


## Goal 1: Academic Excellence \& Educational Equity

## Every student will be academically successful and prepared for life, work and college.

## Objectives:

- Regularly assess and respond to the needs, interests, and abilities of individual students.
- Target academic achievement gaps and increase positive educational outcomes across race/ethnicity, income, disability, and language subgroups.
- Focus on increasing representation of minority students in talented and gifted programs and in Honors and Advanced Placement courses; decreasing suspension rates of minority students, particularly males; and preventing over-identification of racial/ethnic minorities for remedial or special education services. ACPS will also focus on eliminating gender and racial/ethnic disparities among students enrolling in science, technology, engineering, math, and literature classes and in advanced classes such as honors and Advanced Placement.
- Provide each student with opportunities to be challenged and supported.
- Make available to each teacher the resources and supports needed to provide an outstanding education for each and every student, differentiated according to the student's learning style and background.
- Continue to participate with the Early Care and Education Work Group to create an early care and education (ECE) system focused on improved access, quality, and public awareness of ECE services available for children and families.
- Engage with its students in an atmosphere conducive to mutual respect, civic engagement, and good citizenship.
- In pursuit of its desire to provide life-long learning opportunities, facilitate English-language education programs in support of individual economic advancement and civic engagement in Alexandria.
- Create or expand alternative education strategies and programs that will respond to individual learning styles, minimize out of school suspensions, and improve opportunities for all students.
- Implement practices that maximize the benefits of cultural, linguistic, racial, ability, religious, gender, gender-identity, and ethnic diversity within the student body to ensure optimal levels of cultural competence among staff members and students, and that engage every student in a respectful school environment.
- Set expectations for the habits and behaviors students need to succeed and will lay the foundations for student explorations of ethical conduct.
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# WELCOIME AND GENERAL INFORIMATION 

## 2016-17

# PROGRAM OF STUDIES <br> A Planning Guide for Students and Parents 

ACPS MISSION<br>Every Student Succeeds

## a letter from the superintendent

## Dear ACPS Students,

We are excited to provide you with the Program of Studies for the 2016-17 school year. The selection of courses available through this Program of Studies is expansive. A multitude of pathways will prepare you for your dreams of college, career and life success.

Middle and high school offer you the basis for post-secondary school success, as well as opportunities to learn and try new things. Use this time to explore options and find your interests and passions. The ACPS family is committed to ensuring that upon high school graduation you will have the tools to succeed through the ability to 1) read complex text, 2) write for post-secondary success, 3) analyze and interpret data, 4) participate in discourse within the disciplines, and 5) speak and listen with success. This is an important journey. We know you can do it and we are here to help you. This is our commitment to you.

We encourage you to set high goals for yourself and challenge yourself as you select courses. ACPS offers an amazing array of academic, career and technical courses to support you in reaching your goals. Invite your parents or guardians and counselor to sit with you while you share your goals. Discuss with them courses that will help you to achieve your goals.

Be sure to take advantage of the College and Career Center and your school counselor with your questions about the requirements for a future course of study or career.

Best wishes for a great middle and high school experience.


Alvin L. Crawley, Ed.D.
Superintendent of Schools

## una carta del superintendente

Estimados Estudiantes de las ACPS,
Estamos ansiosos por hacerles conocer el programa de estudios para el año escolar 2016-17. La variedad the cursos disponibles para este programa de estudios es extensa. Hay una multitud de caminos que pueden elegir para hacer realidad sus sueños de éxito en la universidad, su carrera y la vida.

La escuela secundaria y la preparatoria les ofrecen las bases para el éxito posterior así como oportunidades de aprender y experimentar cosas nuevas. Es hora de explorar y encontrar sus intereses y pasiones. La familia de las ACPS (Escuelas Públicas de la Ciudad de Alexandria) está comprometida con asegurar que luego de la graduación en la preparatoria los estudiantes tendrán las herramientas para lograr el éxito mediante las habilidades de 1) lectura de textos complejos, 2) escritura para el buen desempeño post-secundaria, 3) análisis e interpretación de información, 4) capacidad para participar en el discurso interdisciplinario, y 5) hablar y escuchar eficazmente. Es una travesía importante. Sabemos que pueden lograrlo y aquí estamos para ayudarlos. Es nuestro compromiso con ustedes.

Los alentamos a proponerse grandes objetivos y desafiarse en la elección de los cursos. Las Escuelas Públicas de la Ciudad de Alexandria ofrecen una sorprendente diversidad de cursos académicos, carreras y cursos técnicos para apoyarlos en la consecución de sus objetivos. Inviten a sus padres o tutores y consejeros a sentarse con ustedes a compartir sus objetivos. Discutan con ellos los cursos que los ayudarán a lograr sus objetivos.

Asegúrense de aprovechar las ventajas del Centro de Universidades y Carreras y el consejero de su escuela para despejar cualquier duda acerca de los requisitos para un futuro curso o carrera.

Nuestros mejores deseos para una grandiosa experiencia en la escuela secundaria y preparatoria.


Alvin Crawley, Ed.D.
Superintendente de Escuelas

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## رسالة من مدير المنطقةّ التّليمية

أعزائي طلاب المدارس العامة بمدينة الإسكندرية

يسعنا أن نقدم لكم برنامج الدر اسات للعام الدر اسي 17-2016. وتعد مجموعة الاورات النتريبية المتاحة من خلال برنامج الدر اسات هذا شاملة. وهناك عدد كبير من المسارات التي يمكنكم البدء بها والتي ستساعدكم في تحقيق أحلامكم المتعلقة بالجامعة، والحباة المهنية والنجاح.

يُتّاح لكم من خلال مرحة الإعدادية والثانوية الأساس لتحقيق النجاح بالإضافة إلى فرص التُلم وخوض تجارب جديدة. وقد آن الأوان لاستكثاف اهتماماتكم وتطلعاتكم وإيجادها. ونلتّزم أسرة المدارس العامة بمدينة الإسكندرية بضمان إتاحة الوسائل عند التخر ج من اللدرسة الثناوية للالجاح من خلال الققرة على ما يلي: 1) قراءة النصوص المعقدة، و2) الكتابة حول النجاح الأي يتحقق بعد المرحلة الثانوية، و3) تحليل البيانات وتفسير ها، و4) المشاركة في الخطاب ضمن التخصصات، و5) التحدث والاستماع بأسلوب ناجح. ويمثل هذا الأمر مسيرة مهمة بالنسبة لكم. ونحن وانقين أنه يمكنكم القيام بها لذا نحن نعمل على مساعدتكم. و هذا هو التز امنا تجاهكم.

كما نشجكم على تحديد أهداف عالية لتحقيقها وتحفيز أنفسكم عند اختيار الدورات النتريبية. تنقام لكم الددارس العامة بمدينة الإسكندرية مجموعة رائعة من الدورات التندريبية الفنية والمهنية والأكاديمية لمساعدتكم في الوصول إلى أهدافكم. نتصحكم بدعوة آبائكم أو أولياء أموركم ومستثشاريكم أن يكونوا معكم أثناء مشاركة أهدافكم التي اخترتمو ها لأنفكم. وننصحكم بأن تناقشوا معهم اللورات التناريبية التي تساعدكم على تحقيق أهدافكم.

احرصوا على الاستفادة من المركز الوظيفي والجامعي ومستشار المدرسة حول أي أسئلة تتعلق بمتطلبات أي دورة تدريبية مستقبلية تتعلق بالدر استة أو المهنة.

مع أطيب التمنيات في مرحلتي الإعدادية والثانوية المتميزتين.


## Introduction

## HOW STUDENTS SHOULD USE THIS GUIDE

The Program of Studies is designed to help you gain a better understanding of the course offerings and to provide you with information that will help you prepare for your future. Academic and career planning is an important process that will involve a collaborative effort between you, your family, counselors and teachers. The more actively involved you are in this process, the more informed your decisions will be in guiding your educational preparation to meet your future goals.

The Program of Studies describes course offerings that are intellectually challenging based on grade-level skills and content. These courses will prepare students for college, work and life, and will ensure that every student will graduate with the ability to demonstrate the following five college preparation competencies:

- Reading Comprehension for College-Level Work
- Writing Skills
- Data Analysis and Interpretation
- Discourse Within the Disciplines (meaning that you have learned to think like a writer, historian or scientist)
- Speaking and Active Listening Skills

Academic and career planning is an ongoing process throughout your educational career.

The following steps will guide you as you prepare to meet your college and career goals and fulfill your potential:

- Complete career-related assessments in Naviance. These assessments will help you identify your interests, skills and personality type.
- Utilize this information to research and identify potential careers based on your interests, skills and personality type.
- Explore post-secondary institutions that offer programs that will prepare you for those careers and review admission requirements.
- Develop a rigorous and relevant Individualized Career and Academic Plan (ICAP) that will meet graduation requirements and prepare you for your post-secondary goals while in middle and high school using the resources in this section.


## FOR ADDITIONAL INFORIMATION, CONTACT THE GUIDANCE OFFICE AT YOUR SCHOOL:

T.C. Williams High School<br>703-824-6828

T.C. Williams High School Minnie Howard Campus

703-824-6755

## T.C. Satellite Campus

703-619-8400
Francis C. Hammond Middle School
703-461-4100
George Washington Middle School
703-706-4500
Jefferson-Houston School PK-8
703-519-5283

The Alexandria City School Board does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, sexual orientation, marital status, status as a parent or pregnancy, in its programs or activities. Please direct all inquiries regarding Alexandria City Public Schools non-discrimination policies to the Chief Human Resources Officer, 703-619-8010.

Este documento se encuentra dispoible en español previa solititud.

## GRADUATION REQUIREIMENTS

## ADVANCED STUDIES DIPLOMA

\(\left.\begin{array}{|l|c|c|}\hline Discipline Area \& \begin{array}{c}Standard Credits <br>
Revised Advanced Studies Diploma Effective <br>
with the 9th Grade Class of 2011-12 and <br>

beyond\end{array} \& Verified Credits\end{array}\right]\)|  |
| :--- |
| English |
| History and Social Sciences |
| Mathematics |
| Laboratory Sciences |
| World Languages |
| Health and Physical Education |
| Fine Arts or Career and Technical Education |
| (CTE) |

Note: Requirements for a student to earn a diploma from a Virginia high school shall be those in effect when that student enters the 9th grade for the first time.

* Advanced Studies Diplomas - One credit must be earned in an Advanced Placement or Dual Enrollment course.
${ }^{* *}$ To opt out of this requirement, follow the directions on pages 10-13.


## EXPLANATIONS AND CLARIFICATIONS

## 1. DISCIPLINES AND COURSES

## English -

English 9, honors or standard
English 10, honors or standard
English 11, honors or standard, Advanced Placement (AP) English Language or Dual Enrollment (DE) College Composition
English 12, honors or standard, AP English Literature and Composition, DE College Composition or DE Survey of World Literature

## Mathematics -

At or above the level of Algebra, credits shall include at least three course selections from among Algebra I, Geometry, Algebra Functions and Data Analysis, Algebra II or above Algebra II. Students in grades 7 and 8 who take Algebra and Geometry during middle school will earn a high school credit for each subject.

## Laboratory Sciences -

Four credits must be earned from among three different science disciplines: Earth Science, Biology, Chemistry or Physics. Students who enroll in AP Science courses must co-enroll in and complete the appropriate AP Science Lab Seminars. When planning course selections, students must count two full periods for each AP science course. The AP course earns science credit and the AP Science Lab Seminar earns elective credit.

## Social Sciences -

World History and Geography, Part I, standard or honors
World History and Geography, Part II, standard or honors, or AP World History Virginia and U.S. History, Honors, AP or DE
Virginia and U.S. Government, standard, honors or AP

## World Languages -

Three years of one language or two years each of two languages. Students in grades 6,7 and 8 who successfully complete both parts 1 A and 1 B and year two of a World Language will earn two high school credits.

## Electives -

Within core academic discipline areas, Fine Arts and/or CTE courses. Students must take two electives that are sequential (coursework that builds similar skills, as defined by the Virginia Department of Education).

## Virtual Courses -

A student must successfully complete one virtual course, which may be noncredit bearing, to graduate with either a Standard or Advanced Studies Diploma, beginning with students entering 9th grade for the first time in 2013-14.
2. VERIFIED CREDITS - To earn Verified Credits, students must pass Virginia Standards of Learning (SOL) end-of-course tests in certain subjects, in addition to two end-of-program English tests administered in Grade 11. Students must pass the courses and the corresponding SOL test(s) to be awarded Verified Credit. (Refer to "Standards of Learning, End-of-Course Tests and Verified Credits"on page 39.)
3. CERTIFICATE OF PROGRAM COMPLETION - Students who successfully complete all academic coursework required for the Advanced Studies Diploma, but who have not earned/been awarded the necessary number of Verified Credits required by the state for the awarding of a diploma, will be awarded Certificates of Program Completion. These students may continue to take the SOL tests needed to upgrade their Certificates of Program Completion to diplomas.
NOTE - Each middle and high school student shall take ALL applicable SOL, AP and CTE tests following course instruction.

NOTE - Grades earned in Algebra, Geometry and/or World Languages during middle school will be used to calculate the high school grade point average (GPA) unless the parents/legal guardians exercise the option to omit the grades and credits from the high school transcript. When these high school courses are omitted from the student's transcript, all graduation requirements must be met. For example, omitting Algebra I in middle school will require the student to earn three or four standard and Verified Credits of high school mathematics to meet graduation requirements.

## GRADUATION REQUIREIMENTS

STANDARD DIPLOMA

| Discipline Area | Standard Credits <br> Effective with 9th Grade Classes <br> of 2003-04 through 2010-11 | Standard Credits <br> Revised Standard Diploma <br> Effective with the 9th Grade Class <br> of 2011-12 and beyond | Verified Credits |
| :--- | :---: | :---: | :---: |

Note: Requirements for a student to earn a diploma from a Virginia high school shall be those in effect when that student enters the 9th grade for the first time.

* To opt out of this requirement, follow the directions on pages 10-13.
${ }^{* *}$ Courses to satisfy the electives requirement shall include at least two sequential electives.
${ }^{* * *}$ A student must earn a board-approved CTE credential to graduate with a Standard Diploma, beginning with students entering 9th grade for the first time in 2013-14. Please see pages 32-33 for a list of approved CTE credentials.


## EXPLANATIONS AND CLARIFICATIONS

## 1. DISCIPLINES AND COURSES

## English -

English 9, honors or standard
English 10, honors or standard
English 11, honors or standard, Advanced Placement (AP) English Language or Dual Enrollment (DE) College Composition
English 12, AP English Literature and Composition, DE College Composition or DE Survey of World Literature

## Mathematics -

At or above the level of Algebra, credits shall include at least three course selections from among Algebra I, Geometry, Algebra Functions and Data Analysis, Algebra II, or above Algebra II. Students in grades 7 and 8 who take Algebra and Geometry during middle school will earn a high school credit for each subject.

## Laboratory Sciences -

Three credits must be earned from at least two different science disciplines: Earth Science, Biology, Chemistry or Physics. Students who enroll in AP Science courses must co-enroll in and complete the appropriate AP Science Lab Seminars. When planning course selections, students must count two full periods for each AP science course. The AP course earns science credit and the AP Science Lab Seminar earns elective credit.

## Social Sciences -

World History and Geography, Part I, standard or honors
World History and Geography, Part II, standard or honors, or AP World History
Virginia and U.S. History, Honors, AP or DE
Virginia and U.S. Government, standard or AP

## World Languages -

Students in grades 6,7 and 8 who successfully complete both parts 1A and 1B and year two of a World Language will earn two high school credits.
CTE -
A student must earn a board-approved career and technical education credential to graduate with a Standard Diploma, beginning with students entering 9th grade for the first time in 2013-14. Please see pages 32-33 for a list of approved CTE credentials.

Electives -
Within core academic discipline areas, Fine Arts and/or CTE courses. Students must take two electives that are sequential (coursework that builds similar skills, as defined by the Virginia Department of Education).

## Virtual Courses -

A student must successfully complete one virtual course, which may be noncredit bearing, to graduate with either a Standard or Advanced Studies Diploma, beginning with students entering ninth grade for the first time in 2013-14.
2. VERIFIED CREDITS - To earn Verified Credits, students must pass Virginia Standards of Learning (SOL) end-of-course tests in certain subjects, in addition to two end-of-program English tests administered in Grade 11. Students must pass the course and the corresponding SOL test(s) to be awarded Verified Credit. (Refer to "Standards of Learning, End-of-Course Tests and Verified Credits" on page 39.)
3. CERTIFICATE OF PROGRAM COMPLETION - Students who successfully complete all academic coursework required for the Standard Diploma, but who have not earned/been awarded the necessary number of Verified Credits required by the state for the awarding of a diploma, will be awarded Certificates of Program Completion. These students may continue to take the SOL tests needed to upgrade their Certificates of Program Completion to diplomas.
NOTE - Each middle and high school student shall take ALL applicable SOL, AP and CTE tests following course instruction.
NOTE - Grades earned in Algebra, Geometry and/or World Languages during middle school will be used to calculate the high school grade point average (GPA) unless the parent/legal guardian exercises the option to omit the grades and credits from the high school transcript. When these high school courses are omitted from the student's transcript, all graduation requirements must be met. For example, omitting Algebra I in middle school will require the student to earn three or four standard and Verified Credits of high school mathematics to meet graduation requirements.

## GRADUATION REQUIREIMENTS

MODIFIED STANDARD DIPLOMA (20 STANDARD CREDITS)

| Discipline Area | Standard Credits Required |
| :--- | :---: |
| English | 4 |
| Mathematics | 3 |
| Laboratory Science | 2 |
| History and Social Sciences | 2 |
| Health and Physical Education | 2 |
| Fine or Practical <br> (Career and Technical Education) <br> Arts | 1 |
| Electives | $\mathbf{2 0}$ |
| Total |  |

Note: Requirements for a student to earn a diploma from a Virginia high school shall be those in effect when that student enters the 9th grade for the first time.

In addition to these credits, students must:

- pass the 8th-grade English (Reading, Literature and Research) Standards of Learning (SOL) test OR
- pass the 11th-grade English (Reading, Literature and Research) SOL test AND
- pass the 8th-grade Mathematics SOL test OR
- earn a Verified Credit in high school Mathematics


## EXPLANATIONS AND CLARIFICATIONS

1. DISCIPLINES AND COURSES.

## English -

English 9, honors or standard
English 10, honors or standard
English 11, honors or standard, Advanced Placement (AP) English Language or Dual Enrollment (DE) College Composition
English 12, AP English Literature and Composition, DE College Composition or DE Survey of World Literature

## Mathematics -

From among applications of Algebra, Geometry, Personal Finance and Statistics. Students in grades 7 and 8 who take Algebra and Geometry during middle school will earn a high school credit for each subject.

## Science -

From at least two of the following: applications of Earth Science, Biology, Chemistry or Physics.

## Social Sciences -

Includes one unit of credit in Honors Virginia and U.S. History and one unit of credit in Virginia and U.S. Government.

Fine or Practical Arts -
Includes Career and Technical Education (CTE) courses.
Electives -
Within core academic discipline areas, Fine Arts and/or CTE courses. (See "Sequential Electives and the Standard Diploma" on page 39.)
NOTE - Students who enter the 9th grade for the first time in 2013-14 or beyond are not eligible to graduate with a Modified Standard Diploma.
NOTE - Students pursuing the Standard Diploma and choosing to take SOL courses are required to take the corresponding SOL test(s).
NOTE - Students with a current 504 plan or an Individualized Education Program (IEP) may be eligible for credit accommodations for the Modified Standard Diploma. More information about credit accommodations may be found on page 41.

## APPLIED STUDIES DIPLOMA

The Applied Studies Diploma is intended for certain students at the secondary level who have a disability and who will not meet credit requirements for another type of diploma. Eligibility and participation in the Applied Studies Diploma program shall be determined by the student's Individualized Education Program (IEP) team and the student, when appropriate. The school must secure informed written consent of the parent/legal guardian and the student, when appropriate, to change this diploma program.

For more information, call the ACPS Office of Specialized Instruction at 703-619-8023.

## STUDENT EXEMPTION FORM

## Human Growth and Development 2016-17 School Year

Alexandria City Public Schools regulations permit a student to opt out of the Human Growth and Development (HGD) course. Lessons that will be used in the HGD course are available for review in the library media center of your child's school, the central library/media center and Ellen Coolidge Burke Branch Library, 4701 Seminary Road. All of our high school films associated with this curriculum are kept at T.C. Williams High School and the T.C. Williams Minnie Howard Campus. To preview any of these films, please contact the Human Growth and Development Department. To stay in HGD does not require any action on your part.

Directions: To have your child exempted from participation in the HGD course, please complete the form below and return it to the counselor at your child's school.

Student's Last Name: $\qquad$ First Name: $\qquad$

Grade: $\qquad$ $\square$ T.C. Williams King Street CampusT.C. Williams Minnie Howard CampusSatellite CampusCFC Campus

Please exempt the above-named student from participation in the HGD course requirement.

Signature of Parent/Legal Guardian: $\qquad$

Date: $\qquad$ Home Phone Number: $\qquad$
cc: Parent/Legal Guardian
Building Principal
School Counselor

## FORMULARIO DE EXENCIÓN DEL ESTUDIANTE

## Crecimiento y desarrollo humano Año escolar 2016-17

Las normas de Escuelas Públicas de la Ciudad de Alexandria le permiten a un estudiante no participar del curso de crecimiento y desarrollo humano (Human Growth and Development, HGD). Las lecciones que se dictarán en el curso de crecimiento y desarrollo humano se encuentran disponibles para su revisión en la librería multimedia de la escuela de su hijo, la biblioteca central o la biblioteca multimedia, y Burke Library. Todas las películas de la escuela secundaria asociadas con este programa se almacenan en las escuelas T.C. Williams High School y T.C. Williams High School Minnie Howard Campus. Si desea revisar alguna de estas películas, comuníquese con el Departamento de crecimiento y desarrollo humano. Para permanecer en HGD no es necesario que realice ninguna acción de su parte.

Instrucciones: Para que su hijo quede exento de su participación en el curso de crecimiento y desarrollo humano, complete el formulario a continuación y envíelo al director de la escuela de su hijo.

Apellido del estudiante: $\qquad$ Nombre: $\qquad$

Grado: $\qquad$ $\square$ T.C. Williams King Street CampusT.C. Williams Minnie Howard Campus

Sírvase eximir al mencionado estudiante de su participación en el curso de requisito crecimiento y desarrollo humano.
Fecha: $\qquad$

Date: $\qquad$ Número de teléfono de domicilio: $\qquad$
cc: Padre/Madre
Director de la escuela
Consejero escolar

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 $\qquad$ $\square$ T．C．Williams King Street CampusT．C．Williams Minnie Howard CampusSatellite CampusCFC Campus

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## نموذج إعفاء الططلاب

## التتمية البشرية والتطوير <br> السنة الاراسية 17-2016

تسمح نظم مدارس مدينة ألكساندريا العامة للطالب بالانسحاب من دورة التنمية البشرية والتطوير (HGD). تتوفر الاروس التي سوف يتم اعطاؤها في هذه اللورة للاطلاع عليها في مركز الوسائط التابع للمكتبة في مدرسة طفلكم، وفي مركز الوسائط في المكتبة المركزية، وفي مكتبة إيلين كوليدج بيرك الفر عية، Ellen Coolidge Burke Branch Library, 4701 Seminary Road. ويتم حفظ كل أفلام الددارس الثناوية ذات الصلة بهذا المنهج الدر اسي في مدرسة تي سي ويليامز الثانوية ومبنى ميني هو ارد التابع لمدرسة تي سي ويليامز ـ ولاطلاع على اليّلي أي من هذه الأفلام، يُرجى الاتصـال بإدارة التتمية والتطوير. لا يتطلب البقاء في دورة التتمية البشرية و التطوير اتخاذّ أي إجراء من طرفكم. توجيه: لإعفاء طفلكم من المشاركة في دورة التنمية البشرية و التطوير، يرجى إكمال النموذج أدناه وإعادته إلى المستشـار (Counselor) في مدرسة طفلكم.
$\qquad$ الاسم الأول: $\qquad$ اسم عائلة الطالب:
$\qquad$ اسم معلم الصف:Satellite Campus
$\qquad$ توقيع الأب/ولي الأمر :

## INDIVIDUALIZED CAREER AND ACADEIMIC PLAN

- The Individual Career and Academic Plan (ICAP) provides a structured means to support students to achieve their potential, actively contribute to his/her own learning and be prepared for college, work and life.
- The ICAP is the vehicle by which each student, with support for his or her unique circumstances, will graduate from high school with the knowledge and skills necessary for higher education, multiple career paths and active citizenship.
- The ICAP is a working document that maximizes student achievement by having students accomplish goals in middle and high school that lead to post-secondary and career readiness.
- The plan is one that will evolve and adapt over time, just like our students' interests and talents.
- The components of the ICAP include the student's program of study for high school graduation, a post-secondary career
pathway based on the student's academic and career interests, and goal-setting, with a focus on English and Math, or any other content area where the student may need additional support in order to be successful in achieving his or her postsecondary goals. Students will analyze their data regularly to monitor their mastery of goal attainment.
- Students utilize Naviance, the online college and career planning system, to complete the Do What You Are, Personality-Type assessment and the Career Cluster Finder career assessments, as well as to use the Naviance Course Planner to create a grade 7-12 program of study for high school graduation and a post-secondary career pathway based on the student's academic and career interests. The ICAP template starts on page 18.


## STEPS FOR ACADEMIC AND CAREER PLANNING

The following is a list of suggested steps for students to take at each grade level. Steps should be adjusted to meet individual needs. Students whose first language is not English and students with certain disabilities should always consider their particular circumstances when making individual plans.

| GRADE | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Meet with your counselor to discuss, create and update your Individualized Career and Academic Plan (ICAP) | X | X | X | X | X | X | X |
| Take career-related assessments in Naviance | X | X | X | X | X | X | X |
| Talk to parents/legal guardians, teachers and a counselor about your interests and post-secondary goals | X | X | X | X | X | X | X |
| Talk to parents/legal guardians and other adults about their careers | X | X | X | X | X | X | X |
| Attend career and elective fairs | X | X | X | X | X | X | X |
| Identify and research potential careers | X | X | X | X | X | X | X |
| Look at colleges and identify high school courses needed for college admission | X | X | X | X | X | X | X |
| Educate yourself about the different kinds of diplomas and the requirements for each | X | X | X | X | X | X | X |
| Review the Program of Studies and identify courses you would like to take in the future | X | X | X | X | X | X | X |
| Enroll in Honors, Advanced Placement, Dual Enrollment and other advanced academic courses offered in high school | X | X | X | X | X | X | X |
| Challenge yourself academically; strive for a higher GPA each year | X | X | X | X | X | X | X |
| Participate in school and community activities | X | X | X | X | X | X | X |
| Consider summer enrichment programs, including campus, school-based courses and college courses | X | X | X | X | X | X | X |
| Consider volunteering or service learning activities | X | X | X | X | X | X | X |
| Create a game plan in Naviance Family Connection and update it each year | X | X | X | X | X | X | X |
| Start exploring financial aid options |  |  | X | X | X | X | X |
| Review your academic record to ensure information is correct |  | X | X | X | X | X | X |
| Start narrowing your field of potential careers and identify colleges that offer related majors |  |  | X | X | X | X | X |
| Become familiar with the T.C. Williams College and Career Center |  |  |  | X | X | X | X |
| Visit the Scholarship Fund of Alexandria office |  |  |  |  | X | X | X |
| Take ACT/SAT combo exam; Use results to prepare for SAT and/or ACT |  |  |  |  | X | X |  |
| Identify teachers, coaches or other adults who might write letters of recommendation for you |  |  |  | X | X | X | X |
| Attend college fairs and see presentations by college admissions representatives visiting T.C. Williams High School |  |  | X | X | X | X | X |
| Create a résumé in Naviance; update annually |  |  | X | X | X | X | X |
| Research and start applying for potential scholarships |  |  |  |  | X | X | X |
| Consider a part-time job or volunteer opportunity in a field related to your career goals |  |  |  |  | X | X | X |
| Start narrowing your college choices and visit the schools; create a filing system for notes |  |  |  | X | X | X | X |
| Consider community college, technical schools or apprenticeship programs |  |  |  |  |  | X | X |
| Start the application process for a military academy |  |  |  |  |  | X | X |
| Take College Entrance Exams (SAT, ACT, SAT Subject); retake as needed |  |  |  |  |  | X | X |
| Take the ASVAB if considering military options; retake as needed |  |  |  |  | X | X | X |
| Practice interviewing skills |  |  |  |  | X | X | X |
| Take ACT District Choice exam; Reportable scores will be sent to colleges |  |  |  |  |  | X |  |
| Narrow your college list to five or six schools and visit the campuses |  |  |  |  |  | X | X |
| Write your college application essay and/or personal statement |  |  |  |  |  | X | X |
| Complete and send college applications; decide if you are applying for early decision |  |  |  |  |  |  | X |
| Consider applying to the Pathway to the Baccalaureate Program through Northern Virginia Community College (NOVA) |  |  |  |  |  |  | X |
| Take the NOVA placement exams if considering the community college |  |  |  |  |  |  | X |
| Tell your counselor what colleges you are applying to so the appropriate information will be sent |  |  |  |  |  |  | X |
| Request letters of recommendation through Naviance |  |  |  |  |  |  | X |
| Complete the Federal Financial Aid Forms (FAFSA) as close to January 1 as possible |  |  |  |  |  |  | X |
| Complete the Scholarship Fund of Alexandria application and any other scholarship applications |  |  |  |  |  |  | X |
| Meet with a recruiter if you are joining the military; complete paperwork |  |  |  |  |  |  | X |
| Inform your counselor of your final post-secondary plans |  |  |  |  |  |  | X |
| Notify colleges by May 1 of your final decision |  |  |  |  |  |  | X |
| Participate in the Senior Experience program |  |  |  |  |  |  | X |
| Graduate with an action plan for your future success |  |  |  |  |  |  | X |

## THE 16 CAREER CLUSTERSTM

One key to improving student achievement is to provide students with relevant contexts for studying and learning. Career Clusters ${ }^{\mathrm{mw}}$ do exactly this by linking school-based learning with the knowledge and skills required for success in the workplace. The National Career Clusters ${ }^{\text {ma }}$ Framework is comprised of 16 Career Clusters ${ }^{\text {™ }}$ and 79 related Career Pathways to help students of all ages explore different career options and better prepare for college and career.

Each Career Cluster represents a distinct grouping of occupations and industries based on the knowledge and skills they require. The 16 Career Clusters ${ }^{\text {w }}$ and related Career Pathways provide an important organizing tool for schools to develop more effective programs of study (POS) and curriculum. Additional information can be found online at http://www.careertech.org/career-clusters.

| CAREER CLUSTER | CAREER PATHWAYS | CLUSTER DESCRIPTION |
| :---: | :---: | :---: |
| Agriculture, Food and National Resources | Agribusiness Systems <br> Animal Systems <br> Environmental Service Systems <br> Food Production and Processing <br> Natural Resource Systems <br> Plant Systems <br> Power, Structural and Technical Systems | The production, processing, marketing, distribution, financing and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture and other plant and animal products/resources |
| Architecture and Construction | Construction <br> Design/Pre-Construction Maintenance/Operations | Careers in designing, planning, managing, building and maintaining the built environment. |
| Arts, AV Technology and Communications | Audio and Video Technology and Film Journalism and Broadcasting <br> Performing Arts <br> Printing Technology <br> Telecommunications <br> Visual Art | Designing, producing, exhibiting, performing, writing and publishing multimedia content including visual and performing arts and design, journalism and entertainment services |
| Business, Management and Administration | General Management <br> Business Information Management <br> Human Resources Management <br> Operations Management <br> Administrative Support | Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations |
| Education and Training | Administration and Administrative Support Teaching and Training Professional Support Services | Planning, managing and providing education and training services and related learning support services |
| Finance | Securities and Investments <br> Business Finance <br> Accounting <br> Insurance <br> Banking Services | Planning, services for financial and investment planning, banking, insurance and business financial management |
| Government and Public Administration | Governance <br> National Security <br> Foreign Service <br> Planning <br> Revenue and Taxation <br> Regulation <br> Public Management and Administration | Planning and performing government functions at the local, state and federal levels, including governance, national security, foreign services, planning, revenue and taxation and regulations |
| Health Science | Therapeutic Services <br> Diagnostic Services <br> Health Informatics <br> Support Services <br> Biotechnology Research and Development | Planning, managing and providing therapeutic services, diagnostic services, health informatics, support services and biotechnology research and development |

## THE 16 CAREER CLUSTERSTM (CONTINUED)

| CAREER CLUSTER |  | CAREER PATHWAYS |
| :--- | :--- | :--- |
| Hospitality and Tourism | $\begin{array}{l}\text { Lodging } \\ \text { Restaurant and Food/Beverage Services } \\ \text { Recreation, Amusement and Attraction } \\ \text { Travel and Tourism }\end{array}$ | $\begin{array}{l}\text { Hospitality and Tourism encompasses the management, } \\ \text { marketing and operations of restaurants and other food } \\ \text { services, lodging, attractions, recreation events and travel- } \\ \text { related services }\end{array}$ |
| Human Services | $\begin{array}{l}\text { Counseling and Mental Health Services } \\ \text { Consumer Services } \\ \text { Early Childhood Development and Services } \\ \text { Family and Community Services } \\ \text { Personal Care Services }\end{array}$ | $\begin{array}{l}\text { Preparing individuals for employment in career pathways } \\ \text { that relate to families and human needs such as counseling } \\ \text { and mental health services, family and community services, } \\ \text { personal care and consumer services }\end{array}$ |
| Information Technology (IT) | $\begin{array}{l}\text { Network Systems } \\ \text { Information Support and Services } \\ \text { Web and Digital Communications } \\ \text { Programming and Software Development }\end{array}$ | $\begin{array}{l}\text { Building linkages in IT occupations for entry level, technical } \\ \text { and professional careers related to the design, development, } \\ \text { support and management of hardware, software, multimedia } \\ \text { and systems integration services }\end{array}$ |
| Law, Public Safety, |  |  |
| Corrections and Security | $\begin{array}{l}\text { Corrections Services } \\ \text { Emergency and Fire Management Services } \\ \text { Law Enforcement Services } \\ \text { Legal Services } \\ \text { Security and Protective Services }\end{array}$ | $\begin{array}{l}\text { Planning, managing and providing legal, public safety, } \\ \text { protective services and homeland security, including } \\ \text { professional and technical support services }\end{array}$ |
| Manufacturing | $\begin{array}{l}\text { Production } \\ \text { Manufacturing Production Process Development } \\ \text { Maintenance, Installation and Repair } \\ \text { Quality Assurance } \\ \text { Logistics and Inventory Control } \\ \text { Health, Safety and Environmental Assurance }\end{array}$ | $\begin{array}{l}\text { Planning, managing and performing the processing of } \\ \text { materials into intermediate or final products and related } \\ \text { professional and technical support activities such as }\end{array}$ |
| production planning and control, maintenance and |  |  |
| manufacturing/process engineering |  |  |$]$

## INDIVIDUALIZED CAREER AND ACADEIMIC PLAN (TEMPLATE)


PROGRAM OF STUDY


[^0]POST-SECONDARY GOALS
Post-Secondary

|  | Post-Secondary |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Post-Secondary Major or Area of Study | Post-Secondary Minor or Area of Study |  | Comments |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| K0000000 | Colleges/Universities of Interest |  |  |  |
|  | Name of College/University/Other | Early Decision/Application Deadline | Date Transcript Sent | Comments |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  | A |  |  |
|  |  |  | , |  |


| 2 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 | Scholarships and Grants |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Scholarship/Grant Name | Eligibility: (Merit, Athletic, Other) | Award Amount | Submission Deadine |
|  |  |  |  |  |
|  |  |  |  |  |

S.M.A.R.T. GOALS


# STUDENT: <br> Other: 

## SAMPLE COURSE SEQUENCES - MATHEMATICS

The sample course sequence can be used as a guide to assist students in planning their course of study during their school career. When choosing course selections students should take into consideration their Individualized Career and Academic Plan and the Secondary and Post-Secondary Career Cluster Pathway.

| DIPLOMA | GRADE 6 | GRADE 7 | GRADE 8 | GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Standard or Advanced Diploma | Math 6 | Math 7 | Math 8 | Algebra I | Geometry | Algebra, Functions and Data Analysis | Algebra II |
|  | Math 6 | Math 7 | Math 8 | Algebra I | Algebra, Functions and Data Analysis | Geometry | Algebra II |
| Advanced Diploma | Math 6 | Math 7 | Algebra I | Geometry | Algebra, Functions and Data Analysis | Algebra II | Probability and Statistics or Pre-Calculus or Discrete Mathematics |
|  | Math Honors 6 | Math Honors 7 | Algebra I | Geometry | Algebra II | Pre-Calculus | AP Calculus AB or BC |
|  | Math Honors 6 | Math Honors 7 | Algebra I | Geometry | Algebra II | Probability and Statistics or Discrete Mathematics | AP Statistics |
|  | Math Honors 7 | Algebra I | Geometry | Algebra II | Pre-Calculus | AP Calculus AB or BC | DE Calculus with Analytics Geometry II or DE Differential Equations |

## SAMMPLE COURSE SEQUENCES - SCIENCE

The sample course sequence can be used as a guide to assist students in planning their course of study during their school career. When choosing course selections students should take into consideration their Individualized Career and Academic Plan and the Secondary and Post-Secondary Career Cluster Pathway.

MIDDLE SCHOOL

| GRADE 6 | GRADE 7 | GRADE 8 |
| :--- | :--- | :--- |
| General Science 6 (Physical, Life, Earth) | Life Science 7 | Physical Science 8 |
| Honors General Science 6 | Honors Life Science 7 | Honors Physical Science 8 |

## HIGH SCHOOL



## COURSE EXPECTATIONS

## Core Standards of Learning (SOL) courses at the middle and high school levels have the following expectations:

- English / Language Arts: Students in English classes will investigate thematically organized literature that reflects a challenging range of historical classics and contemporary selections. In addition to demonstrating a high level of analytical and critical reading comprehension, students will write in a variety of genres, including informational/expository text, narration, and persuasion. Major focus in English is on students' acquisition and application of technical and academic vocabulary applied in written, spoken, and multi-media formats. Formal and informal oral communication focus areas will include seminars, debates, Reader's Theatre, and presentations. Throughout students' English experience, they will engage in a range of formal and informal research tasks and processes.
- Mathematics: Students in mathematics classes will be expected to acquire and apply the language of mathematics, using mathematical operations and processes in authentic, realworld scenarios, situations, and performance tasks. They will also develop analytical and critical reasoning in their use of mathematics, including the ability to explain and support mathematical claims and assertions with data-based evidence. In mathematics classes, students will generate multiple methods and use a variety of strategies for solving problems, reflect upon and critique their own mathematical reasoning and that of others, and demonstrate and express their mathematical understanding through a range of modalities (including writing and visual representations).
- Science: Students in science classes require students to engage actively in the processes of hypothesis formulation and testing as well as scientific inquiry. A major focus of science is the laboratory and field experience, ensuring that students develop the habits of mind used by scientists as they investigate, analyze, and draw inferences about the world. Students in science continually engage in the " 5 -Es learning cycle," including: (1) being Engaged in the content; (2) having multiple chances to Explore it through inquiry-based experiential learning tasks; (3) committed to Explaining what they learned from their investigation; (4) Extending their learning to other situations, displaying growing levels of guided and independent transfer; and (5) engaged actively in Evaluating their own progress and learning.
- Social Studies: Students in social studies students are required to demonstrate a high degree of reading comprehension and writing skills as they respond to a range of primary sources, research studies, and comparative text analysis. The social studies class emphasizes student's learning to think and reason within the academic disciplines being studied. For example,
rather than memorizing historical facts in isolation, students become historians - examining, comparing, and drawing inferences about the meaning of writings, events, and historical figures. Similarly, students will investigate key economic, cultural, political, and geographic themes, skills, and concepts - learning how professionals in these disciplines construct knowledge and express insights about social phenomena. Perhaps most significantly, social studies students will analyze and explain themes and unifying concepts underlying the study of various era and individuals, reinforcing interconnections and patterns.


## ADVANCED ACADEIMIC PROGRAMS

Alexandria City Public Schools (ACPS) offers several advanced academic programs to meet the needs of a diverse group of students. In grades 6-12, students have the opportunity to enroll in Honors courses and in grades 10-12 students can choose to enroll in college-level courses through the Advanced Placement (AP) and Dual Enrollment (DE) programs.

The purpose of the advanced academic programs is to extend the ACPS Program of Studies in terms of depth and complexity and to appropriately challenge advanced learners to achieve their highest academic potential:

- Each of the advanced-level programs is designed to provide a rigorous and engaging curriculum to motivated students.
- The courses are taught at an accelerated pace and offer enhanced content.
- Students will receive accelerated and enriched assignments and reading in these courses to support the application of material in the classroom.
- In addition, students are expected to learn independently with less directed instruction from the teachers.

ACPS has an Equity and Excellence policy (ACPS policy IGBJ) for advanced academic programs, including students with disabilities and English language learners who seek increased academic rigor. Any student who is interested in taking a course should talk with his or her teacher, counselor and parent/legal guardian for advice. If students are ready to accept the challenge of more rigorous coursework, they should consult with their counselor when selecting classes.

## HONORS PROGRAM Middle and High School

Honors courses are advanced courses 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.

## Students enrolled in one or more Honors courses should:

- Be highly motivated, independent learners
- Demonstrate intellectual curiosity and a willingness to accept higher levels of challenge
- Have a strong interest in the subject area
- Demonstrate the ability to link new knowledge to prior knowledge quickly
- Use the time management and task commitment skills to perform consistently at an advanced level


## Honors Program Entrance Expectations

Students and their parents/guardians should consider the rigor and academic demands of an Honors course experience. The following are suggested performance indicators that will help guide students' decision-making process.

Recommended Virginia Standards of Learning (SOLs) Results: The Virginia SOL tests represent a minimum standard of performance; therefore, other assessments and criteria should be considered as a predictor of Honors success. Students should have passed previous SOL tests in the required content area for which they are seeking Honors placement.

## Recommended Course Grades:

- Students entering an Honors course should have above-average grades in previous classes in the Honors content area.
- For rising sixth graders, a recommended 3 or 4 in the Honors content area is advisable.
- For students in grades $7-12$, an average grade of $B$ or higher in the Honors content area is recommended.


## Recommended Reading Levels:

- Reading comprehension is an essential component of success in any Honors class.
- Entering students should be reading at or above grade level.
- The complexity of Honors texts requires that students be achieving at or above identified Lexile levels for each grade and each course within the Program of Studies (e.g., minimum 800 at sixth grade, 850 at seventh grade, 900 at eighth grade, etc.).
- Students and parents/guardians are also encouraged to refer to the expectations descriptions for each Honors course in the Program of Studies, including recommended Lexile levels of the texts used in the class, reading implications of additional in-class and out-of-class assignments, and the following:
- Lexile level of the texts used in the class
- Accelerated and enriched assignments in class and at home
- Major projects


## Recommended Writing Competencies:

- All Honors classes require students to express themselves in a variety of written formats.
- Students' previous academic experiences should prepare them for writing in a variety of genres (informational/expository, narrative, persuasive).
- Students should be able to formulate a thesis statement and support it with text-based evidence.
- Additionally, students should be prepared to engage in research projects and investigations, expressing their conclusions in organized, coherent written formats.

| DEPARTMENT | MIDDLE SCHOOL COURSE | PAGE NUMBER |
| :--- | :--- | :---: |
| Language Arts | Language Arts Honors 6 | 48 |
| Language Arts | Language Arts Honors 7 | 48 |
| Language Arts | Language Arts Honors 8 | 48 |
| Mathematics | Math Honors 6 | 48 |
| Mathematics | Algebra I | 49 |
| Mathematics | Geometry | 49 |
| Science | Honors General Science 6 | 50 |
| Science | Honors Life Science 7 | 50 |
| Science | Honors Physical Science 8 | 50 |
| Social Studies | U.S. History I Honors | 50 |
| Social Studies | U.S. History II Honors | 51 |
| Social Studies | Civics and Economics Honors | 51 |

DEPARTMENT HIGH SCHOOL COURSE PAGE NUMBER

| English | Honors English 9 | 66 |
| :--- | :--- | :---: |
| English | Honors English 10 | 66 |
| English | Honors English 11: Survey of <br> American Literature | 66 |
| English | Honors English 12 |  |
| Science | Honors Biology I | 77 |
| Science | Honors Chemistry I | 77 |
| Science | Honors Earth Science I | 78 |
| Social Studies | Honors World History and <br> Geography Part I | 80 |
| Social Studies | Honors World History and <br> Geography Part II | 80 |
| Social Studies | Honors Virginia and U.S. History |  |
| Social Studies | Honors Virginia and U.S. <br> Government - We the People |  |
| World Languages | Chinese IV Honors |  |
| World Languages | French IV Honors |  |
| World Languages | German IV Honors |  |
| World Languages | Latin IV Honors |  |
| World Languages | Spanish IV Honors |  |

## Middle School Honors Intervention Support Plan

1. Students who are enrolled in an Honors course but are having difficulty should receive academic and counseling support. A variety of challenges may confront Honors students, including:

- Lack of requisite background knowledge and skills essential for learning the course content
- Difficulty keeping up with the instructional pace of an Honors class
- Struggles with the complexity of course content
- Quality of time management, goal attainment, and selfregulation
- Social-emotional issues related to maturity of the learner

2. Once the teacher, parent/guardian, counselor, or student is aware of issues affecting the quality of student performance and work products, teacher or counselor conferences and interventions should be initiated. However, no later than the time of the interim report for any grading period, a plan must be initiated for any student who is not earning at least a "B" grade in the specific Honors class.
3. When a student is experiencing difficulties in one or more classes within the Honors program (as evidenced by a grade of "C" or lower), a focused intervention plan will be initiated to support the student's academic needs. The support plan should proceed in the following order, with each successive step taken only if the student continues to struggle:

- Counselor, teacher, student and parent/guardian meet to discuss what additional supports are available. The student is encouraged to speak candidly about what is working and what is not working in terms of meeting the requirements of the course.
- A support plan is developed, listing the following:
- Specific intervention steps and dates are identified for follow-up to monitor implementation of the support plan.
- The student, parent/guardian, and counselor sign the support plan.
- Intervention steps may include attending before, during, or after school tutoring, attending bi-weekly meetings with counselors to discuss student progress, enrolling in remediation classes, and/or other supports.
- After all avenues of accommodation and support have been explored, the student, parent/guardian, and counselor should work together to consider if alternative placement for the student in the parallel standard course is the right decision developmentally for the student.
- If a consensus regarding placement cannot be reached, the school principal will make the final decision regarding the appropriate placement of the student no later than the interim grade report of the following grading period.


## ADVANCED PLACEMENT (AP)

The Advanced Placement (AP) program provides motivated high school students with the opportunity to take college-level courses while still in high school. Students who participate in the AP program gain college-level skills and in many cases, also earn college credit. T.C. Williams High School offers 30 AP courses, each organized to be equivalent to a first-year college course. All teachers teaching AP courses have undergone professional development and must annually submit course syllabi for audit to The College Board. Students who enroll in AP courses must take the end-of-course AP examination to demonstrate their levels of understanding of college-level knowledge and skills. Examinations are administered in May of each year. AP exam fees are paid for by ACPS (if student chooses to be absent for an AP exam, the fee must be reimbursed to ACPS). Examinations are scored on a five-point scale set by the College Board: $5=$ extremely well-qualified; $4=$ well-qualified; $3=$ qualified; $2=$ possibly qualified; and $1=$ no recommendations. AP scores are sent to students, their designated colleges and their high school in July. Colleges that participate in the AP Examinations Program determine full or partial credit for scores of three or better.

Although most students who take AP examinations are enrolled in corresponding AP courses, any highly motivated and academically gifted student may take an AP examination in the subject areas of his/her choice.

Students enrolled in AP Science courses must also enroll in the AP Science Lab Seminar. This 1.0 elective credit co-requisite course is aligned with each AP Science course.

NOTE: See policies IGBI and IKC. Policies can be read in their entirety on the ACPS website at http://www.acps.k12.va.us/board/manual.

The following is a list of AP courses that are expected to be offered during the 2016-17 school year:

| DEPARTMENT | T.C. WILLIAMS HIGH SCHOOL COURSE | PAGE NUMBER |
| :---: | :---: | :---: |
| English | AP English Language and Composition | 66 |
| English | AP English Literature and Composition | 67 |
| Fine and Performing Arts | AP Art History | 69 |
| Fine and Performing Arts | AP Music Theory | 71 |
| Fine and Performing Arts | AP Studio Art: Drawing |  |
| Fine and Performing Arts | AP Studio Art: 3-D Design |  |
| Mathematics | AP Calculus AB | 75 |
| Mathematics | AP Calculus BC | 75 |
| Mathematics | AP Computer Science A | 76 |
| Mathematics | AP Computer Science Principles |  |
| Mathematics | AP Statistics | 75 |
| Science | AP Biology | 77 |
| Science | AP Chemistry | 78 |
| Science | AP Environmental Science | 79 |
| Science | AP Physics 1: Algebra-Based | 79 |
| Science | AP Physics 2: Algebra-Based |  |
| Science | AP Physics II (C) | 79 |
| Science | AP Science Lab Seminar | 80 |
| Social Studies | AP Comparative Government and Politics | 82 |
| Social Studies | AP Macroeconomics | 82 |
| Social Studies | AP Microeconomics | 82 |
| Social Studies | AP European History | 81 |
| Social Studies | AP Psychology | 82 |
| Social Studies | AP United States Government and Politics | 81 |
| Social Studies | AP United States History | 81 |
| Social Studies | AP World History | 80 |
| World Languages | AP Chinese Language and Culture | 83 |
| World Languages | AP French Language and Culture | 84 |
| World Languages | AP German Language and Culture | 85 |
| World Languages | AP Latin | 86 |
| World Languages | AP Spanish Language and Culture | 87 |
| World Languages | AP Spanish Literature and Culture | 87 |
| AP Capstone | AP Research \& AP Seminar |  |

## DUAL ENROLLMENT (DE)

Dual Enrollment is a program that allows high school students to earn college credit for courses they are taking in high school. The courses are taught by high school faculty who meet the credentials to teach college level courses. The teachers follow the college curriculum, use college approved textbooks, and work with a mentor, who is a full-time college faculty member, to ensure they are delivering a college-level course.

In the Spring of 2012 legislation (HB 1184) was passed that "Requires local school boards and community colleges to develop agreements allowing high school students to complete an associate's degree or a one-year Uniform Certificate of General Studies from a community college concurrent with a high school diploma."

In addition, The Uniform Certificate of General Studies (HB 441); clarifies that credits earned in academic subject area coursework as part of the Uniform Certificate of General Studies shall be transferable to a four-year public institution of higher education. Students interested in attending private or colleges outside of Virginia should contact that college's admission's office regarding their dual enrollment policies.

Alexandria City Public Schools has been working with Northern Virginia Community College (NOVA) to create both a one-year General Studies Certificate and identify possible Associate Degree programs students could pursue while in high school. The following chart identifies the course requirements for the General Studies Certificate and courses offered at TC Williams High School that students can take to meet these requirements. The Certificate can be earned through a combination of Advanced Placement and Dual Enrollment courses, however at least twenty-five percent (25\%) of the credits must be earned via dual enrollment.

Students interested in pursuing an Associate Degree while in high school should work with their Counselor and NOVA to identify appropriate courses. Information about specific degree programs can be found online at www.nvcc.edu/curcatalog.

## ACPS GENERAL STUDIES CERTIFICATE

The following articulates a pathway for a qualifying student within Alexandria City Public Schools to complete the Northern Virginia Community College General Studies Certificate. To be eligible for this certificate at least twenty-five percent (25\%), or nine (9),of the credits must be taken in dual enrollment courses.

When choosing college courses, it is recommended that students check transferability with the colleges they hope to attend.

| NOVA COURSE | COLLEGE CREDITS | HIGH SCHOOL CREDIT | POSSIBLE HIGH SCHOOL COURSES |
| :---: | :---: | :---: | :---: |
| ENG 111 / 112 College Composition I \& II | 6 | 1 | AP Courses with 3 or better on exam <br> AP Language \& Composition <br> AP Literature \& Composition <br> DE ENG 111 / 112 College Composition I \& II |
| MTH 151 / 152 Math for the Liberal Arts <br> OR higher level math courses | 3-10 depending on course | 1 | AP Courses with 3 or better on exam <br> AP Calculus AB =Math 173 <br> AP Calculus BC $=$ MTH 173-174 <br> AP Statistics = MTH 241 <br> DE MTH 174 Calculus with Analytic Geometry II <br> DE MTH 291 Differential Equations <br> DE MTH 292 Topics in Differential Equations |
| 2 Physical or Life Science with Lab I \& II | 8 | 1-2 | AP Courses with 3 or better on exam <br> AP Biology = BIO 101-102 <br> AP Chemistry $=$ CHM 111-112 <br> AP Environmental Science = ENV 121-122 <br> *AP Physics courses are currently under review |
| 3 Social Science Classes approved by ACPS | $9$ | 1.5-2 credits, students need at least two high school courses | AP Courses with 3 or better on exam <br> AP European History = HIS 101-102 <br> AP Virginia \& U.S. History = HIS 121-122 <br> AP World History = HIS 111-112 <br> AP Virginia \& U.S. Government $=$ PLS 135-211 <br> AP Economics, Macro = ECO 201 <br> AP Economics, Micro = ECO 202 <br> AP Psychology = PSY 201-202 <br> DE HIS 121-122 U.S. History I \& II |
| 2 Humanity Classes approved by ACPS | $6$ | 1 | AP Courses with 3 or better on exam <br> AP Chinese $=$ CHI 201-202 <br> AP French V = FRE 201-202 <br> AP German Language and Culture $=$ GER 201-202 <br> AP Latin = LAT 201-202 <br> AP Spanish Language and Culture $=$ SPA 201-202 <br> AP Spanish Literature and Culture $=$ SPA $233+$ SPA <br> elective OR SPA 271-272 <br> AP Art History = ART 101-102 <br> DE ENG 251-252 Survey of World Literature I \& II |
| SDV 100 College Success Skills | 1 | 0 | No equivalent high school course. Would need to take through NOVA. |
|  | 33-40 |  |  |

[^1]
## DUAL ENROLLMENT PROCESS

In order to dual enroll in any course students must apply to NOVA and place at the appropriate level on the Virginia Placement Tests. The Virginia Placement test is offered at T.C. Williams several times during the year or students can go to any NOVA campus to take the test. Additional information about the placement test and practice tests can be found online at: http://www.nvcc.edu/ testing/placement.html. Students may use scores from approved alternative assessments in lieu of taking the Virginia Placement Test. Students must attach copies of official English \& Math score reports with their Dual Enrollment Registration Form.

## APPROVED ALTERNATIVE ASSESSMENTS

All tests must have been taken within two years.

SOL Math Scores: Passing score on Algebra I or higher within two years
PSAT Scores: 50 on both Critical Reading and Writing 52 on Math
AP Scores: 3 or better on AP English 3 or better on AP Calculus

SAT Scores: 500 on both Critical Reading and Writing 520 on Math
ACT Scores: 21 on the combined score for Reading and Writing 22 on Math

Once a student has applied to NOVA and has taken appropriate placement tests, he or she must complete a registration form that requires parental signature. For non-core academic courses, students have the option not to take the course for DE credit, but only for high school credit. The following is a list of courses expected to be offered during the 2016-17 school year. Courses will only be offered if there is sufficient enrollment. Students will be given the option to take a course at a NOVA campus if onsite enrollment is low.

## 2016-17 EXPECTED COURSE OFFERINGS AND TEST REQUIREMENTS

| DEPARTMENT | T.C. WILLIAMS HIGH SCHOOL COURSE | COLLEGE COURSE | ENGLISH REQUIREMENT | MATH REQUIREMENT |
| :---: | :---: | :---: | :---: | :---: |
| Business and Information Technology | DE AOF: Introduction to Business and International Finance | FIN 248, International Finance, 3 credits | Level I on VPT English | Level I on VPT Math |
| English | DE College Composition | ENG 111 and ENG 112, College Composition, 6 credits | Level IV on VPT English | Level I on VPT Math |
| English | DE Survey of World Literature | ENG 251 and 252, Survey of World Literature, 6 credits | DE College Comp or 3 or higher on AP English Language | Level I on VPT Math |
| English | DE Theater Practicum | CST 136 Theater Workshop, 3 credits | Level III on VPT English | Level I on VPT Math |
| Health and Medical Sciences | DE Surgical Technologist I | HIM 111 Medical Terminology, 3 credits | Level I on VPT English | Level I on VPT Math |
| Math | DE Differential Equations | MTH 291 and 292, Differential Equations, 6 credits | Level III on VPT English | 3 or higher on AP Calculus BC |
| Math | DE Calculus with Analytic Geometry II | MTH 174 Calculus with Analytic Geometry, 5 credits | Level III on VPT English | 3 or higher on AP Calculus AB |
| Marketing | DE Entrepreneurship | BUS 116 Entrepreneurship, 3 credits | Level I on VPT English | Level I on VPT Math |
| Marketing | DE Advanced Entrepreneurship | BUS 165 Small Business Management, 3 credits | DE Entrepreneurship | DE Entrepreneurship |
| Social Studies | DE College U.S. History | HIS 121-122 U.S. History, 6 credits | Level III on VPT English | Level I on VPT Math |
| Technology Education | DE Engineering Statics and Strength of Materials | EGR 130 Statics and Strength of Materials for Engineering Technology, 5 credits | Level I on VPT English | Place into Calculus on VPT Math |
| Trade and Industry | DE TV Production II | PHT 130 and PHT 131, Video I and II, 6 credits | Level III on VPT English | Level I on VPT Math |
| Trade and Industry | DE TV Production \& Screenwriting III | PHT 274 Digital Film Editing \& Post Production, 3 credits | DE TV Production II | DE TV Production II |
| Trade and Industry | DE Automotive Technology II | AUT 100 Intro to Auto Shop Practice, 2 credits AUT 241 Automotive Electricity I, 4 credits AUT 265 Automotive Braking, 4 credits | Level I on VPT English | Level I on VPT Math |
| Trade and Industry | DE Automotive Technology III | AUT 242 Automotive Electricity II, 4 credits AUT 266 Automotive Alignment, Suspension \& Steering, 4 credits | DE Automotive Technology II | DE Automotive Technology II |
| General Elective | None Applicable | SDV 100 College Success Skills | Level I on VPT English | Level I on VPT Math |

## ADVANCED PLACEMENT AND DUAL ENROLLMENT COMPARISON

Students are able to earn college credit through Advanced Placement (AP) or Dual Enrollment (DE) courses. Both programs are designed to challenge students and provide an introduction to college-level work while in high school, but there are distinct differences between the programs, and students need to decide which option is best for them. The following chart compares some key characteristics of each program:

|  | ADVANCED PLACEMENT | DUAL ENROLLMENT |
| :---: | :---: | :---: |
| Credentialing Agency | College Board | The partner college/university |
| Required Teacher Credentials | Teachers must have completed AP training. | Teachers must have the same qualifications as any college/university faculty member and are considered "adjunct faculty." |
| Curriculum Followed | College Board curriculum | College/university curriculum |
| Curriculum/Evaluation | Teachers must submit AP Curriculum Audit forms and syllabi for approval annually. | The college/university must approve book choice and the teacher's syllabi. Each semester, the teacher is observed by a college mentor and is evaluated by the students in the class. |
| What types of courses are offered? | Generally, offerings include academic courses such as English, Math, Science and Social Studies, and a few electives such as World Languages, Computer Science, Psychology and Art History. Currently, there are 30 approved courses. The courses offered at T.C. Williams High School are listed in the Program of Studies. | Both academic and elective courses are available. Any course that is offered at the college/university could be offered to high school students. The courses offered at T.C. Williams High School are listed in the Program of Studies. Students can take courses at the college campus as well. |
| How do students enroll? | Open Enrollment; any student can enroll in the course. | Students must apply to the college/university and place at the required level on a college placement test or alternative exam. In general, students must be 16 years old and a high school junior. Waivers can be made for "exceptional" students. |
| Do students have to leave the school? | No, courses are offered at the high school. | No; the courses are taught at the high school. Students who want to take courses not offered at the high school would have to either take online courses or go to the campus. |
| Is the credit weighted? | Yes, 1 point. | Yes, 1 point. |
| How much does it cost? | Nothing; the course is free and the school district pays for the exam | The school division pays for courses offered at the high school. Students are responsible for the tuition for courses taken online or on campus. |
| How will dropping the course impact the student's transcript? | When a student drops an AP course prior to the drop date, the course is dropped and is not reflected on the report card or transcript. For withdrawals after the drop date, a withdrawal pass (WP) or withdrawal fail (WF) for the course is reflected on the student's transcript. | For the high school transcript, the DE policy mirrors the AP policy. For the college transcript, students need to be aware of earlier drop and withdrawal dates. If a student drops by the drop date, there is no record of the course on the college transcript. If the student withdraws by the withdrawal date, a W is listed on the transcript. |
| How do students earn college credit? | Credits are earned through scores on the end-of-year exam. Most colleges require a score of 4 or 5 on the exam to receive credit. The community college and some other colleges only require a 3 on the exam. | The students earn college grades based on the work they do during the course of the year. In general, the grade the student receives in high school is also what he or she receives on his or her college transcript. Students need to earn a grade of $C$ or higher. |
| Do students need to take the AP exam? | Yes, students are required to take the course-related AP exam. | Students are strongly encouraged to take course-related AP exams. |
| Do students have a college transcript? | No | Yes |
| How do students transfer the credit to other colleges? | A request through the College Board to send official score reports to the college/university | A request through the college/university to have a transcript sent to the receiving college/university |
| Do colleges accept the credit? | More than 90 percent of U.S. colleges take some form of AP credit, however, the required score and the course equivalent varies by college. Students should refer to the college/university's website to see what credit they award and the required score. Most competitive colleges require a 4 or 5 . | Generally, DE courses follow the same transfer guidelines as courses taken on the college campus. Students need to earn a grade of $C$ or higher. |

## STUDENT-EARNED INDUSTRY CREDENTIALS

The 2012 General Assembly passed, and the Governor signed into law, HB 1061 and SB 489, to strengthen postsecondary education and workplace readiness opportunities for all students. $\neg$ The legislation says, in part:
"Beginning with first-time ninth grade students in the 2013-2014 school year, requirements for the standard diploma shall include a requirement to earn a career and technical education credential that has been approved by the Board, that could include, but not be limited to, the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness skills assessment."

To meet this graduation requirement all students will have the opportunity to take both the CTECS Workplace Readiness Skills Assessment® and the w!se Financial Literacy Certification in the Economics and Personal Finance course.

To earn an industry credential students must successfully complete the required CTE course and pass the related industry certification exam. Earning a certification provides industry recognized proof that the student has achieved a professional skill level in that area and is prepared for entry-level career-related responsibilities and/or post-secondary education.

Students graduating with the Standard diploma who earn multiple industry-related credentials in more than one CTE course may be able to use the additional certification as their student selected verified credit. Students may also be eligible for the Career and Technical Education Seal and/or Advanced Math Seal on their high school diploma, if they meet all the requirements for these seals. Please see your Counselor for details.

The table below shows additional CTE Credentials students can earn in advanced level CTE courses.

| COURSE | CERTIFICATION | CTE CREDIT | CTE SEAL | MATH SEAL |
| :---: | :---: | :---: | :---: | :---: |
| Business and Information Technology |  |  |  |  |
| Advanced Computer Information Systems II | Microsoft Office Specialist (MOS) | X | X |  |
| Computer Information Systems I | Microsoft Office Specialist (MOS) | X | X |  |
| Family and Consumer Science |  |  |  |  |
| Culinary Arts II | NOCTI: Cook II | X | X |  |
|  | National Restaurant Association: ServSafe | X | X |  |
| Advanced Early Childhood Education and Services II | NOCTI: Early Childhood Education | X | X |  |
| Teachers for Tomorrow | NOCTI: Education and Training | X | X |  |
| Health and Medical Science |  |  |  |  |
| Certified Nurse Aide | Virginia Board of Nursing: Certified Nurse Aide | X | X |  |
| Marketing |  |  |  |  |
| Advanced Marketing II | National Retail Federation: Customer Service | X | X |  |
| Technology Education |  |  |  |  |
| Electronic Systems II | NOCTI: Electronics Technology | X | X |  |
| Trade and Industry |  |  |  |  |
| Computer \& Cyber Security Solutions | NOCTI: Computer Repair Technology | X | X | X |
| Computer Networking | NOCTI: Computer Networking | X | X | X |
| Cosmetology II | Virginia Board of Cosmetology: Cosmetology License | X | X |  |
| DE: Automotive Technology III | Workplace Readiness Skills for the Commonwealth Exam | X | X |  |

## HIGH SCHOOL HONORS, ADVANCED PLACEMENT AND DUAL ENROLLMENT INTERVENTION SUPPORT PLAN

Students who are enrolled in an Advanced Placement (AP), Dual Enrollment (DE) or Honors course but are having difficulty should receive academic and counseling support. A variety of challenges may confront AP, DE and Honors students, including:

- Lack of requisite background knowledge and skills essential for learning the course content
- Difficulty keeping up with the instructional pace of an Honors class
- Struggles with the complexity of course content
- Quality of time management, goal attainment and self regulation
- Social-emotional issues related to maturity of the learner

Once the teacher, parent/guardian, counselor or student is aware of issues affecting the quality of student performance and work products, the teacher will meet with the student to establish an intervention plan. However, no later than the time of the 1st quarter interim, a plan must be initiated for any student who is earning less than a "C" in the specific AP, DE or Honors class.

At the end of the 1st quarter when a student continues to experience difficulties in one or more classes within the AP, DE or Honors program (as evidenced by a grade of "D" or lower):

- Counselor, teacher, student and parent/guardian meet to discuss what additional supports are available. The student is encouraged to speak candidly about what is working and what is not working to meet the requirements of the course.
- After all avenues of accommodation and support have been explored, the student, parent/guardian and counselor should work together to consider if alternative placement for the student in the parallel standard course is the right decision developmentally for the student or if the student should remain in the course with continued support.
- If a consensus regarding placement cannot be reached, the school principal will make the final decision regarding the appropriate placement of the student no later than the interim grade report of the following grading period.


## ADVANCEMENT VIA INDIVIDUAL DETERMINATION (AVID)

Pre-requisite: AVID enrollment prior to 11th grade year. AVID is a sixth- through 12th-grade system to prepare students in the academic middle for four-year college eligibility. It has a proven track record in bringing out the best in students and in closing the achievement gap. The AVID program includes an elective course that earns one credit. The three main components of this course are academic instruction and college awareness, tutorial support and motivational activities including college visits. This course provides students with strategies to be successful in rigorous coursework and to be well prepared for post-secondary opportunities. It emphasizes organizational skills, intellectual risk-taking, critical thinking skills, strategic reading and writing, community involvement and the steps necessary to increase college access options and college success. AVID students are supported academically as they pursue AP, DE and other rigorous courses. Note: AVID recruitment includes an application and interview process for fifth-ninth for placement the following year.

## INTERNATIONAL ACADEMY

The International Academy, offered at T.C. Williams High School and Francis C. Hammond Middle School, is at the forefront supporting the unique needs of English Language Learners as they accomplish the challenging task of graduating college-ready, while simultaneously learning English. Through the innovative use of strategic grouping, experiential learning, academywide collaboration and language and content integration, students are provided the targeted supports required for their success. The dedicated International Academy team includes bilingual counselors, a bilingual social worker and a bilingual dean to ensure that students' needs are holistically addressed. Additionally, the program offers targeted numeracy and literacy interventions, academic support classes and a variety of afterschool programs to promote student engagement in all aspects of school life.

## T.C. SATELLITE CAMMPUS

In September 2012, ACPS launched a new innovative learning campus to help students fast-track their way to graduation. It is the first comprehensive, non-traditional satellite high school campus in Northern Virginia. The satellite campus delivers a 21st-century curriculum that is flexible in scheduling and student-centered in support. This opportunity prepares students to compete in the global marketplace, but with a down-toearth approach that recognizes the challenges they may face in completing their education.

Some of the features of the T.C. Satellite Campus include:

- Flexible scheduling with a minimum of 20 hours of physical attendance each week
- Personalized learning environment that uses online and digital content to engage and enhance learning; an environment where data is consistently used to drive instruction
- A streamlined program targeted towards earning a high school diploma
- Small group setting (maximum capacity of 100 students)
- College and career counseling and life skills preparation
- Opportunity to also register for CTE courses held at the T.C. Williams High School main campus

The T.C. Satellite Campus is open daily from 8 a.m. to 6 p.m. Monday through Friday and multiple Saturdays throughout the year as needed to support student success.

Turn to the "Online and Satellite Campus Courses" section of this guide on page 88 to find courses options. To complete an application to enroll in the T.C. Satellite Campus, contact your school counselor or call the campus at 703-619-8400. Visit www. acps.k12.va.us/satellite for more details.

## SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (STEM) ACADEIMY

The T.C. Williams STEM Academy is a school-within-a-school. This program is an appropriate option for any student who:

- Learns best by doing, rather than by more traditional instructional models;
- Benefits from inquiry-based learning;
- Is inquisitive and likes taking things apart to see how they work;
- Is interested in math and/or science and/or engineering and/or technology such as computer graphics or animation;
- Demonstrates creativity and inquisitiveness; and
- Will be a freshman in the 2016-17 school year.

The Academy is formed by a team of 9th- and 10th-grade students and teachers who create a learning community that is
a collaborative, caring environment. Both students and teachers are learners in a real-world, problem-solving, project-based environment. Students in the Academy will participate in a STEM Explorations course in which they will be immersed in the investigation of real-world engineering and technology problems and decisions affecting their local, state, national and global problems related to human sustainability. In addition, students will participate in core classes taught by a team of teachers and focused on creating connections between the content areas and studied through the lens of STEM.

## STUDENT REQUIREMENTS

Graduates of the T.C. Governor's STEM Academy complete the program by meeting the following benchmarks:

- Meet the requirements for an advanced high school diploma
- Earn one or more industry certifications
- Complete a rigorous STEM Pathway
- Earn at least nine transferable college credits as defined by the Early College Scholars program including dual enrollment and Advanced Placement
- Participate in cohort model in grades 9 and 10
- Follow course requirements and CTE STEM pathways in grades 11 and 12
- Complete the Senior STEM Research class in grade 12. This class will include:
- apprenticeships, mentorships, job shadowing, internships, cooperative education
- project-based learning opportunities
- school, community or service learning experiences
- culminating research project with an electronic portfolio and final STEM reflection presentation


## ACADEIMY GOALS

- To maximize opportunities in preparing students for targeted careers by breaking down barriers between traditional core academics and CTE, between high school and postsecondary education and training, and between education and the workplace.
- To raise student aspirations and attract more students to postsecondary education in preparation for technical careers.
- To provide well-trained workers to support the recruitment of new businesses and industries to the commonwealth and to meet the workforce needs of existing business and industry.

CTE STEIM PATHWAY OPTIONS AND COURSES

| PATHWAY OPTIONS | YEARI (9TH GRADE) | YEAR II (10TH GRADE) | YEAR III (11TH GRADE) | YEARIV <br> (12TH GRADE) |
| :---: | :---: | :---: | :---: | :---: |
| Engineering and Technology | Engineering Explorations | Engineering Analysis \& Applications - Robotics | Aerospace Technology | DE Engineering Statics |
| Electronic Systems |  |  | Electronics Systems I | Electronics Systems II |
| Computer Systems Networking |  |  | Computer \& Cyber Security Solutions | CISCO Academy: Computer Networking Hardware Applications |
| Sustainability/Biotechnology/ Forensics |  |  | Sustainability \& Renewable Technologies | Biotechnology \& Forensics |
| Architectural/Engineering Design |  | Technical Drawing I | Advanced Engineering Drawing II | Advanced Architectural Drawing II |

RECOMIMENDED STEM COURSE MAP WITH ADVANCED STUDIES DIPLOMA

| SUBJECT | COURSES |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 9TH GRADE (COHORT) | 10TH GRADE (COHORT) | 11TH GRADE (STUDENT CHOICE) | 12TH GRADE* (STUDENT CHOICE) <br> *Available to seniors in 2017-18 school year. |
| English Language Arts | Honors English 9 | Honors English 10 | Honors English 11: Survey of <br> American Literature <br> AP English Language and Composition <br> Dual Enrollment College Composition 11 | AP English Literature and Composition Dual Enrollment College Composition 12 Dual Enrollment Survey of World Literature |
| Mathematics | Algebra II / Geometry | Pre-Calculus / Geometry | AP Statistics <br> AP Calculus AB <br> AP Computer Science <br> Discrete Mathematics | AP Statistics <br> AP Calculus BC <br> AP Computer Science <br> Discrete Mathematics <br> Dual Enrollment Calculus with Analytic Geometry II |
| Science | Honors Biology I | Honors Chemistry I | Physics I <br> AP Biology <br> AP Chemistry <br> Honors Earth Science I <br> AP Environmental Science <br> AP Physics 1 | Physics I <br> AP Biology <br> AP Chemistry <br> Honors Earth Science I <br> AP Environmental Science <br> AP Physics 1 <br> AP Physics 2 |
| Social Studies | Honors World History and Geography Part I | Honors World History and Geography Part II AP World History | Honors Virginia and U.S. History <br> AP United States History <br> Dual Enrollment College U.S. <br> History | Honors Virginia and U.S. <br> Government - We the People AP United States Government and Politics |
| CTE 1 | CTE STEM Pathway Course: <br> Engineering and Technology Year I <br> Electronic Systems Year I <br> Computer Systems Networking Year I <br> Sustainability / Biotechnology/ <br> Forensics Year I <br> Architectural / Engineering Design Year I | CTE STEM Pathway Course: <br> Engineering and Technology Year II <br> Electronic Systems Year II <br> Computer Systems Networking Year II <br> Sustainability / Biotechnology/ <br> Forensics Year II <br> Architectural / Engineering Design Year II | CTE STEM Pathway Course: <br> Engineering and Technology Year III <br> Electronic Systems Year III Computer Systems Networking Year III <br> Sustainability / Biotechnology/ <br> Forensics Year III <br> Architectural / Engineering Design Year III | CTE STEM Pathway Course: <br> Engineering and Technology Year IV <br> Electronic Systems Year IV Computer Systems Networking Year IV <br> Sustainability / Biotechnology/ Forensics Year IV Architectural / Engineering Design Year IV |
| CTE 2 |  |  | Economics and Personal Finance (This course can be taken either in grade 11 or 12) | Economics and Personal Finance (This course can be taken either in grade 11 or 12) |
| STEM Elective | (Advisory) STEM Explorations I | (Advisory) STEM Explorations II | (Advisory) STEM Explorations III | STEM Research: Independent <br> Study including: <br> a) apprenticeships, mentorships, job shadowing, internships, cooperative education <br> b) project-based learning opportunities <br> c) school, community, or service learning experiences <br> d) culminating research project with an electronic portfolio and final STEM reflection presentation |
| Health and Physical Education | Heath and Physical Education | Heath and Physical Education |  |  |
| World Language | Chinese I, II, III <br> French I, II, III <br> German I, II, III <br> Latin I, II, III <br> Spanish I, II, III | Chinese II, III, IV <br> French II, III, IV <br> German II, III, IV <br> Latin II, III, IV <br> Spanish II, III, IV | (Elective) <br> Chinese III, IV, AP French III, IV, AP German III, IV, AP Latin III, IV, AP Spanish III, IV, AP |  |

## SUMMMER RESIDENTIAL GOVERNOR'S SCHOOL

The Virginia Governor's School Program is a state-sponsored summer residential program aimed at providing the state's most gifted students with highly challenging academic and artistic experiences. High school sophomores and juniors may apply to attend a summer residential program on a college campus for up to five weeks in visual performing arts; agriculture; humanities; mathematics, science and technology; world languages; life sciences and medicine; or mentorships in marine science or engineering.

The application process begins in October and is extremely competitive with high school sophomores and juniors from across the state vying for limited spaces in each program. Each Virginia school division is permitted a certain number of nominees based on school enrollment. For the Visual and Performing Arts program, T.C. Williams High School may nominate two students for visual arts, two for dance, two for instrumental music, two for vocal music and two for theatre. For the World Language Academies, T.C. Williams High School may nominate two per language including Japanese. T.C. may nominate up to seven students for the Academic program and up to four for the Agriculture program. If more than two students apply in an area, a selection committee for that subject area will meet to hold auditions (performing arts only), review applications and select the nominees. Once nominated, students then go through a selection process at the state level.

Teachers in specific subject areas generally recommend students for application to Visual Performing Arts and Academic Governor's Schools and Foreign Language Academies. Students may also apply by obtaining applications from the School Counseling Department.

The criteria for nomination to the Academic and Visual Performing Arts programs include:

- Participation in, or eligibility to participate in, the Talented and Gifted (TAG) program at T.C. Williams High School;
- Genuine interest in attending Governor's School, and the emotional maturity, stability and self-discipline to live away from home for an extended period;
- Recommendation by a teacher or other professional who is knowledgeable of the student's academic strength in the selected area;
- Application to only one Summer Residential Governor's program or foreign language academy per year;
- Attendance at only one Summer Residential Governor's program or foreign language academy during high school; and
- Eligibility for a free, public education in the Commonwealth of Virginia.

The criteria for nomination to the World Language academies include:

- Genuine interest in attending the Foreign Language Academies, and the emotional maturity, stability and selfdiscipline to live away from home for an extended period;
- Recommendation by a teacher or other professional who is knowledgeable of the student's academic strength in the selected area;
- Application to only one Summer Residential Governor's program or foreign language academy per year;
- Attendance at only one Summer Residential Governor's program or Foreign Language Academy during high school; and
- Eligibility for a free, public education in the Commonwealth of Virginia.

Additional criteria for students applying to the French, German and Spanish Academies include:

- Completion of at least level III of the language prior to the beginning of the academy;
- Good proficiency in using this language; and
- Willingness to use the target language for all social and academic interactions.

An additional criterion for students applying to the Latin Academy includes:

- Completion of at least level II of the language prior to the beginning of the academy.

An additional criterion for students applying to the Arabic, Chinese, Japanese and Russian Academies includes:

- Completion of at least level II of ANY language prior to the beginning of the academy, but are not required to have previously studied the academy languages. Students currently studying these languages are also encouraged to apply.

More information on the Governor's School program may be found at http://www.doe.virginia.gov/VDOE/Instruction/ Govschools/SRGS/.

## NCAA CLEARINGHOUSE FOR COLLEGE-BOUND ATHLETES

Students who plan to participate as college freshmen in Division I or II athletic programs must register and be certified by the National Collegiate Athletic Association (NCAA) Initial Eligibility Clearinghouse. Students may register through the NCAA Eligibility website, www.eligibilitycenter.org. Students participating in the free/reduced lunch program are exempt from the registration fee.

NCAA eligibility requirements may change annually; therefore, future college athletes must regularly check the NCAA
website for updates. Students should specifically review core course requirements, SAT/ACT requirements, recruiting rules and amateur status. There are specific GPA and SAT/ACT requirements for scholarships. For more information, see your counselor, the athletic department and www.ncaaclearinghouse. net.

## DIPLOMA SEALS

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

Governor's Seal - Awarded to students who complete the requirements for an Advanced Studies Diploma with an average grade of "B" or better, and successfully complete college-level coursework that will earn the student at least nine transferable college credits in Advanced Placement (AP), 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 "A" beginning with the ninthgrade class of 2006-2007 and beyond.

## Board of Education's Career \& Technical Education Seal -

 Awarded to students who:- earn a Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain a " B " or better average in those courses
OR
- 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.


## Board of Education's Advanced Mathematics \& Technology

Seal - 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 a " $B$ " average or better; and either:

- 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.


## Board of Education's Excellence in Civics Education Seal

- Awarded to students who meet each of the following four criteria:

1. Satisfy the requirement to earn a Modified Standard Diploma, a Standard Diploma or an Advanced Studies Diploma
2. Complete Virginia \& United States History and Virginia \& United States Government courses with a grade of "B" or higher
3. 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.
4. Have good attendance and no disciplinary infractions as determined by local school board policies.

Seal of Biliteracy - Graduating high school students who achieve a high level of proficiency in English and in one or more languages other than English receive the Seal of Biliteracy. To attain this seal, the Virginia Board of Education requires students to meet the following criteria:
a. The Board of Education's Seal of Biliteracy will be awarded to students who earn a Board of Education-approved diploma and
i. pass all required and End-of Course Assessments in in English reading and writing at the proficient or higher level; and
ii. be proficient at the intermediate mid-level or higher in one or more languages other than English, as demonstrated through an approved assessment.

## MIDDLE SCHOOL GRADING SCALE

| LETTER GRADE | HONORS | STANDARD | RECEIVES CREDIT | INCLUDE IN GPA |
| :---: | :---: | :---: | :---: | :---: |
| A | 4.0 | 4.0 | Y | Y |
| A- | 3.7 | 3.7 | Y | Y |
| B+ | 3.3 | 3.3 | Y | Y |
| B | 3.0 | 3.0 | Y | Y |
| B- | 2.7 | 2.7 | Y | Y |
| C+ | 2.3 | 2.3 | Y | Y |
| C | 2.0 | 2.0 | Y | Y |
| C- | 1.7 | 1.7 | Y | Y |
| D+ | 1.3 | 1.3 | Y | Y |
| D | 1.0 | 1.0 | Y | Y |
| F | 0.0 | 0.0 | N | Y |
| I |  |  | N | N |
| NR |  |  | N | N |
| P |  |  | N | N |
| WP |  |  | N | N |
| WF |  |  | N | N |


| I | Incomplete | Given when a student has not completed sufficient assignments and assessments to calculate a valid quarter <br> grade. Students will work with the teacher to resolve the Incomplete within 10 days of the end of the quarter. |
| :--- | :--- | :--- |
| NHI | Not Handed In | Given when the teacher has determined that the student has made no effort on the assignment and does not <br> plan on completing the assignment. The numerical equivalent of this grade is a 40. |
| NR | Not Required | Given when a particular assignment is not required of an individual student for such reasons as medical, IEP <br> accommodation, senior experience, etc. |
| P | Pass | Given for pass/fail classes such as PACE, SOL Prep, etc. |
| WP | Withdraw Passing | Given when a student withdraws from a class with a passing grade. |
| WF | Withdraw Failing | Given when a student withdraws from a class with a current grade of F. |

HIGH SCHOOL GRADING SCALE

| NUMERICAL GRADE | LETTER GRADE | ADVANCED PLACEMENT/ DUAL ENROLLMENT QUALITY POINT* | HONORS QUALITY POINT* | STANDARD AND NONHIGH SCHOOL CREDIT COURSES (GRADES 6-8) | RECEIVES CREDIT* | $\begin{aligned} & \text { INCLUDE IN } \\ & \text { GPA } \end{aligned}$ | WEIGHTED CREDIT* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 93-100 | A | 5.0 | 4.5 | 4.0 | Y | Y | Y |
| 90-92 | A- | 4.7 | 4.2 | 3.7 | Y | Y | Y |
| 87-89 | B+ | 4.3 | 3.8 | 3.3 | Y | Y | Y |
| 83-86 | B | 4.0 | 3.5 | 3.0 | Y | Y | Y |
| 80-82 | B- | 3.7 | 3.2 | 2.7 | Y | Y | Y |
| 77-79 | C+ | 3.3 | 2.8 | 2.3 | Y | Y | Y |
| 73-76 | C | 3.0 | 2.5 | 2.0 | Y | Y | Y |
| 70-72 | C- | 1.7 | 1.7 | 1.7 | Y | Y | N |
| 67-69 | D+ | 1.3 | 1.3 | 1.3 | Y | Y | N |
| 60-66 | D | 1.0 | 1.0 | 1.0 | Y | Y | N |
| 0-59 | F | 0.0 | 0.0 | 0.0 | N | Y | N |
|  | 1 |  |  |  | N | N | N |
|  | NHI |  |  |  | N | N | N |
|  | NR |  |  |  | N | N | N |
|  | P |  |  |  | N | N | N |
|  | WP |  |  |  | N | N | N |
|  | WF |  |  |  | N | N | N |

*High School Credit Courses Only

| I | Incomplete | If the assignment/assessment has not been submitted, the teacher may assign a grade of Incomplete (I) <br> as a placeholder so that the student can work with the teacher to complete the assignment. In addition, in <br> accordance with Policy IFA, an (I) may be assigned as a student's quarter grade. |
| :--- | :--- | :--- |
| NHI | Not Handed In | Given when the teacher has determined that the student has made no effort on the assignment and does not <br> plan on completing the assignment. The numerical equivalent of this grade is a 0. |
| NR | Not Required | Given when a particular assignment is not required of an individual student for such reasons as medical, IEP <br> accommodation, senior experience, etc. Teachers are encouraged to work with counselors, case managers and <br> administrators to determine when the conditions for a Not Required indicator are appropriate. |
| P | Pass | Given for classes graded on a Pass/Fail scale. Secondary support classes/intervention programs and Driver's <br> Education will be graded on a Pass/Fail scale. |
| WP | Withdraw Passing | Given when a student withdraws from a class with a passing grade. |
| WF | Withdraw Failing | Given when a student withdraws from a class with a current grade of F. |

## SEQUENTIAL ELECTIVES AND THE STANDARD DIPLOMA

To obtain a 22 -credit Standard Diploma, students must take two electives that are sequential (coursework that builds similar skills, as defined by the Virginia Department of Education). A course may satisfy the requirement for Fine or Practical (Career and Technical Education) Arts and still meet the requirement for sequential electives. Example: Art I followed by Art II count as sequential electives and meet the Fine or Practical Arts requirement.

## STANDARDS OF LEARNING, END-OF-COURSE TESTS AND VERIFIED CREDITS

The Virginia State Board of Education has established a set of K-12 subject-area Standards of Learning (SOL) with corresponding end-of-course SOL tests. These SOLs are incorporated into the ACPS Essential Learnings for each course. All middle and high school students enrolled in applicable high school credit-bearing courses are required to take corresponding end-of-course tests or substitute tests.

Remediation opportunities (before school, after school, during school and in summer school) will be provided in certain subject areas for students failing one or more SOL tests. Students and parents/legal guardians should check with their school counselors regarding participation in these programs.

A student who passes a course and achieves a passing score on the corresponding SOL test is awarded a Verified Credit in that course. A Verified Credit is defined as 140 clock hours of instruction, successful completion of the course requirements and the achievement of a passing score on the SOL test for that course or on a Substitute Assessment. (See "Substitute Assessments" in this section.)

The State Board has established the number of Standard Credits and Verified Credits required for the Standard Diploma and for the Advanced Studies Diploma. (See "Graduation Requirements" on pages 7-9.)

The number and subject areas of Verified Credits required for a Standard Diploma depends on the school term in which a student enters the 9th grade:
3. Students entering the ninth grade must pass six SOL tests: two English plus one Mathematics, one Science, one Social Studies/ History and one of the student's choice.
4. Students who meet specific criteria may be eligible for up to four locally awarded Verified Credits in social studies and/or
science. See your school counselor for details.
Students seeking any Advanced Studies Diploma must pass nine end-of-course tests: two English, two Mathematics, two Science, two Social Studies/History and one of the student's choice. At least one course must be an AP or college-level course.

Verified credits may be earned in each of the following corecontent areas:

## English

For all diplomas, Virginia graduation requirements specify four standard course credits with two Verified Credits earned by passing the English SOL end-of-program tests in Reading (one Verified Credit) and in Writing (one Verified Credit). These tests are administered to all 11th-grade students and address the English SOL for grades 9-11.

## Mathematics

Virginia graduation requirements for the Standard Diploma specify three course credits with one Verified Credit; for the Advanced Studies Diploma, four course credits with two Verified Credits are required.

## Science

Virginia graduation requirements for the Standard Diploma specify three laboratory science credits (from at least two different science disciplines) with one Verified Credit; for the Advanced Studies Diploma, four laboratory science credits (from at least three different science disciplines) and two Verified Credits are required.

## Social Studies

ACPS graduation requirements for the Standard Diploma specify four course credits with one Verified Credit; for the Advanced Studies Diploma, four course credits with two Verified Credits are required.

## LOCALLY AWARDED VERIFIED CREDITS

Students are able to earn up to four locally Verified Credits in Science and History/Social Science. To be eligible to earn locally awarded Verified Credits, a student must:

- Pass the high school course and not pass the related SOL test,
- Take the SOL test at least twice,
- Score within a 375-399 scale score range on any administration of the SOL test and
- Demonstrate achievement in the academic content through an appeal process.

Appeal Process: A local review panel, appointed by the Alexandria City School Board, will review information that provides evidence of the student's achievement of adequate knowledge of the SOL content. That information may include, but is not limited to, results of classroom assignments, divisionwide exams, course grades and additional academic assignments (such as papers, projects, essays or written questions).

Based on the evidence presented, the local review panel may award the Verified Credit, deny the Verified Credit, require participation in a remedial program and retesting, or make additional academic assignments prior to determining whether to award the Verified Credit.

Locally Verified Credits are available in the areas of Math and English, as part if the credit accommodations for students with disabilities. The same criteria for awarding credits currently approved for Science and History will be applied.

## SUBSTITUTE ASSESSMENTS (FOR SOL TESTS)

As of October 13, 2000, the options for end-of-course tests to earn units of Verified Credit have been expanded. Students should keep in mind that the following information pertains to "Graduation Requirements" on pages 7-9. They should carefully read these topics before choosing substitute tests.

Assessments that substitute for SOL tests and enable students to earn Verified Credit must meet the following minimum criteria:

1. The substitute test must be standardized and graded independently of the school or school division in which the test is given.
2. The substitute test must be knowledge-based.
3. The substitute test must be administered on a multi-state or international basis.
4. The substitute test must measure content that incorporates or exceeds the SOL content in the course for which Verified Credit is given.
5. The grade or cut score will be pre-determined for approved substitute tests.
The State Board of Education has approved various tests that may substitute for certain SOL tests. See details at http://www. doe.virginia.gov/VDOE/Instruction/. Click the Substitute Assessment link to see current listings and minimum acceptable scores. Please see your counselor for more information.

## VERIFIED CREDITS IN CAREER AND TECHNICAL EDUCATION (CTE)

## Student-Selected Verified Credit

A student-selected Verified Credit can be earned in certain elective courses that include a test approved by the Virginia Board of Education. According to the Standards of Accreditation, a student may utilize additional tests for earning Verified Credit in Computer Science, Technology or other areas as prescribed by the Board.

The Board of Education has provided guidelines for awarding differentiated numbers of Verified Credit for CTE Certification and licensure examinations. The following guidelines shall be retroactive to students who first entered the 9th grade in 200001. Verified credits earned in CTE may be used to satisfy studentselected Verified Credit requirements for the Standard Diploma
or the Advanced Studies Diploma. Your counselor will assist you in determining your Verified Credit status.

## Criteria for Awarding Student-Selected Verified Credit

Student-selected Verified Credit will be awarded for certification or licensure examinations that meet all of the following criteria:

- Industry certification or licensure examinations that are approved to satisfy the requirements for the Board of Education's CTE Seal and the Board of Education's Seal of Advanced Mathematics and Technology will satisfy requirements for student-selected Verified Credits
-The teacher and/or the CTE program must be certified by the issuing organization relative to the industry certification or license
- A standard credit may not be verified more than once


## COURSES THAT REQUIRE SOL TESTS

| COURSE | PAGE <br> NUMBER |
| :--- | :--- |
| English 11: Survey of American Literature |  |
| Honors English 11: Survey of American Literature |  |
| AP English Language and Composition |  |
| Dual Enrollment College Composition 11 |  |
| Dual Enrollment College Composition 12 |  |
| Algebra I |  |
| Geometry |  |
| Algebra II |  |
| Biology I |  |
| Honors Biology I |  |
| Chemistry I |  |
| Honors Chemistry I |  |
| Earth Science I |  |
| Honors Earth Science I |  |
| World History and Geography Part I |  |
| Honors World History and Geography Part I |  |
| World History and Geography Part II |  |
| Honors World History and Geography Part II |  |
| AP World History |  |
| Honors Virginia and U.S. History |  |
| AP Virginia and U.S. History |  |
| Dual Enrollment College U.S. History |  |
| Honors U.S. History |  |
|  |  |

## Earning Student-Selected Verified Credit

One student-selected Verified Credit will be awarded for passing each certification or licensure examination that meets all of the above criteria, and the student earns one standard unit of credit only in the CTE concentration or specialization.

Two student-selected Verified Credits will be awarded for passing each certification or licensure examination that meets all of the above criteria; and:

- The student meets program completion criteria listed in this course catalog; and
- The student earns at least two standard units of credit in the CTE program completion option.


## SPECIALIZED INSTRUCTION

The Office of Specialized Instruction encourages a collaborative relationship with parents/legal guardians, teachers, administrators and other staff members to support the academic, emotional and physical success of students with disabilities through a team concept focusing on the belief that all children can learn and achieve at high levels including Honors and college level (AP and DE) classes. Specialized Instruction services provide support to students with varying disabilities. In order to meet the needs of all students with disabilities, a continuum of Specialized Instruction services is provided to students as required by the Individuals with Disabilities Education Act (IDEA 2004). These services are primarily delivered in the general education classroom. Based on the individual needs of the student, specially designed instruction may be necessary through the delivery of services in a resource room or a special education classroom for part or all of the instructional day.

A transition plan plays a significant role as we prepare our students for post-secondary success. Beginning at age 14, a transition plan is developed as part of the student's Individualized Education Program (IEP). The focus areas of the plan include independent living, post-secondary education, postsecondary training and employment. This plan, in conjunction with the course of study, leads students to positive outcomes for life after high school.

The course of study for students with disabilities can take a variety of paths dependent upon student goals and interests. Students with disabilities have an opportunity to receive Specialized Instruction services at the high school up to age 22. Most students receiving Specialized Instruction services obtain standard or advanced studies high school diplomas. Other diploma options available to students with disabilities include a modified standard diploma (valid until 2016) or an applied studies diploma. All decisions pertaining to a student's diploma status are taken under consideration by the IEP team, which includes the student, parents/legal guardians and the school team.

## CREDIT ACCOMIMODATIONS FOR STUDENTS WITH DISABILITIES

A student who has an IEP or 504 plan with standardsbased content goals is eligible for the consideration of credit accommodation. Informed written consent of the parent/legal guardian and the student to choose credit accommodations after a review of the student's academic record and full disclosure of the student's options is required.

IEPs and 504 plans must specify which credit accommodations are allowed and under what circumstances. A student must have a disability that precludes him or her from meeting gradelevel expectations on grade-level content. The student must need significant instructional supports, and based on multiple measure of past performance, might not be able to achieve the required units of credits within the standard time frame.

Credit accommodations provide alternatives for students with disabilities in earning the standard and Verified Credits required to graduate with a State Diploma. Credit accommodations for students with disabilities or 504 plans may include alternative courses, locally awarded Verified Credit in Math and English, additional test options if approved by the local board of education, adjusted cut scores for earning Verified Credits and allowances of work, based on learning experiences through CTE courses.

## APPLYING FOR COLLEGE BOARD SPECIAL ACCOMMODATIONS

A student with a documented disability may be eligible for accommodations on College Board tests (SAT, AP or PSAT/ NMSQT). Most students seeking accommodations on College Board tests work with their school officials to ensure that the disability documentation required by the College Board eligibility guidelines is complete and substantiates the need for the accommodations being requested. Every student requesting accommodations must submit a Student Eligibility Form. It requests detailed information relating to the student's name, address, disability, past testing, and accommodations received at school.

Although students and parents/legal guardians can submit a request for accommodations without the involvement of the school, in most cases students will work with their school to submit a request for accommodations. The student/parent/legal guardian completes Section I of the Eligibility Form. The school test coordinator should ensure that the parent/legal guardian (or student, if 18 or older) signs it before the school forwards it to the College Board. In most cases, the school test coordinator completes Sections II and III of the form and forwards the form to the College Board.

## EXCEL ACADEMY

The Excel Academy provides support for students with disabilities by offering a consistent opportunity to engage in preteaching of content that would be taught in content area classes,
as well as time for direct instruction on executive functioning skills and re-teaching of material in content classes. Students benefit from daily interaction with their case manager in a Resource for Academic Purposes (RAP) class. Students share the same content teachers so that pre-teaching targeted to students' daily classes can occur. Content and Specialized Instruction teachers meet regularly as part of a professional learning community to plan lessons based on student data. The goal is that students participating in the Excel Academy will achieve at high levels and actively contribute to the community. Students will receive the skills necessary to be confident learners prepared for rigorous academics.

# MIDDLE SCHOOL <br> Grades 6-8 

## 2016-17

PROGRAM OF SHUDIES<br>a planning guide for students and parents

# Middle School Course Descriptions 

The availability of elective classes is dependent upon adequate enrollment to fund the teaching positions. Students who have requested an under-enrolled class will need to make another elective course selection. Counselors will notify and assist students with this process.

## Advancement Via Individual Determination (AVID)

AVID is a 6th- through 12th-grade elective to prepare students in the academic middle for four-year college eligibility. It has a proven track record in bringing out the best in students, and in closing the achievement gap.

## Advancement Via Individual <br> Determination (AVID)

## Grades 6-8

The three main components of this course are academic instruction, tutorial support and motivational activities. This course provides students with strategies to be successful in high school and to be well prepared for post-secondary opportunities. It emphasizes organizational skills, how to produce exemplary work, intellectual risktaking, critical thinking skills, community involvement and the steps necessary to increase college access options and college success. AVID students are supported academically as they pursue Advanced Placement (AP) and other rigorous courses.

## Business and Information Technology

## Make It Your Business

Grade 6 one semester Students design, establish and operate a small group or class business, producing a service or product that meets an identified school or community need. Emphasis is placed on the introduction and application of business terminology, basic entrepreneurship concepts and fundamental business principles. Basic academic skills (Mathematics, Science, English and History/Social Science) are integrated into this course.

## Computer Solutions

## Grade 7 one semester

Students are introduced to the world of business using the computer as a problemsolving tool to create a variety of projects. Students apply word processing, database, spreadsheet and telecommunication skills to solve problems. They also analyze problems involving integrity, courtesy and confidentiality related to information and communications systems, Internet safety and computer maintenance issues.

## Digital Input Technologies

## Grade 8 one semester

 Digital Input Technologies enhances keyboarding skills and introduces new and emerging input devices (such as speech- and handwriting-recognition software, headset/ microphones, iPads, personal digital assistants [PDA], scanners, digital cameras, digital video cameras, keyboards, and mice) to prepare students for using tools that are becoming standard in the workplace and in everyday life in the 21 st century.
## Family and Consumer Sciences

## Family and Consumer Sciences I

## Grade 6

one semester
Students gain a foundation for managing individual, family, career and community roles and responsibilities. Students focus on areas of individual growth such as personal goal achievement, responsibilities within the family and accountability for personal safety and health. They also explore and practice financial management, clothing maintenance, food preparation, positive and caring relationships with others and self-assessment as related to career exploration. Students apply problem-solving and leadership skills as they progress through the course. Mathematics, Science, English, Social Sciences, Fine Arts and Technology are integrated throughout the course.

## Family and Consumer Sciences II

Grade 7 one semester Students use higher order thinking skills to help them develop responsible and positive attitudes toward their societal roles. Through lab experiences and simulated activities with peers, students focus on their individual development as well as their relationships and roles within the family unit. Students use computers, technology, Math, Science and Language Arts to prepare for college and personal responsibilities. Emphasis is also placed on resource management, nutrition and wellness, goal setting and career exploration.

## Family and Consumer Sciences III

Grade 8
one semester
Students focus on their individual roles in the community as well as how the community influences individual development. Students develop change-management and conflict-resolution skills and examine how global concerns affect communities. In addition, students enhance their knowledge of nutrition and wellness practices and learn how to solve household problems by maximizing consumer and family resources. Students also increase their leadership abilities and explore how volunteerism aids communities. Mathematics, Science, Language, Social Science and Technology are integrated throughout the course.

## Fine Arts

## VISUAL ARTS

## Art 6

Grade 6
one semester
During the rotation period for 6th grade, students express ideas and create images in various media, using the principles of design. Students practice art techniques and develop art skills. Students also analyze, interpret and evaluate well-known works of art. The course also covers art his-
tory, including major art movements and the styles, materials, methods and subject matter of individual artists.

## Art 7

Grade 7 one semester Students study two-dimensional, threedimensional and graphic arts/multimedia visual arts. Students experiment with art techniques that emphasize creative expression and application of problem-solving skills to communicate ideas and emotions. Throughout all activities, instruction stresses art elements and principles of design. Students learn about the cultural context of art history and complete a project that integrates other fields of knowledge. Using appropriate art vocabulary and their own life experiences, students evaluate and analyze art, as well as explore art careers.

## Art 8A

Grade 8
one semester
This course is intended for students with a serious interest in art. Students develop design sensitivity and sophistication through a variety of art media. Creativity is encouraged with studies in two-dimensional and three-dimensional art, multimedia technology and design.

## Art 8

Grade 8
full year
Specific two-dimensional, three- dimensional and graphic arts/multimedia courses are offered in the 8th grade. In addition to the media and techniques taught in each area, students learn how to critique art and study various artists throughout history. Aesthetics are emphasized as students develop their artistic awareness and new way of looking at ordinary things in life. Fullyear art students engage in large-scale projects to create an aesthetic environment in the school. They learn about art careers and maintain both portfolios and sketchbooks.

## DRAMA

## Speech and Drama I

Grade 6 one semester
Speech and Drama I is designed to provide students with an introduction to the study of theatrical production, theatre history and dramatic literature. Through research, planning, scripting, production and performance experiences, students acquire skills
in communicating ideas, critical thinking and collaborative problem solving. This course prepares students for further theatrical study and nurtures an appreciation for the many forms of theatre.

## Speech and Drama II

Grade 7 one semester
Students are taught basic theatre skills. The course includes units on history of theatre and the following units in acting skills: learning how to use one's voice, body, and imagination; the structure and analysis of plays; and the stage environment. Students learn how theatre reflects life, and they develop the self-discipline necessary for the study of theatre. Completion of Speech and Drama I in grade 6 is not a prerequisite for this class.

## Speech and Drama III

## Grade 8

one semester Students continue exploring theatre arts by examining theatre production through units on directing, playwriting and learning technical elements of theatre. Students also explore theatre in the community and as a venue for careers. A speech component is used to enhance oral-communication skills. Students learn how to construct and deliver various effective presentations. Completion of Speech and Drama I in grade 6 and Speech and Drama II in grade 7 are not prerequisites for this class.

## MUSIC

## Beginning Band

## Grades 6 or 7

full year Students learn the techniques of playing instruments, working to develop ensemble and solo performances. Tonal quality and technical facility are developed. Students discuss and constructively comment on their own performances and on the performances of the band.

## Concert Band

Grades 6-8
full year
Prerequisite: Previous music instruction or audition
Students with some playing experience are eligible for this course. Students develop individual and group performance skills, using various styles of band literature. Emphasis is placed on proper breathing, tone quality, intonation, articulation, develop-
ment of range and music-reading skills. Successful completion of this course should prepare the student for placement in Symphonic Band.

## Symphonic Band

Grades 6-8 full year
Prerequisite: Concert Band or audition
Students study a variety of styles of music literature, emphasizing full band, solo and ensemble performance. Students continue to develop good tone, intonation, articulation and style. The Symphonic Band participates in school concerts and local, district and regional festivals. Students are introduced to the fundamentals of marching to prepare them for the high school marching band program. Some marching activities are provided. In addition to the regular class period, Symphonic Band students usually practice one day per week, either before or after school. Symphonic Band students may choose to participate in the Jazz Band, which also practices one day per week, either before or after school.

## Marching Band - 8th Period

## Grade 8 <br> one semester

## Prerequisite*: One year of Concert Band

Students build on music fundamentals learned in previous years. Students develop and refine spatial awareness, leadership and team-building skills, discipline and mental and physical strength in order to produce a musically and visually refined show. Students enrolled are musical ambassadors to the community, state and region. Professional musicians work with students in small-group lessons during band camp. Marching Band is an extension of the Concert Band class. Exceptions include student health condition, family crisis, or participation in a Virginia High School League (VHSL) fall sport. Marching Band meets 8th period. Season duration: mid-August through early November. Activities include football games, 3 competitions, 1-2 parades. This course may be taken for a grade or pass/fail. ${ }^{*}$ Interested 8th-grade students may enroll in Marching Band at the recommendation of the middle school music director.

## Beginning Orchestra

Grade 6
full year
Students develop skills in bowing and fingering and demonstrate a controlled tonal quality. They learn to perform an assigned
part in ensemble playing. In addition, students learn to observe musical terms and apply them to a variety of music literature, developing an awareness of musical styles.

## Concert Orchestra

Grades 6-8
full year
Prerequisite: Previous music experience or audition
For students with some playing experience, this course continues to develop skills in bowing, fingering and reading music with good intonation and rhythm. Success in this course should lead to placement in Symphonic Orchestra.

## Symphonic Orchestra

## Grades 6-8

full year
Prerequisite: Concert Orchestra or audition
This course provides students who have successfully completed one year or more of string study experience in performing music of various styles and periods as they continue to develop skills in fingering and bowing. Musical interpretation and ensemble playing are stressed, and opportunities for public performance are provided. Students continue to develop good tone, intonation, articulation and style of playing by studying solo, ensemble and orchestra literature. They will be able to sight read Grade II and III literature and identify music symbols, key signatures and tempo. Orchestra members participate in school concerts and local and regional festivals. In addition to the regular class period, Symphonic Orchestra students usually practice one day per week, either before or after school.

## Beginning Chorus

Grade 6
full year
Chorus is offered to students who want to sing for enjoyment while continuing to develop their musical knowledge and vocal skills. Emphasis is placed on reading octavo music and independent-part singing. Chorus members are required to perform in the winter and spring concerts and in local and district festivals, as determined by the music director.

## Intermediate Chorus

Grades 7 or 8
full year
Prerequisite: Previous music experience or audition
Intermediate Chorus is offered to qualified students who want to develop their vocal skills and perform. Emphasis is on the development of proper vocal techniques, rhythmic and melodic music-reading skills and ensemble singing. Members are required to perform in the winter and spring concerts and may be given the opportunity to participate in local and district festivals as determined by the director. Music performed covers a wide range of historical periods and musical styles.

## Advanced Chorus

## Grades 7 or $8 \quad$ full year

## Prerequisite: Intermediate Chorus or audition

Advanced Chorus is offered to students who exhibit advanced skill levels in music literacy and vocal technique. The content of the course is designed to develop the students' technical, musical and performance skills. The music studied by this choir is challenging and requires a desire for excellence on the part of its members. Students are required to perform in the winter and spring concerts, local and district choral festivals and other performance opportunities. Music performed covers a wide range of historical periods and musical styles. In addition to the regular class period, Advanced Chorus students often practice one day per week, either before or after school.

## Health, Physical Education and Family Life

The purpose of the Health, Physical Education and Family Life program is for students to develop the knowledge, skills and confidence to be physically active and healthy over their lifetime.

Physical Education provides standardsbased instruction on motor/movement knowledge and skills, physical activity and fitness knowledge and skills, personal and social responsibility, and valuing physical activity for its many benefits.

ACPS offers students a rich program that targets individual fitness. Students use pedometers to measure the level of physical activity and heart rate monitors to learn about exercise intensity. Students are offered a variety of opportunities to practice and enjoy physical activity both within and outside of school.

Health Education provides standardsbased instruction that focuses on the relationships among physical health, mentalemotional health and family-social health. Students become their own advocates for health promotion by learning and practicing skills that lead to healthy behaviors and reduce risky behaviors.

## Health, Physical Education and Family Life 6

Grade 6 full year
Students develop the skills, knowledge, attitudes and behaviors that lead to lifetime wellness and fitness. Activities include a variety of aerobic, movement, rhythm/dance and game experiences in which students learn the fundamental rules and practice the lead-up skills that encourage successful participation in sports. Students work cooperatively, exhibit positive sportsmanlike conduct and promote a healthy lifestyle. Health and Family Life are included in the year-long course to present students with information on nutrition, safety and accident prevention, disease prevention and control, alcohol and drug abuse prevention and maintenance of personal health and fitness. The Family Life content focuses on family relationships, sexual safety, assertive behavior, emotional and physical aspects of puberty, human reproduction, and human growth and development.

## Health, Physical Education and Family Life 7

Grade 7 full year Physical Education activities continue with skill progression through instruction and participation in rhythmic activities, dance and individual, dual and team sports. Concepts of personal fitness and wellness are developed through experiences in physical activities as well as in the health classroom. Health Education content gives students information on the interaction of body systems in maintaining good health, conflictresolution skills and the life skills training to be better prepared to deal with the risk
factors associated with drugs and alcohol. The Family Life unit covers human reproduction, communicable diseases, HIV/ AIDS, abstinence, contraception, communication and personal goal setting.

## Health, Physical Education and Family Life 8

Grade 8
full year
Students develop personal fitness plans that stress involvement in physical activities that assist with physical, mental and social wellbeing. Skills are reviewed and enhanced through participation in more complex physical activities and sports to promote a healthy lifestyle. Health Education covers information on life-skills training, personal health and physical development, and prevention of sexually transmitted diseases, including HIV/AIDS. The Family Life unit covers abstinence, contraception, peer pressure, sexual abuse and harassment and changing relationships, and helps students to match behavior to personal values.

## Adaptive Physical Education

## Grades 6-8

full year
Students who are unable to participate in regular Physical Education classes may be offered this course of developmental activities, games, sports and rhythms. Active participation is encouraged in many recreational sports. Students learn rules and techniques for sports adapted to the participants' specific conditions. Students enrolled in this course may join with the regular Physical Education and/or Health Education classes when appropriate. The goal is to help students adapt their abilities to the demands of daily living. Middle school students have the opportunity to use traverse climbing walls, pedometers, heart rate monitors, inline skates, mountain bikes and outdoor adventure activities.

## English Language Arts

A standard program of study and an advanced (Honors) program of study are offered in English Language Arts. Students develop and refine:

- skills in listening, speaking, reading and writing
- vocabularies for reading, writing, listening and speaking
-the ability to analyze words using word context, origin and structure
- an understanding of relationships between words and ideas
- research and reference skills
-the ability to write clearly and effectively
-the ability to use writing to demonstrate learning, and for personal expression
-the ability to adjust written and oral communication to fit a variety of purposes and audiences

Students identified to receive Talented and Gifted (TAG) services in English Language Arts are scheduled into Honors sections of Language Arts 6, 7 or 8.

## Language Arts 6

## Grade 6

full year As students read and respond to classic and contemporary literature, they continue to develop reading, writing, listening and speaking skills. Students expand their understanding of and appreciation for literature's diverse origins, purposes and forms through textbooks and supplemental reading. Students also use reading and writing as learning tools and for demonstrating understanding while developing writing, grammar, spelling and vocabulary skills.

## Language Arts 7

Grade 7
full year
Literature study in the seventh grade includes classical and contemporary works, sampling a variety of cultures. Students explore literary themes within all genres: poetry, autobiography, biography, fiction, non-fiction, drama, the short story and the novel. As often as possible, literature study explores and capitalizes on natural and thematic connections to other areas of study (such as Social Studies, Science, Fine Arts). Students' composition skills, vocabulary development, grammar usage and spelling proficiency are developed through both direct instruction and writing activities and responses to literature. By preparing and delivering class presentations, students develop oral-language skills.

## Language Arts 8

## Grade 8

full year
In the eighth grade, students continue the study of a rich, culturally diverse literary
heritage that is expanding through the contributions of contemporary writers. Students use various forms of writing, class discussions, dramatizations and other projects to explore and demonstrate their comprehension of reading. Where parallels occur, interdisciplinary studies align literature with other content areas. Efficient writing strategies, accurate use of written language and effective oral-presentation skills are developed through active participation in individual, small-group and whole-class projects.

## MIDDLE SCHOOL LANGUAGE ARTS HONORS PROGRAM

The Honors Language Arts curriculum includes grade-level Standards of Learning while providing an advanced curriculum that addresses the particular learning characteristics and competence level of the individual student. Students have the opportunity to work at an accelerated pace; be exposed to higher-level thinking; participate in activities that promote and develop creativity, originality and problem-solving strategies; and increase the depth and sophistication of the content. Students develop analytic and interpretive skills in literature and nonfiction written above grade level. They also develop creative, persuasive, and expository writing skills. Research and the exploration of supplemental materials will encourage students to become more self-directed and independent in their courses of study. Students focus on vocabulary development, including Greek and Latin roots, and extend their reading and writing abilities through the use of advanced models and materials.

## Language Arts Honors 6

Grade 6
full year
The curriculum revolves around the theme of individual change. Students study the concept of change by reading autobiographies of writers and by looking at change in selected lives. To help students gain insight into the development of talent, the lessons encourage them to explore their own identities as talented learners through discussions and reflective writing. Additional selections and activities continue the emphasis on individual change as expressed
by authors and students in their reading and writing.

## Language Arts Honors 7

Grade 7
full year
The curriculum revolves around the theme of societal change. Through the study of literature, students learn about change that happens in the world in general, and America in particular, and how the lives of ordinary people change even as the events of war unfold. Additional selections and activities continue the emphasis on societal change, and students are encouraged to research an issue of significance.

## Language Arts Honors 8

Grade 8
full year
The curriculum revolves around the theme of universal change. Students examine why the ideas about utopia undergo change, about the search through the ages for utopia and the struggles to grasp and maintain it on personal and societal levels. Additional selections and activities continue the emphasis on universal change, and students are encouraged to explore utopia through personal dreams and goals.

## Literacy Support

Grades 6-8
full year
Students may register for this course or be recommended for enrollment. This course is for the student whose reading and writing performance indicates a need to strengthen basic reading and writing skills and strategies. Through direct instruction, multimedia applications and exposure to a variety of reading materials, including fiction and nonfiction, the student becomes more adept at meeting the reading and writing requirements of middle school. Classroom instruction supports and improves the reader's ability to decode words, comprehend text, expand reading and writing vocabularies and apply reading-to-learn strategies to other subject areas. Writing instruction and writing opportunities improve the student's ability to organize ideas and express them clearly. To ensure that the needs of individual students are met, several approaches to Literacy Support are available. These approaches may include Multimedia Literacy, Soar to Success or the Autoskills program.

## English for Academic Purposes (EAP)

 Grades 6-8 full yearEAP Algebra I (1 high school elective credit) EAP English Language Arts EAP Mathematics
EAP (English for Academic Purposes) is a language development course that promotes the development of Academic English. The class is aligned with and supports the core English Language Arts course. This course is designed specifically to support English Language Learners (ELL) students in accessing the standard curriculum and developing academic language.

## Reading for English Language Learners

 Grades 6-8 full year This course promotes accelerated literacy and language acquisition for targeted ELL students at the secondary level. The course is designed for adolescent emergent readers who are in the beginning stages of English language acquisition and need to develop foundational literacy skills such as phonological awareness, concepts of print, vocabulary development, reading comprehension and interpretation, writing, speaking and listening. The course supports students' move along a learning continuum from initial basic language acquisition toward increasing levels of guided and independent transfer in listening, speaking, reading and writing.
## Mathematics

The purpose of the middle school Mathematics program is to prepare students for successful study of Algebra and Geometry. Algebraic activities move from informal explorations of patterns, graphs, rules and solutions of equations to a more formalized understanding of algebraic processes. Geometric activities have a special emphasis on spatial-reasoning skills and learning geometric relationships by visualizing, comparing, constructing, sketching, measuring, transforming, and classifying geometric figures.

For sample Secondary Mathematics course sequences, see page 22 .

## Math 6

Grade 6
full year
The Math 6 course is a balanced and comprehensive exploration of the 6th grade Vir-
ginia Mathematics Standards of Learning core content and process strands that begins to set the foundations for algebraic thinking. This course includes: number and number sense with a focus on the relationships among fractions, decimals and percents; computation and estimation with a focus on operations with rational numbers; measurement with a focus on problem solving with area, perimeter, volume and surface area; geometry with a focus on properties and relationships; probability and statistics with a focus on practical application of statistics; and patterns, functions and algebra with a focus on variables, equations and properties.

## Math Honors 6

Grade 6
full year
The Math Honors 6 course is a rigorous exploration of the 6th grade and some of the 7ths grade Virginia Mathematics Standards of Learning core content and process strands in mathematics. This course is primarily distinguished from the Math 6 comprehensive grade level course by significant acceleration and complexity of content. Students will learn authentic application and have broader opportunities for problem solving with the blended Math 6th and 7th course content. Focus is distributed across all content in number and number sense; computation and estimation; measurement, geometry, probability and statistics; and patterns, functions and algebra.

## Math 7

Grade 7 full year The Math 7 course is a balanced and comprehensive exploration of the 7th grade Virginia Mathematics Standards of Learning core content and process strands in mathematics that further prepares students to study algebra. The course includes: number and number sense with a focus on proportional reasoning; computation and estimation with a focus on integer operations and proportional reasoning; measurement with a focus on proportional reasoning; geometry with a focus on relationships between figures; probability and statistics with a focus on their applications; and patterns, functions and algebra with a focus on linear equations.

## Math Honors 7

Grades 6 or 7
full year
The Math Honors 7 course is a rigorous exploration of the 7th and 8th grade Virginia Mathematics Standards of Learning core content and process strands in mathematics. It is primarily distinguished from the Math 7 comprehensive grade level course by acceleration and integration of two years' worth of content. Study includes authentic application and deeper problem solving of the blended Math 7 and 8 course content with the intent to prepare the learner for the more abstract concepts of algebra and geometry. In addition to all of the areas of focus in the Math 7 course of study, this course includes: number and number sense with a focus on the relationships in the real number system; computation and estimation with practical application of operations with real numbers; measurement with a focus on problem solving; geometry with a focus on problem solving with 2-D and 3-D figures; probability and statistics with a focus on statistical analysis of graphs and problem situations; and patterns, functions and algebra with a focus on linear relationships.

## Math 8

Grade 8 full year
This course is for students working at grade level. While continuing to develop students' number sense and proportional reasoning, this course will focus on the foundations of Algebra, including: (1) investigating functions and their behavior; (2) graphing equations in two variables; (3) solving multistep linear equations using rational numbers; and (4) making inferences and predictions about real-life data. Students take the eighth-grade SOL test. The goal for this course is to have a maximum number of students prepared for success in Algebra 1 in grade 9.

## Mathematics Support

## Grades 6-8 <br> full year

Through the use of manipulatives, models, sketches and diagrams, students develop an understanding of mathematical concepts and processes that help them retain and recall information. In so doing, students have the opportunity to experience mathematics in a rich and meaningful way while creating a conceptual basis for future study in algebra and geometry. Students may reg-
ister for this course or be recommended for enrollment.

## HIGH SCHOOL MATHEMATICS COURSES (one high school credit earned per course)

Students in Algebra I and Geometry at the middle school level earn high school credit for these subjects. A grade earned by a student in these courses is used to calculate his or her high school grade point average (GPA). For any high school credit-bearing course taken in middle school, parents/ legal guardians may request, by August 1 of that year, that grades be omitted from the student's transcript and the student not earn high school credit or Verified Credit for the course.

Students are expected to complete three or more mathematics credit courses before graduation from high school. However, the readiness of students to think abstractly varies. Algebra I is a rigorous high school mathematics course. Abstract reasoning skills and good study skills are essential for success in this subject. All students are not ready to begin a formal study of Algebra I at the same time.

## Algebra I

Grades 7 or $8 \quad$ full year

## 1 high school credit

Prerequisite: Math 6 and 7 or Math Honors 7 successfully completed in Grade 6
This full-year Algebra I course is designed to engage students in the applications of Math Honors 7 and processes applied to real-world problem-solving situations. The content of this course includes solutions of equations and inequalities, operations with polynomials, factoring, and the study of linear and quadratic equations. Problemsolving situations are emphasized.

## Geometry

## Grade 8 <br> 1 high school credit <br> Prerequisite: Algebra I

The content focuses on integrated plane, solid and coordinate geometry, along with the properties of geometric figures, trigonometric relationships and reasoning to justify conclusions. Methods of justification include paragraph proofs, two-column
proofs, indirect proofs, coordinate proofs, algebraic methods and verbal arguments.

## Science

The middle school Science program is a progressively differentiated, disciplinebased curriculum. A standard program of study and an advanced (Honors) program of study are offered. These programs provide curriculum direction that assists students in achieving the understanding, skills and appreciation vital to self-fulfillment in an increasingly scientific and technological society and to continuous, lifelong learning. The focus at grade 6 is on the environment, Earth and space, and basic concepts relative to matter. At grade 7, students are engaged in studies related to Life Science, with an emphasis on change, cycles, patterns and relationships in the living world. In grade 8, the nature and structure of matter and the characteristics of energy are studied.

As an alternative to the standard program of studies for middle school science, advanced or Honors options for each grade level are available. These courses follow the prescribed ACPS curriculum and the Virginia Science SOL. They are recommended for highly motivated students. Students use experimental design to conduct small-group and individual research projects related to real-world problems. Students develop an understanding of the role of science in their lives. Each student will conduct a science project for the ACPS Science Fair and will participate in journal writing and portfolio development to conduct reflective thinking.

Students enrolled in an Honors Science course in grade 6,7 or 8 are likely to be successful if they demonstrate the competence to read and understand articles and texts written at or above grade level and/or have achieved strong scores (450 or higher) on Science SOL tests and above average course grades in science. They should be prepared to use experimental design to conduct small-group and individual research projects related to real-world problems. Each student conducts an individual science project for the ACPS Science Fair and participates in journal writing and portfolio development to increase reflective thinking skills.

Students identified to receive Talented and Gifted (TAG) services in Science are scheduled into Honors sections of General Science, Life Science or Physical Science. For sample Secondary Science course sequences, see page 23 .

## General Science 6 or Honors General Science 6

Grade 6 full year
General Science focuses on the role of the sun's energy on the Earth's systems, water in the environment, air and atmosphere and basic chemistry concepts. Students explore the concept of change through study of transformations of energy and matter. Instruction also focuses on a more detailed understanding of the solar system and space exploration; natural resource management, its relation to public policy and its cost/benefit trade-offs; and scientific methodology, emphasizing precision in stating hypotheses and defining dependent and independent variables. Students learn to test the validity of predictions and conclusions. Instruction focuses on inquiry through observing, experimenting and modeling. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are encouraged to develop research projects for entry into science fair competition.

## Life Science 7 or Honors Life Science 7

## Grade 7

full year
Life Science emphasizes a more complex understanding of change, cycles, patterns and relationships in the living world. Students build on basic principles related to these concepts by exploring the cellular organization and the classification of organisms; the dynamic relationships among organisms, populations, communities and ecosystems; and change as a result of the transmission of genetic information from generation to generation. Instruction focuses on inquiry through observing, experimenting and modeling. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are encouraged to develop research projects for entry into science fair competition.

## Physical Science 8 or Honors Physical Science 8

Grade 8 full year
Physical Science continues to build on skills of systematic investigation, with
a clear focus on variables and repeated trials that were studied in grades 6 and 7. Students also validate conclusions using evidence and data. Instruction stresses an in-depth understanding of the nature and structure of matter and the characteristics of energy, with considerable emphasis on the technological application of physical science principles. Major areas covered include periodicity (the Periodic Table); physical and chemical changes; nuclear reactions; temperature and heat; sound, light, electricity and magnetism; and work, force and motion. Instruction focuses on inquiry through observing, experimenting and modeling. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are encouraged to develop research projects for entry into science fair competition.

## Social Studies

A standard program of study and an Honors program of study are offered in Social Studies. Students identified to receive Talented and Gifted (TAG) services in Social Studies are scheduled into Honors sections of U.S. History I, U.S. History II and Civics and Economics.

## U.S. History I

## Grade 6

full year
This course focuses on United States history from the pre-Columbian era to 1865. Students explore the historical development of people, places and patterns of life, and learn, within the context of United States history, fundamental concepts in civics, economics and geography. This course continues in grade 7.

## U.S. History II

## Grade 7

full year
Students continue the study of United States history begun in grade 6 , examining major trends and events from 1865 to the present. Emphasis is placed on 20th-century events, including the Great Depression, World War II, the Cold War, the Civil Rights Movement and the Vietnam Conflict.

## Civics and Economics

Grade 8 full year
This course focuses on the structure and functions of government institutions at the national, state and local levels; the
role of the citizen in the American political and economic systems; and the basic principles, structure and operation of the American economy.

## MIDDLE SCHOOL SOCIAL STUDIES HONORS PROGRAM

Honors courses are offered in Social Studies at each level in middle school. The Honors Social Studies curriculum follows the prescribed Virginia Social Studies SOL while providing instruction in advanced content at an accelerated pace. Students engage in higher-level thinking and develop advanced reasoning and problem-solving strategies to enable them to analyze their own thinking and the thinking of others. Through the use of primary source documents, simulations of real-world events and above grade-level nonfiction materials (excerpts and books), students analyze historical, geographical and economic events to become informed citizens, motivated to participate in civic and community affairs. Students enrolled in Honors courses write extensively on a variety of topics in several formats, including responses to Document Based Questions (DBQs), a skill that is essential to their success in Advanced Placement or Honors courses at the high school level.

## U.S. History I Honors

Grade 6
full year
The Honors Social Studies curriculum for grade 6 revolves around the theme of liberty. This theme traces the evolution of the United States from a collection of colonies through its inception as a nation and how this concept almost destroyed the nation itself. Students develop skills of historical and geographical analysis to study the early history of the United States and understand the ideas and events that both strengthened and weakened the union. Students explore the fundamental concepts of civics, geography and economics within the context of the history of the United States by reading nonfiction material written at advanced levels. Using primary source documents, they analyze the people and events that shaped the United States. Students enrolled in Honors courses are introduced to the DBQ .

## U.S. History II Honors

Grade 7
full year
The Honors Social Studies curriculum for grade 7 revolves around the theme of expansion: How the nation evolved from a small nation, weakened by the Civil War, to a world power in the span of a century. Students continue to develop their skills in historical and geographical analysis as they study United States history into the 20th century. Building on the skills developed in U.S. History I, students analyze and evaluate the events of the late 19th and 20th centuries to reach a full understanding of how the development of the United States shaped the political and economic events of the world. Students use a variety of primary source documents in their written and oral analyses. Students respond to more advanced DBQs each quarter.

## Civics and Economics Honors

Grade 8
full year
The Honors Social Studies curriculum for grade 8 revolves around the concept of systems. Through the exploration of this concept, students analyze social, political, legal and economic systems according to their structures and functions. Throughout the year, students respond to increasingly complex DBQs. Students engage in thoughtful analysis and evaluation of news articles from several sources and draw connections between the topics in the news and the course content.

## Technology Education

## Introduction to Technology

Grade 6
one semester
Students study the resources of all technology, including tools, energy, materials, people, time, information and systems. They investigate the impacts of technology by identifying emerging technologies and predicting future technological changes. The problem-solving process is utilized, and students produce small products using measuring, drawing and basic hand tool operations skills. They also work in teams using computers to explore rocketry, space, robotics and other forms of technology.

## Inventions and Innovations

## Grade 7

one semester
Students explore inventions and innovations and explain how they relate to the de-
velopment of new products, processes and systems. After studying these developments, they explore contemporary technological problems facing them, their community or the world and apply systematic procedures to invent new products or innovations as solutions, applying the design process. Students construct a model or a prototype and evaluate the model through assessment or the prototype through testing.

## Technological Systems

## Grade 8

one semester
Through a global view of technology, students combine resources and techniques to create systems, attaining comprehension of how technological systems work. Students explore, design, analyze and evaluate technological systems. By simulating systems and assessing their impacts, students gain insight into how to approach the problems and opportunities of a technological world. They also explore technology-oriented careers. Students design specific technological systems (information, communication, construction, transportation, energy and power or biotechnology) to solve a problem. Projects include photographic portfolios, video productions, magnetic levitation vehicles, telephones and construction models.

## World Languages

All courses are one full year. Students are strongly encouraged to begin or continue their study of World Languages during the middle school years. Colleges and universities look favorably upon applicants who complete three, four or five years of study of one or more world languages.

Students enjoy a variety of opportunities to study a World Language (Chinese, French, German, Latin, Spanish):

- Rising sixth-grade students may begin studying a world language in grade 6 and earn two high school credits by successfully completing three years of study of the same language. A student may also choose to study another subject in sixth grade and begin World Language study in grade 7 , earning one high school credit after successfully completing two years of study of this course.
- Rising seventh-grade students may earn one World Language high school credit
after successfully completing two years of study of this course.
- Rising eighth-grade students who are already enrolled in the study of a World Language should continue the second year of study to earn one World Language high school credit. Rising eighthgrade students who have not yet begun their study of World Languages may earn one high school credit through successful completion of Spanish I during the eighth-grade year.

For any high school credit-bearing course taken in middle school, parents/legal guardians may request that grades be omitted from the student's transcript and the student not earn high school credit or Verified Credit for the course.

For students transferring into ACPS from other school divisions, appropriate beginning language placement will be provided pending sufficient enrollment.

## HIGH SCHOOL WORLD LANGUAGE COURSES (one high school credit earned per course)

## Chinese IA

Grades 6 or 7 full year 1 high school credit for successful completion of both IA and IB
In this course, students develop their ability to speak, read, write and comprehend Mandarin Chinese through the application of functional tasks. Emphasis is placed on the development of communication skills in the target language. By the end of the course, students should be able to hold a brief conversation about their families, friends, dates, times, the weather, school life and transportation. Using simplified Chinese characters (in use in mainland China), students learn to read and write 150 characters.

## Chinese IB

Grades 7 or 8 full year 1 high school credit for successful completion of both IA and IB Prerequisite: Chinese IA
Students continue to develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in
all four language skills: listening, speaking, reading and writing. The development of students' ability to communicate orally and in writing remains a focus of the course. Students continue to explore and study themes related to personal and family life, school life and community life. By the end of the course, students have an expanded knowledge of 300 Chinese characters, with the ability to read and write them in simple sentence structures.

## Chinese II

## Grade 8

full year
1 high school credit

## Prerequisite: Chinese IA and IB or equivalent

Students continue to develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills: listening, speaking, reading and writing, with emphasis on the ability to communicate orally and in writing. Students begin to show a greater level of accuracy when using basic language structures, as they are exposed to more complex features of the language. Students continue to focus on communicating about their immediate world and daily life activities. Emphasis continues to be placed on the use of the target language in the classroom as well as on the use of authentic materials to learn about the culture. Please note: some familiar themes and topics from level I may reoccur in level II. However, the spiraling nature of embedded theme-based instruction requires students to demonstrate their communicative skills and acquired linguistic knowledge at a new developmental level.

## French IA

Grades 6 or $7 \quad$ full year
1 high school credit for successful completion of both IA and IB
Students learn basic vocabulary and language structures for day-to-day situations. This course stresses communication and culture, making use of a variety of ancillary materials and appropriate technology applications to present the language in an authentic manner. Students attain language proficiency through acquired cultural knowledge and the development and application of the four language skills: listening, reading, speaking and writing.

## French IB

Grades 7 or $8 \quad$ full year
1 high school credit for successful completion of both IA and IB Prerequisite: French IA
Students continue the study of French language and culture, learning essential vocabulary and structures for day-to-day situations. Vocabulary and grammar structures are presented in real-life contexts and are developed around specific communicative functions. Topics focusing on adolescents' lives, needs and experiences, such as family, after-school activities and shopping, are integrated into instruction, as well as products, practices and perspectives drawn from the target culture. During the language-learning process, students gain insights into how their own language is structured, as well as an increased understanding of the relationship between culture and language. Students also develop an appreciation for the many recreational, educational and occupational uses of French beyond the classroom. This course stresses communication and culture, making use of a variety of ancillary materials and appropriate technology applications to present the language in an authentic manner. Students attain language proficiency through acquired cultural knowledge and the development and use of the four language skills: listening, reading, speaking and writing.

## French II

## Grade 8 <br> 1 high school credit <br> Prerequisite: French IA and IB or <br> equivalent

Students continue the study of French language and culture, with emphasis on the development of communicative competence. French II centers on further development of students' reading, writing, listening and speaking skills in the target language. Students begin to show a greater level of accuracy when using basic language structures. They focus on communicating information about their immediate world and daily activities as they encounter more complex features of the language. Vocabulary, grammar and language structures are presented in real-life contexts and are developed around specific communicative functions. Emphasis continues to be placed on the use of French within and beyond the classroom, with the integration of authentic
materials into instruction to learn about the cultures of the French-speaking world.

## German IA

Grades 6 or $7 \quad$ full year
1 high school credit for successful completion of both IA and IB
Students learn basic vocabulary and language structures for day-to-day situations. This course stresses communication and culture, making use of a variety of ancillary materials and appropriate technology applications to present the language in an authentic manner. Students attain language proficiency through acquired cultural knowledge and the development and use of the four language skills: listening, reading, speaking and writing.

## German IB

Grades 7 or $8 \quad$ full year 1 high school credit for successful completion of both IA and IB Prerequisite: German IA
Level I German focuses on the development of communicative competence and on the understanding of German-speaking cultures. Students develop a solid and comprehensive foundation in the target language in the domains of listening, speaking, reading and writing. Vocabulary and grammar structures are presented in real-life contexts and are developed around specific communicative functions. Topics focusing on adolescents' lives, needs and experiences, such as family, after-school activities and shopping, are integrated into instruction, as well as products, practices and perspectives drawn from the target culture. During the language-learning process, students gain insights into how their own language is structured, as well as an increased understanding of the relationship between culture and language. Students also develop an appreciation for the many recreational, educational and occupational uses of German beyond the classroom.

## German II

Grade 8
full year
1 high school credit
Prerequisite: German IA and IB or equivalent
In German II, students continue to develop their proficiency in the three strands of communicative competence: interacting with other speakers of German, understanding oral and written messages
in German and making oral and written presentations in German. Students begin to demonstrate a greater level of accuracy when using basic language structures and are exposed to more complex features of the German language. Students continue to focus communication on their immediate world and daily life activities. Emphasis continues to be placed on the use of German in the classroom, as well as on the use of authentic materials to learn about the culture.

## Latin IA

Grades 6 or $7 \quad$ full year
1 high school credit for successful completion of both IA and IB
Students learn basic vocabulary and language structures for understanding life in Ancient Rome. This course stresses communication and culture, making use of a variety of ancillary materials and appropriate technology applications to present the language in an authentic manner. Students attain language proficiency predominantly through the development of reading and writing skills and acquired cultural knowledge.

## Latin IB

Grades 7 or 8 full year
1 high school credit for successful
completion of both IA and IB

## Prerequisite: Latin IA

Students continue to focus on the development of communicative competence and their understanding of Roman culture. Students develop a solid and comprehensive foundation in the target language through the domains of listening, speaking, reading and writing. Vocabulary and grammar structures are presented in historical and real-life contexts and are developed around specific communicative functions. Topics focusing on history, culture, literature and daily life are integrated into instruction, as well as products, practices and perspectives drawn from the target culture. During the language-learning process, students gain insights into how their own language is structured, as well as an increased understanding of the relationship between culture and language. Students also develop an appreciation for the many recreational, educational and occupational uses of Latin beyond the classroom.

## Latin II

Grade 8
full year

## 1 high school credit

## Prerequisite: Latin IA and IB or equivalent

Students enrolled in Latin continue to develop their ability to comprehend written Latin texts with more complex grammar and syntax. The focus on comprehending Latin differs from the primary goal of the modern languages. Students read and comprehend adapted and/or authentic Latin from original sources. They learn about the perspectives, practices and products of the ancient Romans in areas such as architecture, art and history. Students compare these cultural and historical elements to those in their own culture, and find examples of the influence of Greco-Roman civilization in their own world. Students also compare effects of the geography of the ancient Roman world and that of the United States on aspects of culture such as food, dwellings, clothing and the arts.

## Spanish IA

Grades 6 or $7 \quad$ full year 1 high school credit for successful completion of both IA and IB
Students begin the study of Spanish acquiring basic vocabulary and language structures for day-to-day situations. This course stresses communication and culture, making use of a variety of ancillary materials and appropriate technology applications to present the language in an authentic manner. Students attain language proficiency through acquired cultural knowledge and the development of the four language skills: listening, reading, speaking and writing.

## Spanish IB

## Grades 7 or 8

full year
1 high school credit for successful completion of both IA and IB

## Prerequisite: Spanish IA

Students continue the study of Spanish, learning basic vocabulary and language structures for day-to-day situations. This course places emphasis on the development of communicative skills and the expansion of cultural knowledge, making use of a variety of ancillary materials and appropriate technology applications to present the language in an authentic manner. Students attain language proficiency through the development and application of the four
language skills: listening, reading, speaking and writing.

## Spanish I

Grade $8 \quad$ full year 1 high school credit
Students begin the study of Spanish, learning basic vocabulary and language structures for day-to-day situations. This course places emphasis on the development of communicative skills and the expansion of cultural knowledge, making use of a variety of ancillary materials and appropriate technology applications to present the language in an authentic manner. Students attain language proficiency through the development and application of the four language skills: listening, reading, speaking and writing.

## Spanish II

Grade 8
full year 1 high school credit
Prerequisite: Spanish I, IA/IB, or equivalent Students continue the study of Spanish language and culture, with emphasis on the development of communicative competence. Spanish II centers on further development of students' reading, writing, listening and speaking skills in the target language. Students begin to show a greater level of accuracy when using basic language structures. They focus on communicating information about their immediate world and daily activities as they encounter more complex features of the language. Vocabulary, grammar and language structures are presented in real-life contexts and are developed around specific communicative functions. Emphasis continues to be placed on the use of Spanish within and beyond the classroom, with the integration of authentic materials into instruction to learn about the cultures of the Spanish-speaking world.

## Spanish for Heritage Speakers IA

Grades 6 or $7 \quad$ full year
1 high school credit for successful completion of both IA and IB
Prerequisites: Oral proficiency in spoken
Spanish and limited proficiency in reading and writing Spanish. Proficiency to be determined by a placement test.
This course is designed for students who are orally proficient in Spanish, but have limited reading and writing ability. Emphasis is placed on familiarizing students with the structural and written aspects of the lan-
guage to improve their reading and writing skills. Students will begin to develop written compositions and become familiar with various literary genres. Students will also increase their awareness and appreciation of differences and similarities among the Hispanic culture. Upon successful completion of this course, students may progress to Spanish for Heritage Speakers II. Spanish is used exclusively in the classroom.

## Spanish for Heritage Speakers IB

Grades 7 or 8 full year
1 high school credit for successful
completion of both IA and IB
Prerequisites: Successful completion of Spanish for Heritage Speakers IA or oral proficiency in spoken Spanish and basic proficiency in reading and writing Spanish. Proficiency to be determined by a placement test.
This course is a continuation of Spanish for Heritage Speakers IA and is designed for students who are orally proficient in Spanish, but have limited reading and writing ability. Emphasis is placed on familiarizing students with the structural and written aspects of the language to improve their reading and writing skills. Students will begin to develop written compositions and become familiar with various literary genres. Students will also increase their awareness and appreciation of differences and similarities among the Hispanic culture. Upon successful completion of this course, students may progress to Spanish for Heritage Speakers II. Spanish is used exclusively in the classroom.

## Spanish for Heritage Speakers II

Grade 8
full year
1 high school credit
Prerequisites: Spanish for Heritage Speakers IB or oral proficiency in spoken
Spanish and basic proficiency in reading
and writing Spanish. Proficiency to be determined by a placement test.
In this course, students will continue to expand their skills in listening, reading, writing and speaking Spanish. Emphasis is placed on increased complexity of grammatical structures, literary genres, and multi-paragraph basic compositions. Students are expected to understand the main ideas and some detail of authentic Spanish texts as they begin to analyze and synthesize written information. In written assignments, students will learn to summarize
information, express their opinions, and provide some details. Students will also continue to study Hispanic culture by learning about various Hispanic personalities and historic events in Spanish speaking countries. Upon successful completion of this course, students may progress to Spanish for Heritage Speakers III. Spanish is used exclusively in the classroom.

## DUAL LANGUAGE SPANISH

The Dual Language program at the Francis Hammond Middle School and George Washington Middle School campuses continues the Spanish language instruction offered to students matriculating through the John Adams Elementary School and Mount Vernon Community School Dual Language programs. The program is designed to further enhance students' Spanish language proficiency and knowledge of Spanish and Hispanic cultures. The program is open to all students who demonstrate appropriate Spanish language proficiency in the areas of listening, speaking, reading and writing. To receive three credits for this course, students must successfully complete the sixth-, seventh- and eighth-grade portions of the course.

## Dual Language Spanish A

## Grade 6

full year

## 1 high school credit

In this course, students make the transition from partial Spanish immersion, taught in the K-5 setting, to a traditional language course taught entirely in Spanish. Thematic units emphasize the development of skills in the target language, with a focus on speaking, reading, writing and listening skills, as well as the cultivation of students' knowledge of Hispanic culture. A variety of materials and technology are used to aid students in their acquisition and study of the language.

## Dual Language Spanish B

## Grade 7 <br> full year

## 1 high school credit

## Prerequisite: Dual Language Spanish A

Students continue their study of the Spanish language as they advance and perfect their comprehension, speaking, reading and writing skills in the target language. Vocabulary, grammar and language structures are presented in real-life contexts and are
developed around specific communicative functions. Emphasis continues to be placed on the use of Spanish within and beyond the classroom, with the integration of authentic materials into instruction to aid students in learning more about the cultures of the Spanish-speaking world.

## Dual Language Spanish C

Grade 8

## full year

1 high school credit
Prerequisite: Dual Language Spanish A and B
Modeled after Spanish III, Dual Language Spanish C aids students in refining their knowledge and use of the Spanish language. Students are exposed to thematic units emphasizing written and oral expression, reading comprehension and culture. The course is taught entirely in Spanish, and all materials are presented in the target language. Course content is enriched through the use of technology and authentic ancillary materials.

## Academic Support Courses

## Resource for Academic Purposes (RAP)

Grades 6-8
Prerequisite: The student has an Individualized Education Program (IEP). Students in the Resource for Academic Purposes (RAP) class participate in lessons that pre-teach key vocabulary, skills and concepts to front load information prior to engaging with the content in the general education content classes. Based on progress in core content classes, students also have re-teaching opportunities to address student needs. Additionally, students learn and implement effective learning strategies.

# HIGH SCHOOL Grades 9-12 

## 2016-17

PROGRAM OF SHUDIES<br>a planning guide for students and parents

# High School Course Descriptions 

The availability of elective classes is dependent upon adequate enrollment to fund the teaching position. Students who have requested an under-enrolled class will need to make another elective course selection. Counselors will notify and assist students and families with this process.

## Academy-Specific Classes

## STEM Explorations I

Grade 9
1 elective credit
Co-requisite: STEM Academy participation
This experiential course immerses students in the investigation of real-world engineering and technology problems and decisions affecting their local, state, national and global communities. The course encourages students to use the habits of mind employed by actual scientists, engineers, technology specialists and mathematicians. Students work in teams to identify a problem relevant to life in Alexandria and consistent with identified course themes. Each problem-solution, investigation and decision-making scenario makes use of a design cycle protocol and is conducted using a combination of laboratory and field experiences. Students' physical work space allows them to access support to gain hands-on experiences with a range of technologies and innovative processes related to designing and building projects. Partners with local STEM businesses and organizations bring industry experts into the classroom for collaboration in problem solving.

## STEM Explorations II

Grade $10 \quad 0.5$ elective credit Co-requisite: STEM Academy participation This second-year experiential course continues to focus on immersing students in the investigation of real-world applications and problems related to science, technology, engineering and mathematics and their impact on local, state, national and global initiatives. This course encourages students to explore though hands-on learning and investigation, both individually and in collaboration with peer group and external partners. The STEM Explorations II course also serves as a vehicle through which students may focus on their personal projects and practicum experiences.

## STEM Explorations III

## Grade $11 \quad 0.5$ elective credit

 Co-requisite: STEM Academy participation The third year of STEM Explorations will serve as the unifying class for STEM Academy students as they continue their focus and investigation of real-world problems and applications related to science, technology, engineering, and mathematics; and the impact of these on local, state, national, and global initiatives. The STEM Explorations III course will continue the STEM Explorations sequence in supporting the inquiry-driven, project-based learning experiences of the STEM Academy, as students navigate through the STEM technical sequences they choose at the end of their sophomore year. Additionally, STEM Explorations III will serve as a foundation and launching point for STEM students as they prepare for their engineering or technical course completions and certifications, as well as prepare students for their senior year STEM internship opportunities.
## International Academy Network Internship

Grade $11 \quad 1$ elective credit Prerequisite: 11th-grade students in the International Academy Network
The International Academy Network Internship combines academic study of college and workplace skills with a 16-week experiential learning apprenticeship. During Quarter 1, students conduct research, write résumés and engage in interviews to secure an internship placement for the second and third quarters. During their internships, students develop important workplace competencies while exploring particular career interests. Post-internship study during Quarter 4 focuses on reflection of learning, college applications and essay writing. Students participating in the internship program have the opportunity to apply language skills and academic knowledge to real-world situations and purposes that prepare them for life beyond high
school, including post-secondary institutions and professional work environments.

## Advancement Via Individual Determination (AVID)

AVID is a sixth- through 12th-grade system to prepare students in the academic middle for four-year college eligibility. It has a proven track record in bringing out the best in students, and in closing the achievement gap. The AVID program includes an elective course that earns one credit.

## Advancement Via Individual Determination (AVID)

## Grades 9-12 <br> 1 elective credit

The three main components of this course are academic instruction, tutorial support and motivational activities. This course provides students with strategies to be successful in high school and to be well prepared for post secondary opportunities. It emphasizes organizational skills, how to produce exemplary work, intellectual risktaking, critical thinking skills, community involvement and the steps necessary to increase college access options and college success. AVID students are supported academically as they pursue Advanced Placement (AP) and other rigorous courses.

## Career and Technical Education (CTE)

All CTE courses apply towards elective credit.

## BUSINESS AND INFORMATION TECHNOLOGY

Student leadership skills may be enhanced by participation in school-based or virtual enterprises, job shadowing, internships,
co-operative education and/or the Future Business Leaders of America (FBLA). The co-operative education method is available in most full-year business courses. A participating student combines classroom instruction and a minimum of 396 hours supervised on-the-job training in an approved position with continuing supervision throughout the school year. A student may receive an additional credit for their co-operative education experience.

## Accounting I

Grades 10-12 $\quad 1$ or 2 credits
Students explore the accounting procedures and practices required for partnerships and corporations. Units of instruction include accounts receivable, accounts payable, payroll, taxes and financial statements. Federal tax laws are emphasized for payroll preparation. An automated integrated accounting system is used to reinforce accounting procedures.

## Advanced Accounting II

Grades 11-12
1 or 2 credits Prerequisite: Accounting I
Students gain in-depth knowledge of the accounting procedures and practices required for corporations and financial institutions. Students develop spreadsheets to analyze and solve financial reports. An integrated accounting software program is used to reinforce accounting fundamentals. Units include inventory maintenance, longterm and short-term investments, stock investments, distribution of dividends, cost and management accounting and tax preparation. Projects include maintaining financial records for a corporation and presenting a proposal to establish a subsidiary accounting firm.

## Business Law

Grades 10-12 0.5 credit
Students examine the foundations of the American legal system and learn the rights and responsibilities of citizens. Students gain practical knowledge and life skills by exploring economic and social concepts related to laws governing business and individuals. Focus areas include contracts, consumer protection, criminal law, tort law, international law, family/domestic law, employment law and careers in the legal profession. It is suggested that students enroll in Business Management to prepare for business college programs.

## Business Management

Grades 10-12
0.5 credit

Students explore the principles and concepts required for business ownership, planning, operations, marketing, finance and human relations. Units of instruction also include forms of business ownership, management and financial responsibilities. Problem solving and ethical decisionmaking are integral parts of the course. It is suggested that students enroll in Business Law to prepare for business college programs.

## Computer Information Systems I

## Grades 9-11

1 credit
This course is part of the State Microsoft IT Academy, which includes classroom and online learning, hands-on labs and access to hundreds of courses, books and cutting-edge resources. These resources help prepare students for Microsoft Office Specialist (MOS) certification that can help students earn college credits and enhance their résumés with credentials recognized by employers around the world. Students apply problem-solving skills to real-life situations through word processing, spreadsheets, databases, multimedia presentations and integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, telecommunications and emerging technologies. Students take the MOS certification exam.

## Advanced Computer Information Systems II

Grades 10-12
1 or 2 credits

## Prerequisite: Computer Information

## Systems I

This course is part of the State Microsoft IT Academy, which includes classroom and online learning, hands-on labs and access to hundreds of courses, books and cutting-edge resources. These resources help prepare students for Microsoft Office Specialist (MOS) certification that can help students earn college credits and enhance their résumés with credentials recognized by employers around the world. Students apply problem-solving skills to real-life situations through advanced integrated software applications, including printed, electronic and Web publications. Students work individually and in groups to explore advanced computer maintenance activities, website development, programming,
networking, emerging technology and employability skills. Projects include spreadsheets, graphics and text layout, database, word processing and charting. Students have the opportunity to take the MOS certification exam.

## Economics and Personal Finance

Grades 10-12 1 credit
This course meets the Economics and Personal Finance graduation requirement, the virtual course requirement and the Industry Certification requirement.
Students explore the fundamentals of microeconomics and macroeconomics to practice decision-making skills for business and personal financial management. Units include apartment contracts, mortgages, car financing, banking, life and health care insurance, real estate, retirement plans, stocks, bonds, treasury notes, annuities, mutual funds, pensions, personal loans, credit cards, educational loans, consumer rights and awareness, and federal, state and city tax assessments. As a culminating project, students prepare financial plans that include saving, investing, borrowing, risk management and retirement and estate planning. Students take the w!se Financial Literacy Certification (FLC) Exam and the CTECS Workplace Readiness Skills Assessment.

## Graphic Design and Multimedia I

Grades 10-12 1 credit
Students develop proficiency in designing and creating desktop-published projects, multimedia presentations/projects and websites, using industry-standard application software. Students apply principles of layout and design in completing projects. Students create portfolios that include résumés and a variety of desktop-published, multimedia and website projects produced in the course.

## Advanced Graphic Design and

Multimedia II
Grades 11-12 1 credit
Prerequisite: Graphic Design and
Multimedia I
Students develop advanced skills for creating desktop-published, interactive multimedia and website projects. Students work with sophisticated hardware and software, applying skills to real-world projects. Classroom instruction is combined with on-the-job training in an approved position,
supervised continuously throughout the school year, to broaden the student's educational experiences.

## Student Help Desk Co-op

Grades 10-12
1 credit
Co-requisite: Computer Information
Systems I, Advanced Computer
Information Systems II, Computer
Networking Hardware Operations I and II, Computer and Cyber-Security Solutions, or another related CTE course
Now offering a cooperative education experience through Student Helpdesk. The role includes trouble-shooting and serving at the student-run Student Helpdesk, trouble-shooting technical issues for peers and teachers, planning and creating student training resources, and planning for the annual Digital Learning Day and Coding Week.

## ACADEMY OF FINANCE (AOF)

The AOF Program is sponsored by the National Academy Foundation (NAF). Students must be accepted into the AOF Program before enrolling in the following courses. An NAF Certificate in Financial Services is awarded upon successful completion of courses.

## AOF Introduction to Financial Services

## Grade 10

1 credit
Prerequisite: Acceptance into the AOF
Students learn about the career options available in the financial services industry and develop professional, transferable skills required for successful integration into the 21st-century workplace. Students create electronic portfolios, develop career plans, explore career clusters, identify short- and long-term goals, develop interpersonal skills, apply the decisionmaking process and demonstrate time management, technology, teamwork and communication skills. Students learn about both the nature of the careers found in a particular sector and the scope of such careers as banking, management, finance, hospitality, insurance and real estate. Students work in the Commonwealth One Federal Credit Union.

## AOF Economics and Personal Finance

Grade $11 \quad 1$ credit
Prerequisite: AOF Introduction to Financial

## Services

## This course meets the Economics and

 Personal Finance graduation requirement, the virtual course requirement and the Industry Certification requirement.Students develop money management skills for savings, budgeting, credit and debt management and investing, in addition to planning for future expenses including education, transportation, housing, taxes, insurance and retirement. Students analyze insurance as risk management, conduct tax functions and examine the financial implications of an inheritance. Students research investment instruments to include stocks, bonds, mutual funds, real estate, insurance and tax-sheltering devices. For a culminating project, students prepare financial plans that include saving, investing, borrowing, risk management and retirement and estate planning. Students take the w!se Financial Literacy Certification (FLC) Exam and the CTECS Workplace Readiness Skills Assessment.

## Dual Enrollment AOF Introduction to Business and International Finance

## Grade 12

1 credit
Prerequisite: AOF Economics and Personal Finance
This course introduces students to the roles of the major functional areas of business and interrelationships among them. Students also learn how international finance issues impact their lives and the world. Organizational theories and techniques are examined. Economic, cultural, political and technological factors affecting business organizations are evaluated. As a culminating project, students develop detailed feasibility and business plans.

## FAMILY AND CONSUMER SCIENCES

Student leadership skills may be enhanced by participation in school-based or virtual enterprises, job shadowing, internships, co-operative education and/or the Family, Career and Community Leaders of America (FCCLA). The co-operative education method is available for all fullyear courses. A full-year student combines classroom instruction and a minimum of 396 hours of supervised on-the-job training
in an approved position with continuing supervision throughout the school year. The student may receive an additional credit for his or her co-operative education experience.

## Introduction to Early Childhood Education and Services I

Grades 10-12 1 credit This course is for students who are interested in the Early Childhood Education profession and/or want to further their education while pursuing a related career in the field. The course introduces students to the child development theories and principles, current early childhood education issues, the role of the teacher working in special education programs, assessment/ observation skills, and developmentally appropriate curricula and lessons. The program currently has a partnership with the Campagna Center of Alexandria, Virginia which is located on campus and services families in the community. Students also have the opportunity to work in Alexandria City Public Schools daycare classrooms. Students focus on career development and careers related to early childhood professionals through hands-on exploration, and special projects groups. Through combination of classroom instruction with an opportunity for service learning with our on-site preschool laboratory, students work with young children from the ages of six weeks to five-years old during the second quarter of this year long course. Students are required to have the updated tuberculosis (TB) shot, complete the CPR and First Aid training provided on-site. Fees are associated with this course.

## Advanced Early Childhood Education and Services II

Grades 10-12 2-3 credits
Prerequisite: Introduction to Early
Childhood Education and Services I, Teachers for Tomorrow
The primary focus of this class is to complete steps to apply for the Child Development Associate (CDA) credential through hands-on, on site early childhood education experience(s). In depth concentration is on education and training and entrepreneurial opportunities, critical thinking and practical problem solving within the field of early childhood education. Students combine classroom instruction and supervised
on-the-job training in an approved position with continuing supervision throughout the school year. Students also have the opportunity to work in Alexandria City Public Schools daycare classrooms. Student experiences include but are not limited to: designing lesson plans that are developmentally appropriate and meet the needs and interest of all students; child monitoring and supervision; record keeping; and referral procedures. Students also participate in weekly lectures, peer observations, and presentations from guest speakers. The course prepares students for the transition from school to work and is recommended for those with a genuine interest in working with young children. A positive attitude, a good work ethic (in school and on the job), and good attendance are required. Students are required to have their updated tuberculosis (TB) shot, complete CPR and First Aid training on site, background check for working at their training stations. Students are required to take the National Occupational Competency Testing Institute (NOCTI) industry certification. Students may receive three college credits with the successful passing rate of this certification test. Fees are associated with this course.

## Introduction to Culinary Arts I

## Grade 11

1 credit
This course prepares students for entrylevel employment in the hospitality/food service industry. Students are taught basic professional cooking skills, baking, foodservice sanitation, kitchen safety, catering, table service and menu planning. Students also acquire business skills for successful employment and develop and experience personal growth through goal setting and career development activities. Fees are associated with this course.

## Culinary Arts II

## Grade 12

2 credits
Prerequisite: Introduction to Culinary Arts I Students receive instruction in classical cooking methods (broiling, sautéing, deep fat frying, steaming, poaching, roasting) and preparation of special dishes, ethnic cookery, U.S. regional cookery, soups, sauces and salads. Students also receive instruction in basic baking of yeast dough products, pastry and simple cake decorating. Students take the ServSafe Food Safety and NOCTI Cook II industry cer-
tifications upon completion of this course. Fees are associated with this course.

## Teachers for Tomorrow

Grades 11-12
1 credit
Virginia Teachers for Tomorrow (VTfT) is a state program designed to foster student interest, understanding, and appreciation of the teaching profession and allows secondary students to explore careers in education. Students build a foundation for teaching; learn the history, structure and governance of teaching; apply professional teaching techniques in the VTfT classroom and field experience; and reflect on their teaching experiences. Additional educational leadership opportunities are offered through the student organization, Educators Rising. Students will be required to participate in an off-site supervised internship. This course can be a completer sequence with Introduction to Early Childhood Education.

## HEALTH AND MEDICAL SCIENCES

Student leadership skills may be enhanced by participation in school-based or virtual enterprises, job shadowing, internships, clinical experiences and/or Health Occupations Student Association (HOSA).

## Introduction to Health and Medical Sciences

Grades 10-12 1 credit This course introduces the student to a variety of health care careers and develops basic skills required in all health and medical sciences. Topics include physical therapy, respiratory therapy, dental technician, pharmacist, pharmacy technician, medical assistant, EKG technician, physician and more. Students learn about human needs, theory, anatomy and physiology, medical terminology, how to measure vital signs, job skills for success and how to conduct a career search. Field trips include visits to local hospitals and viewing open heart surgery at Fairfax Heart Center. Students may also earn First Aid and CPR certification.

## Certified Nurse Aide

## Grades 11-12

2 credits This program is available to students who want to assist registered and practical nurses in patient care. Students learn
basic skills, such as infection control, bedmaking and measuring and recording vital signs: temperature, pulse, respiration and blood pressure. CPR Certification is offered in this course. Students learn how to deliver safe nursing care and apply communication skills to residents in long-term care facilities. Students who successfully complete the theory and clinical requirements of this program are eligible to take the Virginia State certification exam for Nurse Aides, NNAAP. Students who successfully pass NNAAP are able to work as certified nurse aides. Students must have a current PPD test before attending clinical section in the winter. Fees are associated with this course.

## Dual Enrollment Surgical Technologist <br> I - Surgical Tech Scholars Program

 Grade 123 credits Prerequisite: Introduction to Health and Medical Sciences or Nurse AideThis comprehensive elective program offers one school year (nine months) of pre-clinical instruction followed by nine months of clinical instruction after high school graduation. Completion of the 18month program prepares the graduates to sit for the Tech in Surgery-Certified (TS-C) exam and possible employment as surgical technicians. Students acquire knowledge and assisting-level skills to function in association with licensed nurses and surgeons/physicians, providing the best possible care of the surgical patient. Instruction emphasizes human anatomy, medical terminology, cleanliness, asepsis, safety and efficiency in the operating room. Fees may be associated with this course.

## JUNIOR RESERVE OFFICERS' TRAINING CORPS (JROTC)

## Junior Reserve Officers' Training Corps (Army)

Grades 9-12 1-4 credits
The JROTC program prepares high school students in grades 9 through 12 for responsible leadership roles while making them aware of their rights, responsibilities and privileges as American citizens. The Leadership Education and Training (LET) program consists of four years of instruction with a maximum of 108 core hours and 72 optional hours per year. One credit is awarded for each academic year. Core
courses include Techniques of Communications, Leadership Lab, Map Reading, History, Citizenship, Drug and Alcohol Abuse Prevention and Cadet Challenge (physical training). Fees are associated with this course.

## MARKETING

Student leadership skills may be enhanced by participation in school-based or virtual enterprises, job shadowing, internships, co-operative education and/or DECA. The co-operative education method is available for all full-year business courses. A participating student combines classroom instruction and a minimum of 396 supervised on-the-job training hours in an approved position with continuing supervision throughout the school year. The student may receive an additional credit for his or her co-operative education experience.

## Marketing I

Grades 11-12
1 or 2 credits
Students examine activities in marketing and business important for success in marketing employment and post-secondary education. Students learn how products are developed, branded and sold to businesses and consumers. Students analyze industry trends and gain hands-on experience in the marketing of goods, services and ideas. Topics include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues and the impact of technology on the marketplace.

## Advanced Marketing II

Grades 11-12 $\quad 1$ or 2 credits
Prerequisite: Any Marketing course
This course provides more in-depth instruction into the field of marketing. Students participate in supervisory and management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing and emerging technologies. Students prepare for advancement in marketing careers and post-secondary education. Students take the National Retail Federation Customer Service or Sales Exam.

## Education for Employment

## Grade 12

1 credit
This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self- awareness, self-advocacy, customer-service, and life skills. Students will study the Virginia Workplace Readiness Skill in depth and will take the WRS exam.

## Fashion Marketing I

Grades 10-12 $\quad 1$ or 2 credits Fashion Marketing is a specialized course for students with a career interest in apparel and accessories marketing and merchandising. Students learn skills unique to employment in the apparel and accessories field in such areas as personal selling, sales promotion, purchasing, physical distribution, market planning and product/service technology.

## Advanced Fashion Marketing II

## Grades 11-12 <br> 1 or 2 credits

## Prerequisite: Fashion Marketing I

Students develop advanced skills unique to fashion marketing and advanced general marketing skills applied to the apparel and accessories industry. Professional selling, sales promotion, buying, merchandising, marketing research, product/ service technology and supervision are emphasized. Students prepare for advancement in marketing careers and post-secondary education.

## Hospitality \& Tourism Marketing

## Grades 10-12 <br> 1 credit

 This course examines the components of the hospitality and tourism industry, including attractions, lodging, transportation, and food and beverage. Other topics include the history, political, social, and cultural impacts hospitality and tourism have had on local, state, and global environments. Students will develop competencies in the areas of communication, customer service, marketing, industry technology, economics, and management functions, and will be provided with opportunities for hands-on, real-world applications. Regional workforce investment boards will provide speaker to discuss local opportunities in these areas.
## Sports, Entertainment and Recreation

 Marketing
## Grades 10-11 <br> 1 or 2 credits

This is a specialized course for students with a career interest in the sports or entertainment industries. In addition to learning basic marketing concepts, the course provides students with the knowledge and skills unique to employment in the fields of sports and entertainment marketing in such areas as sponsorship, endorsements, event planning and promotion. Students develop and implement a school-related marketing activity. Students also obtain information regarding career opportunities in the sports and entertainment industries.

## Dual Enrollment Entrepreneurship: Business Ownership and Management

## Grades 11-12

1 or 2 credits
This course is offered in partnership with the National Foundation for Teaching Entrepreneurship (NFTE). Entrepreneurship is a specialized course for students with an interest in one day owning and managing their own businesses. The course focuses on the development of a business plan, which requires determination of the type of business organization, legal and accounting considerations, location selection, financing and marketing. Students work with professional mentors to develop their business plans and have the opportunity to present their business plans in local, regional and national competitions.

## Dual Enrollment Advanced Entrepreneurship

Grade 12 l-2 credit Prerequisite: Dual Enrollment Entrepreneurship: Business Ownership and Management
This course is designed for students who wish to concentrate on advanced strategies for entrepreneurship. The focus of the course is on development of a business plan and small business management. Students will establish, market and maintain a business. Students will be responsible for maintaining, marketing and growing the T.C. Williams High School Store.

## TECHNOLOGY EDUCATION

Student leadership skills may be enhanced by participation in school-based or virtual enterprises, job shadowing, internships,
and/or student organizations such as Skills USA or the Technology Student Association (TSA).

## Aerospace Technology

Grades 10-12
1 credit
This course offers students an introduction to flight, space travel and supporting technologies. Students use a hands-on approach to study concepts including the history of aviation, aerodynamics, aircraft components, flight conditions, airport and flight operations, space, rocketry, and the aviation and space industries.

## Biotechnology and Forensics <br> Foundations

Grades 11-12 1 credit
Prerequisites: Algebra I, Biology I and Chemistry I
This course focuses on various techniques that are used to modify living organisms, or parts of organisms, to improve plants and animals, and the development of microorganisms for specific purposes. Student activities range from bioprocessing and DNA analysis, to medicine, biomechanical systems and the environment. Students gain insight and understanding about biotechnology career fields.

## Technical Drawing and Design I

## Grades 10-12

1 credit
In this foundation course, students learn the basic language of technical design using AutoCAD, while they design, sketch and make technical drawings, illustrations, models or prototypes of real design problems. Students develop spatial ability as they apply mathematical concepts to visual representations. This course is especially recommended for future engineering and architecture students.

## Advanced Architectural Drawing and Design II

Grades 11-12 1 credit
Prerequisite: Technical Drawing and Design I
Students explore architectural design foundations and increase understanding of working drawings, construction techniques and codes regulating building design. They learn the design process and apply the elements and principles of design to architectural projects. Through producing models and illustrations of all aspects of a building, students create architectural design solu-
tions using Computer Aided Drafting and Design (CADD). The course sequence focuses on duties and tasks performed by professionals in architecture, as well as preemployment and employment skills.

## Advanced Engineering Drawing and Design II

## Grades 11-12

1 credit
Prerequisite: Technical Drawing and Design I
Students explore the engineering design process and use a graphic language for product design, technical illustration, assembly, patent and structural drawings. Students use computers, calculators, and descriptive geometry and adhere to established standards to solve design problems. Throughout the course, students hold seminars, meet engineers and tour technical design firms to learn about the benefits of the course on their future studies and careers.

## Electronic Systems I

## Grades 10-12

1 credit
Designed for students who wish to pursue careers in computer technology, electronic engineering or a related field, this course introduces electronic terms and components. Using algebraic formulas, students solve electronic circuit problems. They compare AC voltages to DC voltages and component reaction in each, use common electronic test equipment, and learn soldering techniques, circuit requirements and problemsolving skills. Students develop skills by constructing sample circuits, as well as by building several projects from the circuit board to completion. This course may be used as an introductory course to computer engineering, computer science or computer technology maintenance and repair.

## Electronic Systems II

Grades 11-12 1 credit

## Prerequisite: Electronic Systems I

This course places greater emphasis on semiconductors/solid state components. Students study the effects of amplifiers (transistors), SCRs, digital circuits, voltage dividers, power supplies and many other modern electronic devices. Students are exposed to shop techniques and in-depth use of test equipment. Additionally, students are trained in coax, category 5 and twisted pair block wire termination. Wire termination and testing certification through Lucent

Technology is an option upon successful completion of this program. Students take the NOCTI Electronics Technology exam.

## Engineering Explorations I

Grades 9-11

## 1 credit

 Students examine technology and engineering fundamentals in relation to solving real-world problems. Students investigate engineering history, including major engineering achievements, and they examine the principle engineering specialty fields and their related careers. Students practice engineering fundamentals using mathematical and scientific concepts, and they apply the engineering design process through participation in hands-on engineering projects. Students communicate project-related information through teambased presentations, proposals and technical reports.
## Engineering Analysis and Applications II (Robotics)

Grades 10-12 1 credit Prerequisite: Engineering Explorations I
This is the second of a possible four-course pathway that allows students to examine systems, the interaction of technology and society, ethics in a technological world and the fundamentals of modeling while applying the engineering design process to areas of the design world. Students participate in hands-on projects in a laboratory setting as they communicate information through team-based presentations, proposals and technical reports.

## Dual Enrollment Statics and Strength of Materials

Grades 11-12 1 credit

## Prerequisite: Pre-Calculus

Recommend: Previous Engineering course
This college-level engineering course introduces students to fundamental principles related to objects at rest, as well as the properties, characteristics and design of structural members of mechanical systems. It presents information and real-life applications of free-body diagrams of systems in equilibrium and problems in friction. Students learn about material properties, such as stress, strain, elasticity, shear and bending as they relate to beams and columns. This course requires a strong foundation in mathematics.

## Sustainability and Renewable Technologies

Grades 10-12
1 credit
This course explores issues that affect global citizens in the areas of economics, culture and the environment. The course introduces students to the historic, economic, political, environmental and cultural issues that impact the global community and its future. Students address issues affecting the health of our environment and explore solutions offered by sustainable agriculture, energy-efficient building design and renewable energy sources.

## TRADE AND INDUSTRIAL EDUCATION

Student leadership skills may be enhanced by participation in school-based or virtual enterprises, job shadowing, internships and/or Skills USA.

## Automotive Technology I

Grades 10-11
1 credit
In this first course of the three-course program, students learn all aspects of repair, safety and customer service by concentrating on Brakes and Electrical/ Electronics, two of the primary ASE/ NATEF areas for certification. Students who successfully complete this portion of the program will be prepared to take and pass the respective ASE/NATEF Exam and will be prepared for post-secondary education opportunities.

## Dual Enrollment Automotive Technology II

Grades 11-12 2 credits
Prerequisite: Automotive Technology I
In this second course of the three-course program, students learn all aspects of repair, safety and customer service by concentrating on Suspension and Steering and Engine Performance, two of the primary ASE/NATEF areas of certification. Students who successfully complete this portion of the program will be prepared to take and pass the respective ASE/NATEF Exam and will be prepared for post-secondary education opportunities. Fees are associated with this course.

## Dual Enrollment Automotive Technology III Grade 12 <br> 2 credits

## Prerequisite: Automotive Technology II

In this capstone course of the three-course program, students master all aspects of repair, safety and customer service by concentrating on the remaining tasks from the four primary ASE/NATEF areas for certification: Suspension and Steering, Brakes, Electrical/Electronics and Engine Performance. Students who successfully complete this program will be prepared to take and pass the respective ASE/NATEF Exam and will be prepared for post-secondary education opportunities. Fees are associated with this course.

## Commercial Photography I

Grades 10-11 1 credit
The ability to apply principles of visual literacy to produce visual content gives students an advantage in today's global, multimedia society. Students are taught industry-relevant technical skills and have the opportunity to work with a variety of technology, including digital cameras, design software and editing tools to stage, shoot, process, print and present profes-sional-grade images. In addition, students evaluate and critique photographic work and investigate the history of photography, including (optionally) the fundamentals of film and darkroom development.

## Commercial Photography II

## Grades 11-12

2 credits
Prerequisites: Commercial Photography I
The ability to apply principles of visual literacy to produce visual content gives students an advantage in today's global, multimedia society. In this final year of Commercial Photography, students are taught industry-relevant technical skills and have the opportunity to work with a variety of technology, including digital cameras, lighting, design software and editing tools to stage, shoot, process, print and present professional-grade images while developing portfolios for related careers.

## Computer and Cyber-Security Solutions

## Grades 10-11

1 credit
Students enter the world of computer technology and gain practical experience in assembling a computer system, installing an operating system, troubleshooting computers and peripherals, and using system tools and diagnostic software. Students are
introduced to cyber-security concepts and the ethical use of these skills. They develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer components. Emphasis is place on customer service skills and career explorations. Students take the NOCTI Computer Repair Certification exam.

## Computer Networking Hardware Operations I and II

Grades 11-12 1 credit
Prerequisite: Computer Maintenance or

## Electronic Systems I

This two-semester course ( 0.5 credits per semester) covers general networking theory and the basics of routing, switching and advanced technologies within the context of environments ranging from home and small-office networks to more complex enterprise models. The curriculum helps students prepare for the industry-standard Cisco Certified Network Associate (CCNA) certification exams. T.C. Williams offers the first two courses of CCNA Discovery to prepare students for the Cisco CCENT certification for entry network technicians, an optional first step toward earning the CCNA certification. CCNA Discovery is delivered as an independent curriculum course of study. The curriculum consists of two courses delivered sequentially. Each course includes a troubleshooting chapter, and advanced technologies (voice, video, wireless and security) are introduced throughout the curriculum. Students take the NOCTI Computer Networking exams.

## Cosmetology I

Grades 10-11
3 credits
This is the first year of a two-year sequential program. 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 mannequins for manipulative skill practice. The course emphasizes personal safety, professionalism and sanitation of equipment and facilities. Students develop skills in shampooing and conditioning as well as styling and cutting hair. They also receive an introduction to manicure and pedicure procedures. Fees are associated with this course.

## Cosmetology II

Grades 11-12
Prerequisite: Cosmetology I
This is the second year of a two-year program. Students enhance their skills, knowledge and experience, and meet 1,080 hours of classroom experience required to qualify for a cosmetology license. 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 mannequins for manipulative skill practice. The course emphasizes personal safety, professionalism and sanitation of equipment and facilities. Students develop skills in shampooing and conditioning as well as styling and cutting hair. They also receive an introduction to manicure and pedicure procedures. This program prepares students for the Virginia State Board of Cosmetology Examination. Fees are associated with this course.

## Criminal Justice I

Grade 11
1 credit
This course prepares students for entrylevel employment in the criminal justice system as well as for entrance into an institution of higher learning in the related fields of criminal justice, political science and law. Specific areas of training include investigation, security training, communications, court procedures and corrections.

## Criminal Justice II

Grade $12 \quad 2$ credits

## Prerequisite: Criminal Justice I

This second-level course allows students to understand the rule of law, explore policing, investigate crime scenes, apply criminal justice communication skills and explore the corrections component of the criminal justice services system. Students learn the principles, techniques and practices for pursuing careers within the criminal justice services system.

## Television and Media Production I

Grades 9-11
l credit
In this course, students explore video technology and examine television as information media. Students learn the basic principles of video production, media literacy and legal aspects through classroom discussions, video screenings and actual hands-on activities. As they work through the production process (pre-production, production, post-production), students
learn techniques in videography, editing, audio production, scriptwriting and oncamera performance. Students also gain experience in computer graphics, special effects applications and other techniques related to video production.

## Dual Enrollment Television and Media Production II

Grades 10-12 2 credits
Prerequisite: Television and Media Production I
Students continue to master the phases of the production process and focus on the television studio and new media applications of video production skills. They learn multi-camera studio set-up for live-to-tape productions and gain experience in the operation of studio and control room equipment at the on-site television studio. In addition, students explore occupational opportunities in the areas of video, television and new media as well as internships, apprenticeships and post-secondary prospects.

## Dual Enrollment TV Production and Screenwriting III

 Grades 11-12 1 credit
## Prerequisite: Dual Enrollment Television

 and Media Production IIThis course serves as the capstone course of the TV Production sequence and functions as a small production unit where students write, produce and distribute a variety of programs proposed by ACPS and non profit community agencies. Projects produced in this class are used for portfolio development and are televised throughout Alexandria on ACPS-TV. Through the use of individual and team-based projects, students experience all phases of production including client networking, project development, budgeting, scheduling, postproduction of both picture and sound, and finally, presentation and distribution of the product.

## English

Standards of Learning (SOL) tests in reading/literature and writing are administered to all 11th-grade students. Passing scores on these tests result in two verified credits in English.

## ENGLISH CORE COURSES

## English 9

Grade 9

## 1 credit

This course presents a correlation of world history, world literature and the humanities. Students develop critical thinking skills, acquire historical knowledge and understanding, analyze world literature from the ancient time period to the 16th century and compare it to modern world literature, and describe how historical events and political thinking influenced representative works from each era studied. Students also write interpretive papers to demonstrate knowledge of specific subjects and proficiency in composition skills. Additionally, students develop competency in grammar, research (including the use of technology), vocabulary, public speaking and test-taking skills.

## Honors English 9

Grade 9

## 1 credit

This open enrollment Honors English course requires students to apply advanced levels of written and spoken communication as well as formal and informal discourse strategies required for college preparation work. This course analyzes world literature from early civilizations to the 16th century, comparing classical texts to examples from modern world literature. Students learn how historical events and political thinking influenced literature, as exemplified by major writers of various literary genres. Students develop a range of essay types (narrative, expository, persuasive) with emphasis on writing suitable for publication. They write essays that evaluate the merits of various components of literary works, including style, mood and significance of theme in literature. A major focus throughout the year is comparative text analysis, discerning areas of similarity and difference as well as universal patterns in world literature.

## English 10

Grade 10

## 1 credit

Continuing the process that began in ninth grade, students further explore the association between world history and world literature. Students read and analyze literary works from the 16th century to the present, examining the influence of historical events and eras on literature. Students develop
skill in literary analysis through class discussions, various forms of writing and other activities, addressing similarities and differences of literary structures, images, themes and archetypes across many cultures and historical periods. Students read critically both literary excerpts and full texts, and strengthen oral language skills, through participation in and peer evaluation of individual and small-group activities. For in-class and out-of-class writing assignments, students generate and organize ideas, develop drafts, evaluate the clarity and accuracy of the writing and make revisions as appropriate. Students also continue to develop research strategies through direct instruction and the completion of research activities that require students to locate information using technology, verify the accuracy of the information, confirm its relevance to a specific topic and purpose and select the information to prepare a presentation of the research findings.

## Honors English 10

Grade 10
1 credit
Students enrolling in this Honors course are advised to have taken the English 9 course and to have earned a final grade of B or better. As in the standard offering of English 10, students enrolled in this Honors course read and analyze literary works from the 16 th century to the present, focusing on the study of world literature as influenced by the historical events and eras of the past four centuries. In addition, students in the Honors course pursue the required readings in greater breadth and depth. Students also read additional complete literary works, perform more extended written and oral critical analyses, and practice writing in the forms and styles of the studied authors.

## SOL English 11: Survey of American

Literature
Grade 11
1 credit
Students investigate and compare the themes, viewpoints and techniques of American poets, playwrights and prose writers from the founding of this country to the present day. Through writings and projects that extend from the literature study, students develop composition skills, vocabulary, research strategies and oral presentation ability.

## SOL Honors English 11: Survey of American Literature

Grade 11
1 credit
Entry into this Honors-level course is open to any student willing to complete the required assignments. Students are advised to have taken English 10 and to have earned a B or better. Focusing on a chronological study of American Literature, this course strives to make students aware of the relationship between literary works and the conventions and fads in American civilization and intellectual history. Writing skills, critical thinking skills and vocabulary are stressed through the development of analytical essays.

## English 12: British and World Literature

 Grade $12 \quad 1$ credit In this course, students examine the development of all genres of British and world literature, as well as the writers who created them, from the Anglo-Saxon period to the 20th century. Study focuses on British literature but includes many multicultural texts. The course emphasizes vocabulary development and experiences with various kinds of written composition.
## Honors English 12

## Grade 12

1 credit
Entry into this honors-level course is open to any student willing to complete the required assignments. Students are advised to have taken English 11 and to have earned a B or better. Students enrolled in this honors course will read and analyze fiction, nonfiction, poetry, drama and creative nonfiction works with an emphasis on modern British, American and world literature. This college preparatory course will culminate with a literary investigation seminar project and presentation to an audience that emphasizes the independent critical reading, writing and inquiry skills necessary for college success.

## SOL AP English Language and Composition

Grades 11-12 1 credit
Entry into this course is available to any student willing to complete the required assignments. Students are strongly advised to have taken ninth- and tenth-grade
Honors English and to have earned a B or better.
Students who enroll in AP courses must take the end-of-course AP exam. The cost of these
exams is paid by ACPS.
The AP English Language and Composition course is the equivalent of an introductory college writing course. Its purpose is to enable students to understand complex texts and to write prose of sufficient richness and complexity to communicate effectively with mature readers. Students must have an above-average aptitude for writing effectively across the curriculum. Emphasis on expository, analytical and argumentative writing as well as personal and reflective writing heightens students' awareness of their composing processes and the way they explore ideas, reconsider strategies and revise their work. Students write a variety of papers, including researched argument papers, using information synthesized from complex nonfiction and fiction, primarily from American literature. Vocabulary study, writing, and grammar study development help students develop stylistic maturity.

## AP English Literature and Composition Grade $12 \quad 1$ credit

Entry into this course is available to any student willing to complete the required assignments. Students are advised to have taken ninth-, tenth- and 11th-grade Honors/ AP English and to have earned $a B$ or better in these courses. Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
The AP English Literature and Composition course is the equivalent of an introductory college English course. Students must have an above-average aptitude for reading and interpreting literature and the motivation to complete the extensive and intensive readings. The course builds vocabulary, develops dynamics of group discussion and concentrates on various forms of writing, including research papers, using information synthesized from complex nonfiction and fiction, primarily from American literature.

## SOL Dual Enrollment College

## Composition 11

Grade $11 \quad 1$ credit
Prerequisite: Meets college entrance requirements
This is a two-semester dual enrollment course offered through NOVA. Students who successfully complete this course earn six college credits in English Composition.

Students develop writing ability for study, work and other areas of writing based on experience, observation, research and reading of selected literature. This course guides students in learning writing as a process, understanding the audience and purpose, exploring ideas and information, composing, revising and editing, and supports writing by integrating experiences in thinking, reading, listening and speaking. This section is for students needing to take English SOL exams. The course will be supplemented to support the SOL tests. Students need a C or better at the end of the first semester to enroll in the secondsemester course. Students who do not have a C or better will be moved to a non-collegelevel course.

## Dual Enrollment College Composition 12

 Grade 12
## 1 credit

## Prerequisite: Meets college entrance requirements

This is a two-semester dual enrollment course offered through NOVA. Students who successfully complete this course earn 6 college credits in English Composition. Students develop writing ability for study, work and other areas of writing based on experience, observation, research and reading of selected literature. This course guides students in learning writing as a process, understanding the audience and purpose, exploring ideas and information, composing, revising and editing, and supports writing by integrating experiences in thinking, reading, listening and speaking. Students need a C or better at the end of the first semester to enroll in the secondsemester course. Students who do not have a C or better will be moved to a non-collegelevel course.

## Dual Enrollment Survey of World Literature

Grade $12 \quad 1$ credit
Prerequisite: Dual Enrollment College
Composition or 3 or better on AP Language exam
This is a two-semester dual enrollment course offered through NOVA. Students who successfully complete this course earn six college credits in English Literature. The course introduces students to selected major works that represent the development of world literature from the ancient world to the present. Topics include the recognition
of cultural (philosophical, religious, political, etc.) movements that may influence or be influenced by the works studied. This course seeks to increase students' abilities in critical reading and writing. Students need a C or better at the end of the first semester to enroll in the second-semester course. Students who do not have a C or better will be moved to a non-college-level course.

## ENGLISH ELECTIVES

## College Competencies for the 21st Century A (Semester 1)

Grades 9-12 0.5 elective credit
In this practical course, students develop skills for success in school and in the workplace. Students apply reading, writing, speaking and listening skills to the course requirements of content-area classes. Students read for different purposes, summarize, paraphrase, compare and contrast and read critically. They apply writing skills and the writing process to study practices and research projects, and through presentations and demonstrations, develop effective oral communication skills. In addition, increased use of technology helps students access information and produce clearly written communication.

## College Competencies for the 21st Century B (Semester 2)

Grades 9-12 $\quad 0.5$ elective credit
In this practical course, students develop skills for success in school and in the workplace. Students apply reading, writing, speaking and listening skills to the course requirements of content-area classes. Students read for different purposes, summarize, paraphrase, compare and contrast and read critically. They apply writing skills and the writing process to study practices and research projects, and through presentations and demonstrations develop effective oral communication skills. In addition, increased use of technology helps students access information and produce clearly written communication.

## Debate I

Grades 9-12 1 elective credit This class is intended for students interested in studying the structure and strategies associated with policy debate. Participants are involved in an intensive study of both the techniques used in debate and the research
required for each year's specific debate topic. Student debate teams encourage collaboration in conducting research, formulating strategies and preparing arguments. Participants master basic speaking and researching skills as well as logic and reasoning. In addition to studying policy debate, students also study the history of debate and its modern applications.

## Debate II

## Grades 10-12 1 elective credit Prerequisite: Debate I

This course is for students who want to continue to build on their debate skills and knowledge. This course allows students to research and debate the national policy debate topic. Students in Debate II need to be able to work independently and be actively involved in course decisions.

## Introduction to Film Studies

Grades 10-12 $\quad 0.5$ elective credit This semester course focuses on the history, culture and study of film from the late 1890s to today. Topics include the development of film and film technologies, creation of movie houses, the spread of mass entertainment in the early 1900s, censorship and the Production Code. Students examine the invention of sound/color/computer-generated imagery (CGI) and their effects on the industry, the effect of film on education and its use in classrooms. Genre studies may include musicals, film noir, suspense, the western, science fiction, foreign films and what is known as the blockbuster or "tent pole" film. Representative directors include Alfred Hitchcock, Orson Welles, Stanley Kubrick, Woody Allen, Steven Spielberg, Martin Scorsese, Clint Eastwood and Joel and Ethan Coen. Students examine the process of screenwriting from the pitch, the storyboard and the final script; the importance of teamwork by editors, art directors and cinematographers; film's impact on American and global culture; and the future of film. The course may include a requirement for viewing film outside school hours.

## Creative Writing

Grades 10-12

## 0.5 credit

## Prerequisite: Writing sample

This class is intended for students demonstrating a specific talent for writing poetry and prose. Participants are involved in an intensive study of the writing and publication processes, producing poetry, short
fiction and drama. Student writing groups support peer-critique and the improvement of specific pieces of writing. Participants master basic techniques important to portraying characters, establishing settings, focusing narration and using symbolism. In addition to creating individual portfolios of written work, the class produces an anthology of student writings. Students are required to submit selected works to contests and magazines highlighting the works of young writers.

## Journalism I

Grades 9-12 1 credit
Students acquire journalistic skills needed to obtain accurate information and write precisely and succinctly. They examine various kinds of media in society. Students also learn the basic skills of interviewing, writing and layout for newspapers or yearbooks.

## Journalism II: Magazine

Grades 10-12
1 credit
Students are responsible for creating the school's literary, art and photography magazine, Labyrinth. Students manage all aspects of magazine creation and publication, including gathering written and artistic submissions from T.C. students, selecting submissions, designing the magazine, doing publicity and fundraising. Staff members must have strong reading and writing skills and an interest in the visual arts. This is a hands-on class that requires self-direction and teamwork. Graphic design is an important element of this course; Adobe InDesign and Photoshop are used.

## Journalism II: Newspaper

Grades 10-12 1 credit Students are responsible for producing the school newspaper, Theogony. The newspaper is published every month in print and online. The newspaper is entirely student-run. Important skills used in this course include interviewing and writing clear, concise stories. Students must demonstrate proficiency in both writing and grammar. High grades in English courses are a prerequisite. Students registering for this course who have not taken Journalism I may be asked to take and pass a writing test. Staff writers must meet monthly deadlines and be prepared to correct their edited work. Photographers must meet the same deadlines. Graphic design is an important
element of this course. Photoshop and InDesign are used.

## Journalism II: Yearbook

Grades 10-12
l credit Students are responsible for producing the school yearbook, which is entirely studentrun. Students must demonstrate proficiency in both writing and grammar. High grades in English courses are a prerequisite. Staff writers must also meet deadlines and be prepared to correct their edited work. Photographers must meet deadlines and must have their own cameras. Graphic design is also an important element of this course.

## Public Speaking I

Grades 9-12
0.5 credit

This course develops students' self-confidence, ability to organize ideas, and sensitivity to other people. Students work on interpersonal communication as they learn skills that will help them talk to friends, parents and teachers; participate in job and college interviews; and speak before groups. Students learn to select a topic; formulate, organize and support ideas; and forge these into an effective speech.

## Public Speaking II

Grades 9-12
0.5 credit

This course involves interpretive speaking and teaches the many areas of interpretation, from declamation and dramatic duo, to dramatic interpretation and original works. Extemporaneous speaking and impromptu work are also included. Public Speaking I is not a prerequisite for this course.

## English for Academic Purposes (EAP)

Grades 9-12 1 elective credit
EAP Algebra I
EAP Algebra II
EAP Biology
EAP Earth Science
EAP Ecology
EAP English
EAP Geometry
EAP Technology*
EAP U.S./Virginia History
EAP World Civilizations I
EAP World Civilizations II
English for Academic Purpose (EAP) courses are English language development classes designed specifically for English Language Learners and run side-by-side with core content courses. In EAP, students receive direct language instruction to
aid them in acquiring content knowledge, in producing and understanding texts in various genres within the content area and in becoming proficient in the areas of the five college competencies. Students only take an EAP class if they are enrolled in the matching SOL or core class and it is determined that they need additional support based on examining a body of evidence (for example, school history, grades, teacher recommendation, ACCESS for ELLs level, SRI score and writing samples).
${ }^{*}$ EAP Technology does not support a matching SOL course. This is a hands-on course for beginning English Language Learners with limited experience with computer programs.

## English Language Acceleration

Grades 9-12 $\quad 1$ elective credit
This course is designed to promote the literacy development of students who are identified as having low levels of first language literacy. The course focuses on building the reading, writing, speaking and listening skills in English that are essential to academic success. This course is not a prerequisite for ELA-required courses and would be taken along with the appropriate ELA class.

## Foundations of Literacy A (Semester 1)

Grades 9-12 $\quad 0.5$ elective credit
This course helps students improve functional reading skills and develop new strategies, enabling them to be more successful in their high school classes. The curriculum expands vocational and academic literacy and promotes personal security by enhancing fundamental reading proficiency. Instruction utilizes research-based programs and methods in the area of active literacy. Students develop and implement skills in reading, writing, speaking, listening and thinking. An important objective of this course is to encourage students to read independently for enjoyment.

## Foundations of Literacy B (Semester 2)

 Grades 9-12 $\quad 0.5$ elective credit This course helps students improve functional reading skills and develop new strategies, enabling them to be more successful in their high school classes. The curriculum expands vocational and academic literacy and promotes personal security by enhancing fundamental reading proficiency.Instruction utilizes research-based programs and methods in the area of active literacy. Students develop and implement skills in reading, writing, speaking, listening and thinking. An important objective of this course is to encourage students to read independently for enjoyment.

## Literacy

Grades 9-12 1 credit
Prerequisite: The student has an Individualized Education Program (IEP).
Students in this class learn basic skills including, but not limited to, letter identification, word attack skills, sight work recognition, language development and sentence structure. These literacy skills are needed to access public transportation, seek employment opportunities and live independently.

## Advanced Literacy Strategies A (Semester 1)

Grades 9-12 0.5 elective credit Using research-based programs, this course strengthens skills in reading, writing, speaking, listening and thinking. Students learn strategies to develop vocabulary, increase fluency and improve reading comprehension and writing skills in all curriculum areas. An important objective of this course is to encourage students to read independently for enjoyment. Coursework is differentiated to meet individual student needs.

## Advanced Literacy Strategies B

## (Semester 2)

Grades 9-12 0.5 elective credit Using research-based programs, this course strengthens skills in reading, writing, speaking, listening and thinking. Students learn strategies to develop vocabulary, increase fluency and improve reading comprehension and writing skills in all curriculum areas. An important objective of this course is to encourage students to read independently for enjoyment. Coursework is differentiated to meet individual student needs.

## Writing Center Peer Tutor

Grades 10-12 1 elective credit
Prerequisite: Application and acceptance to tutoring program
This course equips student writers to become peer tutors. The beginning of the course covers writing center theory and basic tutoring approaches. After a training
period, tutors spend the rest of the course tutoring, working on individual projects to enhance the Writing Center, and developing their own writing. Tutors also have opportunities to present at writing center conferences, work with teachers in the classroom, and submit their writing to writing center publications. Tutors will develop interpersonal skills, improve their writing skills, gain leadership experience, and have opportunities to become part of the writing center community. Interested students will need to submit an application (with English teacher approval) to the Writing Center director.

## Fine Arts

All Fine Arts courses apply toward elective credit.

## VISUAL ART

## Art 1

## Grades 9-12 <br> 1 credit

Designed as a foundation for those who intend to pursue art as a career or for cultural enrichment, this course emphasizes the fundamentals of drawing, sculpture and painting in a variety of media. Weekly homework assignments aid in acquisition and development of basic observational skills. Higher-order thinking skills such as analysis, problem solving and evaluation are emphasized. The course also incorporates the study of art history, criticism, aesthetics and additional enrichment experiences such as museum field experience, artists-in-residence and student workshops.

## Art II

Grades 10-12
1 credit

## Prerequisite: Art I

Art II emphasizes the elements and principles of design and their conscious application. Students learn techniques and processes in a variety of media, including painting, drawing, sculpture and printmaking. The course also incorporates the study of art history, criticism and aesthetics. Higher-order thinking skills, such as analysis, problem solving and evaluation, are emphasized throughout this course.

## Art III

Grades 11-12
1 credit

## Prerequisite: Art II

Art III offers a 9-week concentration in three major areas: drawing and painting, sculpture and printmaking. Instruction emphasizes design, composition, creativity, originality and increased skills. Higherorder thinking skills, such as analysis, problem solving and evaluation, will be emphasized throughout this course.

## Art IV

Grades 11-12

## 1 credit

## Prerequisite: Art III

Art IV is designed for the serious, motivated student who wants to enter an art program beyond high school or who desires further artistic growth. Each student develops a well-rounded portfolio suitable for college or employment review.

## AP Art History

Grades 10-12
1 credit
Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
This course is intended for students with exceptionally high commitments to academic study. The history of art from before the common era (B.C.E.) to the present day is taught. Lecture, video, class discussion, museum work and multimedia study aids reinforce reading and writing assignments. Students examine the major forms of artistic expression (including architecture) of past and distant cultures, as well as those of our own time and environment. They learn to look at works of art critically, with intelligence and sensitivity, and to articulate and appreciate the art they experience. Students are expected to complete all reading assignments, keep a notebook, contribute to class discussions and complete all museum assignments and all written work.

## AP Studio Art: 3-D Design

Grades 11-12 1 credit
Prerequisite: Art I, Ceramics I, and/or permission of instructor
Students who enroll in this AP course must
submit the end-of-course AP portfolio. The cost of this assessment is paid by ACPS.
This course is designed for highly motivated, advanced art students who have demonstrated a serious interest in the study of art. Ideally suited for students who work well independently, the course will focus
on the preparation of a three-dimensional design portfolio of artworks that exhibit quality, concentration in an area of visual interest or problem solving, and breadth of experience in the formal, technical, and expressive means of an artist. The three-dimensional portfolio may include, but is not limited to, traditional sculpture, architectural models, ceramics, and three dimensional fiber arts or metal work. Students will submit three-dimensional portfolios based on objectives that reflect the format and requirements established by the College Board for Advanced Placement Studio Art. Advanced Placement college credit and/or placement may be awarded if a qualifying exam score is achieved.

## AP Studio Art: Drawing

Grades 11-12
1 credit
Prerequisite: Art I, Art II and/or permission of instructor
Students who enroll in this AP course must submit the end-of-course AP portfolio. The cost of this assessment is paid by ACPS.
This course is designed for highly motivated, advanced art students who have demonstrated a serious interest in the study of art. Ideally suited for students who work well independently, the course will focus on the preparation of a drawing portfolio of artworks that exhibit quality, concentration in an area of visual interest or problem solving, and breadth of experience in the formal, technical, and expressive means of an artist. The drawing portfolio addresses a broad interpretation of drawing issues including painting, printmaking, studies for sculpture, some forms of design, and abstract and observational works. Students will prepare and submit drawing portfolios based on objectives that reflect the format and requirements established by the College Board for Advanced Placement Studio Art. Advanced Placement college credit and/or placement may be awarded if a qualifying exam score is achieved.

## Ceramics I

Grades 10-12 quisite: Art 1 or Exploration \& Design
This course explores 3-D clay forms by creating both functional and decorative ceramic works of art. Students use various techniques in hand-building and wheel throwing. Students think creatively and critically to solve ceramic problems in
unique ways. Each student will maintain a developmental workbook (sketchbook) of ideas and processes.

## Ceramics II

Grades 11-12 1 credit

## Prerequisites: Art I or 3D Exploration \& Design, and Ceramics I

Complex problem-solving skills will be used in the construction of a variety of hand-built and wheel thrown projects. The in-depth focus will be on design, construction, and craftsmanship skills. Students will be required to keep a sketchbook along with a digital portfolio, which will record images and reflections of their created art works.

## 3D Exploration \& Design

Grades 9-12
1 credit
An in depth approach to three-dimensional processes such as the subtractive and additive methods. Projects will include but are not limited to installations, functional design and craft, and collaborations with various materials. There will be an emphasis on design concepts and approaches to art-making. Students will be required to keep a sketchbook and create a digital portfolio of their art-making process.

## Design

Grades 10-12 1 credit
Prerequisites: Art I and II. If scheduling necessitates, Art II and Design may be taken in the same school year.
This third-level art course serves as an introduction to a broad range of commercial art applications, including graphics and animation, fabric, fashion and costume design, furniture, and interior and industrial design. Emphasis is placed upon the elements of art and principles of design, with students using both computer and hand-building techniques. Projects are undertaken with client presentations in mind and are accomplished both individually and in collaborative teams.

## MUSIC

## Concert Band

## Grades 9-12 1 credit

The Concert Band performs Level II - IV literature. Students work to develop skills in tone production, intonation, technique, rhythm, balance and musicianship. The Concert Band presents a minimum of two
concerts a year, participates in the State Concert Assessment (when appropriate). Successful participation in this course will prepare students for Symphonic Band and/ or Wind Ensemble.

## Marching Band - 8th Period

Grades 9-12 0.5 credit Prerequisite*: One year of band
Students build on music fundamentals learned in previous years. Students develop and refine spatial awareness, leadership and team-building skills, discipline and mental and physical strength to produce a musically and visually refined show. Students enrolled are musical ambassadors to the community, state and region. Professional musicians work with students in smallgroup lessons during band camp. Marching Band is an extension of the Concert Band class. As such, it is required for all high school Symphonic Band and Wind Ensemble members. Exceptions include student health condition, family crisis or participation in a VHSL fall sport. Marching Band is a class that meets 8th period. Season duration: mid-August through early November. Activities include football games, 3 competitions, 1-2 parades. This course may be taken for a grade or pass/fail.
${ }^{*}$ Interested eighth-grade students may enroll in Marching Band with the recommendation of the middle school music director.

## Wind Ensemble

Grades 10-12
1 credit
Prerequisite: Previous music instruction and audition
This course is offered for students able to perform music successfully at Grade V and VI levels of the VBODA rating system. The band's repertoire includes a wide variety of musical styles and periods to enhance the students' knowledge of music and performing skills. This ensemble performs a minimum of three concerts and one festival performance per year.

## Jazz Ensemble

Grades 9-12
1 credit
Co-requisite: Concert, Symphonic or Wind Ensemble
This group studies and performs a variety of literature, including swing, jazz, and rock. Each year, the group performs at concerts, adjudicated festivals, and various civic occasions. Special emphasis is placed
on developing improvisation skills and ensemble playing. Membership requires a high degree of musical skill and personal discipline. This class may be taken for a grade or pass/fail.

## Advanced Orchestra I

Grade $9 \quad 1$ credit

## Prerequisite: Prior participation in an Orchestra course

This course is offered for 9th-grade students able to play successfully at Grade IV and V levels of the VBODA rating system. Students with advanced playing experience continue to develop skills in bowing, fingering and reading music, with good intonation, rhythm and musicianship. Success in this course should lead to participation in Chamber Orchestra.

## String Orchestra I

## Grade 9

1 credit

## Prerequisite: Prior participation in an

 Orchestra courseThis course is offered for ninth-grade students who wish to continue their study in orchestral music and advance their performance skills in bowing, fingering and reading music, with good intonation and rhythm. This course is offered for students able to play successfully at Grade III and IV levels of the VBODA rating system.

## String Orchestra II

Grades 10-12
1 credit
Prerequisite: Prior participation in String Orchestra I or Advanced I
Students with some playing experience continue to develop skills in bowing, fingering and reading music, with good intonation and rhythm. This course is offered for students able to play successfully at Grade III and IV levels of the VBODA rating system. Success in this course should lead to participation in Chamber Orchestra.

## Chamber Orchestra

Grades 10-12
1 credit
In Chamber Orchestra, advanced string players perform the best orchestral literature with string and full orchestras. This course challenges music students interested in the finest concert performance. Students learn standard orchestral works as performed by leading professional orchestras, including music of all periods and styles. The orchestra performs several concerts a year and participates in dis-
trict and regional music festivals and allstate orchestra.

## Music Theory I

Grades 10-12
1 credit
Music Theory provides students with the necessary tools to work with music from creative and performance viewpoints. The course stresses the fundamentals of music reading, with emphasis on scales, intervals, chords, four-part writing and form. Ear training is an important part of the course. Music Theory is most helpful for students who plan to major in music in college or those interested in performance/ composition.

## AP Music Theory

Grades 11-12
1 credit
Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
This course is intended for advanced music students who have completed Music Theory I. Fundamental to success in this course is the student's ability to read and write musical notation. Musicianship skills such as dictation, sight-singing and musical analysis are sharpened. Skills in original composition, vocal/instrumental arrangement techniques, advanced part-writing, instrumental transpositions and score analysis are emphasized. Students become familiar with music-writing computer software and with the MIDI/synthesizer. This course replaces Music Theory II.

## Music Laboratory/Guitar

## Grades 10-12

0.5 credit

This course is designed to reach students who have never played guitar. Emphasis is placed on learning to play melodies and a few chords. Students learn music fundamentals such as note reading, theory and related musical knowledge. The course acquaints students with various styles of music, including folk, classical, jazz and rock; provides opportunities for group playing; and, although there are some basic minimum expectations, lets students advance at their own rates. Students provide their own instruments. This course provides an additional option for students taking half-year courses, with the potential for the music department to reach an even greater number of non-performanceoriented students.

## Mixed Choir

Grades 9-12

## 1 credit

## Prerequisites: Previous choral instruction

This is a beginning choral course taught at the instructional level of the Concert Choir course. Choir students are provided the opportunity to concentrate on the varying demands of vocal technique for each piece of repertoire that is studied. Music performed covers a wide range of historical periods and styles. Difficulty ranges from Grades II to IV of the Virginia Choral Directors' Association (VCDA) rating system. Choir members are expected to perform in the fall, winter and spring concerts and participate in local/district festivals as determined by the director.

## Advanced Choir

## Grades 9-12 1 credit Prerequisites: Previous choral instruction and audition

Advanced Choir provides a medium for performing more challenging choral music in the school and the community. Choir students learn to create an appropriate individual vocal sound and contribute to an ensemble choral sound. Instruction stresses correct use of the voice including correct tone, diction, articulation and breathing. Students learn to read standard musical notation as printed in vocal scores, in fourpart harmony. Music performed covers many styles and periods and ranges in difficulty from III-VI based on the VCDA rating system. Choir members are expected to perform in the fall, winter and spring concerts, and are encouraged to audition and participate in school musicals, VMEA Honor Choir, District Chorus and the AllVirginia Chorus.

## Performance Ensemble/Show Choir -

 8th PeriodGrades 9-12 $\quad 1$ credit Co-requisite: Concert Choir
Singers/Show Choir provides a medium for performing more challenging, difficult choral music in the school and the community. Choir students are provided the opportunity to explore other genres of music, which include but are not limited to Broadway showtunes and various styles in the gospel realm. Choir students are also provided the opportunity to learn various types of choreography that are set to the various pieces they perform. Choir members
are expected to perform in the fall, winter and Spring Concerts, and are encouraged to audition for musicals, Christmas in Washington/Kennedy Center Honors televised productions, District Chorus and VMEA Honor Choir. This class may be taken for a grade or pass/fail.

## Concert Choir

## Grades 9-12

1 credit

## Prerequisites: Previous choral instruction

Concert Choir provides a medium in which all choral disciplines can study and perform together in preparation for major concerts and community events. It is also open to students who have not registered for any choral course due to scheduling. Choral students in Concert Choir explore every genre of music from Western European Classical to Broadway and Gospel. It is in this course where students learn to master the mass ensemble sound. Attendance is mandatory. Choir members are expected to perform in the fall, winter and spring concerts, and are encouraged to audition for musicals, Christmas in Washington/Kennedy Center Honors televised productions, District Chorus and VMEA Honor Choir.

## Gospel Choir

Gospel Choir is offered as an after-school club activity.

## Chamber Music - Eighth Period

Grades 9-12 $\quad 0.5$ credit
Prerequisite: Prior participation in the Orchestra Course
This course is offered during Eighth period after school. Chamber Music is designed to provide students with a performance opportunity in small ensemble repertoire. Various ensembles will be formed using the available personnel of string trio, quartets and other various ensembles based on the selected repertoire. This class may be taken for a grade or pass/fail.

## Symphonic Band

Grades 9-12
1 credit
Prerequisites: Previous music instruction and audition
The Symphonic Band performs Level III V literature. Students work to master skills in tone production, intonation, technique, rhythm, balance and musicianship. The Symphonic Band performs a minimum of three concerts a year, and participates in the State Concert Assessment and other Festi-
vals as deemed appropriate. Successful participation in this course will prepare students for Wind Ensemble. Students in the Symphonic Band are required to participate in Marching Band, except students participating in a Fall TC VHSL sport.

## DRAMA

## Theatre Practicum - Eighth/Ninth Periods Grades 9-10 1 credit

 Prerequisite: Audition and/or interview; dependent upon position assigned for Fall/Spring PracticumFall Theatre Practicum - The student commits to spending a minimum of 50 hours on the preparation and execution of the fall play and/or the winter one-act festival. The student may participate in performance, playwriting, stage carpentry, sound, costuming, lighting, stage management, direction, props, publicity, fundraising and/ or running crew. At the beginning of the semester, all students meet with their instructors to commit to tasks best suited to their interests and abilities.

Spring Theatre Practicum - The student commits to spending a minimum of 50 hours on the preparation and execution of the spring play and/or the original play festival. The student may participate in performance, playwriting, stage carpentry, sound, costuming, lighting, stage management, direction, props, publicity, fundraising and/ or running crew. At the beginning of the semester, all students meet with their instructors to commit to tasks best suited to their interests and abilities.

## Dual Enrollment Theatre Practicum Eighth/Ninth Periods

## Grades 11-12

0.5 credit per semester

Prerequisite: Audition and/or interview;
dependent upon being assigned to Fall/
Spring Practicum. Student must meet college entrance requirements.
Students can only take this course one time for college credit.
Fall Theatre Practicum - The student commits to spending a minimum of 70 hours on the preparation and execution of the fall play and/or the winter one-act festival. The student may participate in performance, playwriting, stage carpentry, sound, costuming, lighting, stage management, di-
rection, props, publicity, fundraising and/ or running crew. At the beginning of the semester, all students meet with their instructors to commit to tasks best suited to their interests and abilities.

Spring Theatre Practicum - The student commits to spending a minimum of 70 hours on the preparation and execution of the spring play and/or the original play festival. The student may participate in performance, playwriting, stage carpentry, sound, costuming, lighting, stage management, direction, props, publicity, fundraising and/ or running crew. At the beginning of the semester, all students meet with their instructors to commit to tasks best suited to their interests and abilities.

## Introduction to Drama: Character Creation and Theatre Appreciation

 Grades 9-12 1 credit In this class, students gain an appreciation for the theatre, its history, literature and performance. Students read and act out scenes and plays from the beginning of time through the Renaissance, focusing on the creation of character, utilizing voice and body movement. Students review dramatic performances in and out of class to develop their ability to thoughtfully analyze the performances of themselves and others. Students also gain practical experience in the theatre by serving as ushers for one of T.C. Williams High School's dramatic productions.
## Intermediate Drama: From Page to Stage

 Grades 10-12 1 creditPrerequisite: Introduction to Drama or audition
In this class, students further their knowledge of theatre, theatre history, dramatic literature and especially performance. Students read and act out scenes, plays and monologues from the modern era. In addition, students explore the process of creating a character through writing their own scenes, monologues and short plays. Students also gain practical experience in the theatre by writing a play or plays to be performed at the end of the school year. This class may be repeated for credit.

## Advanced Drama: Theatre for Competition and Community Performance

Grades 10-12 1 credit

## Prerequisite: Audition

Students at the advanced level continue to polish their acting skills through performance and study. Students in this class are required to participate in a play eligible for the Virginia High School League (VHSL) District One-Act Competition, either as actors or through direction or stage management. Students also gain practical experience in the theatre by participating in various aspects of producing shows in the high school. This course offers enrichment experiences through Lincoln Center for the Arts Institute Teaching Strategies workshops, stage management, artists-in residence, acting, makeup and costuming. This class may be repeated for credit.

## Stagecraft I

Grades 10-12
1 credit
Students in Stagecraft focus on the non-performance-related areas of theatre, focusing on scenic design and construction, but also including costume, makeup and lighting design. Students engage in handson activities such as building sets for school shows. Further enrichment supports master class sessions, teacher workshops, artists-in-residence and technical support clinics.

## Stagecraft II

Grades 10-12 1 credit
Prerequisite: Stagecraft I or teacher recommendation based on previous technical experience.
Stagecraft II furthers the theatrical design and construction skills established in Stagecraft I. Students are expected to take leadership roles and assist in guiding new students in design technique, tool use and other aspects of the Stagecraft course. Students are asked to assume more responsibility in assisting in the technical aspects of school theatre and music functions.

## Health and Physical Education

All Health and Physical Education courses apply toward elective credit.

## Physical Education

Grade $9 \quad 1$ credit
Physical education in ninth grade is required for graduation and offers students an elective approach to physical literacy and laying the groundwork for leading an active life. Roughly every two weeks students register for an activity strand (team sports, individual sports, outdoor recreation or exploratory activities). All students are given the Virginia Wellness Related Physical Fitness tests during the year to assist them with determining their personal fitness levels and as a means of measuring personal improvement. Health education instruction takes place on a rotating basis throughout the year and focuses on nutrition education, consumer health, mental health, substance abuse, community health, and fitness principles.

## Health and Physical Education

## Grade 10 <br> 1 credit

Physical education in tenth grade is required for graduation and offers students an elective approach to physical education. At the beginning of each quarter, students register for an activity strand (team sports, individual sports, outdoor recreation or exploratory activities). Once a week, students participate in health lessons/activities that incorporate the Virginia Health Standards of Learning and the Virginia Wellness Related Physical Fitness tests. Students develop personal fitness plans, use pedometers to measure activity and use heart rate monitors to measure the intensity of physical activity. Driver Education is taught during the second and third quarters only and meets the 36 -hour instructional period requirement for classroom instruction. CPR instruction typically takes place during the fourth quarter.

An amendment to $\$$ 22.1-205 Driver education programs, House Bill 1782, passed by the General Assembly of Virginia, calls for an additional parent/student driver education component to be included as part of the in-classroom portion of the driver education curriculum. In compliance with the new legislation, ACPS requires a 90 -minute parent/student traffic safety presentation, to include a) parental responsibilities regarding juvenile driver behavior, b) juvenile driving restrictions pursuant to the Code of Virginia, and c)
the dangers of driving while intoxicated and underage consumption of alcohol.

## Human Growth and Development

## Grades 9-12 1 credit

In this comprehensive human growth and development course, students study the life stages from conception to death. The course offers a unique opportunity for serious consideration and discussion of human sexuality, the family, child development, adolescence, adulthood, aging and death. This course is required for graduation from ACPS. Content and activities are intended for ninth-grade students; however, the course may be taken in grades 9-12, as well as in summer school prior to grades 9-12. Additionally, students who wish to take this course in the 9th grade but are having difficulty scheduling the course may take Health and Physical Education 9 if offered in summer school or as an early bird class. To opt out of this requirement, follow the directions on the Student Exemption Form on pages 10-13.

## 25th Hour Health and Physical Education Grade 10 1 credit

 25th Hour Physical Education is an independent course that fulfills the 10th-grade physical education requirement. Students enrolled in this course use heart rate monitors (provided) to analyze and record their workouts that take place independently before or after school hours. All students are given the Virginia Wellness Related Physical Fitness tests during the year to assist them with determining their personal fitness levels and as a means of measuring personal improvement to develop a personal fitness plan. Correspondence with the instructor takes place during individual meetings before school and during lunch time; Blackboard is also used for communication, assignments, and assessments. The driver education portion of the curriculum is taught daily from 7:30 to 8:25 a.m. for one quarter of the school year. The Virginia Health Standards of Learning are taught via Blackboard during one quarter. Due to limited enrollment, students are required to attend an after-school orientation where class contracts are distributed. The first 60 students to return the completed contracts will be placed in the class. After the 60 spots are filled, a waiting list will be created.An amendment to $\$$ 22.1-205 Driver education programs, House Bill 1782, passed by the General Assembly of Virginia, calls for an additional parent/student driver education component to be included as part of the in-classroom portion of the driver education curriculum. In compliance with the new legislation, ACPS requires a 90 -minute parent/student traffic safety presentation, to include a) parental responsibilities regarding juvenile driver behavior, b) juvenile driving restrictions pursuant to the Code of Virginia, and c) the dangers of driving while intoxicated and underage consumption of alcohol.

## Physical Education: Fitness and Strength Training <br> Grades 11-12 1 credit

The year-long Fitness and Strength Training course is designed to improve student fitness through a variety of training methods, with an emphasis on proper technique. Strength training uses four core lifts, including the flat bench press, push press, power cleans and back squats. Fitness training includes a multitude of aerobic, anaerobic, plyometric and agility exercises. The course also stresses the importance of maintaining and increasing flexibility through dynamic stretching (pilates) for a warm-up and static stretching for a cool-down (yoga). Proper nutrition and its relationship to overall fitness is another key component to the course. This class is open to all male and female students who have completed ninthand tenth-grade Physical Education.

## World Dance

Grades 11-12
1 credit
Students explore and examine a variety of rhythmic movements and dance genres. The course emphasizes Latin, Hip-Hop and Social dance. Students develop proficiency in technique, performance and choreography. Students also focus on the historical and cultural implications of dance around the world. Proper dance attire, including footwear, is required and may be purchased through the instructor.

## Mathematics

A verified unit of credit for graduation is based on a student's satisfactory completion of a course and a passing score on the end-of-course Standards of Learning (SOL) test
for that course. Currently, there are SOL Mathematics tests for Algebra I, Geometry and Algebra II.

## MATHEMATICS CORE COURSES

## Math

Grades 9-12 1 credit
Prerequisite: The student has an Individualized Education Program (IEP).
Students in this class learn basic skills including, but not limited to, math operations, counting money and management. These functional math skills are needed to access public transportation, seek employment opportunities and live independently.

## SOL Algebra I <br> Grades 9-12 <br> 1 credit

The Algebra I course is designed to engage students in the application of Math Honors 7 and processes applied to real-world problem-solving situations. The content of this course includes solutions of equations and inequalities, operations with polynomials, factoring and the study of linear and quadratic equations. Problem-solving situations are emphasized.

## SOL Geometry

## Grades 9-12

## 1 credit

## Prerequisite: Algebra I

This course focuses on integrated plane, solid and coordinate geometry, along with the properties of geometric figures, trigonometric relationships and reasoning to justify conclusions. Methods of justification include paragraph proofs, two-column proofs, indirect proofs, coordinate proofs, algebraic methods and verbal arguments.

## Algebra, Functions and Data Analysis

## Grades 9-12 <br> 1 credit

## Prerequisite: Algebra I

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

## SOL Algebra II

Grades 9-12
1 credit Prerequisite: Algebra I
A thorough treatment of advanced algebraic concepts is provided through the study of functions, "family of functions," equations, inequalities, systems of equations and inequalities, polynomials, rational and radical equations, complex numbers and sequences or series.

## Discrete Mathematics

Grades 10-12
1 credit
Prerequisite: Geometry and either Algebra II or Algebra, Functions and Data Analysis
This course is the study of mathematical properties of sets and systems that have a countable (discrete) number of elements. Topics in the course include election theory, fair decision, apportionment, graph theory and recursion.

## Probability and Statistics

Grades 10-12
1 credit
Prerequisite: Geometry and either Algebra II or Algebra, Functions, and Data Analysis This introductory statistics and probability course focuses on collecting and analyzing data, making predictions and organizing and graphing data in meaningful ways. Topics include counting rules permutations and combinations analysis of univariate and bivariate data, normal distribution and survey analysis.

## Pre-Calculus

Grades 10-12 1 credit

## Prerequisite: Geometry and Algebra II

A study of functions, analytic geometry and trigonometry precedes a formal study of Calculus.

## AP Statistics

Grades 10-12 1 credit
Prerequisite: One year of Mathematics beyond Algebra II
Students use graphical and numerical techniques to analyze data, determine appropriate methods of data collection and analysis, learn to anticipate what a distribution of data should look like, and use statistical inference to guide the selection of appropriate models. Course content closely follows that of the Advanced Placement Probability and Statistics exam. Students should be aware that knowledge of probability and statistics is becoming increasingly important to greater numbers of college majors.

Students use TI-83 or TI-84 calculators in this course.

## AP Calculus AB

Grades 10-12
1 credit
Prerequisite: Pre-Calculus
Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
This course teaches topics in calculus, including limits, derivatives and integrals, and their applications. Colleges may grant higher placement or credit to students who score well on the AP exam.

## AP Calculus BC

Grades 10-12 1 credit
Prerequisite: Pre-Calculus
Students who enroll in AP courses must take
the end-of-course AP exam. The cost of these

## exams is paid by ACPS.

This AP course provides an intensive study of the calculus of functions of a single variable. Course content includes topics in infinite series and polar and parametric equations, as well as the topics covered in AP Calculus AB. The course represents collegelevel mathematics for which colleges may grant higher placement or credit to students who score well on the AP exam.

Dual Enrollment Calculus with Analytic Geometry II
Grades 11-12
1 credit
Prerequisites: Scoring 3 or better on AP
Calculus AB exam
This is a semester dual enrollment course offered over the course of a year. Students who successfully complete this course earn five college credits in Math. This course continues the study of analytic geometry and the calculus of algebraic and transcendental functions including rectangular, polar and parametric graphing; indefinite and definite integrals; methods of integration; and power series along with applications. Students who complete this course earn the equivalent of AP Calculus BC, and are eligible to take the AP Calculus BC exam.

## AP Computer Science Principles

Grades 10-12
1 credit

## Prerequisite: Algebra I

AP Computer Science Principles introduces students to the foundations of Computer Science while exposing them to programming and the impact of computers in today's society. The course focuses on problem
solving and real world applications. The units of study include: digital representation of information and data manipulation, algorithms, the Internet, and programming and performance tasks, among others. This course is designed to broaden participation in computer science and STEM fields, and is highly supported by the National Science Foundation. The course serves as a precursor to AP Computer Science A.

## AP Computer Science A

## Grades 10-12 <br> 1 credit

## Prerequisite: Algebra II

Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
In this course, students design and write sophisticated programs, using Java. Emphasis is placed on program design, methodology, data types and structures, classes, algorithms, computer systems and applications used in the computing field, such as sorting and searching techniques. Students develop many advanced data types, using classes and pointers, and implement those data types in real-world simulations. The course content closely follows that of the Advanced Placement Computer Science curriculum and prepares the student to take the AP Computer Science A Exam.

## Dual Enrollment Differential Equations

## Grades 11-12 <br> 1 credit

Prerequisite: Scoring 3 or better on AP Calculus BC exam
This is a two-semester dual enrollment course offered through NOVA. Differential Equations is a rigorous college-level course offered to students who have successfully completed AP Calculus BC and who wish to study higher-level math. The dual enrollment course awards six college credits. This course gives students a basic understanding of the techniques used to solve ordinary differential equations. Topics covered include first-order differential equations, linear differential equations, numerical methods and applications, presents power series solutions, Fourier Series, Laplace Transforms, partial differential equations and boundary value problems. Students need a C or better at the end of the first semester to enroll in the second-semester course. Students who do not have a C or better will be moved to a non-college-level course.

## Personal Living and Finance

Grades 10-12 1 credit
Prerequisite: 3 standard credits in History and Social Studies
The Personal Living and Finance objectives require instruction in those skills necessary to handle personal business and finances and include, but need not be limited to, opening a bank account and judging the quality of a bank's services; balancing a checkbook; completing a loan application; the implications of an inheritance; the basics of personal insurance policies; consumer rights and responsibilities; dealing with salesmen and merchants; debt management, including retail and credit card debt; state and federal tax computation; local tax assessments; computation of interest rates by various mechanisms; understanding simple contracts; and how to contest an incorrect bill. The course includes the 21 work readiness skills and students take the Workplace Readiness Skills for the Commonwealth Exam and/or w!se Exam. This course is only available to students with disabilities where credit accommodation is documented in the IEP.

## MATHEMATICS ELECTIVES

## Algebra Readiness

## Grades 9-12 1 elective credit

The instructional goal of this course is to prepare English Language Learner students with interrupted education to be successful in Algebra I. Students test into this course through a math assessment given at the Office of English Language Learner Services.

## Introduction to Computer Science

Grades 10-12 1 elective credit In this course, students gain an understanding of the different disciplines of Computer Science, with a focus on programming. Computer Science is a field of study that focuses on the theory and application of computers as computational tools to solve real-world problems. This course narrows students' focus on the use and implementation of computers by investigating the design and development of programs. Specifically, students learn to program their own programs and applications in a variety of languages.

## Math Center Peer Tutor

## Grades 10-12 0.5-1 elective credit Co-requisites: Pre-Calculus, AP Statistics or AP Calculus

The T.C. Math Center Peer Tutor opportunity encourages, promotes and fosters students' independent learning and academic achievement in math courses. The typical duties of a Math Center Peer Tutor include:

- Participating in training sessions. Peer tutors attend a six-week training session in which students are taught tutoring techniques to assist learners in developing a deeper understanding of mathematics as well as techniques for working with students who may have gaps in learning.
- Providing academic support to fellow students and communicating an enthusiasm for mathematics.
- Regularly meeting with individuals and small groups to work collaboratively on classwork/homework problems, course content, transfer tasks and study for unit exams.
- Conducting outreach with the school environment to promote student use of the T.C. Williams Math Center.


## Science

A verified unit of credit for graduation is based on a student's satisfactory completion of a course and a passing score on the end-of-course Standards of Learning (SOL) test for that course. Currently, there are SOL Science tests for Earth Science, Biology and Chemistry. See page 23 for sample course sequences in science. Students enrolled in AP Science courses must also co-enroll in the 1.0 -credit AP Science Lab Seminar aligned with the AP Science course.

## SCIENCE CORE COURSES

## SOL Biology 1

Grades 9-12
1 credit
In this laboratory-based course, students develop skills needed to understand, explain, analyze and communicate about scientific phenomena and living organisms. Students also explore the history of scientific thought and the evidence that supports it, laying the foundation for in-
vestigation of biomolecules, cells, heredity, evolution and ecology. This curriculum addresses the Commonwealth's Science SOL for Biology through its focus on inquiry observing, experimenting and modeling. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are encouraged to develop research projects for entry into the city science fair competition or participate in internship programs.

## SOL Honors Biology I

## Grades 9-12

1 credit
This inquiry-based course, an alternative to Biology I, is for students who want to conduct laboratory investigations and re-search-based projects. Students investigate the history of scientific thought and the evidence that supports it, laying the foundation for investigation of biomolecules, cells, heredity, evolution and ecology. Students also investigate the dynamic relationship of science, technology and society by examining historical perspectives and current news topics. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are required to develop research projects for entry into the city science fair competition or participate in internship programs.

## Ecology: Biology II

Grades 10-12
Prerequisite: Biology I
This field studies laboratory addresses environmental concerns. Through an interdisciplinary approach, students delve into social sciences and economics to discuss the effects of global warming and population explosion. The course is deeply rooted in analyzing scientific data related to the environment. Students learn how the world works and how to assess the extent of human impact on the Earth. Through experimentation and observation, students develop a scientific understanding of their natural surroundings along with an introductory understanding of biological and physical sciences. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students develop stewardships for the environment through service-hour requirements with local environmental agencies. Also, students are encouraged to develop research projects for
entry into the city science fair competition or participate in internship programs.

## Human Anatomy and Physiology: Biology II <br> Grades 11-12 <br> 1 credit <br> Prerequisite: Biology I

This laboratory course is designed for motivated students with an interest in an indepth study of normal human structures and functions, with an emphasis on anatomical concepts. The meticulous dissection of a lower species of mammal and various major mammalian organs forms the framework for the Gross Anatomy study. Topics include integumentary, muscular, nervous, digestive, respiratory, circulatory, excretory, endocrine and reproductive systems. The course integrates biology and chemistry, using unifying concepts and processes of systems, order and organization, evidence, models and explanation, change, consistency and equilibrium, and form and function. Scientific inquiry and understanding about inquiry are emphasized through practical and meaningful applications. Students are encouraged to develop research projects for entry into the city science fair competition or participate in internship programs.

## AP Biology

## Grades ll-12 <br> 1 credit

Prerequisites: Chemistry I and Biology I Co-requisite: AP Science Lab Seminar. Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
In this course, students investigate, in depth, the phylogenetic survey of basic physiological functions, modern molecular genetics, developmental biology and the biochemistry of living systems. Students extend their understanding of biology and biochemistry with an emphasis on cytology, the biological processes of cellular respiration and photosynthesis, enzymology, vertebrate anatomy and physiology and ecology. Through laboratory work, students develop important laboratory skills, problem-solving techniques, research techniques and higher-order thinking skills. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are offered the opportunity to develop research projects for entry into science fair competition.

## SOL Chemistry I

Grades 10-12
1 credit
Prerequisite: Algebra I
Co-requisite: Geometry, however Algebra II is strongly recommended.
This course is designed to provide students with a detailed introduction to the interaction of matter and energy and to prepare them for a first-year college course in Chemistry. Using laboratory techniques, the manipulation of chemical quantities and problem-solving applications, students learn how matter and energy interact. Topics include laboratory safety and equipment, atomic theory, bonding, chemical reactions, behavior of gases and solutions. Students use technology, including graphing calculators, computer simulations and probe ware, to explore concepts. Scientific methodology is employed in experimental and analytical investigations, and concepts are illustrated with practical applications that include examples from environmental science, nuclear science, organic chemistry and biochemistry. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are encouraged to develop research projects for entry into the city science fair competition or participate in internship programs.

## SOL Honors Chemistry I

## Grades 10-12

1 credit
Prerequisite: Algebra I
Co-requisite: Algebra II
This course is designed to provide students with a detailed introduction to Chemistry and prepare them for AP Chemistry or a first-year college course in Chemistry. This laboratory-based alternative to Chemistry I is for students interested in a mathemat-ically-based application of chemical principles. Concepts will be explored using inquiry-based laboratory techniques, data analysis and evaluation, the manipulation of chemical quantities and technology (including graphing calculators, computer simulations and probe ware).

This course includes topics such as atomic theory, compounds and bonding, chemical reactions, gases and solutions, moles and stoichiometry, as well as the appropriate safety precautions when working with chemical and laboratory equipment. Scientific methodology is employed in in-quiry-based experimental and analytical
investigations, and concepts are illustrated with examples from environmental science, nuclear science, organic chemistry and biochemistry. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are required to develop research projects for entry into the city science fair competition or participate in internship programs.

## AP Chemistry

Grades 10-12 1 credit
Prerequisites: Algebra II and Chemistry I Co-requisite: AP Science Lab Seminar. Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
This course begins with a first-quarter review of Chemistry I concepts and skills, including significant figures, atomic theory, stoichiometry, chemical reactions and gases. The remainder of the year explores topics including thermochemistry, bonding, kinetics, equilibrium and electrochemistry. This course also includes an introduction to nuclear and organic chemistry. Throughout the course, students extend their understanding of chemistry fundamentals by learning laboratory skills, problem-solving techniques and higherorder thinking skills. Laboratory work is emphasized and the course stresses the collection and analysis of data. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are offered the opportunity to develop research projects for entry into the city science fair competition.

## SOL Earth Science I

## Grades 10-12 <br> 1 credit

This course acquaints students with the Earth's composition, structure, processes and history. Students explore major fields of physical science inquiry, including meteorology, astronomy, oceanography and geology. Topics include weather, plate tectonics, Earth history, the rock cycle, the oceans, the atmosphere, the solar system and the universe. The course stresses the interpretation of maps, charts, tables and profiles; the technology of collecting, analyzing and reporting data through the use of probe ware; and the development of science problem-solving skills through systematic investigation. The importance of scientific research that validates or challenges ideas
is emphasized; therefore, students are encouraged to develop research projects for entry into the city science fair competition or participate in internship programs.

## SOL Honors Earth Science I

Grades 10-12
1 credit
Prerequisite: Algebra I
Co-requisite: Geometry
This laboratory-based alternative to Earth Science I is for students interested in applying biological, chemical and physical principles to the laboratory and field study of selected topics in astronomy, meteorology, geology, oceanography and associated sciences. Topics include Earth forces, volcanoes, earthquakes, tectonics, rocks, minerals, mapping skills, the stars and universe, the solar system, the Earthmoon system, Earth's history, energy, fossils, the atmosphere, meteorology and climates. By integrating Earth science and environmental science (e.g., contaminant study, human health, and global cycling), this course brings the perspective of time and Earth science to bear on contemporary problems of natural resources, conservation, and environmental quality. Students also explore the impact of the Space Age and technology applications, including GPS (Global Positioning System). The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are required to develop research projects and either present the project at the city science fair or participate in internship programs.

## Astronomy: Earth Science II

Grades 11-12 1 credit
Prerequisites: Junior Classification
with any two of the following courses
completed: Earth Science I, Biology I, Chemistry I or Physics I
Co-requisite: Geometry or higher-level mathematics course
Note: Students who have not completed
Earth Science I have the option of taking the SOL test in Earth Science and earning a verified science credit. This course is a higher-level science that can be considered by students with mathematics competency. In this course, students tour the final frontier, from planet Earth to the edge of our universe. Topics include the legacy of the ancient astronomers, the origin of the solar system, comparative planetology,
the composition and evolution of galaxies, and cosmology. Using the working tools of the astronomer, including telescopes and reflection, refraction and diffraction spectroscopes, students study the universe outside the wavelength of visible light. The origin and the fate of the universe are discussed, including the Big Bang and Dark Matter theories. Students study Earth Science from an astronomical perspective, exploring constellations, the sun and moon, planets, asteroids, comets, the structure and evolution of the stars, pulsars, black holes, gaseous nebulae, star clusters, galaxies, quasars and the search for extraterrestrial life. The laboratory includes visual observations and electronic imaging of astronomical objects in the T.C. Williams High School Planetarium, as well as a field trip to a dark sky observatory where nighttime observations are possible. Students also study astronomy from an interdisciplinary perspective, discussing plate tectonics, the rock cycle, Earth's history, the oceans and the phenomena of the atmosphere, weather and climate as a basis for the Standards of Learning (SOL) test for Earth Science. Students are encouraged to develop research projects for entry into the city science fair competition.

## Oceanography: Earth Science II

Grades 11-12
1 credit
Prerequisites: Junior Classification with
any two of the following science courses
completed: Earth Science I, Biology I,
Chemistry I or Physics I
Note: Students who have not completed
Earth Science I have the option of taking
the SOL test in Earth Science and earning a verified science credit.
In this field studies laboratory, students learn the physics of ocean currents and basins, the chemistry of ocean water and bottom deposits, sea floor spreading and continental drift and the biology of plant and animal communities in the oceans. A few topics that will be explored are biodiversity, the geology of the ocean floor and environmental interactions between humans and the oceans. Students also study oceanography from an interdisciplinary perspective, exploring the rock cycle, Earth's history, the atmosphere, weather and climate and the phenomena of our solar system and our universe as a basis for the SOL test for Earth Science. Students are encouraged to
develop research projects for entry into the city science fair competition.

## AP Environmental Science

Grades 11-12
1 credit
Prerequisite: Biology I
Co-requisite: AP Science Lab Seminar. Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
Note: Students who have not completed Earth Science I must take the SOL test in Earth Science.
This course is an interdisciplinary experience; it embraces a wide variety of topics from different areas of study. The goal of the course is to provide students with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world; to identify and analyze environmental problems, both natural and human-made; to evaluate the relative risks associated with these problems; and to examine alternative solutions for resolving and/or preventing them. The course is an excellent option for any interested student who has completed two years of high school laboratory science - one year of life science and one year of physical science. Due to the quantitative analysis that is required in the course, students should also have taken at least one year of Algebra and Geometry. Also desirable is a course in Earth Science. Students are offered the opportunity to develop research projects for entry into the city science fair competition.

## Physics I

Grades 11-12
1 credit

## Prerequisite: Algebra I and Geometry Co-requisite: Algebra II or a higher-level Mathematics course

This is an introductory course in the basic laws of the physical universe for students who do not plan to take physics in college. This course stresses the practical application of high school physical science by exploring basic concepts that relate to the nature and characteristics of energy and its interaction with matter. Topics include force and motion, the atom, the kinetic molecular theory, energy transformations, heat, sound, wave phenomena, astronomy, the electromagnetic spectrum, light and electricity fields and non-Newtonian physics. The importance of scientific research that validates or challenges ideas
is emphasized; therefore, students are encouraged to develop research projects for entry into the city science fair competition or participate in internship programs.

## AP Physics 1

Grades 10-12
1 credit
Prerequisite: Algebra II
Co-requisite: Pre-Calculus
Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
Students who have previously taken AP Physics II (C) may not take this course. This course is the equivalent of a first-semester college course in Algebra-based Physics, but is designed to be taught over a full academic year to enable AP students to develop deep understanding of the content and to focus on applying their knowledge through inquiry labs. The full year also allows time for inclusion of Physics content specified by Virginia standards. 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. Additionally, students study an additional unit on electromagnetic waves (light) after the AP exam. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are offered the opportunity to develop research projects for entry into the city science fair competition.

## AP Physics 2

Grades 11-12
1 credit Prerequisite: Algebra II and AP Physics 1 Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
This course begins with a first quarter. This course is the equivalent of a secondsemester college course in Algebra-based Physics, but is designed to be taught over a full academic year to enable AP students to develop deep understanding of the content and to focus on applying their knowledge through inquiry labs. This is a second-year physics course and should be taken only after a student has completed AP Physics 1. The full year also allows time for inclusion of Physics content specified by Virginia standards. The course covers fluid mechanics, thermodynamics, electricity and magnetism, optics and atomic and nu-
clear physics. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are offered the opportunity to develop research projects for entry into the city science fair competition.

## AP Physics II (C)

Grades 11-12
1 credit
Co-requisites: Calculus, AP Science Lab Seminar
Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
This course ordinarily forms the first part of the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering. The subject matter of the AP Physics II (C) course is principally mechanics and electricity and magnetism, with the majority of emphasis on mechanics. The sequence is more intensive and analytic than that in the Physics 1 and 2 courses. The sequence is parallel to or preceded by Mathematics courses that include Calculus. Methods of Calculus are used wherever appropriate in formulating physical principles and in applying them to physical problems. Strong emphasis is placed on solving a variety of challenging problems, some requiring Calculus. The importance of scientific research that validates or challenges ideas is emphasized; therefore, students are offered the opportunity to develop research projects for entry into the city science fair competition.

## STEM Research: Independent Study

Grades 10-12 1 credit
Prerequisite: One honors or AP science course
This course gives students the opportunity to pursue their own scientific questions and skills through authentic research in science. Students are expected to develop their own projects and write scientific papers suitable for presentation. Students are encouraged to pursue discussions, internships and/or mentorships with scientists and professionals based on the nature of their selected projects. Students may participate for multiple years; 10th- and 11th-grade students are encouraged; 12th-grade students need instructor approval.

## SCIENCE ELECTIVES

## AP Science Lab Seminar

Grades 11-12 1 elective credit Co-requisites: AP Biology, AP Chemistry, AP Environmental Science and/or AP Physics II (C)
Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
Students are required to take this onecredit laboratory course as a component of AP Biology, AP Chemistry, AP Physics II (C) and AP Environmental Science. Grades from the class and the lab will be averaged and assigned for both portions of the course.

## Social Studies

A verified unit of credit for graduation is based on a student's satisfactory completion of a course and a passing score on the end-of-course Standards of Learning (SOL) test for that course. Currently, there are SOL History and Social Sciences tests for U.S. History, World History Part I and World History Part II.

## SOCIAL STUDIES CORE COURSES

SOL World History and Geography Part I Grade 9
$l$ credit
This course correlates world history and world literature from the ancient time period to 1500 A.D. Through a study of world civilizations and their historical development, students gain an understanding of contemporary global issues. Students examine distinguishing characteristics of cultures through literature, art, architecture, music, religion, philosophy and geography.

## SOL Honors World History and Geography Part I

Grade 9
1 credit
Entry into this Honors-level course is open to any student willing to complete the required assignments.
This course correlates world history and world literature from the ancient time period to 1500 A.D. Through a study of world civilizations and their historical development, students gain an understanding of contemporary global issues. Students examine distinguishing characteristics of cul-
tures through literature, art, architecture, music, religion, philosophy and geography. The Honors sections are more reading intensive and require independent thought and sustained effort. This course incorporates strategies and skills to help students prepare for AP World History and Geography II in 10th grade.

## SOL World History and Geography Part II

Grade $10 \quad 1$ credit
This high school honors world history course provides students with a comprehensive, intensive study of major events and themes in world history geared toward preparing the students for the academic rigors of college, AP, and DE courses. This course is a survey of world history circa 1400 through the post-Cold War world of the early 21 st century. The course helps students form connections between time periods and diverse areas of the world by analyzing social, cultural, political, economic, environmental, and intellectual movements. Students enrolling in the course at this level should have reading and composition skills appropriate to their grade level. This course emphasizes the development of reading, writing, analytical, communication, and research skills.

## SOL Honors World History and Geography Part II

Grade 10
1 credit
Students enrolled in this Honors course are
advised to have taken World History and Geography Part I and to have earned a B or better.
This high school Honors World History course provides students with a comprehensive, intensive study of major events and themes in world history geared toward preparing the students for the academic rigors of college, AP and Dual Enrollment courses. This course is a survey of world history starting in circa 1500 with the Renaissance through the post-Cold War of the early 21st century. The course helps students form connections between diverse areas of the world using the themes of trade, migration and centers of world power. Students enrolling in the course at this level should have reading and composition skills appropriate to their grade level. The course emphasizes the development of reading, writing, analytical and research skills necessary for understanding
historical materials. Students encounter a variety of learning activities and materials, including maps, college-level readings, document-based question essays, Socratic seminars, analysis of primary and secondary historical documents, free response essays, research papers and library sources. Students are required to complete several comprehensive writing assignments based on the 11th-grade AP History and English models.

## SOL AP World History

Grade 10

## 1 credit

Grades 11-12 1 elective credit Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
This college-level course is designed to develop greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. Such understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The chronological time frame is from 8000 BCE to the present. An organizing principle of change and continuity is examined throughout the course. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The course emphasizes relevant factual knowledge deployed in conjunction with leading interpretive issues and types of historical evidence. The course builds on an understanding of cultural, institutional and technological precedents that, along with geography, set the human stage. Specific themes provide further organization to the course, along with the consistent attention to contacts among societies that form the core of world history as a field of study. This course includes a summer reading assignment.

## SOL Virginia and U.S. History

Grade $11 \quad 1$ credit
In this course, students examine American history from exploration to the present, focusing on political and economic history. Students also explore American culture through a chronological survey of major issues, movements, people and events in United States and Virginia history.

## SOL Honors Virginia and U.S. History

 Grade 11 1 credit In this course, students examine American history from exploration to the present, focusing on political, social, and economic history. Students also explore American culture through a chronological survey of major issues, movements, people and events in United States and Virginia history. Students enrolling in the course at this level should have reading and composition skills appropriate to their grade level. The course emphasizes the development of reading, writing, analytical and research skills necessary for understanding historical materials. Students encounter a variety of activities and materials including maps, college-level readings, document-based question essays, Socratic seminars, analysis of primary and secondary historical documents, free response research papers, and library sources. Students are required to complete several comprehensive writing assignments throughout the school year.
## SOL AP United States History

Grade $11 \quad 1$ credit
Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
Using a college-level text, students study the major themes, events and ideas that have shaped the history of the United States. Students probe, in depth, the dynamics of American political and diplomatic decision making, national and sectional interests and a variety of personalities and social movements related to the historical development of the nation. Emphasis is placed on themes of American history, their relationship to contemporary events, and the skills needed for the AP United States History test. This course includes a summer reading requirement.

## SOL Dual Enrollment College U.S. History

Grade $11 \quad 1$ credit
Prerequisite: Meets college entrance
requirements This is a two-semester dual enrollment course offered through NOVA. Students who successfully complete this course earn six college credits in History. This course surveys United States history from its beginnings to the present. HIS 121 begins in the pre-Columbian period and ends with
the Reconstruction period. HIS-122 begins with the Gilded Age and ends in the present. Students use college-level texts and historical documents to study the themes, events and ideas that have shaped the history of the United States. Emphasis is placed on col-lege-level reading and writing assignments including essays and research papers, and the skills needed for the AP United States History Exam. Students need a C or better at the end of the first semester to enroll in the second-semester course. Students who do not have a C or better will be moved to a non-college level-course. This course includes a summer reading assignment.

## Virginia and U.S. Government

Grade 12
1 credit
This course examines the origins and workings of the United States and Virginia governments. Students analyze the United States and Virginia Constitutions and the structure and operation of our federal system, including policy-making, economics, foreign affairs and civil rights. Students explore the impact of the general public, political parties, interest groups and the media on policy decisions. Further, the United States' political and economic systems are compared with the economic systems of other nations, with an emphasis on the relationship between economic and political freedoms. An economics unit covers the United States' market system, the fundamentals of supply and demand and the role of government in the economy.

Honors Virginia and U.S. Government -
We the People We the People
Grades $12 \quad 1$ credit
This course fulfills the U.S./VA Government graduation requirement.
This course will appeal to students who like demonstrate skills in debate and public speaking, and have an interest in law, public policy the U.S. Constitution and government. Students will gain an indepth knowledge of our Constitution and political system while working towards the following goals:

1. Prepare to participate in the district and state-wide "We the People" competitions.
2. Empower students to think about the world in which they live, and study specific public policy issues with an eye toward affecting change in the community. Students
pick an issue they believe is in need of change. Then thoroughly research the topic to determine alternatives to the current situation, costs of the change and which public officials are responsible for decisionmaking, then construct an action plan designed to bring about change. Students will be inspired to contact government officials, present testimony at public hearings and lobby for proposed change.

## AP United States Government and Politics

Grade $12 \quad 1$ credit
Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
Students examine the principles and processes of government, particularly of the United States government at the national, state and local levels. Topics include political heritage, the Constitution, politics, civil rights and civil liberties, the institutions of government, law and the justice system, basic economics and current domestic and foreign policy. Intended for highly motivated students, this course uses collegelevel materials and includes a summer reading requirement. Students complete challenging assignments involving reading, analysis, writing and speaking in preparation for the AP test.

## AP European History

Grades 11-12
1 credit
Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
This college-level course is designed to develop greater understanding of the context of modern-day political, diplomatic, social, economic, artistic, intellectual and cultural institutions through the study of European history since 1450 B.C.E. Such understanding is advanced through a combination of selective factual knowledge and appropriate analytical and interpretative skills, focusing on primary and secondary source documents.

## AP Comparative Government and Politics

 (one semester)Grades $12 \quad 0.5$ credit
Comparative Government and Politics is an incredibly important field of study for students in our modern, interconnected world. Globalization and other events over the past several decades have drawn the
countries of the world closer together than at any other point in history. Events around the globe now directly impact our lives, and it is the job of students, our future leaders, to understand the similarities and the differences of these countries. In this course, students compare and contrast the government and politics of each of the countries studied and analyze both commonalities and differences among modern political systems throughout the world. The six countries studied are Great Britain, Iran, Russia, China, Mexico and Nigeria.

## SOCIAL STUDIES ELECTIVES

## AP Microeconomics

## (one semester)

Grades 11-12 0.5 elective credit Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
Microeconomics provides a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economic system. These consumers and producers include households, business firms, government and community organizations. The course places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy.

## AP Macroeconomics

(one semester)
Grades 11-12 0.5 elective credit Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
Macroeconomics is designed to give students a thorough understanding of the principles of economic analysis that apply to an economic system as a whole. Macroeconomics places particular emphasis on the study of economic institutions, issues of public policy, national income and price determination. Emphasis will be placed on the following: basic economic concepts, measurement of economic performance and national income analysis, including Classical, Keynesian and Monetarist views of the economy, including fiscal and monetary policy. International economics,
trade issues and banking policies will be discussed.

## The Minority Majority

Grades 10-12 0.5 elective credit This semester course surveys the minority experience in the United States and how it affects all citizens. Issues of race, gender and culture are discussed and analyzed for political, cultural and socioeconomic impact on American society. Strategies such as action research, Socratic seminars, data interpretation, primary and secondary source readings, oral presentations, research papers and written response are used to guide students in their study. Students participate in positive discourse in preparation for success in the 21st-century global community.

## Psychology

Grades 10-12 0.5 elective credit This course introduces students to the goals and principles of psychology. Students examine the history, theorists, theoretical approaches and research methods of psychology. They learn how biological factors affect behavior, attitudes and motivation and examine types of abnormal behaviors. They discover how to better communicate with and relate to peers and how to achieve greater awareness and understanding of self, family and friends. This course also focuses on the ethical standards governing the work of psychologists.

## AP Psychology

Grades ll-12 1 elective credit Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
This course is designed to introduce students to a comprehensive and in-depth scientific study of behavioral and mental processes of human beings and other animals. Students are exposed to current trends in psychological research and the facts, principles and phenomena associated with each subfield within psychology. They also learn about the ethics and methods psychologists use in their science and practice. AP Psychology is a good option for students who are interested in learning about the methods psychologists use to explore the processes involved in normal and abnormal perceptions, thoughts, feelings and actions.

## Social Justice

Grades 10-12 $\quad 0.5$ elective credit
Any student interested in social issues, such as violence, peace and war, the environment or human rights, should find this course valuable. The focus is divided between the theoretical and the practical. Students learn the history, philosophy and methods of non-violence and investigate presentday applications of the non-violence philosophy. Additionally, students examine the causes of conflict in their relationships and in the larger society.

## Sociology

Grades 10-12 0.5 elective credit This course introduces students to the basic principles of sociology and its many related fields and careers. Students examine social problems, such as cultural and ethnic relations, delinquency, crime and community problems as presented through surveys, case histories and exam of selected current topics. Probation officers, religious leaders, social service workers and other resource persons offer a wide range of topics to examine and discuss. Students also examine the functions of social institutions, changing sex roles, changes related to education and human growth and the experiences of minorities. Students are introduced to the study of ethnography and social stratification.

## Advanced Placement Capstone

## AP Seminar Year 1

Grades 11-12
1 credit
In AP Seminar, students investigate realworld issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible an valid evidence-based arguments. In AP Research, students cultivate the skills and discipline necessary to conduct independent research in order to produce and defend a scholarly academic thesis.

## World Languages

All World Languages courses apply toward elective credit.

## Chinese I

## Grades 9-12

1 credit
Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills: listening, speaking, reading and writing. The development of students' ability to communicate orally and in writing remains a focus of the course. Students continue to explore and study themes related to personal and family life, school life and community life. By the end of the course, students will have an expanded knowledge of 300 Chinese characters, with the ability to read and write them in simple sentence structures.

## Chinese II

Grades 9-12
1 credit
Students continue to develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills: listening, speaking, reading and writing, with emphasis on the ability to communicate orally and in writing. Students begin to show a greater level of accuracy when using basic language structures, as they are exposed to more complex features of the language. Students continue to focus on communicating about their immediate world and daily life activities. Emphasis continues to be placed on the use of the target language in the classroom as well as on the use of authentic materials to learn about the culture. Some familiar themes and topics from level I may reoccur in level II. However, the spiraling nature of embedded theme-based instruction requires students to demonstrate their communicative skills and acquired linguistic knowledge at a new developmental level.

## Chinese III

Grades 9-12 1 credit Students continue to develop and refine their proficiency in all four language skills: listening, speaking, reading and writing, with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas
of the authentic materials that they read and hear, and they are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying rights and responsibilities, future plans and choices, teen culture, the environment and humanities. Some familiar themes and topics from levels I and II may reoccur in level III. However, the spiral nature of the theme-based instruction requires students to demonstrate their communicative skills and linguistic sophistication at a new developmental level.

## Chinese IV Honors

## Grades 10-12

## 1 credit

Students continue to develop and refine their proficiency in all four language skills: listening, speaking, reading and writing, with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, focusing on abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear, and they are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying Beijing, facets of China's traditional culture, social life, hobbies, the environment, work and college. Some familiar themes and topics from Chinese I, Chinese II and Chinese III may reoccur, however, the spiral nature of theme-based instruction requires students to demonstrate their communicative skills and sophistication at a new developmental level.

## AP Chinese Language and Culture

Grades 10-12 1 credit

Prerequisite: Chinese IV Honors or equivalent
AP Chinese Language and Culture focuses on refining skills in reading, writing and listening in Chinese. Special emphasis is placed on improving speaking proficiency. Cultural topics such as history, civilization, philosophy, music and art are studied in depth. In addition, students read and analyze several works/excerpts from various genres of literature. Intense vocabulary and grammar review prove integral parts of this course, which is conducted almost entirely in Chinese.

## French I

Grades 9-12 1 credit
Students learn essential vocabulary and structures for day-to-day situations. Vocabulary and grammar structures are presented in real-life contexts and are developed around specific communicative functions. Topics focusing on adolescents' lives, needs and experiences, such as family, after-school activities and shopping, are integrated into instruction, as well as products, practices and perspectives drawn from the target culture. During the languagelearning process, students gain insights into how their own language is structured, as well as an increased understanding of the relationship between culture and language. Students also develop an appreciation for the many recreational, educational and occupational uses of French beyond the classroom. This course stresses communication and culture, making use of a variety of ancillary materials and appropriate technology applications to present the language in an authentic manner. Students attain language proficiency through acquired cultural knowledge and the development and application of the four language skills: listening, reading, speaking and writing.

## French Conversation and Culture ISummer School

Grades 9-11 1 credit Prerequisite: French I
This is an intensive situation-oriented conversation course, with a cultural component, based on practical application. The course is intended for students participating in our exchange with a partner school in Caen, France. Pre-departure instruction prepares students to function in everyday situations and conversational exchanges to be encountered during a two- to three-week home-stay with a French family. While in France, students attend regularly scheduled classes and immerse themselves in the French language and culture. This course offering is dependent upon student interest and the availability of qualified teacher chaperones. Each student produces and submits a project upon completion of the home-stay.

## French II

## Grades 9-12

## Prerequisite: French I

Students continue the study of French language and culture, with emphasis on the development of communicative competence. French II centers on further development of students' reading, writing, listening and speaking skills in the target language. Students begin to show a greater level of accuracy when using basic language structures. They focus on communicating information about their immediate world and daily activities as they encounter more complex features of the language. Vocabulary, grammar and language structures are presented in real-life contexts and are developed around specific communicative functions. Emphasis continues to be placed on the use of French within and beyond the classroom, with the integration of authentic materials into instruction to learn about the cultures of the French-speaking world.

## French III <br> Grades 9-12 <br> 1 credit <br> Prerequisite: French II

In the French III course, students continue to focus on the development of communicative competence in the target language, while enhancing their productive and receptive skills. Students will understand oral and written messages in French, and will interact with each other and with the teacher, both orally and in writing. During the third level of language study, students begin to use more complex structures and are able to communicate about an increasingly wider range of topics. Units of study are thematic in nature and grammatical concepts are presented and practiced in context. Thematic units include contemporary life, choices and future plans, teen culture, the environment and the humanities. The level III class is conducted largely in French.

## French IV Honors

Grades 10-12 1 credit

## Prerequisite: French III

Level IV French reviews and recycles some of the essential structures introduced in levels I, II and III. As students revisit these key concepts, focus is on the development of communicative competence, both in writing and in speaking. Units of study are thematic in nature and grammatical
points are presented and practiced in context throughout the year. Vocabulary is introduced via short readings, contemporary articles, songs and films. During the course of the year, students refine their control of the major verb tenses and focus on clear and consistent use of tense in sequencing events. The course is conducted in French and students are expected to use the target language with the instructor and with each other in the classroom.

## AP French Language and Culture

Grades 10-12 1 credit
Prerequisite: French IV Honors and/or permission of instructor.
Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
AP French V focuses on refining skills in reading, writing and listening in French. Special emphasis is placed on improving speaking proficiency. Cultural topics such as history, civilization, philosophy, music and art are studied in depth. In addition, students read and analyze several works/ excerpts from various genres of literature. Intensive vocabulary and grammar review prove integral parts of this course, which is conducted entirely in French.

## Advanced Topics in French Language and Culture VI

Grades 11-12 1 credit AP/DE 1.0 additional Quality Point
This full-year course is taught in French and is thematic in nature. It assumes strong foundational skills in speaking, listening, reading and writing, and will expand upon the AP themes introduced during the previous 2 years of study. As such, it covers a wide range of topics related to the history of France, contemporary French life, and the Francophone world. Specific units may vary from year to year depending upon current events.

Course goals: Advanced Topics in French Language and Culture seeks to provide students with a means of maintaining and building upon the fluency they have worked to gain during their years in ACPS. The study of content-rich topics organized around themes will provide students with the opportunity to broaden their understanding of the world and in particular that of the Francophone world. Providing an uninterrupted sequence of language study
will maximize the potential for student success at college.

## German I

Grades 9-12 1 credit Level I German focuses on the development of communicative competence and on the understanding of German-speaking cultures. Students develop a solid and comprehensive foundation in the target language in the domains of listening, speaking, reading and writing. Vocabulary and grammar structures are presented in real-life contexts and are developed around specific communicative functions. Topics focusing on adolescents' lives, needs and experiences, such as family, after-school activities and shopping are integrated into instruction, as well as products, practices and perspectives drawn from the target culture. During the language-learning process, students gain insights into how their own language is structured, as well as an increased understanding of the relationship between culture and language. Students also develop an appreciation for the many recreational, educational and occupational uses of German beyond the classroom.

## German Conversation and Culture I- <br> Summer School

## Grades 9-11 l credit

Prerequisite: German I
This is an intensive situation-oriented conversation course, with a cultural component, based on practical application. The course is intended for students participating in our student exchange with a partner school in Austria. Pre-departure instruction prepares students to function in everyday situations and conversational exchanges likely to be encountered during their two-week home-stay with an Austrian family. While in Austria, students attend regularly scheduled classes and immerse themselves in the German language and culture. Field trip locations include Munich, Salzburg and Vienna. This course offering is dependent upon student interest and the availability of qualified teacher chaperones. Students produce and submit projects upon completion of the course.

## German II

Grades 9-12
1 credit
Prerequisite: German I
In German II, students continue to develop their proficiency in the three strands
of communicative competence: interacting with other speakers of German, understanding oral and written messages in German and making oral and written presentations in German. Students begin to demonstrate a greater level of accuracy when using basic language structures and are exposed to more complex features of the German language. Students continue to focus communication on their immediate world and daily life activities. Emphasis continues to be placed on the use of German in the classroom, as well as on the use of authentic materials to learn about the culture.

## German III

Grades 9-12 1 credit

## Prerequisite: German II

Students continue the development of communicative competence as they enhance productive and receptive skills. Units of study are thematic in nature and grammatical concepts are presented and practiced in context. Thematic units include contemporary life, choices and future plans, teen culture, the environment and the humanities. Students understand oral and written messages in German and interact with each other and with the teacher, both orally and in writing. During the third level of language study, students begin to use more complex structures and are able to communicate about an increasingly wider range of topics. The level III class is conducted largely in German.

## German IV Honors

## Grades 10-12

1 credit

## Prerequisite: German III

In this pre-AP course students continue to develop their proficiency in the three strands of communicative competence: interacting with other speakers of the language, understanding authentic oral and written messages in the target language and making oral and written presentations in the target language. This highly rigorous curriculum requires students to analyze and synthesize authentic materials and exchange and support opinions on a variety of topics related to contemporary and historical events and issues, at a proficiency level commensurate with their study. Students comprehend spoken and written texts from a variety of authentic sources as well as produce compositions
containing well-developed ideas on various topics. Units of study are thematic in nature and grammatical points are presented and practiced in context throughout the year. Vocabulary is introduced via short readings, ranging from the radio play "Das Mysteriöse Konzert" by Hans König to contemporary articles, interviews, songs, film and the popular children's novel "Emil und die Detektive" by Erich Kästner. During the course of the year, students refine their control of the major verb tenses (present, past, future and conditional) and focus on clear and consistent use of tense in sequencing events. The course is taught in German and students are expected to use German with the instructor and with each other in the classroom.

## AP German Language and Culture

 Grades 10-12
## 1 credit

Prerequisite: German IV Honors or

## equivalent

Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
In AP German Language and Culture, students refine reading, writing and listening skills, with special emphasis on improving speaking proficiency. Students examine cultural topics such as history, civilization, philosophy, music and art in depth, and read and analyze several works/excerpts from various genres of literature. Students read one radio play, several short stories and poems and three short novels in German. Intensive vocabulary and grammar review is an integral part of this course, which is conducted entirely in German.

## Advanced Topics in German Language and Culture VI

Grades ll-12 l credit AP/DE 1.0 additional Quality Point
This full-year course is taught in German and is thematic in nature. It assumes strong foundational skills in speaking, listening, reading and writing, and will expand upon the AP themes introduced during the previous two years of study. As such, it covers a wide range of topics related to the history of Germany, contemporary German life, and the German speaking world. Specific units may vary from year to year depending upon current events. Course goals: Advanced Topics in German Language and Culture seeks to provide students with a means of
maintaining and building upon the fluency they have worked to gain during their years in ACPS. The study of content-rich topics organized around themes will provide students with the opportunity to broaden their understanding of the world and in particular that of the German speaking world. Providing an uninterrupted sequence of language study will maximize the potential for student success at college.

## Latin I

## Grades 9-12

l credit
In this course, students focus on the development of communicative competence and their understanding of Roman culture. Students develop a solid and comprehensive foundation in the target language in the domains of listening, speaking, reading and writing. Vocabulary and grammar structures are presented in historical and real-life contexts and are developed around specific communicative functions. Topics focusing on history, culture, literature and daily life are integrated into instruction, as well as products, practices and perspectives drawn from the target culture. During the language-learning process, students gain insights into how their own language is structured, as well as an increased understanding of the relationship between culture and language. Students also develop an appreciation for the many recreational, educational and occupational uses of Latin beyond the classroom.

## Latin II

Grades 9-12 1 credit

## Prerequisite: Latin I

Students enrolled in Latin II continue to develop their ability to comprehend written Latin texts with more complex grammar and syntax. The focus on comprehending Latin differs from the primary goal of the modern languages. Students read and comprehend adapted and/or authentic Latin from original sources. They learn about the perspectives, practices and products of the ancient Romans in areas such as architecture, art and history. Students compare these cultural and historical elements with those in their own culture, and find examples of the influence of Greco-Roman civilization in their own world. Students also compare effects of the geography of the ancient Roman world and that of the

United States on aspects of culture such as food, dwellings, clothing and the arts.

## Latin III

Grades 9-12 1 credit

## Prerequisite: Latin II

Students continue the development of linguistic skills applied in the comprehension of authentic Latin texts with complex linguistic structures. Students expand their knowledge of archaeological evidence, art and literature as reflections of GrecoRoman perspectives and practices. They examine the Roman political system, multicultural aspects of the Roman Empire, and the role of geography in military history, and compare these with similar aspects of United States history and geography.

## Latin IV Honors

## Grades 10-12 <br> Prerequisite: Latin III

In Latin IV, students refine their skills in translation and interpretation of Roman poetry. Because the focus on comprehending Latin differs from the primary goal of the modern languages, the course centers on the interpretation of texts rather than on person-to-person communication. Students analyze the effects of features of style, such as figures of speech, word choice and meter, on a given author's work. They expand their knowledge of the perspectives and practices of Greco-Roman civilization by examining its philosophy, religion, mythology and standards of personal conduct. Students also discuss the contributions of the Romans to modern law, government, art and architecture.

## AP Latin

Grades 11-12 1 credit Prerequisite: Latin IV Honors Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
In AP Latin, students refine their skills in translation and interpretation of Roman poetry. Students practice oral reading and study cultural topics, such as history, civilization and various philosophies, as they apply to the poetry and selected authors. Students also review grammar structures and learn new vocabulary, figures of speech and rhetorical devices.

## Spanish I

Grades 9-12

## 1 credit

Students begin the study of Spanish, learning basic vocabulary and language structures for day-to-day situations. This course places emphases on the development of communicative skills and the expansion of cultural knowledge, making use of a variety of ancillary materials and appropriate technology applications to present the language in an authentic manner. Students attain language proficiency through the development and application of the four language skills: listening, reading, speaking and writing.

## Spanish Conversation and Culture ISummer School

Grades 9-11 1 credit

## Prerequisite: Spanish I

This is an intensive situation-oriented conversation course, with a cultural component, based on practical application. The course is intended for students participating in our exchange with a partner school in Lima, Peru. Pre-departure instruction prepares students to function in everyday situations and conversational exchanges to be encountered during their two- to three-week home-stay with a Pe ruvian family. While in Peru, students attend regularly scheduled classes and immerse themselves in Spanish language and culture. This course offering is dependent upon student interest and the availability of qualified teacher chaperones. Each student produces and submits a project upon completion of the home-stay.

## Spanish II

Grades 9-12
1 credit Prerequisite: Spanish I
Students continue the study of Spanish language and culture, with emphasis on the development of communicative competence. Spanish II centers on further development of students' reading, writing, listening and speaking skills in the target language. Students begin to show a greater level of accuracy when using basic language structures. They focus on communicating information about their immediate world and daily activities as they encounter more complex features of the language. Vocabulary, grammar and language structures are presented in real-life contexts and are developed around specific communicative func-
tions. Emphasis continues to be placed on the use of Spanish within and beyond the classroom, with the integration of authentic materials into instruction to learn about the cultures of the Spanish-speaking world.

## Spanish III

Grades 9-12 1 credit

## Prerequisite: Spanish II

In Level III Spanish, students continue to develop their proficiency in the three strands of communicative competence: interacting with other speakers of the language, understanding oral and written messages in the target language and making oral and written presentations in the target language. They communicate at a level commensurate with their study, using more complex structures in the language on a variety of topics and moving from concrete to more abstract concepts. Students comprehend the main ideas of authentic materials they listen to and read, and are able to identify significant details when the topics are familiar. Students develop the ability to discuss in the target language topics related to historical and contemporary events and issues.

## Spanish IV Honors

Grades 10-12
1 credit

## Prerequisite: Spanish III

Students continue to develop their proficiency in the three strands of communicative competence: interacting with other speakers of the language, understanding oral and written messages in the target language and making oral and written presentations in the target language. They are able to exchange and support opinions on a variety of topics related to contemporary and historical events and issues, at a proficiency level commensurate with their study. Students comprehend spoken and written texts from a variety of authentic sources as well as produce compositions containing well-developed ideas on various topics. Class is conducted exclusively in Spanish. Students use the target language to access information in other subject areas and to compare and contrast cultural elements in the countries where the language is spoken with their own.

## AP Spanish Language and Culture

 Grades 10-121 credit

## Prerequisite: Spanish IV Honors or

## equivalent

Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
In AP Spanish Language and Culture, students refine language skills, with emphasis on improving speaking proficiency. Students study cultural topics, such as history, civilization, philosophy, music and art, in depth. In addition, students read and analyze several works/excerpts from various genres of literature. Intensive vocabulary and grammar review prove integral parts of this course, which is conducted entirely in Spanish.

## AP Spanish Literature and Culture

Grades 10-12
$l$ credit
Prerequisite: Spanish IV or equivalent Students who enroll in AP courses must take the end-of-course AP exam. The cost of these exams is paid by ACPS.
The AP Spanish Literature and Culture course introduces students to the formal study of a representative body of Peninsular and Latin American literary texts. Students study a variety of genres and types of discourse, enabling them to trace the history of Spanish prose from Don Juan Manuel to modern times. Throughout the course, students engage in extensive analysis, critique, and discussion of authentic literary works. Students learn to read more critically, and write and speak clearly in Spanish, while becoming acquainted with major movements in Hispanic Literature. The course is conducted completely in Spanish.

## Spanish for Heritage Speakers I

## Grades 9-12

1 credit
Prerequisite: Oral proficiency in spoken Spanish; limited proficiency in reading and writing Spanish. Proficiency to be determined by a placement test.
This course is designed for students who are orally proficient in Spanish, but have limited reading and writing ability. Emphasis is placed on familiarizing students with the structural and written aspects of the language to improve their reading and writing skills. Students will begin to develop written compositions and become familiar with various literary genres. Students will also increase their awareness and appreciation
of differences and similarities among the Hispanic culture. Upon successful completion of this course, students may progress to Spanish for Heritage Speakers II. Spanish is used exclusively in the classroom.

## Spanish for Heritage Speakers II

Grades 9-12 1 credit
Prerequisite: Spanish for Heritage
Speakers I or oral proficiency in spoken
Spanish; limited proficiency in reading and writing Spanish. Proficiency to be determined by a placement test.
In this course, students will continue to expand their skills in listening, reading, writing and speaking Spanish. Emphasis is placed on increased complexity of grammatical structures, literary genres, and multi-paragraph basic compositions. Students are expected to understand the main ideas and some detail of authentic Spanish texts as they begin to analyze and synthesize written information. In written assignments, students will learn to summarize information, express their opinions, and provide some details. Students will also continue to study Hispanic culture by learning about various Hispanic personalities and historic events in Spanish speaking countries. Upon successful completion of this course, students may progress to Spanish for Heritage Speakers III. Spanish is used exclusively in the classroom.

## Spanish for Heritage Speakers III

Grades 9-12 1 credit
Prerequisite: Spanish for Heritage Speakers II or oral proficiency in spoken Spanish; limited proficiency in reading and writing Spanish. Proficiency to be determined by a placement test.
This course concentrates on enhancing the students' existing competencies in listening, reading, writing and speaking Spanish though exposure to Hispanic history, geography, culture, and current events. Students will be able to express facts, ideas, and feelings in a variety of higher level speaking and writing tasks. Students will read, analyze, and interpret a variety of authentic texts and improve their knowledge and application of grammatical structures. Students will share cultural perspectives and practices and develop a deeper understanding through the context of literature. Through reading, listening, and discussion activities, students will also continue to
develop their vocabulary. Upon successful completion of this course, students may progress to Spanish IV or Spanish V/AP Spanish Language and Culture. Spanish is used exclusively in the classroom.

## Multilingual Teacher Assistant

## Grades 9-12 <br> 1 credit

This elective honors students who bring multilingual skills into the T.C. Williams High School global community. Students who are bilingual can serve as teacher assistants in content area classrooms or World Language classrooms to aid the teachers in strategic use of students' native languages or as language models in World Language classes.

## College Test Preparation

## College Test Preparation

Grades 11-12 0.5 elective credit This course is designed to expose students to the format and structure of the SAT/ ACT, provide students with targeted test strategies, prepare students to strengthen physical and mental preparedness and review key content for each test section. All test sections are covered in this course. Course content also improves basic math, grammar and reading skills. Participants also learn goal-setting, time management and college essay strategies and techniques. Participants are expected to complete about 60 minutes of independent test practice weekly. In addition, participants receive an opportunity to take an actual conditions exam to practice test strategies and target content preparation. Students who register for this course are expected to register for the SAT or ACT on a date scheduled toward the end of the semester.

## College Summit

## College Summit

Grade 12
1 elective credit
Students who enroll in this course will work with peer leaders to strengthen their college readiness skills and to receive support through the college selection and application process, including résumé development, financial aid information and high performance in academic courses.

## Leadership

## Leadership Development I

## Grades 10-11 <br> 1 credit

Marketing Leadership Development is designed for students who are active in school and community organizations and who need to identify and apply leadership skills. Students who are accepted into the Leadership Program learn the basic principles that will help them effectively function in academic, athletic, social and professional (career) environments. This course helps students promote responsible and ethical behavior in leadership positions. Students develop and implement several school-related marketing activities.

## Leadership Development II

## Grades 11-12 <br> 1 credit

## Prerequisite: Leadership Development I

Students develop competencies in identifying individual aptitudes in relation to effective leadership skills, understanding organizational behavior, using effective communication in the workplace, handling human resources and organizational problems, supervising and training employees, resolving conflict and planning for the future. Continuing education in leadership is emphasized, as well as practical leadership experiences in cooperation with school and community leaders.

## Advanced Leadership Development III

## Grade 12 <br> 1 credit

## Prerequisite: Leadership Development II

This is the final course in the Leadership sequence. Students mentor new students in the program and serve as role models. Students take the lead in planning and organizing school programs and events. Students may initiate new programs and learn how to implement ideas.

## Online and Satellite Campus Courses

The ACPS Online Learning Program (ACPS-OLP) provides opportunities for students to take Credit Recovery, Advanced Placement (AP), Elective and Original (first time) Credit Courses. Students who entered ninth grade for the first time in 2013-14 have a virtual course experience required in order to earn a Standard or Advanced Studies Diploma. ACPS students have three options available to them in order to meet that requirement:
-Take a course listed below through the ACPS-OLP,
-Take Economics and Personal Finance (face to face), or
-Take standard American Government (face to face).
Economics and Personal Finance and the standard American Government course have been designed to be taught in a blended environment, thereby meeting the ACPS board approved definition to meet the online course requirement.

All courses offered through the ACPSOLP provide individualized, self-paced instruction and take place on a learning management system (such as Blackboard). Upon enrollment, students are assigned a site based mentor to support their course enrollment as well as an online teacher to support the content. Courses are available for students in grades 9-12 and 6-8 (when deemed appropriate by school administration). Similarly, AP courses are available for grades 10-12 and as deemed appropriate by school administration for 9th-graders.

Course credit varies dependent upon the course, however, electives are typically worth 0.5 credit, and core courses are worth 1.0 credit. Most courses are offered with rolling admissions (students can enroll at any time throughout the school year). Course offerings and availability fluctuate throughout the year per Virginia legislation. While online courses provide a wonderful flexibility for students to complete their coursework, students must stay on pace to complete the course on time. Therefore, a student's quarterly grade (appearing on his or her quarterly report card)
is derived from a formula that is inclusive of both pace and performance. A limited number of spaces are available each semester for online courses, and priority is given to near-term graduates.

For further information, please contact ACPS Director of Online Learning, Izora Everson at izora.everson@acps.k12.va.us or 703-795-6486.

For a full description of all courses, please go to: www.acps.k12.va.us/technology/olp

## ADVANCED PLACEMENT COURSES

## Social Studies:

- AP Art History
- AP Human Geography
- AP Macroeconomics
- AP Microeconomics
- AP Psychology
- AP United States Government and Politics
- AP United States History
- AP World History


## Science:

- AP Biology
- AP Environmental Science


## Math:

- AP Calculus AB
- AP Calculus BC
- AP Statistics

Technology:

- AP Computer Science A


## Language Arts:

- AP English Language
- AP English Literature


## World Language:

- AP French Language V
- AP Spanish Language and Culture


## ORIGINAL CREDIT/FOUNDATIONAL CREDIT CLASSES

## Math:

- Algebra I
- Algebra II
- Algebra, Functions and Data Analysis
- Calculus
- Geometry
- Pre-Algebra
- Pre-Calculus ( 0.5 credit)*
*These classes should be taken together in sequence to equal the face-to-face PreCalculus class.


## Language Arts:

- English 9
-English 10
- English 11
-English 12
- Journalism


## Science:

- Biology
-Chemistry
- Earth Science
- Environmental Science
- Physical Science
- Physics


## Social Studies:

- American Government
- American History
- Civics
- Economics
- Psychology
- Sociology
- World History and Geography (to 1500)
- World History and Geography (1500-present)


## World Languages:

-French I

- French II
- French III
- German I
-German II
-Latin I
-Latin II
- Latin III
- Mandarin (Chinese) I
- Mandarin (Chinese) II
- Mandarin (Chinese) III
- Spanish I
-Spanish II
- Spanish III


## ELECTIVES:

- Art Appreciation
- Art History
- Career Planning ( 0.5 credit)
- Computer Applications - Office 2010
- Computer Science ( 0.5 credit)
-Computing for College and Careers
-Economics and Personal Finance
- Game Design ( 0.5 credit)
- Health Grade 10 ( 0.5 credit)
- Introduction to Communications and Speech
- Law Studies ( 0.5 credit)
-Literacy and Comprehension 1
-Literacy and Comprehension 2
- Online Learning and Digital Citizenship ( 0.5 credit)
- Personal Finance ( 0.5 credit)
- Physical Education Grade 10 ( 0.5 credit)
- Reading for College Success ( 0.5 credit)
- Strategies for Academic Success
( 0.5 credit)
-Web Design


## CREDIT RECOVERY COURSES

-Credit Recovery Algebra I

- Credit Recovery Algebra II
- Credit Recovery Algebra Functions and Data Analysis
- Credit Recovery Geometry
- Credit Recovery American Government
- Credit Recovery American History
- Credit Recovery Economics
- Credit Recovery Geography
- Credit Recovery World History
- Credit Recovery Biology
- Credit Recovery Chemistry
- Credit Recovery Earth Science
-Credit Recovery Physical Science
- Credit Recovery Physics
-Credit Recovery English 9
-Credit Recovery English 10
- Credit Recovery English 11
-Credit Recovery English 12
-Credit Recovery Health 10
- Credit Recovery Physical Education 10
-Credit Recovery Spanish


## PROFHE OF A SUCCESSFUT ONHINE STUDENT

Students who choose to participate in online courses need to examine their personal skills and aptitudes for taking a class online. The following attributes will greatly contribute to a student's success:

Proficient Reading Level- Students should have an assessed Lexile level of 900 or greater on the Scholastic Reading Inventory.
Self-motivation - Students can direct their own learning environments and methods to fulfill course requirements and achieve individual academic success.
Independent learner - The online environment enables students to learn at their own paces, relieving the stress of feeling rushed or pressured and providing enjoyment in the learning process.
Computer literate - Although they do not need to have advanced computer skills, students should possess a working knowledge of email and the Internet, as well as basic keyboarding skills.
Time management - Students must be able to organize and plan their own best times to learn. There is no one best time for everyone, but the key to learning is to make the time to learn.
Effective written communication skills - Students must use email and discussion forums to communicate with their peers as well as the instructors. The ability to write clearly to communicate ideas and assignments is essential. This method provides the learner with rapid feedback as well as a means to inform instructors of any concerns or problems that he or she may be experiencing.

Personal commitment - Because there are no bells that begin and end classes, students must have a strong desire to learn and achieve knowledge and skills via online courses. Making a commitment to learn in this manner is a very personal decision and requires a strong commitment to perform to achieve academic success.
Last but not least, successful online students are students who decide for themselves that online learning is a choice that they want to make.
SPECIAL NOTE: Students may actually learn and hone the above skills by taking an online course. Be careful not to deny a student's request and interest in online learning simply because he or she has not mastered all of the above skills. These are merely considerations.
When may it be in the best interest of a student to enroll in an online course?

- To resolve scheduling conflicts at school or meet the needs of different schedule configurations
- To allow a student flexibility in use of time to meet other school/family/work commitments
- To take courses not available at the student's home school
- To make up a credit
- Online may be a better-suited learning environment
- Student desires the experience of taking a distance education course
- To provide opportunity for a student to complete course(s) at an accelerated pace
- To provide extended time to complete coursework for students who need additional time
- To meet the needs of a transferring student
- To assist students who have medical conditions that may not allow them to be present for a full day
When may it not be in the best interest of a student to enroll in an online course?
- The student does not meet the profile of a successful online student
- The student requires a remedial program, not an entire course
- The student will not have reliable access to the appropriate computer hardware
- Taking an online course is not the student's choice. Students should desire to take course(s) online rather than have significant adults choose the online courses for the students


## ACADEMIC SUPPORT COURSES

## Peer Mentoring for Students with Disabilities

Grades 9-12
1 credit
Peer mentoring is a course in which general education students are able to become more aware of various disabilities, learn to advocate for people with disabilities and interact with the students in the Small Group Classroom at our school. Peer mentors are responsible for providing assistance to students with disabilities in daily living, social, academic, vocational and community skills. As peer mentors, students are taught how to instruct students with disabilities in various settings and activities. As advocates, peer mentors set an example to others that people with disabilities have the same right to consideration and respect that all people are given.

## Catapult Course

Grades 9-12
No credit
This course is an opportunity for students to strengthen their study skills and complete assignments independently and with assistance, as needed. Students have time to continuously work on assignments, transfer tasks, prepare for assessments and work on projects currently in progress. Students also are able to receive academic support from tutors. An additional focus of this course is on organizational skills. Students have an opportunity to plan ahead on projects and keep an updated homework/assignment calendar. Students enrolled in the Catapult Course are expected to work on materials that support their academic classes, and are encouraged to do revision and additional study on assignments in which they have received feedback from their teachers. If students are caught up on homework, assignments and projects, there will be other materials for them to work on to strengthen reading, writing, math and organizational skills.

## Resource for Academic Purposes (RAP)

## Grades 9-12

1 credit
Prerequisite: The student has an Individualized Education Program (IEP). Students in the Resource for Academic Purposes (RAP) class participate in lessons that pre-teach key vocabulary, skills and concepts to front load information prior
to engaging with the content in the general education content classes. Based on progress in core content classes, students also have re-teaching opportunities to address student needs. Additionally, students learn and implement effective learning strategies.

## Resource Organization

## Grades 9-12

1 credit

## Prerequisite: The student has an

 Individualized Education Program (IEP).Students in this class learn the necessary executive function skills to access the general education curriculum throughout the instructional day. Based on progress in core content classes, students also have pre-teaching and re-teaching opportunities to address student needs. Additionally, students receive necessary accommodations as indicated in their IEPs.

## Social Skills - Autism

Grades 9-12 $\quad 1$ credit Prerequisite: The student has an Individualized Education Program (IEP).
This course is specifically designed to meet the needs of learners identified as moderate to high-functioning autism or Asperger Syndrome to address both organizational and social skill deficits. The course focuses on increasing personal problem-solving and social relatedness skills. Students engage in various activities to increase their understanding and competence in social interactions with peers and authority figures as they approach graduation.

## Social Skills - Emotional Disability <br> Grades 9-12 <br> 1 credit <br> Prerequisite: The student has an Individualized Education Program (IEP).

The cornerstone of the instructional program is the Skillstreaming model. This re-search-based program is designed to help students develop competence in dealing with interpersonal conflicts, learn to use self-control and contribute to a positive classroom atmosphere.

## CAREER PREPARATION COURSES

## Career Preparation I

Grades 9-12 1 credit
Prerequisite: The student has an
Individualized Education Program (IEP).
Students in this class rotate every three to four weeks through jobs within the confines of T.C. Williams High School. At the job site, students work on various job skills, including following directions, social skills and independency. While in the classroom, students learn to identify their own job skills. They also learn the process of building a résumé and locating and applying for employment as well as skills needed to maintain employment.

## Career Preparation II

Grades 9-12
4 credits
Prerequisite: The student has an Individualized Education Program (IEP).
Upon completing the requirements for Career Prep 1, students in this class participate in a job sampling internship program in the community. At the job site, students work on various skills, including accessing public transportation, money skills and scheduling, as well as following directions, social skills and independency. Students have been placed in internships that have led to employment.

## Career Preparation III

Grades 9-12 No credit
Prerequisite: The student has an Individualized Education Program (IEP).
The Career Preparation III course is designed to prepare post-graduate students, who have already had an initial exposure to job sampling experiences, instruction on building essential skills that allow them to gain meaningful and satisfying jobs after they graduate from T.C. Williams High School. This course incorporates a combination of functional academic and experiential activities. It is designed to help students refine their vocational and travel skills and assist them in gaining independence. Students engage in internships and/ or competitive employment, participate in field trips and attend presentations by invited speakers from various local agencies to gain information that will impact deci-
sion making toward life goals. This class may be taken for a grade or pass/fail.

## Employment Training I

Grades 10-11 1 credit
Prerequisite: The student has an Individualized Education Program (IEP).
Students investigate daily living skills, per-sonal-social skills and occupational fields within the classroom setting. They examine occupational requirements, explore career pathways, conduct job searches, learn interview skills and demonstrate positive work traits and attitudes. This course is designed for students who plan to enter the workforce after high school.

## Employment Training II

## Grades 11-12

4 credits
Prerequisite: The student has an Individualized Education Program (IEP).
Students receive the opportunity to participate in a work setting while continuing with their employment training. Students participate in work training that is supervised or monitored by ACPS staff during the school day, and may rotate jobs in order to receive a sampling of different job types and work opportunities. Students receive additional classroom instruction when needed. Students are required to travel independently to and from their job sites.

## Urban Alliance Internship / College

## Success Skills

## Grade 12 <br> 1 credits

This course is offered in collaboration with the Urban Alliance, a non-profit organization with a track record of effective programming to help high school seniors transition to college and careers. It is also a college credit required course, SDV100, at NOVA. Topics covered in this course include: interview skills, resume writing, professional ethics, career assessment and exploration, study skills, time management, and financial literacy. Students receive six weeks of pre-work training to prepare them to be successful in their paid, professional internships and on-going training and support throughout the year. All students are mentored at their internships. Students work 12 hours/week during the school year and 32 hours/week in the summer after graduation. Interns are paid and evaluated, with the potential to receive up to two raises over the course of the program.

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[^0]:    Parent/Guardian Signature:

[^1]:    (1) Any modification to the above pathway will be outlined in writing and agreed upon by the College and School Division. Any modifications will not prevent students from obtaining the plan's intended credential.
    (2)In order to participate in the above pathway, a student must meet all Dual Enrollment admission requirements and College program requirements, and complete VCCS placement tests. In order to enroll in any of the courses noted in the pathway, all course pre-requisites must be met.
    (3) Program information including purpose, occupational objectives, admission requirements, notes, computer competency requirements, and course requirements may be found in the College catalog found at www.nvcc.edu/curcatalog.

