational Competency Testing Institute (NOCTI)
Nurse Assisting Examination	SkillsUSA
MARKETING	
Advanced Customer Service and Sales Certification Assessment	National Retail Federation Foundation
Concepts of Entrepreneurship and Management Assessment	ASK Business Institute
Concepts of Finance Assessment	ASK Business Institute

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Customer Service and Sales Certification Assessment	National Retail Federation Foundation
Fashion Merchandising Assessment	National Occupational Competency Testing Institute (NOCTI)
Fundamental Marketing Concepts Assessment	ASK Business Institute
Hospitality and Tourism Management Examinations, (Pass Level 1 and/or Level 2)	American Hotel and Lodging Association (AH&LA)
Lodging Assessment	National Occupational Competency Testing Institute (NOCTI)
Recreation, Amusements, and Attractions Assessment	National Occupational Competency Testing Institute (NOCTI)
Retail Management Certification Assessment	National Retail Federation Foundation
Retail Merchandising Assessment	National Occupational Competency Testing Institute (NOCTI)
Travel and Tourism Assessment	National Occupational Competency Testing Institute (NOCTI)
MILITARY SCIENCE	
Armed Services Vocational Aptitude Battery Examination	United States Military Entrance Processing Command
TECHNOLOGY EDUCATION	
3D Visualization & Animation Examination	SkillsUSA
Architectural Apprentice Drafter Drafting-Apprentice Examination (also listed in Trade and Industrial Education)	American Design Drafting Association (ADDA)
Architectural Certified Drafter Drafting Examination (also listed in Trade and Industrial Education)	American Design Drafting Association (ADDA)
Architectural Drafting Assessment	National Occupational Competency Testing Institute (NOCTI)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Architectural Drafting Examination	SkillsUSA
AutoCAD Certification Tests (Pass any one test)	Brainbench
Autodesk Certified User Examinations (Pass any one exam)	Autodesk
Automated Manufacturing Technology Examination	SkillsUSA
Biotechnology Assessment	National Occupational Competency Testing Institute (NOCTI)
Certified Logistics Associate (CLA) Examination	Manufacturing Skills Standards Council (MSSC)
Certified Logistics Technician (CLT) Associate Examination	Manufacturing Skills Standards Council (MSSC)
Certified SOLIDWORKS Associate Examination	SOLIDWORKS Corporation
Electronics Application/ <u>Electronics</u> Technology Examination	SkillsUSA
Electronics Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
Energy Industry Fundamentals Certificate Assessment	Center for Energy Workforce Development
Engineering Technology Examination	SkillsUSA
Logistics Technology/Distribution Center Services Assessment	National Occupational Competency Testing Institute (NOCTI)
Manufacturing Specialist Certification Examination	Manufacturing Skills Institute
Manufacturing Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
Manufacturing Technology Certification Examinations (Pass any one exam)- <u>Manufacturing Technician Level 1 Certification Examination</u>	Manufacturing Skills Institute

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Mechanical Apprentice Drafter Drafting-Apprentice Examination (also listed in Trade and Industrial Education)	American Design Drafting Association (ADDA)
Mechanical Certified Drafter Drafting Examination (also listed in Trade and Industrial Education)	American Design Drafting Association (ADDA)
Mechanical Drafting and Design Assessment	National Occupational Competency Testing Institute (NOCTI)
Performing Arts Assessment (also listed in Trade and Industrial Education)	National Occupational Competency Testing Institute (NOCTI)
Pre-Engineering Certification Examination	Robotics Education Competition (REC) Foundation- Hostedware Corporation
Pre-Engineering/Engineering Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
Project Lead the Way Tests (Pass any one end-of-course test)	Project Lead The Way
Robotics and Automation Examination	SkillsUSA
Robotics Certification Examination	Robotics Education Competition (REC) Foundation- Hostedware Corporation
Spatial Projects And Community Exchange (SPACE) Examination	Digital Quest, Inc.
Spatial Technology and Remote Sensing (STARS) Certification Examination	Digital Quest, Inc.
Technical Drafting Examination	SkillsUSA
Technical Theater Assessment (also listed in Trade and Industrial Education)	National Occupational Competency Testing Institute (NOCTI)
TRADE AND INDUSTRIAL EDUCATION	
A+ Certification Examination (Pass any one exam) from 2009 certification program	CompTIA
Advertising and Design Assessment	National Occupational Competency Testing Institute (NOCTI)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Air Cooled Gasoline Engines Expert Technician Test	Kohler Engines
Architectural Apprentice Drafter Drafting-Apprentice Examination (also listed in Technical Education)	American Design Drafting Association (ADDA)
Architectural Certified Drafter Drafting Examination (also listed in Technical Education)	American Design Drafting Association (ADDA)
Audio-Radio Production Examination	SkillsUSA
Audio-Visual Communications Assessment	National Occupational Competency Testing Institute (NOCTI)
Automotive Technician Advanced Assessment	National Occupational Competency Testing Institute (NOCTI)
Automotive Technician Core Assessment	National Occupational Competency Testing Institute (NOCTI)
Automotive Technician Examinations (ASE) (Pass any one exam from Automobile Technician Test Series) ASE Student Certification Examinations (Pass any one exam from Automobile, Collision Repair and Refinish, or M/H Truck)	National Institute for Automotive Service Excellence
Broadcasting and Journalism Assessment	National Occupational Competency Testing Institute (NOCTI)
Building Construction Occupations Assessment	National Occupational Competency Testing Institute (NOCTI)
Building Science Principles Examination	Building Performance Institute
Building Trades Maintenance Assessment	National Occupational Competency Testing Institute (NOCTI)
Cabinetmaking Assessment	National Occupational Competency Testing Institute (NOCTI)
Cabinetmaking Examination	SkillsUSA

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
CAD Assessment	National Occupational Competency Testing Institute (NOCTI)
CAD/CAM Assessment	National Occupational Competency Testing Institute (NOCTI)
Carpentry Level One - Entry Level Assessment	National Center for Construction Education & Research (NCCER)
Carpentry Assessment	National Occupational Competency Testing Institute (NOCTI)
Carpentry Examination	SkillsUSA
Carpentry Level One, National Construction Career Test	National Center for Construction Education & Research (NCCER)
Certified Alarm Security Technician (CAST) Examination	Electronics Technicians Association (ETA) International
Certified Broadcast Technologist (CBT) Examination	The Society of Broadcast Engineers (SBE)
Certified Electronics Technician Associate (CETa) Examination	Electronics Technicians Association (ETA) International
Certified Production Technician (CPT) Program Examinations (Pass any one exam)	Manufacturing Skill Standards Council (MSSC)
Certified Radio Operator (CRO) Examination	The Society of Broadcast Engineers (SBE)
Certified Satellite Dish Installer (CSI) Examination	Electronics Technicians Association (ETA) International
Certified Television Operator (CTO) Examination	The Society of Broadcast Engineers (SBE)
Cisco Certified Entry Networking Technician (CCENT) Examination	CiscoSystems, Inc.
Cisco Certified Networking Associate (CCNA) Routing & Switching Examination	CiscoSystems, Inc.
Cisco Certified Networking Associate (CCNA) Security Examination	CiscoSystems, Inc.

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Cisco Certified Networking Professional (CCNP) Routing and Switching Examination	CiscoSystems, Inc.
Cisco Certified Networking Professional (CCNP) Security Examination	CiscoSystems, Inc.
CNC Milling and Turning Examination	SkillsUSA
Collision Repair and Refinishing Technician Examinations (ASE)-(Pass any one exam) (see ASE Student Certification Examination)	National Institute for Automotive Service Excellence
Collision Repair and Refinishing Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
Collision Repair Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
CompTIA Strata Fundamentals of IT Technology <u>IT Fundamentals</u> Certification Examination	CompTIA Certipoint
Computer Maintenance Technology Examination	SkillsUSA
Computer Networking Fundamentals Assessment	National Occupational Competency Testing Institute (NOCTI)
Computer Repair Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
Computer Service Technician (CST) Examination	Electronics Technicians Association (ETA) International
Computer Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
Construction Assessment	National Occupational Competency Testing Institute (NOCTI)
Construction Masonry-Block Assessment	National Occupational Competency Testing Institute (NOCTI)
Construction Masonry-Brick Assessment	National Occupational Competency Testing Institute (NOCTI)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Construction Technologist - Entry Level Assessment	National Center for Constructional Education & Research (NCCER)
Construction Technology: National Construction Career Test	National Center for Constructional Education & Research (NCCER)
Core: Introductory Craft Skills Entry-Level Assessment	National Center For Construction Education & Research (NCCER)
Core: Introductory Craft Skills, National Construction Career Test	National Center For Construction Education & Research (NCCER)
Cosmetology Assessment	National Occupational Competency Testing Institute (NOCTI)
Cosmetology Examination	SkillsUSA
Criminal Justice and CSI Examination/ Crime Scene Investigation (CSI)	SkillsUSA
Criminal Justice Assessment	National Occupational Competency Testing Institute (NOCTI)
Customer Service Examination	SkillsUSA
Customer Service Specialist (CSS) Examination	Electronics Technicians Association (ETA) International
Data Cabling Installer (DCI) Examination	Electronics Technicians Association (ETA) International
Design and Preconstruction Assessment	National Occupational Competency Testing Institute (NOCTI)
Diesel Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
Edison Electric Institute (EEI) Employment Test Batteries (Pass any one test) Listed in Error Issuing Organization Verified Removal - Not An Industry Credential 12-1-16	Edison Electric Institute (EEI)
Electrical Construction Wiring (Residential Wiring) Examination	SkillsUSA
Electrical Occupations Assessment	National Occupational Competency Testing Institute (NOCTI)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Electrical Construction Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
Electrical, National Construction Career Test	National Center For Construction Education & Research (NCCER)
Electrician Level One - Entry-Level Assessment	National Center For Construction Education & Research (NCCER)
Electronics Assessment	National Occupational Competency Testing Institute (NOCTI)
Electronics Module: AC (EM2) Examination	Electronics Technicians Association (ETA) International
Electronics Module: Analog (EM3) Examination	Electronics Technicians Association (ETA) International
Electronics Module: Comprehensive (EM5) Examination	Electronics Technicians Association (ETA) International
Electronics Module: DC (EM1) Examination	Electronics Technicians Association (ETA) International
Electronics Module: Digital (EM4) Examination	Electronics Technicians Association (ETA) International
Emergency and Fire Management Services Assessment	National Occupational Competency Testing Institute (NOCTI)
Emergency Medical Services Assessment	National Occupational Competency Testing Institute (NOCTI)
EPA Technician Examinations (Pass Levels I, II, or III)	Environmental Protection Agency (Authorized Entity)
Fiber Optics Installer (FOI) Examination	Electronics Technicians Association (ETA) International
Firefighter I Certification Examination	Virginia Department of Fire Programs
Firefighter II Certification Examination	Virginia Department of Fire Programs
Fundamentals of Construction Assessment	National Occupational Competency Testing Institute (NOCTI)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
General Communications Technician - Level 1 (GCT1) Examination	Electronics Technicians Association (ETA) International
General Radiotelephone Operator (GRO) Examination	Federal Communications Commission (FCC)
Global Logistics Associate Examination	American Society of Transportation & Logistics
Graphic Production Technology Assessment	National Occupational Competency Testing Institute (NOCTI)
Heating, Electrical, Air Conditioning Technology (HEAT) Examinations (Pass any one exam)	HVAC Excellence
Heating, Ventilation, Air Conditioning & Refrigeration (HVAC/R) Assessment	National Occupational Competency Testing Institute (NOCTI)
Heating, Ventilation, Air Conditioning (HVAC) Assessment	National Occupational Competency Testing Institute (NOCTI)
Heavy Equipment Operations Level One, National Construction Career Test	National Center For Construction Education & Research (NCCER)
Heavy Equipment Operator Level One Entry-Level Assessment	National Center For Construction Education & Research (NCCER)
HVAC Level One Entry-Level Assessment	National Center For Construction Education & Research (NCCER)
HVAC, National Construction Career Test	National Center For Construction Education & Research (NCCER)
ICC Certificates of Achievement Examinations (Pass any one exam)	International Code Council (ICC)
Industrial Electronics Assessment	National Occupational Competency Testing Institute (NOCTI)
Industrial Maintenance Mechanics Assessment	National Occupational Competency Testing Institute (NOCTI)
Installer (or Service) Core (HVAC/R) Examination	North American Technician Excellence, Inc. (NATE)
Internetworking Examination	SkillsUSA

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Machining - Level I Examinations (Pass any one exam with performance component)	National Institute for Metalworking Skills (NIMS)
Maintenance Operations Assessment	National Occupational Competency Testing Institute (NOCTI)
Marine Service Technology Examination	SkillsUSA
Masonry Examination	SkillsUSA
Masonry Level One Entry-Level Assessment	National Center For Construction Education & Research (NCCER)
Masonry Level One, National Construction Career Test	National Center For Construction Education & Research (NCCER)
Mechanical Apprentice Drafter Drafting-Apprentice Examination (also listed in Technology Education)	American Design Drafting Association (ADDA)
Mechanical Certified Drafter Drafting-Examination (also listed in Technology Education)	American Design Drafting Association (ADDA)
Mechatronic Systems Certification Examinations (Pass any one exam)	Siemens AG
Mechatronics-Level 1 Assessment	National Occupational Competency Testing Institute (NOCTI)
Media Composer Certification Examinations (Pass any one exam)	Avid
Mobile Communications and Electronics Installer (MCEI) Examination	Electronics Technicians Association (ETA) International
Mobile Electronics Certified Professional (MECP) Basic Installation Technician Examination	Consumer Electronics Association
Motorcycle Service Technology Examination	SkillsUSA
Nail Care Examination	SkillsUSA

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
Network Cabling Specialist Certification Examination (Pass copper and fiber examinations)	C-Tech Associates, Inc.
Non-Structural Technician - ProLevel 1 Certification Test	ICAR
Performing Arts Assessment (also listed in Technology Education)	National Occupational Competency Testing Institute (NOCTI)
Photography Examination	SkillsUSA
Photovoltaic Installer - Level 1 (PV1-LVL1) Examination	Electronics Technicians Association (ETA) International
Plumbing Assessment	National Occupational Competency Testing Institute (NOCTI)
Plumbing Examination	SkillsUSA
Plumbing-Heating-Cooling Contractors Educational Foundation Examinations (Pass any one exam)	Plumbing-Heating-Cooling Contractors (PHCC) Educational Foundation (Exam is administered by NOCTI)
Plumbing Level One Entry-Level Assessment	National Center For Construction Education & Research (NCCER)
Pre-Apprenticeship Certificate Training (PACT) Assessments (Pass any one assessment)	Home Builders Institute (HBI) (Assessment is administered by NOCTI)
Precision Machining Assessment	National Occupational Competency Testing Institute (NOCTI)
PrintED Certification Examinations (Pass any one exam)	Graphic Arts Education and Research Foundation (Exams are administered by SkillsUSA)
Protective Services Assessment	National Occupational Competency Testing Institute (NOCTI)
Refinish Technician - ProLevel 1 Certification Test	ICAR
Residential Construction Academy Examinations (Pass any one exam)	Home Builders Institute (HBI) (Exam is administered by NOCTI)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
SENSE Training Program Certification Examination (Level 1, Entry-Level Welder)	American Welding Society (AWS)
Student Electronics Technician (SET) Examination	Electronics Technicians Association (ETA) International
Technical Drafting Assessment	National Occupational Competency Testing Institute (NOCTI)
Technical Theater Assessment (also listed in Technology Education)	National Occupational Competency Testing Institute (NOCTI)
Telecommunications Electronics Technician (TCM) Examination	Electronics Technicians Association (ETA) International
Television Broadcasting Assessment Television Production Assessment	National Occupational Competency Testing Institute (NOCTI)
Television Video Production Examination	SkillsUSA
Visual Arts Assessment	National Occupational Competency Testing Institute (NOCTI)
Visual Communication and Multimedia Design Assessment	National Occupational Competency Testing Institute (NOCTI)
Welding Assessment	National Occupational Competency Testing Institute (NOCTI)
Welding Examination	SkillsUSA
Welding Level One Entry-Level Assessment	National Center For Construction Education & Research (NCCER)
Welding, National Construction Career Test	National Center For Construction Education & Research (NCCER)

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
VIRGINIA PROFESSIONAL LICENSES	
Barbers Examination	Board of Barbers and Cosmetology (Virginia Department of Professional and Occupational Regulation)
Commercial Pesticide Applicator Certification Examination	Virginia Department of Agriculture and Consumer Services
Cosmetology Examination	Board of Barbers and Cosmetology (Virginia Department of Professional and Occupational Regulation)
Emergency Medical Responder Examination	Department of Health, Office of Emergency Medical Services
Emergency Medical Technician Examination	Department of Health, Office of Emergency Medical Services
FAA Private Pilot Written Test	Federal Aviation Administration
Licensed Practical Nurse Examination	Virginia Board of Nursing
Nail Technician Examination	Board of Barbers and Cosmetology (Virginia Department of Professional and Occupational Regulation)
Nurse Aide Examination <u>National Nurse Aide Assessment Program (NNAAP) Examination</u>	Virginia Board of Nursing
Private Applicator Certification Examination	Virginia Department of Agriculture and Consumer Services
Real Estate Salesperson Examination	Virginia Real Estate Board (Virginia Department of Professional and Occupational Regulation)
Registered Technician Certification Examination	Virginia Department of Agriculture and Consumer Services
Virginia Pharmacy Technician Examination	Virginia Board of Pharmacy

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NAME OF CREDENTIAL	ISSUING ORGANIZATION
EXAMINATIONS	
Advanced Placement Computer Science A Examination	The College Board
College Level Examination Program (CLEP): Financial Accounting Examination	The College Board
College Level Examination Program (CLEP): Information Systems and Computer Applications	The College Board
College Level Examination Program (CLEP): Introductory Business Law	The College Board
College Level Examination Program (CLEP): Principles of Management	The College Board
College Level Examination Program (CLEP): Principles of Marketing	The College Board
International Baccalaureate Computer Science (Standard Level) Examination	The International Baccalaureate Organization
International Baccalaureate Computer Science (Higher Level) Examination	The International Baccalaureate Organization
International Baccalaureate Design Technology (Standard Level) Examination	The International Baccalaureate Organization
International Baccalaureate Design Technology (Higher Level) Examination	The International Baccalaureate Organization
International Baccalaureate for Business and Management (Standard Level) Examination	The International Baccalaureate Organization
International Baccalaureate Information Technology in a Global Society (Standard Level) Examination	The International Baccalaureate Organization
DELETIONS	
Autodesk Application Certification Program Examinations (Pass any one exam)	Autodesk
BICSI Registered Installer Certification Examination, Level 1	BICSI (International Telecommunications Association)

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Students are eligible to earn diploma seals by passing one of the credentials or licensure examinations in this document as well as completing the requirements set forth in 8 VAC 20-131-50.H.3, 4.

NAME OF CREDENTIAL	ISSUING ORGANIZATION
Copper Based Cabling Certification Examination	RBT Systems, Inc.
Fiber Optic Network Cabling Certification Examination	RBT Systems, Inc.
Lodging Management Program Certification Examinations, (Pass Level 1 and/or Level 2)	American Hotel and Lodging Association (AH&LA)
Medical Assisting Examination	SkillsUSA

Appendix C

Board of Education's Excellence in Civics Education Seal

IWCS Voluntary Community Service Document

Appendix D

NCAA Information

ONE OPPORTUNITY.
LIMITLESS
POSSIBILITIES.



More than
480,000 college athletes
from **1,121** colleges and universities
make up the **19,000** teams
that send more than
54,000 participants
to compete each year in the NCAA's
90 championships
in **24** sports
across **3** divisions.



GRADE 9

Plan

- Start planning now! Take the right courses and earn the best grades you can.
- Ask your counselor for a list of your high school's NCAA core courses to make sure you take the right classes. Or, find your high school's list of NCAA core courses at eligibilitycenter.org.

GRADE 10

Register

- Register with the NCAA Eligibility Center at eligibilitycenter.org.
- If you fall behind on courses, don't take shortcuts to catch up. Ask your counselor for help with finding approved courses or programs you can take.

GRADE 11

Study

- Check with your counselor to make sure you are on track to graduate on time.
- Take the ACT or SAT and make sure we get your scores by using code 9999.
- At the end of the year, ask your counselor to upload your official transcript.

GRADE 12

Graduate

- Take the ACT or SAT again, if necessary, and make sure we get your scores by using code 9999.
- Request your final amateurism certification after April 1.
- After you graduate, ask your counselor to upload your final official transcript with proof of graduation.



FOLLOW
YOUR
PATH

For more information:
eligibilitycenter.org
NCAA.org/playcollegesports

Search Frequently Asked Questions:
NCAA.org/studentfaq

Follow us on Twitter:
[@ncaa_ec](https://twitter.com/ncaa_ec)

If you want to play sports at an NCAA Division I or II school, start by registering with the NCAA Eligibility Center at eligibilitycenter.org during your sophomore year.

Core Courses

This simple formula will help you meet the Divisions I and II core-course requirement:

$$4 \times 4 = 16$$

4 English courses (one per year)

+ 4 math courses (one per year)

+ 4 science courses (one per year)

+ 4 social science courses (one per year)

16 NCAA CORE COURSES

Grade-Point Average

The NCAA Eligibility Center calculates your grade-point average (GPA) based on the grades you earn in NCAA-approved core courses. Visit eligibilitycenter.org for a full list of your high school's core courses.

Sliding Scale

Divisions I and II use sliding scales to match test scores and GPAs to determine eligibility. The sliding scale balances your test score with your GPA. If you have a low test score, you need a higher GPA to be eligible. If you have a low GPA, you need a higher test score to be eligible. Find more information about sliding scales at NCAA.org/playcollegesports.

Test Scores

You may take the ACT or SAT as many times as you want before you enroll full time in college, but remember to list the NCAA Eligibility Center (code 9999) as a score recipient whenever you take a test. We can accept official scores only from ACT or SAT and we won't use the scores from your high school transcript. If you direct the ACT or SAT to send us your scores every time you take a test, we will choose the best scores from each test subject to create your sum score.



ACADEMIC STANDARDS

DIVISION I

To play sports at a Division I school, you must graduate from high school and meet ALL the following requirements:

1. Complete 16 NCAA core courses:
 - 4 years of English
 - 3 years of math (Algebra 1 or higher)
 - 2 years of natural/physical science (including one year of lab science if your high school offers it)
 - 2 years of social science
 - 1 additional year of English, math or natural/physical science
 - 4 additional years of English, math, natural/physical science, social science, foreign language, comparative religion or philosophy
2. Complete 10 NCAA core courses, including seven in English, math or natural/physical science, before your seventh semester.
3. Earn at least a 2.3 GPA in your NCAA core courses.
4. Earn an ACT sum score or SAT combined score that matches your core-course GPA on the Division I sliding scale.



DIVISION II

To play sports at a Division II school, you must graduate from high school and meet ALL the following requirements:

Before August 1, 2018

1. Complete 16 NCAA core courses.
2. Earn at least a 2.0 GPA in your NCAA core courses.
3. Earn an ACT sum score of 68 or an SAT combined score of 820.

After August 1, 2018

1. Complete 16 NCAA core courses.
2. Earn at least a 2.2 GPA in your NCAA core courses.
3. Earn an ACT sum score or SAT combined score that matches your core-course GPA on the Division II sliding scale.

Core Courses for Division II

To play sports at a Division II school, you must complete these NCAA core courses:

- 3 years of English
- 2 years of math (Algebra 1 or higher)
- 2 years of natural or physical science (including one year of lab science if your high school offers it)
- 2 years of social science
- 3 additional years of English, math or natural or physical science
- 4 additional years of English, math, natural or physical science, social science, foreign language, comparative religion or philosophy.

DIVISION III

Division III schools provide an integrated environment focusing on academic success while offering a competitive athletics environment. While Division III schools do not offer athletics scholarships, 75 percent of Division III student-athletes receive some form of merit- or need-based financial aid.

If you are planning to attend a Division III school, you do not need to register with the NCAA Eligibility Center. Division III schools set their own admissions standards.

Appendix E

Early College Scholar Agreement

GOVERNOR'S *EARLY COLLEGE SCHOLARS* AGREEMENT

The responsibilities of each party are outlined herein and the corresponding signature assures acceptance of responsibility of each party.

The student agrees to:

- Earn an Advanced Studies Diploma with a Governor's Seal. To receive a Governor's seal, students must:
 - Complete the requirements for the Advanced Studies Diploma;
 - Earn a "B" average or higher; and
 - Successfully complete college-level coursework that will earn the student at least nine transferable college credits in Advanced Placement (AP), International Baccalaureate (IB), Cambridge, or dual enrollment courses
- Earn at least 15 transferable college credits while enrolled in high school. College credits toward completion of this Agreement will be considered earned by:
 - Completing dual enrollment/dual credit courses and earning a "C" or better in the courses
 - Completing advanced placement courses i.e., AP, IB or Cambridge **and**
 - Scoring a "3" or higher on the AP examinations **or**
 - Scoring a "4" or higher on any form of the IB examinations **or**
 - Scoring a "D" or better on the Cambridge examinations
 - Earning college credits by passing College Level Examination Program (CLEP) examinations
 - Completing college-level courses and documenting credit awarded
- Apply and be accepted to a college or university

Student Name (Printed)

Student Signature

Date

The parent/guardian agrees to:

- Support and monitor student's academic work and progress in school, particularly as it relates to fulfillment of the requirements for the Governor's *Early College Scholars* Agreement.

I understand that the actual number of transferable college credits awarded depends on the criteria of the admitting college or university.

Parent/Guardian Signature

Date

The high school agrees to:

- Provide the student opportunities to access college-level courses and/or advanced placement courses needed to fulfill this agreement.
- Provide the counseling services needed to fulfill the requirements of the Governor's *Early College Scholars* Agreement, including assisting students in developing a program of study.
- Provide the Virginia Department of Education with data regarding participation and completion of the Governor's *Early College Scholars* program.

High School Principal Signature

Date

School Counselor

Date

Appendix F

High School Credit Waiver Request



HIGH SCHOOL CREDIT WAIVER REQUEST

In accordance with the Virginia Department of Education's policy on the deletion of a high school course grade (8 VAC 20-131-90), I would like to have my child's high school credit-bearing course grade omitted from his/her high school transcript. I understand that by signing this waiver my child's grade will not appear on the transcript, and that he/she will have to repeat the subject at the high school level.

Student's Name: _____

Course Waived: _____

Parent's Signature: _____

Date: _____

This form must be returned to the middle school guidance counselor on or before July 15th of the current school year.

Adopted: May 13, 2010

Appendix G

Examples of High School 4 Year Plans incorporating CTE Courses

Isle of Wight County Schools
Plan of Study (Building Trades)

Secondary Plan	Year	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives			
	Year 1	Regular or Honors English 9	Regular or Honors Geometry	Regular or Honors Earth Science	Regular or Honors World History I	Heath/PE9	Art I	Spanish I	Spanish II
	Year 2	Regular or Honors English 10	Regular or Honors Algebra II	Regular or Honors Biology	Regular or Honors World History II	Health/PE10	Art II	Functions Trig	Spanish III
	Year 3	Regular or Honors English 11	DE Math Analysis	Anatomy and Physiology	AP US History	Building Trades I		AP US History	DE Calculus
	Year 4	Regular or DE English 12	AP Biology	AP Biology	Regular or Honors Government	Building Trades II		Economics and Personal Finance	Introduction to Power, Structural, and Technical Systems
Miscellaneous Information: DE (Dual Enrollment) received local and college credit. The student would need to take Economics and Personal Finance online as a 5 th course.									
<u>Possible Industry Certifications with the CTE courses listed above:</u> College and Work Readiness Assessment, National Career Readiness Assessment, Workplace Readiness Skills for the Commonwealth Exam, Agricultural Biotechnology Assessment, Animal Systems Assessment, Beef Quality Assurance Assessment, Pork Quality Assurance Assessment, Certified Veterinary Assistant-Level 1 Exam, Pet Sitters Exam, Small Animal Care Exam, Small Animal Science and Technology Assessment, Certified EKG Technician Exam, Emergency and Fire Management Services Assessment, and Emergency Medical Responder Exam				<u>Concentration Sequences with the CTE courses listed above:</u> 1. Small Animal Care I and II 2. Emergency Medical Technician I and II			<u>Possible Work-Based Learning Opportunities with the CTE courses listed above:</u> Coop and Internship		

Isle of Wight County Schools
Plan of Study (Culinary)

Secondary Plan	Year	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives			
	Year 1	Honors English 9	Honors Geometry	Honors Biology	Honors World History I	Honor Algebra II	Spanish II	Health/PE9	Spanish III
	Year 2	Honors English 10	DE Math Analysis	Chemistry	Honors World History II	Culinary I		Health/PE10	DE Probability and Statistics
	Year 3	AP English Language	DE Calculus	AP Chemistry	Honor VA/US History	AP English Language	AP Chemistry	Culinary II	
	Year 4	AP English Literature	AP Calculus AB	Physics	AP Government	AP English Literature	AP Calculus AB	AP Government	Coop
<p>Miscellaneous Information: DE (Dual Enrollment) received local and college credit. The student would need to take Economics and Personal Finance online as a 5th course.</p>									
<p><u>Possible Industry Certifications with the CTE courses listed above:</u></p> <p>College and Work Readiness Assessment, National Career Readiness Assessment, Workplace Readiness Skills for the Commonwealth Exam, ACF Culinary Arts Exam, ACF Retail Commercial Baking Assessment, Commercial Baking Exam, Commercial Foods Assessment, Culinary Arts Assessment, Culinary Arts Exam, Culinary Arts Level I: Prep Cook Assessment, Culinary Arts Level II: Cook Assessment, ManageFirst Examination, ProStart Program-Level I and II Exam, Restaurant-Food-Beverage Services Assessment, and ServSafe Manager Exam</p>				<p><u>Concentration Sequences with the CTE courses listed above:</u></p> <p>1. Culinary I and II</p>			<p><u>Possible Work-Based Learning Opportunities with the CTE courses listed above:</u></p> <p>Coop and Internship</p>		

Isle of Wight County Schools
Plan of Study (Governor's School for Science and Technology)

Secondary Plan	Year	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives			
	Year 1	Honors English 9	Honors Geometry	Honors Biology	Honors World History I	Honors Algebra II	Spanish II	Spanish III	Engineering Explorations I
	Year 2	Honors English 10	DE Math Analysis	Chemistry	Honors World History II	DE Calculus	Physics	Economics and Personal Finance	Engineering Analysis and Applications II
	Year 3	AP English Language	AP English Language	AP VA/US History	AP VA/US History	Governor's School for Science and Technology			
	Year 4	AP English Literature	AP English Literature	AP Government	AP Government	Governor's School for Science and Technology			
<p>Miscellaneous Information: DE (Dual Enrollment) received local and college credit. All the courses at GSST are DE. The student may take Economics and Personal Finance online as a 5th course, if he/she needs an additional course during the school day. GSST prepares students for acceptance into top universities. Students must apply and be accepted to participate in this program.</p>									
<p><u>Possible Industry Certifications with the CTE courses listed above:</u></p> <p>College and Work Readiness Assessment, National Career Readiness Assessment, Workplace Readiness Skills for the Commonwealth Exam</p>				<p><u>Concentration Sequences with the CTE courses listed above:</u></p> <ol style="list-style-type: none"> Engineering Explorations I and Engineering Analysis and Applications II 			<p><u>Possible Work-Based Learning Opportunities with the CTE courses listed above:</u></p> <p>Mentorship and Job Shadowing</p>		

Isle of Wight County Schools
Plan of Study (Engineering)

Secondary Plan	Year	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives			
	Year 1	Regular or Honors English 9	Regular or Honors Geometry	Regular or Honors Earth Science	Regular or Honors World History I	Health/PE9	Spanish II	Information Technology Fundamentals	Spanish III
	Year 2	Regular or Honors English 10	Regular or Honors Algebra II	Regular or Honors Biology	Regular or Honors World History II	Health/PE10	Engineering Explorations I	Agricultural Production Technology	
	Year 3	Regular or Honors English 11	DE Math Analysis	Physics	Regular or Honors VA/US History	Agricultural Production Management		Engineering Analysis and Applications II	Programming
	Year 4	Regular or DE English 12	DE Calculus	AP Physics	Regular or Honors Government	AP Physics	Introduction to Power, Structural, and Technical Systems	Engineering Concepts and Processes III	Advanced Programming
Miscellaneous Information: DE (Dual Enrollment) received local and college credit. The student would need to take Economics and Personal Finance online as a 5 th course.									
<u>Possible Industry Certifications with the CTE courses listed above:</u> College and Work Readiness Assessment, National Career Readiness Assessment, Workplace Readiness Skills for the Commonwealth Exam, Agricultural Mechanics and Technology Exam, Agriculture Mechanics Assessment, Master Service Technician Exam, Outdoor Power Equipment Technology Exam, Power Equipment Technology Exam, Small Engine Technology Exam, Certified Internet Web Professional Exam, Computer Programming Assessment, Global Standard Exam, Information Systems and Computer Applications CLEP Exam, Microsoft Certified Professional Exam, National Career Readiness Assessment, Software Development Test, Pre-Engineering Industry Certification Examination, Design and Preconstruction Assessment, and Engineering Technology Examination				<u>Concentration Sequences with the CTE courses listed above:</u> <ol style="list-style-type: none"> Information Technology Fundamentals and Programming Programming and Advanced Programming Engineering Explorations I and Engineering Analysis and Applications II Engineering Concepts and Processes III and Engineering Practicum IV Introduction to Power, Structural, and Technical Systems and Agricultural Business Operations 			<u>Possible Work-Based Learning Opportunities with the CTE courses listed above:</u> Mentorship and Job Shadowing		

Isle of Wight County Schools
Plan of Study (Plant Systems)

Secondary Plan	Year	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives			
	Year 1	Regular or Honors English 9	Regular or Honors Geometry	Regular or Honors Earth Science	Regular or Honors World History I	Health/PE9	Spanish II	Concert Band I	Spanish III
	Year 2	Regular or Honors English 10	Regular or Honors Algebra II	Regular or Honors Biology	Regular or Honors World History II	Health/PE10	DE Probability and Statistics	Concert Band II	Introduction to Plant Systems
	Year 3	Regular or Honors English 11	DE Math Analysis	Chemistry	Regular or Honors VA/US History	Art I	Horticulture Sciences	Concert Band III	Greenhouse Plant Production and Management
	Year 4	Regular or DE English 12	DE Calculus	Physics	AP Government	AP Government	Art II	Concert Band IV	Economics and Personal Finance
Miscellaneous Information: DE (Dual Enrollment) received local and college credit.									
<u>Possible Industry Certifications with the CTE courses listed above:</u> Agricultural Biotechnology Assessment, College and Work Readiness Assessment, National Career Readiness Assessment, Workplace Readiness Skills for the Commonwealth Exam, Commercial Pesticide Applicator Examination, Floriculture Assessment, Floriculture: Greenhouse Assessment, Horticulture-Landscaping Assessment, Private Applicator Examination, and Registered Technician Examination			<u>Concentration Sequences with the CTE courses listed above:</u> 1. Introduction to Plant Systems and Agriculture Business Operations 2. Introduction to Plant Systems and Horticulture Sciences 3. Horticulture Sciences and Greenhouse Plant Production and Management 4. Greenhouse Plant Production Management and Agriculture Business Operations			<u>Possible Work-Based Learning Opportunities with the CTE courses listed above:</u> Mentorship and Job Shadowing			

Isle of Wight County Schools
Plan of Study (Manufacturing Systems Technology)

Secondary Plan	Year	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives			
	Year 1	English 9	Algebra I – Part 1	Earth Science	World History I	Health/PE9	Spanish I	Algebra I – Part 2	Art I
	Year 2	English 10	Algebra, Functions, and Data Analysis	Biology	World History II	Health/PE10	Spanish II	Information Technology Fundamentals	Spanish III
	Year 3	English 11	Geometry	Chemistry	VA/US History	Programming	Manufacturing Systems Technology I	Advanced PE I	Oceanography
	Year 4	English 12	Algebra II	Physics	Government	Advanced PE II	Manufacturing Systems Technology II	Advance Programming	Art II
Miscellaneous Information: The student would need to take Economics and Personal Finance online as a 5 th course.									
<u>Possible Industry Certifications with the CTE courses listed above:</u> College and Work Readiness Assessment, National Career Readiness Assessment, Workplace Readiness Skills for the Commonwealth Exam, Certified Internet Web Professional Exam, Computer Programming Assessment, Global Standard Exam, Information Systems and Computer Applications CLEP Exam, Microsoft Certified Professional Exam, National Career Readiness Assessment, Software Development Test, Manufacturing Technology Assessment, and Manufacturing Technology Exam			<u>Concentration Sequences with the CTE courses listed above:</u> 1. Information Technology Fundamentals and Programming 2. Programming and Advanced Programming 3. Manufacturing Systems Technology I and II			<u>Possible Work-Based Learning Opportunities with the CTE courses listed above:</u> Mentorship and Job Shadowing			

IWCS Spring 2017 Manufacturing Systems I Syllabus: 1st Quarter

February 2017																				March 2017					
1	2	3	6	7	8	9	10	13	14	15	16	17	20	21	22	23	24	27	28	1	2	3	6	7	
<p>Use required PPE (personal protective equipment). Adhere to makerspace safety rules and implement a safety plan. Maintain safe working practices around production equipment. Operate lab equipment according to instructor guidelines.</p>																									
Introduction/ Syllabus	Outline the history of manufacturing.				Understand the different types of measurement (metrology) used in manufacturing. (MSI Module 1) -measuring length and weight using SAE and metric units -converting fraction measurements to decimal units -review using ruler/calipers								Describe additive and subtractive processes: <i>subtractive manufacturing</i>							Describe additive and subtractive processes: <i>additive manufacturing</i>					
Makerspace Safety Protocols/ PPE	Differentiate among types of manufacturing: Custom, Intermittent, Continuous, Flexible (including advanced manufacturing and types of rapid prototyping)				- Use a decimal inch machinist's rule to measure a length -how to use micrometer/dial indicators''								Create vector graphic files using Adobe Illustrator, Vinyl Master, Inkscape							Create an original .stl file for a model >1.5 in ² but <3in ² using SketchUp or TinkerCad					
How to read a SDS sheet					Introduction to Significant Figures								Differentiate between raster and vector graphics.							Using CAD, visually translate from 2D drawings to 3D images and back					
Math PreAssessment	Describe Careers in Manufacturing				Measurement Test								Lab: Demonstrate use of vinyl cutter and laser cutter							Lab: Use materials to produce a product, original 3-D printed design: -show correct settings for 3D printer -use supports, brim, rafting					
Hand Tools Notes/Quiz					Demonstrate methods of altering material: Lab: Casting (Smoothcast) and Molding (Moldstar)								Demonstrate metrology used in manufacturing.							Differentiate among properties of materials (plastic filaments: HIPS, PLA, etc)					
Safety Test	Describe the development of U.S. manufacturing, including the necessity for green manufacturing												Use materials to produce a product: decal or laser cut												
													Distinguish which materials can be cut by the laser cutter. Explain how different properties affect design.												

IWCS Spring 2017 Manufacturing Systems I Syllabus: 2nd Quarter

March 2017																	April 2017				
8	9	10	13	14	15	16	17	20	21	22	23	24	27	28	29	30	31	3	4	5	6
<p>Use required PPE (personal protective equipment). Adhere to makerspace safety rules and implement a safety plan. Maintain safe working practices around production equipment. Operate lab equipment according to instructor guidelines.</p>																					
Differentiate among properties (physical, chemical and mechanical) of materials: Metals Ceramics Plastics Glass Composites		MSI Module 2 Work Place behaviors: -Conflict Resolution -Brainstorming Process Process Mapping -KY Ford Truck Facility -How its Made videos Collaborative Group Protocols					Describe the engineering design process: -Spaghetti towers -littleBits prototype project					Prototype Project Presentations Mid-Term Review		Mid Term Exam: 50% Multiple Choice 50% Performance Based							

IWCS Spring 2016 Manufacturing Systems I Syllabus: 3rd Quarter

April 2017					May 2017																							
17	18	19	20	21	24	25	26	27	28	1	2	3	4	5	8	9	10	11	12	15	16	17	18	19				
Participate in a production line activity: Paper Trucks and the Toothpick Factory					Business Acumen (MSI Module 9): Identify levels of management. Classify examples of common business financial terms. Predict how actions, strategies and decisions impact the bottom line. Identify the three basic forms of business ownership.										Business Acumen/Expo Project: MakerSpace Businesses Apply manufacturing systems to produce a prototype. Evaluate the production process.					MSI Module 1: Read and interpret histograms, bar charts, line graphs and scatter plots. Interpret descriptive statistics: mean, median, mode and range.								

IWCS Spring 2016 Manufacturing Systems I Syllabus: 4th Quarter

May 2017						June 2017														
22	23	24	25	26	30	31	1	2	5	6	7	8	9	12	13	14	15	16		
Assess the product life cycle. - cradle-to-grave vs. cradle-to-cradle - maintenance of a product vs. disposal - recycling and reuse.						Describe societal, economic, and environmental impacts of manufacturing. Explain the impact of corporate citizenship.			Final Exam Project: Create a video and written protocol outlining a process map and safety protocols for fabricating a product using: -vinyl cutter; -laser cutter; or -3D printer/molding/casting MT1 PreAssessment						Final exam review			Final Exams		

IWCS Spring 2017 Manufacturing Systems II Syllabus: 1st Quarter

February 2017																				March 2017				
1	2	3	6	7	8	9	10	13	14	15	16	17	20	21	22	23	24	27	28	1	2	3	6	7
<p>Use required PPE (personal protective equipment). Adhere to makerspace safety rules and implement a safety plan. Maintain safe working practices around production equipment. Operate lab equipment according to instructor guidelines.</p>																								
Introduction/ Syllabus Makerspace Safety Protocols/ PPE How to read a SDS sheet Safety Test	Review MSI Module 1: Measurement Statistics Review Define mechatronics.	Mechanics Demonstrate qualitative reasoning about mechanical force and systems involving pulleys, levers and gears. a. Determine the mechanical advantage of different systems of pulleys b. Determine the effects of different lever configurations on the force required to lift an object Generate different configurations of gears or axels to increase power or speed Generate linear equations with one unknown for situations described in text. Solve simple linear equations with one unknown. Apply CAM in subtractive and /or additive processes.	Fluid Power Generate causal explanations of behavior of simple systems involving changes in pressure, temperature and volume, simple hydraulic/pneumatic devices and principles of heat transfer a. Predict the effects of changes of pressure on volume and temperature b. Predict the effects of changes in temperature on volume and pressure Predict the mechanical advantage of simple hydraulic and pneumatic systems. Solve simple linear equations with one unknown. Field trip: Lieber Corp.																					

IWCS Spring 2017 Manufacturing Systems II Syllabus: 2nd Quarter

March 2017																	April 2017				
8	9	10	13	14	15	16	17	20	21	22	23	24	27	28	29	30	31	3	4	5	6
<p>Use required PPE (personal protective equipment). Adhere to makerspace safety rules and implement a safety plan. Maintain safe working practices around production equipment. Operate lab equipment according to instructor guidelines.</p>																					
Fluid Power (Continued)		<p>Electronics in mechatronics systems. Generate causal explanations of the relationship between electrical and magnetic forces and explanations of how electric motors, generators, solenoids and relay switches behave. Generate causal explanations and predictions of electric circuit behavior involving simple series and parallel circuits containing relays, capacitors, resistors and simple devices. Describe the differences between AC and DC systems in mechatronics Use Ohm's Law and the power equation. Demonstrate how a multimeter is used to troubleshoot a circuit.</p>															Mid Term Review		<p>Mid Term Exam: 50% Multiple Choice 50% Performance Based</p>		

IWCS Spring 2016 Manufacturing Systems II Syllabus: 3rd Quarter

April 2017										May 2017														
17	18	19	20	21	24	25	26	27	28	1	2	3	4	5	8	9	10	11	12	15	16	17	18	19
<p>Explain the roles of computer systems in mechatronics. Explain the key components in automated systems. Differentiate between numerical control (NC), computer numerical control (CNC), direct numerical control (DNC) and computer assisted manufacturing (CAM). Identify m-codes and g-codes controlling various machining processes.</p> <p>Field Trip: Shadow a manufacturing tech/engineer at Rolls Royce</p>										<p>Classify substances as a molecule, element, mixture or compound. Classify changes in substances as chemical reaction, mixture or physical change. Classify and apply characteristics of acids and bases. Interpret the periodic chart. Classify methods for separating mixtures (filtration, evaporation, distillation). Generate explanations of molecular structural difference and physical characteristics between common types of polymers such as slime flexi-putty, rubber and plastic bags.</p>														

IWCS Spring 2016 Manufacturing Systems II Syllabus: 4th Quarter

May 2017							June 2017											
22	23	24	25	26	30	31	1	2	5	6	7	8	9	12	13	14	15	16
<p>Applying Business Concepts Review</p>							<p>Examining Product Quality and Using Advanced Manufacturing Systems Processes Identify descriptions of manufacturing quality and lean production initiatives as examples of value stream mapping, waste elimination, 5S, DMAIC and Total Productive Maintenance (TPM) Create a process map and value stream map to improve a process or reduce waste. Explain supply chain management. Demonstrate using an industry standard problem solving method such as DMAIC for improving production processes.</p>											<p>MT1 Exam</p>

Appendix H

Governor's School of Science and Technology

Strand Layout

Program Model for GSST, 2017-2018 SY

(College Credit Subject to Review)

Revised 11.01.16

Engineering Strand (Prerequisites - 2 of the following sciences: Biology, Chemistry and/or Physics, with a math minimum of Pre-Calculus.

11th grade year	Calculus-based Engineering Physics I & II: <i>2 HS/8TNCC credits</i>	Research Methodology & Ethics <i>1 HS /3 TNCC credits* pending approval</i>	Calculus <i>1 HS/8 TNCC credits</i>	4 HS/16 college credits
12th grade year	Calculus-based Engineering Physics III & IV: Engineering Design <i>2 HS / 2 TNCC credits *pending approval</i>	Env Sci /HR/M <i>2 HS credits for Env Sci / HR / M 4 TNCC credits for Env Sci 2 TNCC credits for HR/M</i>	Multivariable (MV) - Linear Algebra (LA) / Statistics <i>1 HS/7 TNCC credits for MV-LA 1 HS/3 TNCC credits for Statistics</i>	5 HS/9-13 college credits Total 9 HS/25-29 college credits

***Biological Science Strand (Prerequisites - Biology and Chemistry, with a math minimum of Algebra II/Trig).**

11th grade year	Advanced Chemical Analysis <i>2 HS/8 TNCC credits</i>	Research Methodology & Ethics <i>1 HS /3 TNCC credits* pending approval</i>	Modern Pre-Calculus / Calculus <i>1 HS/6 TNCC credits for Pre-Calculus 1 HS/8 TNCC credits for Calculus</i>	4 HS/14-16 college credits
12th grade year	Advanced Biological Analysis <i>2 HS/8 TNCC credits</i>	Env Sci /HR/M <i>2 HS credits for Env Sci / HR / M 4 TNCC credits for Env Sci 2 TNCC credits for HR/M</i>	Calculus / MV-LA /Statistics <i>1 HS/8 TNCC credits for Calculus 1 HS/7 TNCC credits for MV-LA HS/3 TNCC credits for Statistics</i>	5 HS/17-22 college credits Total 9 HS/31-38 college credits

Computational Science & Engineering (Prerequisites - 2 of the following sciences: Biology, Chemistry and/or Physics, with a math minimum of Algebra II/Trig).

11th grade year	Computational Science <i>2 HS credits/4 TNCC credits</i>	Research Methodology & Ethics <i>1 HS /3 TNCC credits* pending approval</i>	Modern Pre-Calculus / Calculus <i>1 HS/6 TNCC credits for Pre-Calculus 1 HS/8 TNCC credits for Calculus</i>	4 HS/13-16 college credits
12th grade year	Engineering Design Innovation & Entrepreneurialship <i>2 HS/TNCC credits* pending approval</i>	Env Sci /HR/M <i>2 HS credits for Env Sci / HR / M 4 TNCC credits for Env Sci 2 TNCC credits for HR/M</i>	Calculus / MV-LA /Statistics <i>1 HS/8 TNCC credits for Calculus 1 HS/7 TNCC credits for MV-LA 1 HS/3 TNCC credits for Statistics</i>	5 HS/20-25 college credits Total 9 HS/33-41 college credits

***Biological Science - It is recommended that students take high school Physics at their home school division.**