

Course Description Guide for High School Students

www.npsk12.com

①① (NorfolkPublicSchools

#### **NPS Mission Statement**

The mission of Norfolk Public Schools, the cornerstone of a proudly diverse community, is to ensure that all students maximize their academic potential, develop skills for lifelong learning and are successful contributors to a global society, as distinguished by:

- Courageous advocacy for all students
- Family and community investment
- ❖ Data-driven personalized learning
- Strong and effective leadership teams
- Shared responsibility for Teaching and Learning
- \* Access to rigorous and rewarding college and career readiness opportunities

#### **NPS Board and Division Priorities**

- Ensure full accreditation
- ❖ Increase academic achievement of all students − raise floor and ceiling simultaneously to close achievement gaps
- Improve climate, safety and attendance
- ❖ Become a School Board of Distinction
- ❖ Promote Norfolk Public Schools to reflect outstanding accomplishments of staff, teachers and students
- Develop and coordinate a capital improvement plan for facilities and technology to enhance teaching and learning
- ❖ Attract, retain, and help to develop strong academic families and highly qualified teachers and staff

### **NPS School Counseling Mission Statement**

The school counseling program, based on national, state, and local standards in collaboration with all stakeholders (students, parents, faculty, community members, and local businesses), has been developed to ensure that all students (K-12) regardless of individual differences acquire the academic, career and personal/social competencies needed to access exciting options and opportunities upon graduation in order to become successful, productive contributors to society.

### The Division thanks the Course Description Book Committee for their efforts to produce and update this handbook. Thanks to the Committee Members:

Bruce Brady, Sr. Coordinator, History Dept.
Adrienne Britton, Sr. Coordinator, Science Dept.
Dr. Michael Cataldo, Exec. Director, Curriculum & Instruction
John Coleman, Exec. Director, Secondary Schools
Melinda Collard, Information Systems Specialist
Gwen Collins, Sr. Coordinator, English Dept.
Thomas Etheridge, Sr. Coordinator, Student Information Systems
Georgeanna Fellio, Coordinator
Valerie Ford, Curriculum
Karla Stead, Curriculum
Georgeanna Fellio, Sr. Coordinator, Art Dept.
Kenyetta A. Goshen, Career & Technical Education

April Harmon, Sr. Coordinator, School Counseling & Guidance Meredith Hobson, Sr. Coordinator, Foreign Language Dept.

Darrick Person, Sr. Coordinator, Health, Safety, & Physical Educ.

Danielle Roby, Sr. Coordinator, Music Dept.

Rhonda White, Sr. Coordinator, Mathematics Dept.

Bruce Brady, Sr. Coordinator, History Dept.

Adrienne Britton, Sr. Coordinator, Science Dept.



School Year 2019-2020

Dear Norfolk Public Schools' Students,

The Course Description Guide for High School Students is designed to provide you and your parents/guardians information that will assist you in choosing courses that lead to a meaningful high school education and fulfill your graduation requirements. Whether you plan to enter community college, a four-year institution, the military, a workforce training program or the job market, choosing beneficial courses now will establish a strong foundation for your future college and career goals.

You are encouraged to take advantage of every opportunity available to you during your educational career. Take some time to review this course description book and the options available to you. Meet with your school counselor, your parents/guardians, and your teachers to discuss what education and marketable skills you'll need to achieve your goals. Remember, this is a time to build your foundation for future success. Do not be afraid to stretch your mind and take courses that will challenge and better prepare you for the exciting world you will enter after high school.

While the administration and the entire Norfolk Public Schools staff recognize the importance of being consistent in applying the procedures of this handbook, we also recognize the great diversity in our students' needs and the multiple career pathways available. As such, we will continue to work collaboratively to identify the courses to best meet students' needs. We will also continue to work towards providing engaging educational opportunities to prepare students for life after Norfolk Public Schools.

You have a team of administrators, counselors, teachers, and staff who are committed to making sure you receive the necessary skills and knowledge to prepare you for a rewarding career and to be active participants in the economy and the community. If you have any questions, please contact the Department of School Counseling and Guidance at your school for assistance. We are here to help you set your goals and to ensure you receive the best education possible. Always strive to better yourself and know that you can accomplish your dreams!

Sincerely,

Sharon I. Byrdsong, Ed. D.

Dr. Cha d. D. V.

Acting Superintendent of Schools

### **Table of Contents**

### **General Information**

Graduation Requirements at a Glance	3
Advanced Studies Diploma: Minimum Course & Credit Requirements	
Standard Diploma: Minimum Course & Credit Requirements	
Other Diplomas & Certificates	
Information for Transfer Students	
Standard Diploma Verified Credit Requirements for Transfer Students	
Advanced Studies Diploma Verified Credit Requirements for Transfer Students.	
Graduation (Diploma) Seals of Achievement	
Early College Scholars Program	
Virginia Plan for Dual Enrollment	
Virtual Virginia	
High School Specialty Programs	
Athletics	
Twelfth-Grade Transfer Student	
Summer School	
Evening School	
Credit Recovery	
Attendance	
Homework and Grading	23
Promotion Standards	
Definitions	24
Grading Scale	25
Weighted Courses	25
Honor Roll	25
Grade-Point Average   Class Rank	26
Scheduling	
Repeating Courses Previously Passed	
Repeatable Courses	
·	
Course Descriptions	
Art	29
English	
ForeignLanguage_ESL	
Health, Safety and Physical Education	
History & Social Science	
Mathematics	

Music	58
Science	65
Career and Technical Education	70
Business and Information Technology and Marketing	78
Family & Consumer Sciences Education-High School	75
STEM (Technology Education)	76
Norfolk Technical Center Offerings	81
Agriculture, Trade, and Industrial Education	81
Business and Information Technology at NTC	86
Family and Consumer Science at NTC	87
Health and Medical Services at NTC	88
Career Development Program	91
US Navy JROTC	95
International Baccalaureate Diploma Program at Granby High	97
Medical and Health Specialties Program at Maury High	107
Leadership Center for the Sciences and Engineering at Norview	110
Academy of Visual and Performing Arts at Booker T. Washington High	114
Academy of Leadership and Military Science at Lake Taylor High	119





# GENERAL INFORMATION



### **Graduation Requirements at a Glance**

	Advanced	Standard
Subjects	Studies Credits	Credits
English	4 (Including one credit from English 9, 10, 11, and 12)	4 (Including one credit from English 9, 10, 11, and 12)
Mathematics	4 (Including 1 credit at or above Algebra I and 3 different courses from among Algebra I, Geometry, Algebra II, or any other mathematics courses higher than Algebra II)	3 (Including one credit at or above Algebra I and from two courses from Algebra I, Geometry, Algebra Functions and Data Analysis, Algebra II or higher)
History / Social Science	4 (Including two credits from World History/ Geography, 1 credit from US/VA History and 1 credit from US/VA Government)	3 (Including one credit each from World History/ Geography, US/VA History and US/VA Government)
Science (Laboratory)	4 (From three different science disciplines)	3 (From two different science disciplines)
Health & Physical Education	2 (Including certification in First Aid/CPR/AED)	2 (Including certification in First Aid/CPR/AED)
Foreign Languages	3 (3 credits from one language or 2 from 2)	0
Fine Arts or Career & Technical Education	1	2 (Credits from Foreign Language, Fine Arts or CTE)
Economics and Personal Finance	1	1
Electives	3	4 (Including 2 sequential electives or a coherent sequence of career & technical courses)
Virtual Course	1 (Credit or non-credit)	1 (Credit or non-credit)
Career and Technical Education Credential		1
Standard Units of Credit	26	22
Verified Credits	5	5

Passing grades earned in high school credit-bearing in seventh and eighth grade courses count toward the credit requirements for high school graduation. These credits are included in a student's high school grade-point average and class rank. Parents can request the removal of these credit-bearing courses taken in middle school. However, this request must be done the summer of the 9th grade year.

Beginning with first-time ninth-grade students in the 2016-2017 school year, students shall be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation as a requirement for high school graduation.

## **Advanced Studies Diploma: Minimum Course & Credit Requirements**

Discipline Area	Standard Credits Revised Advanced Studies Diploma Effective with ninth graders in 2011-2012	Verified Credits
English	4	2
Mathematics	4	1
Laboratory Science	4	1
History & Social Science	4	1
Foreign Languages	3	
Health & Physical Education	2	
Fine Arts or Career & Technical Education	1	
Economics and Personal Finance	1	
Electives	3	
Beginning with the 9 <sup>th</sup> grawhich may be non-credit	ide class of 2013 – 2014 and beyond students bearing.	must also complete one virtual course,
Total	26	5

### **Electives**

Fine Arts and Career and Technical Education – Both the Standard and the Advanced Studies Diploma contain a requirement for one standard unit of credit in Fine Arts or Career and Technical Education. The Standards of Accreditation do not require that courses used to satisfy the requirement of Fine Arts or Career and Technical Education be approved by the Board. Therefore, local school officials should use their own judgment in determining which courses students take to satisfy the requirement of a unit of credit in Fine Arts or Career and Technical Education for the Advanced Studies and Standard.

Foreign Language – The Advanced Studies Diploma contains a requirement for three years of one foreign language or two years of two different languages. In March 1998, the Board of Education approved the provision of three years of instruction in American Sign Language (ASL) for foreign language credit toward an Advanced Studies Diploma; other foreign languages will satisfy this requirement as well. Details of this action are available in: <a href="Superintendent's Memo">Superintendent's Memo</a>, Interpretive, #1, June 12, 1998.



## **Standard Diploma: Minimum Course & Credit Requirements**

STANDARD DIPLOMA COURSE REQUIREMENTS					
Discipline Area	Standard Credits Effective with ninth grade classes of 2003-04 through 2010-2011	Standard Credits Revised Standard Diploma Effective with ninth graders in 2011-2012	Verified Credits - Effective for ninth graders: 2018-2019 and beyond		
English	4	4	2		
English: 4 credits in English including o	ne credit from English 9, 10,	11, and 12			
Mathematics	3	3	1		
Mathematics: Courses completed to sa among Algebra I, Geometry, Algebra, Fu level of Algebra II.					
Laboratory Science	3	3	1		
Laboratory Science: Courses complete different science disciplines: earth sciencourses required for the International Barequirement. Note 1–see below	ces, biology, chemistry, or p	hysics or completion of the se	equence of science		
History & Social Science	3	3	1		
History & Social Science: Courses cor and Virginia Government, and one cours additional courses to satisfy this require	se in either world history or g				
Health & Physical Education	2	2			
Fine Arts or Career & Technical Education	1				
Foreign Language, Fine Arts or Career & Technical Education		2			
Foreign Language, Fine Arts or Career & Technical Education: Pursuant to Section 22.1-253.13:4, Code of Virginia, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education.					
Economics and Personal Finance		1			
Electives	6	4			
<b>Electives</b> : Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.					
Beginning with the 9 <sup>th</sup> grade class of 2013 – 2014 and beyond students must also complete one virtual course, which may be non-credit bearing and earn a Board-approved Career and Technical Education credential.					
Total	22	22	5		

To graduate with a Standard Diploma, a student must earn at least 22 standard units of credit by passing required courses and electives and earn at least five verified credits by passing end-of-course SOL tests or other assessments approved by the Board of Education.

The school counselor can advise on available courses to fulfill the requirements for a Standard Diploma.

Note 1

Effective with the 2010-2011 academic year and beyond: Students who complete a career and technical [education] program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (1) the student selected verified credit and (2) either a science or history or social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board of Education as an additional test to verify student achievement.

### **Electives**

**Sequential Electives** – Effective with the graduating class of 2003, students who wish to receive a Standard or Modified Standard Diploma must successfully complete two sequential electives. On February 5, 2002, the Board of Education approved <u>Guidelines for Sequential Electives for the Standard and Modified Standard Diploma</u> (PDF).

- Sequential electives may be in any discipline as long as the courses are not specifically required for graduation.
- Courses used to satisfy the one unit of credit in a fine arts or career and technical education course may be used to partially satisfy this requirement.
- For career and technical education electives, check with the Office of Career and Technical Education at (804) 225-2051.
- An exploratory course followed by an introductory course may not be used to satisfy the requirement.
- An introductory course followed by another level of the same course of study may be used.
- Sequential electives do not have to be taken in consecutive years.

Fine Arts and Career and Technical Education – The Standard, Advanced Studies, and Modified Standard Diplomas each contain a requirement for one standard unit of credit in Fine Arts or Career and Technical Education. The Standards of Accreditation do not require that courses used to satisfy the requirement of Fine Arts or Career and Technical Education be approved by the Board. Therefore, local school officials should use their own judgment in determining which courses students take to satisfy the requirement of a unit of credit in Fine Arts or Career and Technical Education for the Standard, Advanced Studies, and Modified Standard Diplomas.

### **Other Diplomas & Certificates**

### **Applied Studies Diploma**

Available to students with disabilities who complete the requirements of their IEP and who do not meet the requirements for other diplomas.

### **General Achievement Diploma (GAD)**

Available to students 18 years or older who meet the criteria set by the Board of Education.

Superintendent's Memo – Informational #123, August 1, 2003

Requirements for the General Achievement Diploma

### **General Education Development Certificates (GED)**

Refer to Regulations Governing General Education Development Certificates (8 VAC 20-360-10, et. seq.)

Superintendent's Memo – Informational #131, June 30, 2006

General Educational Development (GED) Testing Eligibility, effective July 1, 2006

### **Certificate of Program Completion**

Available to students who complete prescribed programs of studies defined by a local school board but who do not qualify for diplomas.

### **Information for Transfer Students**

### First-Time Transfers to a Virginia Public School

Graduation requirements (in compliance with 8VAC 20-131-60) for a student transferring into a Virginia public school for the first time in grades 9-12, depends on the grade the student is transferring into **and** when in the school year the student is transferring.

A student is considered to have transferred at the **beginning** of the school year if 20 or fewer hours of instruction have been completed. A student is considered to have transferred **during** the school year if more than 20 hours of instruction have been completed.

### Standard Diploma Verified Credit Requirements for Transfer Students

### STUDENTS TRANSFERRING INTO A VIRGINIA PUBLIC SCHOOL FOR THE FIRST TIME

During 9th Grade or Beginning of 10th Grade	Must Earn	Ninth Graders through 2017-2018	Ninth Graders in 2018-2019 and beyond	
Verified Credits				
	English	2	2	
	Mathematics	1	1	
	Science	1	1	
	History & Social Science	1	1	
	Student Selected	1	0	
During 10th Grade or Beginning of 11th Grade	Must Earn	Ninth Graders through 2017-2018	Ninth Graders in 2018-2019 and beyond	
Verified Credits				
	English	1	1	
	Mathematics	1	0	
	Science	1	0	
	History & Social Science	1	0	
	Student Selected	0	1	
During 11th Grade or Beginning of 12th Grade	Must Earn	Ninth Graders through 2017-2018	Ninth Graders in 2018-2019 and beyond	
Verified Credits				
	English	1	1	
	Student Selected	1	1	
During 12th Grade	Students should be given every opportunity to earn a diploma; if this is not possible, the school division should arrange to have the previous school award the diploma; or seek a waiver of the verified credit requirement from VDOE.			

## Advanced Studies Diploma Verified Credit Requirements for Transfer Students

### STUDENTS TRANSFERRING INTO A VIRGINIA PUBLIC SCHOOL FOR THE FIRST TIME

ouring 9th Grade or Seginning of 10th Grade	Must Earn	Ninth Graders in 2018-2019 and beyond	
5 Verified Credits			
	English	2	
	Mathematics	1	
	Science	1	
	History & Social Science	1	
	Student Selected	0	
During 10th Grade or Beginning of 11th Grade	Must Earn	Ninth Graders in 2018-2019 and beyond	
2 Verified Credits			
	English	1	
	Mathematics	0	
	Science	0	
	History & Social Science	0	
	Student Selected	1	
During 11th Grade OR Beginning of 12th Grade	Must Earn	Ninth Graders in 2018-2019 and beyond	
2 Verified Credits			
	English	1	
	Student Selected	1	
During 12th Grade	Students should be given every opportunity to earn a diploma; if this is not possible, the school division should arrange to have the previous school award the diploma; or seek a waiver of the verified credit requirement from VDOE.		

## Graduation (Diploma) Seals of Achievement

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), International Baccalaureate (IB), Cambridge, or dual enrollment courses.

**Board of Education Seal** – Awarded to students who complete the requirements for a Standard Diploma or Advanced Studies Diploma with an average grade of "A" beginning with the ninth-grade 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.

The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.

**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.

The Board of Education shall approve all professional licenses and examinations used to satisfy requirements.

**Board of Education's Excellence in Civics Education Seal –** Awarded to students who meet each of the following four criteria:

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

Local school divisions may award other diploma seals or awards for exceptional academic, CTE, citizenship or other exemplary performance in accordance with criteria defined by the local school board. The design, production and use of those seals are the responsibility of the local school boards awarding the seal.

An explanation of all seal requirements can also be found on page 10 of the <u>Guidance Document</u> <u>Governing Certain Provisions of the Regulations Establishing Standards for Accrediting Public Schools in Virginia</u>.



### **Early College Scholars Program**

The Early College Scholars program allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma. The result is a more productive senior year and a substantial reduction in college tuition. Students earning a college degree in seven semesters instead of eight can save an average of \$5,000 in expenses.

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

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

Early College Scholars are supported by Virtual Virginia and the Commonwealth College Course Collaborative. Virtual Virginia provides statewide access to college-level courses while the Commonwealth College Course Collaborative defines the subjects high school students can complete and receive college degree credit from participating public and private colleges and universities.

### Virginia Plan for Dual Enrollment between Virginia Public Schools and Community Colleges

In the summer of 2008, a revised collaborative agreement entitled the "Virginia Plan for Dual Enrollment between Virginia Public Schools and Community Colleges" was signed. This agreement provides a statewide framework for dual enrollment arrangements between Virginia public schools and community colleges.

These arrangements may be made at the local level, i.e., between the representatives of boards of the participating public school and the participating community college authorized to contract such agreements. They may be formed in three distinct ways:

- First, high school students may be enrolled in the regularly scheduled college credit courses with the other students taught at the community college.
- Second, high school students may be enrolled in specially scheduled college credit courses conducted exclusively for high school students taught at the high school.
- Third, high school students may be enrolled in specially scheduled college credit courses conducted exclusively for high school students taught at the community college.

For further information, see:

Virginia Plan for Dual Enrollment between Virginia Public Schools and Community Colleges (PDF)

All dual enrollment courses may be counted toward the 15 college credits required for a student to become an "Early College Scholar." Certain dual enrollment courses may also qualify as part of the Commonwealth College Course Collaborative. This collaborative, involving all Virginia two- and four-year colleges and universities, with the exception of Virginia Military Institute, provides a set of academic courses that fully transfer as core requirements and degree credits.

### **Virtual Virginia**

Middle school and high school students currently have the option of enrolling in VDOE's Virtual Virginia classes. This web-based/online delivery program provides course offerings that include pre-Advanced Placement (AP), honors and AP classes as well as academic core classes, electives and world languages. The primary mission of the program is to serve rural and underserved students with courses that are unavailable because of the lack of highly qualified instructors or because there are too few students interested for the local school to offer the course.

Each course contains video segments, audio clips, whiteboard and online discussions as well as text. Teachers are available for telephone conversations with students throughout the school day via toll-free numbers, and online. Virtual Virginia classes offer a rich multimedia learning environment that appeals to a variety of learning styles. Courses can be scheduled flexibly throughout the day, as courses do not have to be taken in "real" time.

Eligible students may enroll in Virtual Virginia through their local schools.

Visit the Virtual Virginia Website for details about the program, including the course catalog, school registration information and more.

(http://www.doe.virginia.gov/instruction/virtual\_learning/index.shtml or https;//www.virtualvirginia.org)

### **High School Specialty Programs**

### Granby High School -International Baccalaureate Diploma Program

Granby High School is a member of the International Baccalaureate Organization (IBO) and has been authorized to offer the International Baccalaureate Diploma Program since 1998. This program is a two-year academically rigorous curriculum intended for juniors and seniors who desire in-depth scholastic preparation for college or university. The International Baccalaureate Organization "aims to develop inquiring, knowledgeable, and caring young people with adaptable skills to tackle society's complex challenges and who will help to make a better and more peaceful world". The IB program emphasizes teaching students how to learn and encourages them to "value learning as an essential, integral part of their everyday lives," and cultivates students' intellectual, social, emotional, and physical well-being in addition to their cognitive development. Students who complete the IB Diploma Program enter college with the communication and critical thinking skills needed to be successful in our global society (IB Parent Pack, 2015). Teaching in the program is based on inquiry, focused on conceptual understanding, developed in local and global contexts, focused on effective teamwork and collaboration, differentiated to meet the needs of all learners, informed by formative and summative assessment (IB Approaches to Teaching).

### Lake Taylor High School Academy of Leadership and Military Science

The Academy of Leadership and Military Science is a collaborative venture between Norfolk Public Schools and a number of community, private sector, government, higher education, and military agencies.

The small learning community of the Academy is comprised of cluster scheduling of all core, foreign language, naval science, leadership, and dual credit college classes as well as year-round internships with community partners.



### Maury High School The Medical and Health Studies Program

Entering its thirty-first year, the Medical and Health Specialties Program at Maury High School was formed in 1986 to initiate early preparation of junior and senior level students, particularly minorities and females, for careers in health professions through academic coursework and motivational counseling. Through a special collaboration between Norfolk Public Schools and the Eastern Virginia Medical School many unique experiences enrich and enhance the science coursework for select students. Admission to this program is by application and entry occurs ONLY for rising freshmen students.

# Norview High School The Leadership Center for the Sciences and Engineering

LCSE is a smaller learning community within Norview High School, which consists of high-performing students enrolled in a rigorous curriculum with considerable emphasis in math and science content. LCSE students also receive formal instruction in leadership development. Although designed to guide students toward possible college degrees and careers in engineering, scientific research, math and technology, the ultimate goal of LCSE is to graduate students equipped with the knowledge and skill to serve in leadership roles in their community.

### **Booker T. Washington High School - Academy of the Arts**

The Visual and Performing Arts Academy of Booker T. Washington High School, offers the opportunity for students who have an interest in the arts to select courses that prepare them for postsecondary advanced studies or for a faster entry into arts-related occupations. The balance between artistic development and academic preparation is at the heart of the Academy program. Students are exposed to the humanities and have the opportunity to select a course of study that will best meet their needs and interests.

## Rigorous Extra-Curricular Activities in Arts and Sciences

### Norfolk Science, Technology, and Advanced Research, or NORSTAR

Norfolk Science, Technology, and Advanced Research, or NORSTAR is a student-driven, STEM infused program designed to help gifted and high-ability students in grades 9-12 further their skills in science, technology, engineering, and math. NORSTAR students research and investigate STEM-related topics of their choosing, and work alongside peer-mentors, teacher-mentors, and expert mentors to design and build solutions to real-world problems.

NORSTAR students also participate in STEM-based competitions in Hampton Roads and beyond, including the Tidewater Science and Engineering Fair at Old Dominion University. Students work with instructors to select competitions which best match their areas of interest and academic strengths.

Students should leave the NORSTAR program equipped with the necessary knowledge and experience to successfully pursue higher education and/or advanced training in a STEM-related field. Participants do not have to decide on a specific STEM area to thrive in NORSTAR. NORSTAR peers, instructors, expert mentors, and staff will guide students to investigate topics that agree with students' interests and academic strengths.

#### NORSTAR Components

The NORSTAR program is structured into four major academic components: 1) Goal-Setting, 2) Projects, 3) Competitions, and 4) Presentations. Each component is designed to work with the others, much like the gears of a machine. Opportunities for specialized STEM training is woven into the Projects and Competitions components. Soft skills, such as networking and communication skills are part of the Presentations component. Finally, goal-setting and self-reflection are valuable skills that successful professionals possess, and students will strengthen these skills as part of the NORSTAR curriculum. Each of the four components is discussed in detail later in the NORSTAR Student Handbook.

### **Governor's School for the Arts**

The Governor's School for the Arts (GSA) is a center for innovation that develops excellence, nurtures creativity, inspires artistic vision and builds communities with a passion for the arts.

GSA offers premiere training in Hampton Roads in six departments: Dance, Instrumental Music, Musical Theatre, Theatre & Film, Visual Arts and Vocal Music. Each department trains students to develop in their art form with a focus on conservatory style study. Students take academic classes at

their regular high schools in the morning and attend GSA in the afternoon for three hours daily during the regular academic year. Transportation to and from GSA is provided by NPS. Each department at GSA is tailored to meet the demanding needs of each art form. The unique nature of the school provides a variety of arts experiences in both traditional and non-traditional environments. Classes may be individual lessons, small or large groups, or rehearsals. The average class size is 12. Students may earn three credits for each year they attend GSA. There is no tuition charge. Admission to GSA is by audition and any students in grades 8-11 can apply. Applications are available from school counselors or gifted resource teacher.

### **Strolling Silver Strings**

Any member of a NPS high school orchestra may audition for this prestigious program which has performed locally, nationally and internationally. The students' repertoire ranges from classical themes to popular melodies. Students are expected to perform as soloists on various selections and the entire repertoire is to be performed from memory. Students may contact their school's music instructor to schedule an audition.

#### Jazz Ensemble

Any member of a NPS high school band may audition for this program. These students study jazz, theory, literature, and improvisation in the context of a performing ensemble. Repertoire encompasses all styles of jazz music idiom, from big band to combo playing. All students are expected to perform as soloists on various selections. Since the jazz program is a showcase performing ensemble, participants must play with near professional tone and must be able to exhibit advanced proficiency on their instruments. Students may contact their school's music instructor to schedule an audition.



## Athletics and Other Extracurricular Activities

Norfolk Public Schools offers a variety of opportunities for students to participate in extracurricular activities on the school, district, state, and national levels. Students should check with their school Athletic Director, Career and Technical Education Teachers, Fine Arts Teachers, and School Counselors at their schools for specifics.

### Virginia High School League (VHSL) Scholarship Rule

The VHSL regulates a variety of interschool competitions across the state of Virginia for activities including theater, scholastic bowl, literary publications, forensics, cheerleading, and other athletic competitions.

Students should check with their school athletic director, coach, or activity sponsor about specific eligibility rules. At a minimum:

A student shall not have reached the age of 19 on or before August 1 of the school year in which he/she wishes to compete.

Norfolk Public School's 2.0 Grade Point Average (GPA) Requirement:

- A 2.0 GPA will be required for participation in all VHSL sanctioned activities.
- GPA will be based on all courses taken for credit.
- GPA will be based on semester grades.
- The grading scale shall be the current scale used by NPS, including weighted classes.

Credit for summer school must be applied to the preceding semester. Transfer students should check with the Athletic Director for specific eligibility requirements

Students shall have one appeal or probation period during their middle school eligibility (8th grade only) and one appeal or probation period during their high school eligibility (11th or 12th grade only) if they fall below the minimum GPA requirements to meet VHSL standards. Tutorial classes will be available for all student athletes and attendance shall be mandatory for those who have GPA's below the 2.0 average and using a waiver. The tutorial classes shall have tutors available to assist students. Each school shall hire an academic advisor who is paid a supplement to monitor grades and attendance weekly and supervise the study halls. Coaches will also assist with the monitoring of grades and the supervision of tutorial classes. The tutorial classes are held Monday through Thursday throughout the school year.

Students who are classified as having a disability whose eligibility must be determined according to applicable federal and state laws, who fall below the 2.0 average, will be examined on an individual basis. Waivers shall only be granted by the superintendent or his designee.

Students with disabilities who request a waiver must be making standard progress in courses taken as determined by the student's Individual Education Plan (IEP).

Students, who have a cumulative average above the 2.0, but fall below a 2.0 for the semester, will be allowed to average the semester average with the cumulative average. If the cumulative average is still above 2.0, the student shall be allowed to participate.

Ninth graders are encouraged to try out for high school sports. Fall sports begin in August, winter sports begin in November, and spring sports begin in February. Each student must have a physical before participating in a Norfolk Public Schools sports program. The physical may be given by the student's doctor or by a doctor employed by the high school. Students should check with their school for a schedule of when physicals are offered. A fee is required for all physicals.

First time ninth grade students will be eligible to participate in VHSL extracurricular activities using the VHSL requirements for one (1) academic year only. At the end of their first year of high school, the students must meet the increased academic requirements (2.0 GPA) of Norfolk Public Schools to participate.

Athletes are eligible to ride the late bus home after each day's practice. Usually, these buses leave the high school from 5:30 to 7:00 p.m.

For more specific details, see your high school's athletic director, school counselor, or the NPS Website.

### **NCAA Eligibility**

Students planning to participate in intercollegiate activities at an NCAA Division I or II institution must have their academic and amateurism status certified by the NCAA Eligibility Center. The NCAA recommends you register during your sophomore year of high school. Check with your school counselor for details.



### **Division I Core Academic Requirements**

To be eligible to practice, receive athletic scholarships, and/or compete in your first full-time year at a Division I school, a student must graduate from high school and meet ALL the following requirements:

- 1. Complete 16 NCAA core courses:
  - o 4 years of English
  - o 3 years of math (Algebra I or higher)
  - 2 years of natural/physical science (including one year of lab science if your high school offers it)
  - o 2 years social science
  - o 1 additional year of English, math or natural/physical science
  - 4 additional years from the areas of English, math, natural/physical science, social science, foreign language, comparative religion or philosophy
- 2. Complete 10 core courses, including seven in the areas of English, math or natural/physical science, before the start of the student's seventh semester of high school. A student must have more than 10 core courses completed to be able to repeat or replace any of the 10 courses used to meet the 10/7 requirement.
- 3. Earn a minimum 2.3 GPA in NCAA core courses.
- 4. Earn an SAT combined score or ACT sum score that matches your core-course GPA on the Division I sliding scale.

### **Division II Core Academic Requirements**

To be eligible to practice, receive athletic scholarships, and/or compete in your first full-time year at a Division II school, a student must graduate from high school and meet ALL the following requirements:

- 1. Complete 16 core courses
  - o 3 years of English
  - o 2 years of math (algebra 1 or higher)
  - o 2 years of natural/physical science (including one year of lab science if your high school offers it)
  - o 2 years of social science
  - o 3 additional years of English, math or natural/physical science
  - o 4 additional years of English, math, natural/physical science, social science, foreign language, comparative religion or philosophy
- 2. Earn a minimum 2.2 GPA in NCAA core courses.
- 3. Earn an SAT combined score or an ACT sum score that matches your core-course GPA on the Division II sliding scale.

Division III does not use the NCAA Eligibility center. Students should check with the school to determine amateurism and eligibility requirements for sports.

Division III does not use the NCAA Eligibility Center. Please contact the Division III college regarding their academic and amateurism standards for athletics.

Please visit the NCAA Eligibility Center for additional information at eligibilitycenter.org or NCAA.org/playcollegesports.

### Twelfth-Grade Transfer Student

To be eligible to earn a diploma from Norfolk Public Schools, a twelfth-grade transfer student must be enrolled in Norfolk Public Schools for a minimum of one semester and must earn a minimum of two and one-half credits.

### **Summer School**

Norfolk Public School offers summer classes for students needing additional instruction beyond the regular school year. All classes meet the same requirements as the regular term classes including the end of course SOL test, where appropriate.

### **Evening School**

Granby High Evening School is located at Granby High School and operates on the regular school year calendar during evening hours Monday through Thursday. The Evening School offers additional opportunities for NPS senior students to obtain credits needed for graduation. Requirements for evening school classes are the same as regular day classes including end-of-course SOL tests where appropriate. Students are referred by their home school counselors. There is a fee associated with enrolling in evening school courses. Visit the Granby Evening School web site for classes and fees.

### **Credit Recovery**

Credit recovery is offered via an online, self-paced program to students who have passed the Virginia SOL (Standards of Learning) test (if applicable), completed the required course hours (seat time), but failed one or more semesters of a course.

### **Attendance**

Historical data has proven that regular school attendance will result in better grades and greater success in high school. High school students are responsible for attending school regularly. Norfolk Public Schools has an attendance policy that states:

- Students must attend school regularly. Students assigned to classes that meet daily and who are
  absent ten (10) or more days (excused or unexcused) in a semester course, or twenty (20) or
  more days (excused or unexcused) in a school year, will not earn credit for the class regardless
  of earned grades.
- Students assigned to block schedule and who are absent seven (7) or more days (excused or unexcused) in a semester course, or fourteen (14) or more days (excused or unexcused) in a school year, will not earn course credit regardless of earned grades.

- If your absence is excusable, bring a note (or other verification) signed by your parent or
  guardian to school. Present this note to your teachers to sign, allowing you to make up work
  you missed. Without an excuse, you will not be allowed to make up missed assignments. If
  you are in the hospital or have a long-term illness, have your parent or guardian call your
  school counselor for additional services or supports.
- Parents may request an administrative review by the principal when there are extenuating
  circumstances that prevent the student from meeting the guidelines. Academic credit may be
  approved if the principal determines there to be sufficient evidence presented that the student
  has mastered the standards/objectives for the grade level or for a specific course.

### **Homework and Grading**

Homework is required at all levels and is assigned a minimum of four nights a week. However, in some content areas homework may not be appropriate. Because homework is an extension of class work at an independent level, students should be held accountable for completing homework assignments and given credit for fulfilling the required tasks. Homework should be reviewed, marked, and returned within a reasonable period of time (not to exceed **two to three class periods/meetings/blocks** for secondary). Homework assignments should be reasonable in length, academically based, and meaningful to student learning.

All homework will be counted. Because of the variety of assignments that may be included as homework, some homework assignments may receive grades and some may receive checks for completion. The way in which homework is evaluated will be based on teacher discretion and should be clearly communicated to parents and students. In order to ensure that grading and accounting for homework assignments will be consistent across the district the following guidelines have been developed:

Homework will be assigned, in accordance with School Board Policy, and students will be held accountable for homework assignments. Teachers will maintain records of homework assignments (e.g. grades and/or frequency of completion). Teachers will also use the "Comments" section of the report card to note a concern or need for improvement.

### **Promotion Standards**

Students will be classified as 9th, 10th, 11th and 12th graders on the basis of earning the required number of course and verified credits for the grade level. Course credit is earned on the basis of achieving and/or exceeding course standards.

**Grade 9:** To be classified a ninth grader a student must satisfy the requirements for promotion from the eighth grade.

**Grade 9 to 10:** To be classified a tenth grader a student must earn **at least five (5)** course credits at the end of 9th grade and **one (1) verified credit.** 

**Grade 10 to 11:** To be classified an eleventh grader a student must earn at least ten (10) course credits at the end of 10th grade which include:

English.....(2) credits

Math.....(1) credit

Earn Two (2) Verified Credits

**Grade 11 to 12:** To be classified a twelfth grader a student must have earned at least fifteen (15) course credits at the end of 11th grade which include:

### Earn Four (4) Verified Credits

Students must also be able to complete the requirements for graduation by the following June.

### **Definitions**

#### Standard Unit of Credit

A standard unit of credit for graduation is based on a minimum of 140 clock hours of instruction and successful completion of the requirements of the course.

#### **Verified Unit of Credit**

A verified unit of credit for graduation is based on a minimum of 140 clock hours of instruction, successful completion of the requirements of the course and the achievement of a passing score on the end-of-course SOL test for that course or additional tests by the student. (8 VAC 20-131-110). A performance-based assessment in writing serves as part of the verified credit in writing.

### **Grading Scale**

Grade	100% Scale	Definition
A A-	93-100	Designates the status of a student who consistently demonstrates a thorough understanding and skill application in the content area (e.g., SOL and curriculum objectives for the grade/course level.)
Α-	30-32	and curricularit objectives for the grade/course level./
B+	87-89	
В	83-86	Designates the status of a student who demonstrates a high degree of understanding and skill application in the content area (e.g., SOL and curriculum objectives for the grade/course level).
В-	80-82	
C+	77-79	Designates the status of a student who demonstrates a satisfactory
С	73-76	understanding and skill application in the content area (e.g., SOL and curriculum objectives for the grade/course level).
C-	70-72	
D+	67-69	Designates the status of a student who needs significant practice and instructional experiences to acquire the knowledge of basic content and
D	64-66	skills specified in the content area (e.g., SOL and curriculum objectives for the grade/course level).
E	63 and below	Designates the status of a student who has not demonstrated the basic knowledge of content and/or skills specified and requires additional practice and instructional experiences in order to succeed (e.g., SOL and curriculum objectives for the grade/course level).

### **Weighted Courses**

Advanced Placement (AP) and selected International Baccalaureate (IB) courses carry a weighted value of .03 because the rigorous content requires extra work. Honors credit-bearing courses carry a weighted value of .0125.

### **Honor Roll**

The honor roll is a list of students who make exceptional grades each semester. Students will be included if:

- They earn no grade lower than an A- (A Honor Roll)
- They earn no grade lower than a B- (B Honor Roll)
- They earn no grade lower than a C- and have an overall GPA of 3.0 (B Average Honor Roll)

### Grade-Point Average | Class Rank

High school students earn grades in each subject they take. These grades are recorded on the credit sheet or high school transcript each semester. Grades are averaged to determine a grade-point average (GPA) for all students taking 61 percent of their courses in regular education at a school site. The cumulative grade-point average is recorded on each semester's credit sheet.

A student's junior grade-point average is tabulated in October after the beginning of their senior year for the purpose of class rank. This grade-point average includes grades earned in all high school credit-bearing courses taken, beginning in middle school. The junior grade-point average is sent to colleges, the military, and scholarship sources at the student's request.

A student's senior grade-point average is tabulated after the first semester of the senior year and is recorded on the first semester credit sheet. This grade-point average is then forwarded to colleges, the military, and scholarship sources at the student's direction. A student's grade-point average determines his/her rank or class standing when graduating from high school. To be an honor graduate, you must earn a 3.0 grade-point average. The Valedictorian and Salutatorian of the graduating class are determined by the class rank as calculated after the first semester of the senior year.

### **Scheduling**

Norfolk Public Schools encourages students and parents to familiarize themselves with the graduation requirements and the course offerings in this guide. Students' academic plans are developed and revised throughout their high school years to take into account each individual's unique career and academic aspirations, their performance in previous classes, as well as, funding and staffing constraints. Counselors enter course requests in the spring for the following fall based on student and parent feedback as well as teacher recommendations. The master schedule is built over the summer based on these requests and the actual schedules are created before the fall term. Parents should review these schedules with their student before the start of classes to ensure the selection meets the student's post-graduation plans.

Students are expected to carry a full schedule of eight classes unless special circumstances warrant a student being excused for part of the day. Classes are scheduled on an alternating A/B block schedule with all the even block classes scheduled one day followed by the odd block classes the next. This allows students choosing to attend the Norfolk Technical Center to have a full day of classes at their home school and attend NTC on the alternating day.

Students are scheduled to attend classes for the entire year to get a full credit. In some cases, a course may be changed due to not passing a pre-requisite, a schedule conflict, the class selection does not meet graduation requirements or other such circumstances. In no case may a class be changed after the end of the first interim grading period unless extenuating circumstances are established. The principal shall determine if the circumstances are extenuating.

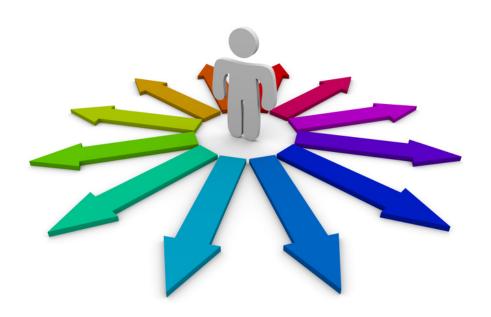
### **Repeating Courses Previously Passed**

Students may repeat a credit-bearing course previously passed in an effort to improve a grade earned as well as their grade point average. The grade earned in a course taken the second time will be recorded in the student's grade point average. The earlier grade will be replaced on the credit sheet with an "R" (repeated at a later date) and will not be counted in the grade point average. Credit will be counted only once. Repeating a course for a higher grade does not count in the five classes an athlete must take to be eligible for VHSL competition.

### **Repeatable Courses**

There is a selection of approved courses that may be taken in multiple years to develop and enhance skills, which are identified in the course offering section. The student will be awarded credit for each semester where he/she earns a passing grade.

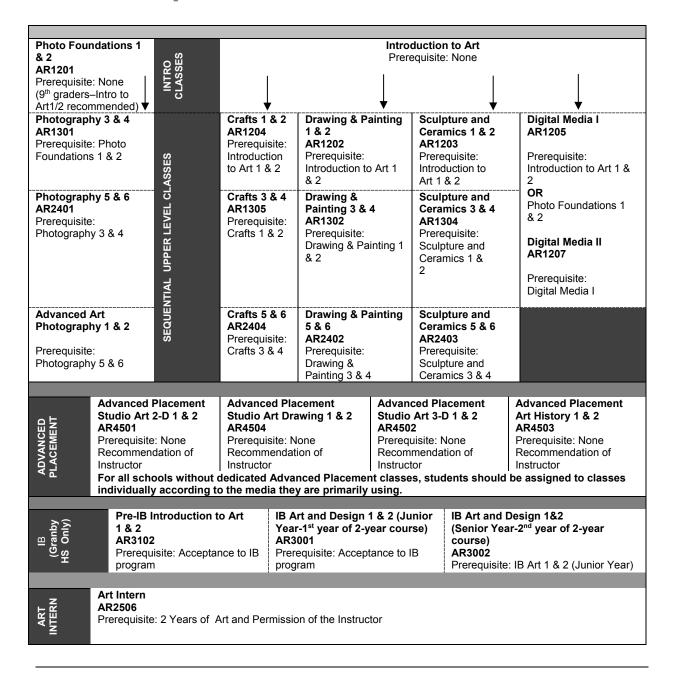
# COURSE SEQUENCE/ COURSE OFFERINGS



### Art

Through the art curriculum, students use the artistic process and various media to explore big ideas and to make personal connections to them. They also examine traditional and contemporary works of art to understand how artists communicate visually across time and cultures, learn to critique their own work and that of others and develop visual literacy. As students' progress through upper level courses, they explore media and ideas more deeply and independently, leading to, where applicable, Advanced Placement studio courses for college credit and the development of a portfolio for career or higher education submission. For all students, the skills and understandings gained in art will help them persist in solving open-ended problems and give additional ways of making sense of their world.

### **Art Course Sequence**



ART					
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)
AR1101	05154	INTROTOART1&2	FY	1	Intro to Art 1: None Intro to Art 2: Intro to Art 1

**Course Description:** This preparatory course exposes the student to a variety of artistic techniques and theories. The course content includes journal writing/ sketchbook, drawing, painting, sculpture, crafts, printmaking, art history and art criticism. This course may be used to satisfy the graduation requirement of one standard unit in Fine Arts or Career and Technical Education. It may also be used to partially satisfy the standard diploma requirement of two sequential electives.

AR1201	05167	PHOTOGRAPHY FOUNDATIONS 1 & 2	FY	1	Photo 1: None Photo Foundations 1 Only 9 <sup>th</sup> graders with successful math background should be placed in Photo 1.
--------	-------	----------------------------------	----	---	---

**Course Description:** This course introduces students to the fundamentals of 35mm photography. Course content includes picture taking, processing of film, and basic darkroom procedures as well as foundational instruction in art and design. Students will begin a negative file and notebook. This course may be used to satisfy the graduation requirement of one standard unit in Fine Arts or Career and Technical Education. It may also be used to partially satisfy the standard diploma requirement of two sequential electives.

**Course Description:** Personal expression and the artistic process are stressed along with the further development of photographic manipulation techniques and skills. Students will begin to develop a portfolio and are expected to participate in exhibitions. When taken in sequence with Photography Foundations 1 and 2, this course completes the standard diploma requirement of two sequential electives.

**Course Description:** Students will develop personal focus in art making, select photographic materials and processes to support their vision/voice, and work in series based on themes, concepts or technical approaches. Portfolio preparation will be emphasized and participation in exhibitions is expected.

AR4502	05170	ADVANCED ART PHOTOGRAPHY 1 & 2	2	.5	Adv. Art Photo 1: Photo 5/6 Adv. Art Photo 2: Adv. Art Photo 1
--------	-------	-----------------------------------	---	----	---

**Course Description:** Students are expected to demonstrate personal artistic direction, quality, concentration, breadth of experience, innovation, and refined photographic skills and techniques. Students will develop a portfolio suitable for a job application and consideration at the post-secondary school level and participate on exhibitions.

AR1202	05154	DRAWING AND PAINTING 1 & 2	FY	1	Draw/Paint 1: Intro. to Art 1/2 Draw/Paint 2: Draw/Paint 1
--------	-------	----------------------------	----	---	---

**Course Description:** Students will use various two-dimensional media, techniques, and tools to develop basic drawing, painting using pen-and-ink, pencil, chalk, watercolor and so on to express ideas. Students will begin to develop a portfolio and are expected to participate in exhibitions. When taken in sequence with Introduction to Art 1 and 2, this course completes the standard diploma requirement of two sequential electives.

	ART							
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)			
AR1302	05154	DRAWING AND PAINTING 3 & 4	FY	1	Draw/Paint 3: Draw/Paint 1/2 Drawing/Painting 3			

**Course Description:** Students will develop personal focus in art making, select drawing, painting, and printmaking materials and processes to support their vision/voice, and work in series based on themes, concepts or technical approaches. Portfolio preparation will be emphasized and participation in exhibitions is expected.

AR2402	05154	DRAWING AND PAINTING 5 & 6	FY	1	Draw/Paint 5: Draw/Paint 3/4 Draw/Paint 6: Draw/Paint 5
--------	-------	----------------------------	----	---	--

**Course Description:** Students are expected to demonstrate personal artistic direction, quality, concentration, breadth of experience, innovation, and refined two-dimensional media skills and techniques. Students will develop a portfolio suitable for a job application and consideration at the post-secondary school level and participate in exhibitions.

**Course Description:** Students will use advanced level skills and concepts in two-dimensional art media. Students are expected to demonstrate mastery of a variety of skills and techniques as well as develop a concentration based on self-directed artistic exploration. Students will develop a portfolio, which meets the AP 2-D Studio Art requirements as specified by the College Board, which will be submitted for College Board assessment. Participation in high school art exhibitions is required.

NOTE: Depending on prior study, students should be scheduled with either Advanced Drawing/Painting or Advanced Photography classes.

**Course Description:** Students will use advanced level skills and concepts in drawing media. Students are expected to demonstrate mastery of a variety of skills and techniques as well as develop a concentration based on self-directed artistic exploration. Students will develop a portfolio, which meets the AP Drawing Studio Art requirements as specified by the College Board, which will be submitted for College Board assessment. Participation in high school art exhibitions is required. **NOTE: Students should be scheduled with Advanced Drawing/Painting classes.** 

AR1203	05154	SCULPTURE AND CERAMICS 1 & 2	FY	1	Sculpture/Ceramics 1: Intro. to Art 1/2 Sculpture/Ceramics 2: Sculpture/ Ceramics 1
--------	-------	---------------------------------	----	---	---

**Course Description:** Students will use various three-dimensional media, techniques, and tools to develop basic skills in sculpture and ceramics and to express ideas. Students will begin to develop a portfolio and are expected to participate in exhibitions. When taken in sequence with Introduction to Art 1 and 2, this course completes the standard diploma requirement of two sequential electives.

AR1304	05154	SCULPTURE AND CERAMICS 3 & 4	FY	1	Sculpture/Ceramics 3: Sculpture/ Ceramics 1/2 Sculpture/Ceramics 3: Sculpture/ Ceramics 4
--------	-------	------------------------------	----	---	--

**Course Description:** Students will develop personal focus in art making, select sculpture and ceramics materials, and processes to support their vision/voice and work in series based on themes, concepts or technical approaches. Portfolio preparation will be emphasized and participation in exhibitions is expected.

	ART							
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)			
AR2403	05154	SCULPTURE AND CERAMICS 5 & 6	FY	1	Sculpture/ Ceramics 5: Sculpture/Ceramics 3/4 Sculpture/ Ceramics 6: Sculpture/ Ceramics 5			

**Course Description:** Students are expected to demonstrate personal artistic direction, quality, concentration, breadth of experience, innovation, and refined three-dimensional media skills and techniques. Students will develop a portfolio suitable for a job application and consideration at the post-secondary school level and participate in exhibitions.

AR4503	99015	ADVANCED PLACEMENT STUDIO ART 3-D 1 & 2	FY	1	None Recommendation of Instructor (especially without Sculpture/ Ceramics 3/4 or Crafts 3/4)
--------	-------	--	----	---	---

**Course Description:** Students will use advanced level skills and concepts in three-dimensional media. Students are expected to demonstrate mastery of a variety of skills and techniques as well as develop a concentration based on self-directed artistic exploration. Students will develop a portfolio, which meets the AP Studio Art 3-D requirements as specified by the College Board and which will be submitted for College Board assessment. Participation in high school art exhibitions is required.

NOTE: Depending on prior study, students should be scheduled with either Advanced Sculpture/Ceramics or Advanced Crafts classes.

**Course Description:** Students will use various three-dimensional media, techniques and tools to develop skills and techniques in crafts and to express ideas. Craft art making may include calligraphy, tile painting, silk-screening, mask making, and so on. Students will begin to develop a portfolio and are expected to participate in exhibitions. When taken in sequence with Introduction to Art 1 and 2, this course completes the standard diploma requirement of two sequential electives.

AR1305	05165	CRAFTS 3 & 4	FY	1	Crafts 3: Crafts 1/2 Crafts 4: Crafts 3
--------	-------	--------------	----	---	--

**Course Description:** Students will develop personal focus in art making, select crafts materials, and processes to support their vision/voice and work in series based on themes, concepts or technical approaches. Portfolio preparation will be emphasized and participation in exhibitions is expected.

AR2404	05154	CRAFTS 5 & 6	FY	1	Crafts 5: Crafts 3/4 Crafts 6: Crafts 5
--------	-------	--------------	----	---	--

**Course Description:** The main focus for all students will be placed on creating craft artworks that will be part of a portfolio. Through individual exploration of materials and expression, students will perfect craft techniques. Participation in high school art exhibitions is required.

AR4501	05153	ADVANCED PLACEMENT ART HISTORY 1 & 2	FY	1	None Recommendation of Instructor
--------	-------	---	----	---	--------------------------------------

**Course Description:** This course is designed to promote the student's intellectual enjoyment and critical examination of multiple art forms from ancient times through the present day across a variety of cultures within historical context. This will prepare students to qualify for possible college credit by taking the Advanced Placement Exam. Serious art studio, history, literary, and college preparatory students are encouraged to enroll.

ART						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
AR1205 AR1207	05169 05162	DIGITAL MEDIA 1 DIGITAL MEDIA 2	FY	1	Introduction to Art OR Photo Foundations	

**Course Description:** During this course, students will be introduced to photography, animation, computer graphic design, and other current digital media and design applications. When taken in sequence with Introduction to Art 1 and 2 or Photography Foundations 1 & 2, this course may be used to complete the standard diploma requirement of two sequential electives.

<b>AR2506</b> 05154 ART INTERN	FY	1	2 years of art and permission of the instructor
--------------------------------	----	---	---

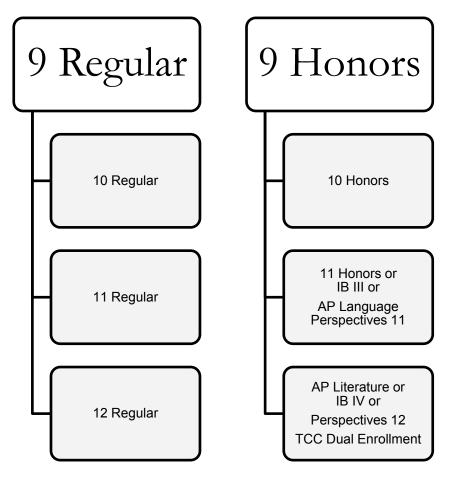
**Course Description:** As an art intern, the student will gain competence in technical processes, display and exhibition methods, demonstration and tutoring procedures, and leadership strategies. Career opportunities in fine arts and curatorial management will be explored. This course may be repeated for credit.

# **English**

The English curriculum provides a progression of course expectations for student learning and understanding in English Language Arts. By the time students graduate from high school, they will have been exposed to essential skills, content knowledge, and critical thinking processes required for 21st Century Literacies. Students in grades 9 through 12 will learn skills aligned with the Virginia Standards of Learning in the following four strands: Communication and Multimodal Literacies (Speaking, Listening, and Media Literacy), Reading, Writing, and Research. Students are expected to continue to apply knowledge, skills, and processes from Standards of Learning presented in previous grades as they build expertise in English.

### **English Course Sequence**

Students can enroll in an Honors English class from a Regular English class by following prerequisites listed in the Course Description Guide.



ENGLISH							
NPS SCED NPS Of Per Prerequisite(s) Code Code Course Title Semesters Year							
LA1100	01001	ENGLISH 9	FY	1	None		

**Course Description:** In English 9, students read and analyze a variety of literary and nonfiction texts, exploring the characteristics of different forms and the techniques authors use to achieve their intended purpose. Language study extends students' vocabulary through learning about connotations, denotations, word origins, and structures. Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure and paragraphing to varied and frequent writing assignments. Through narrative, expository, and persuasive writings, students build on their understanding of writing as a process of prewriting, drafting, revising, and publishing. In the research process students find, evaluate and select appropriate sources to access information to create a research product. In addition, students will develop communication skills through listening to and speaking via oral presentations.

<b>LA2100</b> 01001 HONORS ENGLISH 9 F	FY 1	Student must have a grade of "B" or better in English 8 or have teacher and/or administrator recommendation.
--	------	---

Course Description: English 9 Honors deepens and advances the curriculum of English 9. Students read and analyze a variety of literary and nonfiction texts, exploring the characteristics of different forms and the techniques authors use to achieve their intended purpose. Language study extends students' vocabulary through learning about connotations, denotations, word origins, and structures. Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure and paragraphing to varied and frequent writing assignments. Through narrative, expository, and persuasive writings, students build on their understanding of writing as a process of prewriting, drafting, revising, and publishing. In the research process, students find, evaluate, and select appropriate sources to access information to create a research product. In addition, students will develop communication skills through listening and speaking via oral presentations.

LA1200         01002         ENGLISH 10         FY         1         1 credit of English
--

Course Description: In English 10, students read and analyze a variety of literary and nonfiction texts, comparing and contrasting the techniques authors use in literature of different cultures and eras. Language study continues to extend students' vocabulary through learning about connotations, denotations, word origins, and structures. Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing to varied and frequent writing assignments. With an emphasis on expository and analytic writing, students expand their understanding of writing as a process and develop their skills in revising to address a specific audience and purpose. In the research process, students collect, evaluate, organize, and present accurate and valid information to create a research product. They also improve communication and collaboration skills through small and large group discussion and presentations.

LA2200	01002	HONORS ENGLISH 10	FY	1	Student must have a grade of "B" or better in Honors English 9 or have teacher and/or administrator recommendation.
--------	-------	-------------------	----	---	---

Course Description: English 10 Honors deepens and advances the curriculum of English 10. Students read and analyze a variety of literary and nonfiction texts, comparing and contrasting the techniques authors use in literature of different cultures and eras. Language study continues to extend students' vocabulary through learning about connotations, denotations, word origins, and structures. Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure and paragraphing to varied and frequent writing assignments. With an emphasis on expository and analytic writing, students expand their understanding of writing as a process and develop their skills in revising to address a specific audience and purpose. In the research product. They also improve communication and collaboration skills through small and large group discussion and presentations. Note: This course is a prerequisite for AP English.

	ENGLISH							
NPS SCED NPS Of Per Prerequisite(s) Code Code Course Title Semesters Year								
LA1300	01003	ENGLISH 11	FY	1	2 Credits of English			

Course Description: In English 11, students read and analyze a variety of literary and nonfiction texts, comparing themes of various works of American literature. Students will use nonfiction texts to draw conclusions and make inferences citing textual support. Language study extends students' vocabulary through applying understanding of connotations, denotations, word origins, and structures. Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing to write clear and accurate personal, professional, and informational correspondence and reports for research and other applications. With an emphasis on persuasive writing, students apply their skills and adapt content, vocabulary, voice, and tone to a specific audience and purpose. The student will develop informative and persuasive writings by locating, evaluating, synthesizing, and documenting information following ethical and legal guidelines. The student will be able to make and analyze informative and persuasive oral presentations, with attention to the accuracy of evidence and the effectiveness of delivery. Students are required to take the Standards of Learning End of Course Test.

LA2300	01003	HONORS ENGLISH 11	FY	1	Student must have a grade of "B" or better in Honors English 10 or have teacher and/or administrator recommendation if below "B" in Honors 10 or if having passed English 10 with a "B" or better or parent request.
--------	-------	-------------------	----	---	--

Course Description: Pre-AP English 11 deepens and advances the curriculum of English 11. Students read and analyze a variety of literary and nonfiction texts, comparing themes of various works of American literature. Students will use nonfiction texts to draw conclusions and make inferences citing textual support. Language study extends students' vocabulary through applying understanding of connotations, denotations, word origins and structures. Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing to write clear and accurate personal, professional and informational correspondence and reports for research and other applications. With an emphasis on persuasive writing, students apply their skills and adapt content, vocabulary, voice and tone to a specific audience and purpose. The student will develop informative and persuasive writings by locating, evaluating, synthesizing and documenting information following ethical and legal guidelines. The student will be able to make and analyze informative and persuasive oral presentations, with attention to the accuracy of evidence and the effectiveness of delivery. Students are required to take the Standards of Learning End of Course Test. Note: This course is a prerequisite for AP English.

<b>LA1400</b> 01004 ENGLISH 12	FY	1	3 Credits of English
--------------------------------	----	---	----------------------

Course Description: In English 12, students read and analyze British literature and literature of other cultures, recognizing major forms and their stylistic elements. Using nonfiction texts, students will analyze and synthesize information to solve problems. The student will use organizational skills and both verbal and nonverbal presentation skills to plan and deliver an effective oral presentation, choosing language, and tone appropriate to the audience and purpose. Students will use technology and understanding of media to create, organize, and display knowledge in ways others can access, view and use. Language study expands students' general and specialized vocabulary through speaking, listening, reading, and viewing. Writing will include the production of informational, expository, and persuasive/argumentative papers, logically organized demonstrating knowledgeable judgments, and effective conclusions. The student will also produce a well-documented major research product by locating, evaluating, synthesizing, and documenting information following ethical and legal guidelines. The student will demonstrate advanced knowledge of grammatical conventions through writing, editing and speaking.

LA4450	01006	ADVANCED PLACEMENT ENGLISH LITERATURE	FY	1	Honors English 9, 10, and 11 or teacher recommendation
--------	-------	--	----	---	--

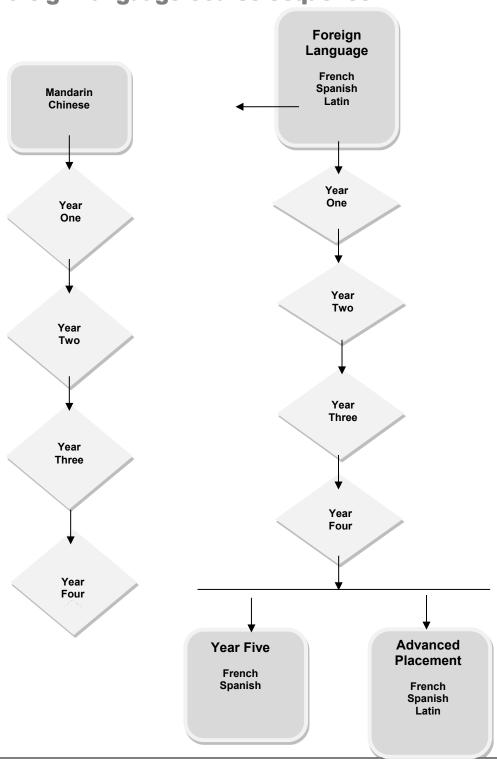
ENGLISH									
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)				
analysis cou their unders consider a v Writing assi	Course Description: The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen heir understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.								
LA4350	01005	ADVANCED PLACEMENT ENGLISH- LANGUAGE & COMPOSITION	FY	1	Honors English 9, 10, and 11 or teacher recommendation				
and writing through sev the course, analyze the	Course Description: The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods.								
LA1502	01104	CREATIVE WRITING	FY	1	None				
emotions, e	xperiences	In this course students will write value, and images to produce writing in value, on, oral readings, and publication.  JOURNALISTIC WRITING							
addition to t	he primary nd journalis	Students in this course may function role of publishing, students will refinetic styles. Students will also explore fessional journalism.	e the techniq	ues of basic n	ews writing by employing different				
LA1507	01002	NEWS PRODUCTION	FY	1	None				
newspaper.	Course Description: This course introduces students to the skills and steps involved in the production of the school newspaper. In addition to basic news writing, students in this course will learn the techniques involved in all stages of the publication field: advertising, graphic arts, business management, layout design, photography, and word processing.								
LA1508	01151	ORAL COMMUNICATION	FY	1	Teacher recommendation/approval				
Course Description: This course will help students refine their speaking skills. Through writing and presenting speeches participating in discussion groups and debates, and practicing reading aloud, students will learn to communicate their houghts and feelings in a variety of ways to a variety of audiences. They will critique their own speeches as well as those of their classmates.									
LA1500	01066	READING FOR IMPROVEMENT	FY	1	Gates Testing Results				

#### **ENGLISH** Number Credits **NPS** SCED NPS of Per Prerequisite(s) Code Code **Course Title** Semesters Year Course Description: This course is designed to provide direct, explicit and intensive reading instruction to students who are reading two or more years below grade level. Basic objectives of this reading course are focused on closing the gap between the student's present level of performance and the level of performance needed to successfully access the general curriculum. Instruction focuses on increasing students decoding, fluency, and comprehension skills of fiction and nonfiction materials. SAT LA1505 10th, 11th, or 12th grade status 22999 FY 1 PREP Course Description: In this course, which consists of two verbal segments and two math segments alternating every 4 ½ weeks, students will develop and practice the skills and strategies necessary for completing the verbal and math items on the Scholastic Aptitude Test. **MULTIMEDIA** FΥ 1 LA1506 99013 Teacher recommendation/approval PRODUCTION Course Description: This course provides students with a basic understanding of the technology behind video production and some of the ways it is created to achieve the desired effect on the audience. Emphasis will be on acquiring the principles and skills relating to visual communication. The program development components include selecting and developing topics, using interviews and other research techniques for gathering background information, writing scripts, and developing graphics, speaking on camera, and evaluating work. Example formats include producing a school news program; video, annual team sports highlights, documentaries, and promotional advertising commercials. LA1602 05099 THEATRE FΥ Teacher recommendation/approval Course Description: In this course, students will examine the historical framework of theater and of selected plays. Students will be involved in performance activities, participate in production activities to mount the plays, and write about varied aspects of theater, including reviews of plays. Teacher recommendation/ YEARBOOK PRODUCTION LA1501 11104 FY approval Course Description: In this course students will study the various elements for publication of the school yearbook. The staff will master various skills in writing, layout, graphics, photography, and business management that are essential in mass production.

# Foreign Language | ESL

Learning a second language provides the learner with skills and experiences in another language and culture and provides a valuable 21st Century skill in an increasingly diverse world.

## Foreign Language Course Sequence



FOREIGN LANGUAGE						
NPS Code	SCED Code	NPS Course Title	Number of Semest ers	Credits Per Semester	Prerequisite(s)	
FL1101	06121	FRENCH YEAR 1	FY	1	None	
writing. Students learn to ma	anipulate im	duces the fundamentals of French by portant structures of the language wit riate. The foundation of the French p	hin a basic	vocabulary ar	nd idiom range. Relevant aspects of	
FL1102	06122	FRENCH YEAR 2	FY	I	Successful completion of French Year 1	
speaking, reading, and writing are introduced and mastered	ng. Structure d. Culture ar	inues introducing the fundamentals of es and vocabulary studied in French \nd nd customs of French speaking peopl he foundation of the French program	∕ear One a es also cor	re reviewed. A	dditional structures and vocabulary	
FL1103	06123	FRENCH YEAR 3	FY	1	Successful completion of French Year 2	
A general review of appropri	iate aspects n spoken ar	er develops the skills of listening, spe of French Year One and Two is pres nd written form. Oral expression will b	ented. Stud	dents will expa		
FL1104	06124	FRENCH YEAR 4	FY	1	Successful completion of French Year 3	
Course Description: This course expands upon and refines the skills of listening, speaking, reading, and writing and further reinforces the study of culture. Reviewing of material from French Year One, Two, and Three will be done according to individual needs. Self-expression in French at an advanced level will be emphasized for both oral and written communication. The development of proficiency in language usage remains the basis of the French program. This is an honors level class with weighted credit.						
FL4106		Advanced Placement French	FY	1	Successful completion of French Year 4 and teacher recommendation	
and reflective writing. The fe with an emphasis on nonfict	Course Description: This Advanced Placement course will emphasize expository, analytical and argumentative writing as well as personal and reflective writing. The focus of the writing is on rhetoric, style, richness, and complexity. In addition, students will read complex texts, with an emphasis on nonfiction and a concentration on authors' use of language. The course is designed as preparation for the College Board Advanced Placement Examination carries weighted credit.					

FL1301	06301	LATIN YEAR 1	FY	1	None			
Course Description: This course introduces the fundamentals of Latin. The skills of listening and speaking are taught, but emphasis is blaced on those of reading and writing. Students learn to manipulate important structures of the language within a basic vocabulary and diom range. Source material for this introductory course centers around the customs and history of the Roman people. The foundation of the actin program is directed toward developing concepts, skills, and positive attitudes in the areas of language usage, culture, and literature.								
L1302	06302	LATIN YEAR 2	FY	1	Successful completion of Latin Year			
eviewed. The skills of re- rammatical structures. F	ading and writing Readings reflect oment of concep	g are emphasized as sentences and the legendary history of Rome and	d reading se its actual mi	lections are u litary expansi				
FL1303	06303	LATIN YEAR 3	FY	1	Successful completion of Latin Year			
	a general review	of material from Latin One and Lat			will develop and expand grammatical inue to develop concepts and skills in			
:L1304	06304	LATIN YEAR 4	FY	1	Successful completion of Latin Year			
Course Description: This course enhances and refines the fundamental skills of Latin. Reviewing of material from Latin Year One, Two, and Three will be done according to individual needs. Students will obtain a broader knowledge of advanced sentence structures of grammar, vocabulary, and techniques of style through study of both prose and poetic works. The development of concepts, skills, and positive attitudes in the areas of language usage, culture, and literature remains the basis of the Latin program.								
		ADVANCED PLACEMENT	FY	1	Successful completion of Latin Year and teacher recommendation			
EL4306	06313	LATIN						
FL4306 FL1401	06313	LATIN SPANISH YEAR 1	FY	1	None			

FL1402	06102	SPANISH YEAR 2	FY	1	Successful completion of Spanish Year 1		
Course Description: This course continues introducing the fundamentals of Spanish by stressing the development of the skills of listening, speaking, reading, and writing. Structures and vocabulary studied in Spanish Year One are reviewed. Additional structures and vocabulary are introduced and mastered. Culture and customs of Spanish speaking peoples also continue as a focus of learning. The development of proficiency in language usage remains the foundation of the Spanish program.							
FL1403	06103	SPANISH YEAR 3	FY	1	Successful completion of Spanish Year 2		
general review of appropria	ate aspects of in spoken an	er develops the skills of listening, spe Spanish Year One and Two is prese d written form. Oral expression will be	nted. Stude	ents will expar			
FL2404	06104	SPANISH YEAR 4	FY	1	Successful completion of Spanish Year 3		
Spanish at an advanced le	vel will be em		nmunicatio	n. The develo	g to individual needs. Self-expression in present of proficiency in language usage u		
Course Description: This course is the most advanced refinement of the skills of listening, speaking, reading, and writing and the most concentrated study of culture. Necessary aspects of Spanish Year One, Two, Three, and Four will be reviewed. Emphasis will be placed on versatility of spoken and written Spanish while expanding the literary, cultural, and historical knowledge of Spanish-speaking areas. The program is directed toward developing proficiency in students' use of the language. This is an honors level class with weighted credit.							
FL4406	06112	ADVANCED PLACEMENT SPANISH	FY	1	Successful completion of Spanish year 4 or Spanish year 5, and teache recommendation.		
Course Description: This course is designed for students of exceptional ability who have a genuine interest in Spanish. Students are required to participate in intensive, teacher-directed, and independent study. This study is based on the introduction of specific materials and the development of specific skills as delineated in the Course Description for Advanced Placement Spanish. Students are strongly encouraged to take the examination for Advanced Placement in Spanish which may qualify them for college and/or advanced class standing and carries weighted credit.							

FL1501	06401	MANDARIN CHINESE YEAR 1	FY	1	None			
Chinese speakers. Students instruction according to the v	Course Description: In Chinese I, students begin to develop communicative competence and expand their understanding of the culture(s) of Chinese speakers. Students learn to communicate in real-life contexts about topics that are meaningful to them Grammar is integrated into instruction according to the vocabulary and structures needed in the various situations in which students are required to communicate. The students' reading and writing skills at this level are very limited but they will learn common Chinese characters.							
FL1502	06402	MANDARIN CHINESE YEAR 2	FY	1	Successful completion of Mandarin Chinese Year 1			
writing with other speakers of presentations in the language more complex features of the read material on familiar topic.	of the target e. They beg e language. ics and write	Students continue to focus on commi	tten messa when usin unicating at sis continu	ges in the lang g basic langua bout their imm es to be place	guage, and making oral and written age structures, and they are exposed to ediate world and daily activities. They d on use of the target language in the			
FL1503	06403	MANDARIN CHINESE YEAR 3	FY	1	Successful completion of Mandarin Chinese Year 2			
Course Description: In Chinese III, students continue to develop their communicative and cultural competence by interacting orally and in writing with other speakers of Chinese, understanding oral and written messages in the language, and making oral and written presentations in the language. They communicate on a variety of topics, using more complex structures in the language and moving from concrete to more abstract concepts in a variety of time frames. They 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 Chinese, topics related to historical and contemporary events and issues. Emphasis continues to be placed on use of Chinese in the classroom as exclusively as possible, as well as on use of authentic materials to learn about the Chinese language and culture								
FL2504 MANDARIN CHINESE YEAR 4 FY 1 Successful completion of Mandarin Chinese Year 3								
Course Description: In Chinese Level IV, students continue to develop their communicative and cultural competence in the interpersonal, interpretive, and presentational modes of communication. They are able to exchange information and express opinions on a variety of topics at a proficiency level commensurate with their study. Students comprehend and produce information drawn from a variety of authentic sources. Students will continue to expand their repertoire of Chinese characters. Emphasis continues to be placed on use of Chinese in the classroom as exclusively as possible, as well as on use of authentic materials to learn about the Chinese language and culture(s).								

### **ESL**

		FL1601	5710	English as a Foreign Language 1 (EFL Year 1) Newcomer	FY	1	Identified English Learners
--	--	--------	------	--	----	---	--------------------------------

Students placed in this course are newly arrived to the US schools and score between a 1.0-1.8 on a WIDA assessment. This intensive course emphasizes social and academic survival skills and is designed for accelerated English acquisition. There is explicit, systematic instruction on literacy skills such as phonemic awareness, decoding, spelling, and high-frequency words. There is an emphasis on speaking and listening skills. Students gain an understanding of social behaviors and instructional phrases for school settings and integration into American society. Academic Language is taught via content. Students will practice and be assessed in the domains of listening, speaking, reading and writing.

<b>FL1602</b> 5720	English as a Foreign Language 2 (EFL Year 2) Beginner	FY	1	Completion of EFL Year 1 or relevant ACCESS score
--------------------	--	----	---	---

A student placed in a beginner class has some knowledge of the English language and typically scores between a 1.8-2.3 on the WIDA assessment. This intensive course continues the development in all four domains of the English language, listening, speaking, reading and writing. The course further builds on the English vocabulary, language proficiency and comprehension skills of the academic and social language. Students begin to see a bridge between the English language and other core subjects such as science, history, et al. Students will begin to focus and emphasize their skills in reading and writing. Students will practice and be assessed in the domains of listening, speaking, reading and writing.

FL1603	5730	English as a Foreign Language 3 (EFL Year 3) Intermediate	FY	1	Completion of EFL Year 2 or relevant ACCESS score
--------	------	--	----	---	---

The intermediate course is designed for students who score between a 2.3-2.9 on the WIDA assessment. The course begins to bridge and refine the academic language with all domains of the target language, listening, speaking, reading and writing. Instruction is vocabulary heavy and begins to focus on higher level thinking strategies, and emphasizes reading comprehension and writing skills. The course becomes more content heavy in regards to the core classes which are integrated with their English development. An increased emphasis on communication and academic language is correlated to the student. English language learners in this course will be on their way to performing successfully in mainstream academic classes and students will have successful performances on Virginia SOL assessments.

<b>FL1604</b> 5731	English as a Foreign Language 4 (EFL Year 4) Advanced	FY	1	Completion of EFL Year 3 or relevant ACCESS score
--------------------	--	----	---	---

This course is for students who earn an overall comprehensive score of a 3.0-3.5 on a WIDA assessment. The course is designed to help improve academic English through reading, writing, listening and speaking skills. Students will integrate their English skills with other academic subjects found in the core curriculum. Students will use strategies to increase their speed and accuracy to listen and read academic English information. Students will be responsible for the creation and delivery of oral presentations and projects in English. Language learners will be expected to perform successfully in core classes and on the Virginia SOL assessments within the target language and subject with less ESL support.

FL2605 ?	English as a Foreign Language (EFL Year 5) Advanced II	FY	1	Completion of EFL Year 4 or relevant ACCESS score
----------	---	----	---	---

This is an elective course. Students are at the most advanced level and fall between the 3.5-4.3 parameters of the WIDA proficiency scale. Students will use fiction and nonfiction modern American texts to create a better understanding of the American culture through writings. Students will present creative ideas and beliefs in the target language about the readings. Students will continue to advance their skills in listening and speaking. Students will focus on their writing skills to prefect the target language through persuasive, comparing/contrasting, expository essays. Students will also begin to focus on skills associated with applications, resumes, cover letters, interviews, memos and emails.

# **Health, Safety and Physical Education**

Physical education provides students with an ongoing commitment to ensure rigorous, relevant physical education standards that reflect disciplinary knowledge and research to prepare all students to be capable, responsible, and self-reliant citizens in a global society. Students will learn essential health concepts, develop understanding of health information, and actively advocate for their own health as well as the health of their peers, families, and communities. The goal of driver education is to transfer the skills and competencies necessary to become a proficient user of the highway transportation system.

	HEALTH, SAFETY AND PHYSICAL EDUCATION								
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)				
PE1100	08052	HEALTH, SAFETY, AND PHYSICAL EDUCATION 9	FY	1	None				

**Course Description:** The Health and Safety curriculum in the first semester of the ninth grade include the Endocrine System, Fitness, Preventing Infectious and Lifestyle Diseases, and Mental Health and Stress. Personal Safety and Violence, Basic First Aid/CPR/AED and Family Life Education. Physical Education is an academic discipline that involves the study of human movement and its impact of health and quality of life.

Physical Education is an academic discipline that involves the study of human movement and its impact of health and quality of life. The grade is an average of the students' performance in classroom health and physical education.

This course meets the graduation requirements for Health & Physical Education.

CLASSROOM DRIVE EDUCATION AND PHY EDUCATION		1	Completion of PE1100.
---	--	---	-----------------------

Course Description: Classroom driver education is taught as part of health education during the first semester of the tenth grade year. Driver literacy is an important life skill. The classroom driver education standards are intended to help students develop conceptual understanding of safe driving practices and skill-based performance. The standards also stress the abilities to reason and connect safe driving skills with safe driving attitudes. Emphasis is placed on linking the skills of visual search, managing time and space, and maintaining vehicle balance. Significant attention is given to awareness of risk, maintenance of alertness, driver distractions, and protection of occupants. Satisfactory completion of this course is required to take Behind-the-Wheel instruction.

The student will receive one grade for Classroom Driver Education and Physical Education.

Physical Education is an academic discipline that involves the study of human movement and its impact of health and quality of life. This course meets the graduation requirements for Health & Physical Education.

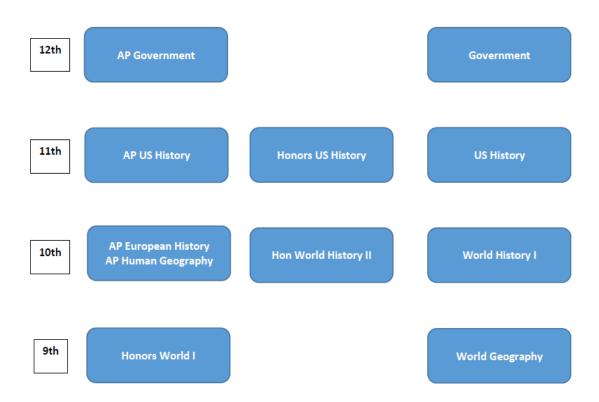
PE1201	08151	CLASSROOM DRIVER EDUCATION	FY	Completion of PE1200	
--------	-------	-------------------------------	----	----------------------	--

#### **HEALTH, SAFETY AND PHYSICAL EDUCATION** Number Credits NPS SCED NPS Per Prerequisite(s) of Code Code **Course Title** Semesters Year Course Description: Classroom driver education is taught within the health education curriculum during the first semester of the tenth grade year. Driver literacy is an important life skill. The classroom and in-car driver education standards are intended to help students develop conceptual understanding of safe driving practices and skill-based performance. The standards also stress the abilities to reason and connect safe driving skills with safe driving attitudes. Emphasis is placed on linking the skills of visual search, managing time and space, and maintaining vehicle balance. Significant attention is given to awareness of risk, maintenance of alertness, driver distractions, and protection of occupants. ELECTIVE - HEALTH. SAFETY, AND PHYSICAL PE1300 08005 FY 1 Successful completion of PE1100 and PE1200. **EDUCATION** 11 Course Description: Elective health, safety and physical education instruction is offered in health concepts, fitness components, various sports, introduction to Physical Education Leadership Training (PELT) and the Peer Facilitator program. PHYSICAL EDUCATION LEADERSHIP TRAINING Successful completion of PE1100 and PE1200. PE1301 08005 FY 1 AND PEER FACILITATOR and teacher recommendation (11th grade) Course Description: PELT is an elective course designed specifically for students who wish to pursue leadership training in the Physical Education and Peer Facilitator program. The PELT program provides leadership opportunities for certain eleventh and twelfth grade physical education students to assist with instruction in elementary, middle, and high schools. PELT students receive instruction and supervision from the physical education staff and cooperating classroom teachers. PELT is designed to make unique contributions to each individual's mental, physical, emotional, and social health. The PELT program is designed to provide diversified career opportunities through the development of leadership skills and verbal/nonverbal communication training. The program will enable students to develop positive self-concepts, consequently, being motivated to continue their education. Upon completion of requirements established for the programs, students will assist with instruction in assigned schools. Each student participating in the program will receive a grade as outlined for the regular grading period. PHYSICAL EDUCATION LEADERSHIP TRAINING Successful completion of PE100, PE1200, and PE1400 08009 FΥ 1 AND PEER FACILITATOR PE1300, and teacher recommendation (12<sup>th</sup> grade) Course Description: The Physical Education Leadership Training (PELT) and Peer Facilitator elective program is offered for selected students who wish to continue to assist the physical education and/or classroom teacher in conducting the health, safety, and physical education instructional program. Students assist teachers in assigned schools during this class period and may assist at other available times during the day. HEALTH, SAFETY AND Successful completion of PE100, PE1200, and PE1302 08005 PHYSICAL EDUCATION FΥ 1 teacher recommendation WEIGHT LIFTING Course Description: Students in elective physical education will demonstrate the knowledge and understanding necessary to analyze movement performance in weight lifting/conditioning using scientific principles, and implement effective practice procedures for skillful performance in specialized movement forms.

# **History | Social Science**

The history and social science instructional program, in keeping with the Standards of Quality and the Standards of Learning, seeks to assist students in acquiring the skills, knowledge, and attitudes necessary for effective citizen participation in a pluralistic American society and the global community. The program is designed to meet the varying needs, abilities, and interest of students. In grades nine through twelve, course offerings include: World Geography, World History and Geography to 1500 A.D., World History: 1500 A.D. to Present, Virginia and U.S. History, Virginia and U.S. Government and electives in Sociology, Psychology and Economics. In addition, several advanced placement courses are available. In light of the distribution of history and social science courses to meet the Virginia Standards of Learning Assessment and graduation requirements, the following planning options are offered:

### **History & Social Science Course Sequence**



	HISTORY/SOCIAL SCIENCE									
NPS Code	State Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)					
SS1100	04001	WORLD GEOGRAPHY	FY	1	None					

Course Description: The focus of this course is the study of the world's peoples, places and environments with an emphasis on world regions. The knowledge, skills, and perspectives of the course are centered on the world's peoples and their cultural characteristics, landforms and climates, economic development and migration, and settlement patterns. Spatial concepts of geography will be used as a framework for studying interactions between humans and their environments. Using geographic resources, students will employ inquiry, research, and technology skills to ask and answer geographic questions. Particular emphasis will be placed on students understanding and applying geographic concepts and skills to their daily lives. An SOL end-of-course test will be given. This course meets the graduation requirement for World Studies credit.

SS4250	04056	ADVANCED PLACEMENT EUROPEAN HISTORY	FY	1	There are no prerequisites. Students are expected to read a college-level textbook and to possess strong writing skills.
--------	-------	--	----	---	--

Course Description: Advanced Placement European History is a year-long college level course that focuses on cultural, economic, political and social developments. These focus areas provide context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. This course prepares students to take the Advanced Placement exam administered in May. An SOL end-of-course test may be given. This course carries weighted credit and meets the graduation requirement for World Studies credit.

SS1200	04052	WORLD HISTORY to 1500 A.D.	FY	1	None
--------	-------	-------------------------------	----	---	------

Course Description: This course will enable students to explore the historical development of people, places, and patterns of life from ancient times until 1500 A.D. (C.E.) in terms of the impact on Western civilization. The study of history rests on knowledge of dates, names, places, events, and ideas. Historical understanding, however, requires students to engage in historical thinking, raise questions, and marshal evidence in support of their answers. Students engaged in historical thinking draw upon chronological thinking, historical comprehension, historical analysis and interpretation, historical research, and decision making. These skills are developed through the study of significant historical substance from the era or society being studied. An SOL end-of-course test will be given. This course meets the graduation requirement for World Studies credit.

SS2101	04052	HONORS WORLD HISTORY to 1500 A.D.	FY	1	Student should have a grade of "B" or better in most recent history/ social science course taken or have teacher and/or administrator recommendation or parent request.
--------	-------	--	----	---	---

Course Description: This course will enable academically talented students to explore the historical development of people, places, and patterns of life from ancient times until 1500 A.D (C.E.) in terms of the impact on Western civilization. The study of history rests on knowledge of dates, names, places, events, and ideas. Historical understanding, however, requires students to engage in historical thinking, raise questions, and marshal evidence in support of their answers. Students engaged in historical thinking draw upon chronological thinking, historical comprehension, historical analysis and interpretation, historical research, and decision making These skills are developed through the study of significant historical substance from the era or society being studied. An SOL end-of-course test will be given. This course carries weighted credit and meets the graduation requirement for World Studies credit.

HISTORY/SOCIAL SCIENCE							
NPS Code	State Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)		
SS4150	04004	ADVANCED PLACEMENT HUMAN GEOGRAPHY	FY	1	There are no prerequisites. Students are expected to read a college-level textbook and to possess strong writing skills.		

Course Description: The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. This course prepares students to take the Advanced Placement exam administered in May. An SOL end-of-course test may be given. This course carries weighted credit and meets the graduation requirement for World Studies credit.

SS1201	04052	WORLD HISTORY: 1500 to Present	FY	1	None
--------	-------	-----------------------------------	----	---	------

Course Description: This course enables students to examine history and geography from 1500 A.D. (C.E.) to the present, with emphasis on development of the modern world. Geographic influences on history will continue to be explored, but increasing attention will be given to political boundaries that developed with the evolution of nations. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. Noteworthy people and events of the nineteenth and twentieth centuries will be emphasized for their strong connections to contemporary issues. An SOL end-of-course test will be given. This course meets the graduation requirement for World Studies credit.

SS2201	04052	HONORS WORLD HISTORY: 1500 to Present	FY	1	Student should have a grade of "B" or better in the most recent history/ social science course taken or have teacher and/or administrator recommendation or parent request
--------	-------	--	----	---	--

Course Description: This course enables the academically talented student to examine history and geography from 1500 A.D. (C.E.) to the present, with emphasis on development of the modern world. Geographic influences on history will continue to be explored but increasing attention will be given to political boundaries that developed with the evolution of nations. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. Noteworthy people and events of the nineteenth and twentieth centuries will be emphasized for their strong connections to contemporary issues. A SOL end-of-course test will be given. This course carries weighted credit and meets the graduation requirement for World Studies credit.

SS2300	04101	HONORS VA/U.S. HISTORY	FY	1	Student should have a grade of "B" or better in the most recent history/ social science course taken or have teacher and/or administrator recommendation or parent request
--------	-------	---------------------------	----	---	--

Course Description: This course expands upon the foundational knowledge and skills previously introduced to include the historical development of American ideas and institutions from the Age of Exploration to the present. While continuing to focus on political, geographic, and economic history, the standards provide students with a basic knowledge of American culture through a chronological survey of major issues, movements, people, and events in Virginia and United States history. As a foundation to develop historical thinking skills, students will apply social science skills to understand the challenges facing the development of the United States. These skills will support the investigation and evaluation of the fundamental political principles, events, people, and ideas that developed and fostered our American identity and led to our country's prominence in world affairs. An SOL end-of-course test will be given. This course carries weighted credit and meets the graduation requirement for US/VA History credit.

HISTORY/SOCIAL SCIENCE									
NPS Code	State Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)				
SS1300	04101	VA/U.S. HISTORY	FY	1	None				
Course Description: This course expands upon the foundational knowledge and skills previously introduced to include the historical development of American ideas and institutions from the Age of Exploration to the present. While continuing to focus on political, geographic, and economic history, the standards provide students with a basic knowledge of American culture through a chronological survey of major issues, movements, people, and events in Virginia and United States history. As a foundation to develop historical thinking skills, students will apply social science skills to understand the challenges facing the development of the United States. These skills will support the investigation and evaluation of the fundamental political principles, events, people, and deas that developed and fostered our American identity and led to our country's prominence in world affairs. An SOL end-of-cours test will be given. This course meets the graduation requirement for US/VA History credit.									
SS4350	04104	ADVANCED PLACEMENT U.S. HISTORY	FY	1	There are no prerequisites. Students are expected to read a college-level textbook and to possess strong writing skills.				
SS1400	04151	GOVERNMENT	FY	1	None				
Course Description: This course addresses the knowledge that enables citizens to participate effectively in civic and economic life in an increasingly diverse democratic society. Students will apply social science skills as a foundation to examine fundamental constitutional principles, the rights and responsibilities of citizenship, the political culture, the organization and policy-making process at each level of government, the development of U.S. foreign policy, and the principles and practices of the American economic system. The course also compares the evolving political and economic roles of Virginia and the United States to various types of governments and economic systems in the global community. This course meets the graduation requirement for US/VA Government credit									
in an increase constitutional process at e economic sy types of gov	singly diverse al principles, the each level of go ystem. The convernments and	democratic society. Students will he rights and responsibilities of covernment, the development of Uurse also compares the evolving deconomic systems in the global	I apply social itizenship, the J.S. foreign p political and	I science skills e political culti policy, and the economic role	s as a foundation to examine fundamental ure, the organization and policy-making principles and practices of the American es of Virginia and the United States to various neets the graduation requirement for US/VA				
in an increase constitutional process at e economic sy types of gov	singly diverse al principles, the each level of go ystem. The convernments and	democratic society. Students wil he rights and responsibilities of c overnment, the development of U urse also compares the evolving	I apply social itizenship, the J.S. foreign p political and	I science skills e political culti policy, and the economic role	s as a foundation to examine fundamental ure, the organization and policy-making principles and practices of the American es of Virginia and the United States to various				
in an increase constitutional process at electronic systypes of government SS4450  Course Desideas, institute examines pound consequent consequ	singly diverse al principles, the ach level of grystem. The corements and t credit  04157  scription: AP utions, policies olitically significuences of polit exam adminis	democratic society. Students will he rights and responsibilities of covernment, the development of Uurse also compares the evolving deconomic systems in the global ADVANCED PLACEMENT AMERICAN GOVERNMENT AND POLITICS  United States Government and Its, interactions, roles, and behavior cant concepts and themes, throutical events, and interpret data to	I apply social itizenship, the J.S. foreign p political and community.  FY  Politics is a cors that characigh which study develop evidentizenship.	science skills e political culti policy, and the economic role This course m  1  ollege-level co cterize the po dents learn to dence-based a	as a foundation to examine fundamental ure, the organization and policy-making principles and practices of the American es of Virginia and the United States to variouneets the graduation requirement for US/VA  There are no prerequisites. Students are expected to read a college-level textbook				

AND POLITICS

#### HISTORY/SOCIAL SCIENCE Number Credits **NPS** State **NPS** of Per Prerequisite(s) Code Code **Course Title** Semesters Year Course Description: AP Comparative Government and Politics is a college-level course that introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures; policies; and the political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. This course carries weighted credit but does NOT meet graduation requirements for US/VA Government credit INTRODUCTION TO SS1301 FY 04254 None **PSYCHOLOGY** Course Description: This course will provide a general introduction to psychology and its development as a major discipline. Major learning theories and their application will be illustrated. The process of thought and the influence of language, creativity, memory, and intelligence on thought will be demonstrated. Additional emphasis will be placed on how the world is perceived and the factors that affect perception. : The development of personality as explained by major theorists will be related to the student's individual personality growth. An emphasis will be placed on adolescence and the factors which influence this period. The measurement of personality and how behavior and emotions interact will be emphasized. Completing the study of personality will be a review of personality disorders and abnormal behavior Psychological experiments as well as theory will be considered a major part of this course. There are no prerequisites. Students are ADVANCED PLACEMENT FY SS4351 04254 expected to read a college-level textbook 1 **PSYCHOLOGY** and to possess strong writing skills. Course Description: The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. Students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas. This course prepares students to take the AP exam administered in May. This is a college level course and carries weighted credit. INTRODUCTION TO 04258 SS1302 None SOCIOLOGY Course Description: In this course, man as a part of society and the elements that influence society will be investigated. Through the use of case studies depicting various aspects of American culture and comparative views of other cultures, the student will evaluate sociological data and analyze the importance of the study of sociology. The social aspects of class structure and the basic institutions of society will be discussed. An emphasis will be placed on sociological problems of America and the student's ability to project solutions for these problems considering sociological factors. There are no prerequisites. Students ADVANCED PLACEMENT should be able to read a college-level SS4452 04203 MICRO-MACRO FY 1 textbook and should possess basic **ECONOMICS** mathematics and graphing skills. Course Description: AP Micro - Macro Economics is an introductory college-level course that focuses on the principles of

Course Description: AP Micro – Macro Economics is an introductory college-level course that focuses on the principles of economics that apply to the functions of individual economic decision-makers and to the economic system as a whole. The course also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. In addition, the course places particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. Students are prepared to take the AP exam administered in May. This course carries weighted credit.

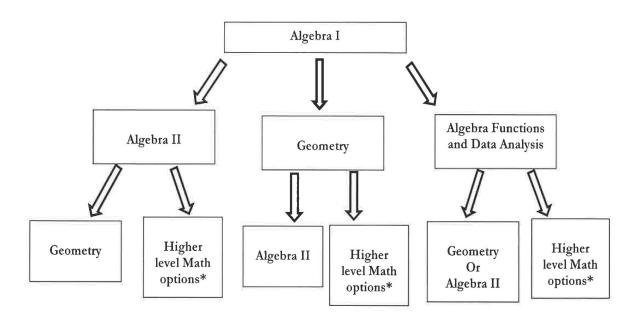
HISTORY/SOCIAL SCIENCE									
NPS Code	ot Por		Prerequisite(s)						
SS1401	04107	SEMINAR IN AFRICAN AMERICAN STUDIES	FY	1	VA/US History				
African Ame	Course Description: This two-semester course offers the academically advanced student the opportunity to focus on the impact of African American history, literature and arts on the overall history of the United States. Emphasis will be placed on developing research and presentation skills. Community resources and special projects will be an integral part of this course.								
SS4251		ADVANCED PLACEMENT WORLD HISTORY	FY	1	WORLD HISTORY				

Course Description: Is designed to be the equivalent of a two-semester introductory college or University World History course. Students investigate significant events, individuals, developments, and processes in in six historical periods. From approximately 8000 B.C.E. to the present. The course provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures.

## **Mathematics**

Mathematics curricular choices are designed to provide extensive opportunities which meet a variety of student needs for college and career readiness. The academic sequence begins with Algebra I and culminates with Advanced Placement courses.

### **High School Mathematics Course Sequence**



### \*Higher level Math options:

Please note prerequisites for each course and consider college and career pathways.

Discrete Math
Math Analysis
Algebra Functions and Data Analysis
Computer Problem Solving
Math Analysis
Algebra III
Trigonometry
Probability and Statistics
AP Courses: Computer Science, Calculus, Statistics

	MATHEMATICS									
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)					
MA1102	02052	ALGEBRA I	FY	1	Pass Math 8 375 on Math 8 SOL					
algebra and system, ded systematica studied with simple opera as a primary	Course Description: This is the first semester of a two-semester course which' is the first rigorous study of formal algebra and begins the college preparatory sequence. In the first semester, emphasis is placed on the real number system, deductive and inductive reasoning as applied to algebraic proofs, and precision of language. These are developed systematically with a proper balance between theory and practice essential for true understanding. The topics to be studied within the framework of the real number system include solving equations and inequalities, evaluating formulas, imple operations with polynomials and related problem solving. Graphing calculators and computer software will be used as a primary tool for investigations, to assist in problem solving and for verifying an algebraic solution. An SOL Algebra I and-of-course test will be given.									
MA1100	02053	ALGEBRA I 2-yr. Sequence	FY	1	Math 8					
expressly st	ates the need	s is the first part of a 2-year seque will receive 2 credits upon comple e completion of the 2-year sequen	tion of the 2-y							
MA1100	02053	ALGEBRA I 2-yr. Sequence	FY	1	Math 8					
expressly st	ates the need	s is the second part of a 2-year se will receive 2 credits upon comple e completion of the 2-year sequen	tion of the 2-y							
MA1101	02054	ALGEBRA I 2-yr. Sequence	FY	1	MA1100					
Course Des	scription: Thi ates the need		ence to comp	lete Algebra 1	. Students with an IEP that . Students without an IEP will					
Course Des	scription: Thi ates the need	2-yr. Sequence s is the third part of a 2-year sequence will receive 2 credits upon comple	ence to comp	lete Algebra 1	. Students with an IEP that . Students without an IEP will					
Course Desexpressly streceive 1 ma  MA1200  Course Desexpressly st	occription: This ates the need ath credit at the 02079 occription: This ates the need	2-yr. Sequence s is the third part of a 2-year sequential receive 2 credits upon complete completion of the 2-year sequential GEOMETRY	ence to complition of the 2-yce. A SOL Alg	lete Algebra 1 vear sequence gebra I end-of	Students with an IEP that Students without an IEP will course test will be given.  Algebra 1  Students with an IEP that					
Course Desexpressly streceive 1 ma  MA1200  Course Desexpressly st	occription: This ates the need ath credit at the 02079 occription: This ates the need	2-yr. Sequence s is the third part of a 2-year sequent will receive 2 credits upon complete completion of the 2-year sequent GEOMETRY 2-yr. Sequence s is the first part of a 2-year sequent will receive 2 credits upon complete.	ence to complition of the 2-yce. A SOL Alg	lete Algebra 1 vear sequence gebra I end-of	Students with an IEP that Students without an IEP will course test will be given.  Algebra 1  Students with an IEP that					
Course Deserversely streceive 1 masses MA1200  Course Deserversely streceive 1 masses MA1201  Course Deserversely streceive 2 masses MA1201	ozorption: Thi ates the need ath credit at the ozorp ozorp ozorp ozorp ozorp ozorp. Thi ates the need ath credit at the ozorp ozorp. This ates the need ozorp ozorp ozorption: This ates the need ozorp.	2-yr. Sequence s is the third part of a 2-year seque will receive 2 credits upon comple e completion of the 2-year sequent GEOMETRY 2-yr. Sequence s is the first part of a 2-year seque will receive 2 credits upon comple e completion of the 2-year sequent GEOMETRY	FY	lete Algebra 1 vear sequence gebra I end-of  1 ete Geometry. vear sequence	Students with an IEP that Students without an IEP will course test will be given.  Algebra 1  Students with an IEP that Students without an IEP will  MA1200  Students with an IEP that					

MATHEMATICS										
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)					
geometry. The and theorems geometric maproperties of they compare	<b>Course Description:</b> This is, the first semester of a two-semester course addressing the formal study of plane and spatial geometry. The student analyzes, makes and tests conjectures, and draws conclusions based on definitions, postulates, and theorems. Students investigate and interpret two- and three- dimensional objects; represent problem situations using geometric models; classify and apply relationships for congruent figures using properties of transformations; deduce properties of figures using transformations and coordinates. Students develop an appreciation for an axiomatic system as they compare and contrast intuitive, inductive, and deductive reasoning. Students must bring a compass, protractor, and uler to this course.									
MA1400	99001	ALGEBRA, FUNCTIONS AND DATA ANALYSIS	FY	1	Algebra or Geometry					
One and Geo mathematica investigate fu and analysis regression eo	ometry. Alge I ideas within Inctions and of data. Stu quations, and	nis course is designed for students bra, Functions, and Data Analysis in the context of solving real-world perfect their behaviors, systems of inequal indents will use graphing calculators do predict the placement of data personal symbols to represent and communications.	provides an operoblems. With lities, probabilities, and other tections. Studen	pportunity for sthin these real lity, experimer chnology tools its will be imm	students to develop and strengthen-world problems, students will ntal design, and implementation to analyze data, to determine nersed in the language of					
MA1300	02106	ALGEBRA II	FY	1	Algebra I, Geometry, or AFDA					
algebra. The applications, computer sof	following top matrices an tware will be	nis course is the first semester of a pics are considered: field properties d determinates, and quadratic functer used as primary tools for investigated the control of the	s, linear functi tions and thei ations, to assi	ons and relation r transformation st in problem s	ons, linear inequalities, ons. Graphing calculators and					
MA2300	02056	HONORS ALGEBRA II	FY	1	Geometry MA1201 and teacher recommendation					
student. The number theor quadratic trar	following top ry, linear and nsformations nd computer	nis course is designed to promote in picco are explored in depth by applying display and functions, and linear programming. A strong resoftware will be used as primary to the strong to the strong resoftware will be used as primary to the strong to the strong to the strong to the strong	ng mathemat linear inequa algebra and	ical theory thro lities, matrices geometry bac	ough problem solving activities: and their applications, linear and kground is required. Graphing					
MA1900	02057	ALGEBRA III	FY	1	Algebra II					
families. The	course add	s offering builds on the study of Alge Is extensive study in trigonometry a will best prepare a student for enro	nd some intro	ductory study	of math analysis. Successful					
MA1500	02201	PROBABILITY AND STATISTICS	FY	1	Algebra II or Honors Algebra II					
basic ideas the theory of the The student v mathematica The student v	MA1500   1/2/01									
MA1601	02102	DISCRETE MATHEMATICS WITH STATISTICS	FY	1	AFDA or Algebra II or Honors Algebra II					

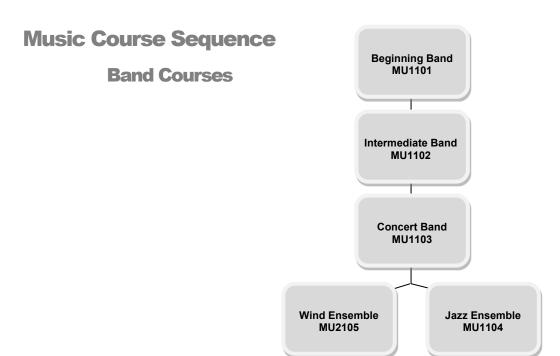
	MATHEMATICS									
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)					
matrices, red how to find the	<b>Course Description:</b> In this course, students will represent problem situations using distinct structures as finite graphs, natrices, recursive relations. Students will explore a variety of topics and techniques that arise in everyday life such as low to find the best route from one city to another, how computers store and retrieve arraignments of information on the increen; represent and solve optimization problems involving linear programming, develop and analyze algorithms.									
MA2700	02104	ANALYSIS WITH TRIGONOMETRY	FY	1	Algebra II or Honors Algebra II					
require the s The study wi	Course Description: Analysis is designed as a pre-calculus course for the student whose future goals or interests may require the study of calculus. Students will use graphing calculators to extend the study of functions and related topics. The study will include polynomial, rational, exponential, and logarithmic functions. Methods of proof using logic, deductive reasoning, and mathematical induction are used. A graphing calculator is required for this course.									
MA4702	02124	ADVANCED PLACEMENT CALCULUS	FY	1	Analysis with Trigonometry (MA2700)					
who have co	mpleted four definite inte	nis offering continues the two-seme units of college preparatory mathe egral, e.g., area and volume; technioptional topics include hyperbolic f	matics. Mathe ques of integi	ematical topics ration; transce	s included are applications of the					
MA4703	02125	ADVANCED PLACEMENT CALCULUS BC	FY	1	Advanced Placement Calculus B					
Placement B representation analytically,	C syllabus a onal approac and verbally.	nis first semester of a two-semester s established by the College Entrar h to calculus, with concepts, results Mathematical topics considered in of derivatives; and geometric inter	nce Examinat s, and probler clude parame	ion Board. Thi ns expressed etric, polar, and	s course emphasizes a multi- geometrically, numerically, d vector functions and their					
MA4600	02203	ADVANCED PLACEMENT STATISTICS	FY	1	Honors Algebra II or Algebra II					
understandir fluctuations, models to in	Course Description: The extensive use of statistics in our world makes it essential that students have more than a basic understanding of statistics. The students will recognize and understand the kinds of regularity that occurs amid random fluctuations, associated with problematic mathematical models with occurrence in the real world, and use the mathematical models to interpret these happenings. The materials and content includes those required for the Advanced Placement Statistics Examination.									
MA4801	10157	ADVANCED PLACEMENT COMPUTER SCIENCE	FY	1	Algebra II or Honors Algebra II					
structures. A language co computer sy	Course Description: The major emphasis in this course is on programming methodology, algorithms, and data structures. Applications of computing provide the context in which these subjects are treated. A particular programming language constitutes the vehicle for implementing computer-based solutions to particular problems. Treatments of computer systems and the social implications of computing are integrated into the course and not isolated as separate units. This course is designed to prepare students for entry into programs in Computer Science and Information Science.									

MATHEMATICS						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
LA1505	22999	SAT PREPARATION	FY	1	10 <sup>th</sup> , 11 <sup>th</sup> or 12 <sup>th</sup> grade status	

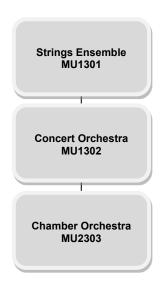
**Course Description:** This is a one semester course which consists of two verbal segments and two math segments alternating every 4  $\frac{1}{2}$  weeks. The course is designed to develop and practice the skills and strategies necessary for completing the verbal and math items on the Scholastic Aptitude Test.

## **Music**

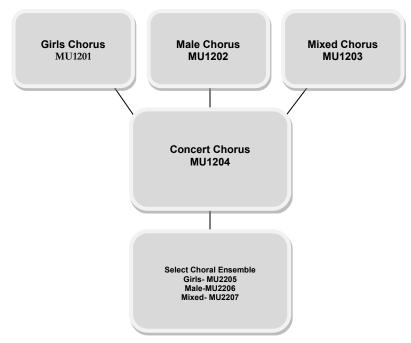
The goal of music education in NPS is to ensure that all interested students have the opportunity for meaningful musical experiences incorporating knowledge and skill for successful learning. The program is sequentially structured in order to provide high quality music instruction and cultural enrichment focused on student achievement, performance skills, life-long learning connections and personal accomplishment. Opportunities are available for students who have interest in non-performing courses as well as those who plan to make music education a career.



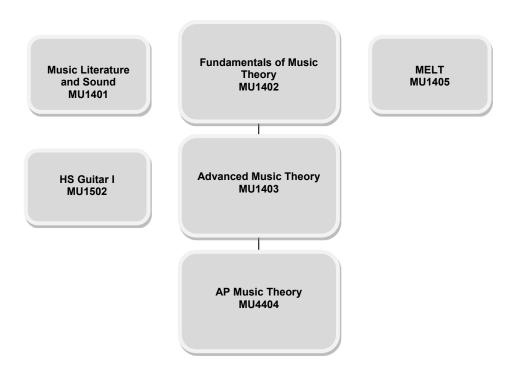
### **Orchestra Courses**



### **Chorus Courses**



### **Non-Performance Courses**



	MUSIC						
NPS Code	SCED	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)		
MU1201	05110	GIRLS CHORUS	FY	1	None		

**Course Description:** This is a preparatory class for concert chorus or select ensemble. No previous choral experience is necessary. Emphasis is placed on learning to use the voice correctly and strengthening part singing. Instruction includes development of basic music skills and choral techniques. Performances are scheduled during each semester. These performances include classroom performances, school assemblies, annual winter and spring concerts, and any other concert dates which the group accepts. On the recommendation of the director, students may be eligible for District Chorus audition. Special uniforms may be necessary and performance requirements may include in-school and out-of-school hours. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MU1202	05110	MALE CHORUS	FY	1	None
--------	-------	-------------	----	---	------

**Course Description:** This is a preparatory class for concert chorus or select ensemble. No previous choral experience is necessary. Emphasis is placed on learning to use the voice correctly and strengthening part-singing. Instruction includes development of basic music skills and choral-techniques. Performances are scheduled during each semester. These performances include classroom performance, school assemblies, annual winter and spring concerts, and any other concert dates which the group accepts. On recommendation of the instructor, students may be eligible to audition for District Chorus. Special uniforms may be necessary and performance requirements may include in-school and out-of-school hours. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MU1203	05110	MIXED CHORUS	FY	1	None
--------	-------	--------------	----	---	------

Course Description: This class is offered without audition. No previous choral experience is required. Its purpose is to prepare the students for more advanced singing experience. Classroom instruction includes basic elements of music, choral techniques, choral disciplines and group deportment. This chorus participates in school performances as designated by the teacher. Performances are scheduled during each semester. These performances include classroom performance, school assemblies, annual winter and spring concerts, and any other concert dates which the group accepts. Members may be eligible to audition for District Chorus. Special uniforms may be necessary and performance requirements may include inschool and out-of-school hours. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MU1204 05110 CONCERT CHORUS FY	1 Approval of instructor
--------------------------------	--------------------------

Course Description: This is an advanced choral performing group. It is an advanced training level for all students enrolled Membership is by audition or by choral teacher recommendation. Performances are scheduled during each semester. These performances include classroom performance, school assemblies, annual winter and spring concerts, and any other concert dates which the group accepts. Attendance outside of school hours is required. Optional opportunities available through audition are: District Chorus, All-Virginia Chorus for selected eligible juniors and seniors who have participated in the District event, and Honors Choir for eligible seniors. Special uniforms may be necessary. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MUSIC							
NPS Code	SCED	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)		
GIRLS MU2205 MALE MU2206 MIXED MU2207	05111	SELECT CHORAL ENSEMBLE	FY	1	Audition and/or approval of instructor		

Course Description: Membership in these small groups, which are limited by vocal balance and by established numbers, is by audition and approval of the instructor. This group assumes most of the responsibility for serving civic and community organizations. Required performances will be numerous and will contain a high degree of seasonal demands. Special uniforms may be necessary and attendance outside of school hours is required. Optional opportunities available through audition are: District Chorus, All-Virginia Chorus for selected eligible juniors and seniors who have participated in the District event, and Honors Choir for eligible seniors. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MU1101	05101	BEGINNING BAND	FY	1	None
MU1101	05101	BAND	FY	1	None

**Course Description:** This class provides an opportunity for students who have not had any prior instruction on wind or percussion instruments. Instruction includes basic elements of music and basic band instrument techniques. Performances are scheduled during each semester. These performances include classroom performances, school assemblies, annual winter and spring concerts, and any other concert dates which the group accepts. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MU1102 05101 INTERMEDIATE BAND FY 1 Approval of instructor
--

Course Description: This class provides an opportunity for students to continue their development of skills and understanding of music fundamentals which will prepare them for participation in the school's advanced performing groups. It also provides an opportunity for students who were started on basic instruments to select one of many other instruments not considered as basic but needed for complete instrumentation in all instrumental music organizations. Performances are scheduled during each semester. These performances include classroom performances, school assemblies, annual winter and spring concerts, and any other concert dates which the group accepts. Special uniforms may be necessary and performance requirements may include in-school and out-of-school hours. This course may be repeated for credit.

1 Approval of instructor	1	FY	CONCERT BAND	05101	MU1103	
--------------------------	---	----	--------------	-------	--------	--

Course Description: The membership of this organization consists of the advanced performers in the school. Students in this group have demonstrated knowledge of the basic skills necessary for performance and have been recommended for membership by their instrumental music teacher. The organization will provide an opportunity for students to participate in the musical activities of their school, city, and throughout the Tidewater area sponsored by local and state organizations. The basic fundamentals of marching techniques will be incorporated in the instructional program of the band class. Students will be provided an opportunity to participate in local and school sponsored parades. Attendance outside of school hours is required. Additional performances are scheduled during each semester. These performances include classroom performances, school assemblies, annual winter and spring concerts, and any other concert dates which the group accepts. This course meets the requirements for Fine Arts credit.

MUSIC						
NPS Code	SCED	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
MU2105	05101	WIND ENSEMBLE	FY	1	Audition and approval of instructor	

Course Description: This course is an advanced performance class for brass and woodwind instrumentalists who desire additional instruction in concert performance skills. Emphasis include study of scales and technique as well as solo ensemble literature. Students in this class will be expected to participate in all after school Concert Band rehearsals and performances. Performances are scheduled during each semester. These performances include classroom performances, school assemblies, annual winter and spring concerts, and other concert dates that the group accepts. Performance requirements may include in-school and out-of-school hours. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MU1104	05106	JAZZ ENSEMBLE	FY	1	Audition and approval of instructor
--------	-------	---------------	----	---	-------------------------------------

Course Description: This course is an advanced performance class for band instrumentalists who desire additional instruction in jazz performance skills. Emphasis will include study of scales and technique as well as jazz ensemble literature. Students in this class will be expected to participate in all after school rehearsals and performances. Performances are scheduled during each semester. These performances include classroom performances, school assemblies, annual winter and spring concerts, and any other concert dates which the group accepts. Performance requirements may include in-school and out-of-school hours. This course meets the requirements for Fine Arts credit.

MU1301	05104	STRING ENSEMBLE	FY	1	Middle School Orchestra

**Course Description:** This class provides an opportunity for students who have had minimal orchestra instruction in middle school. Instruction includes elements of music and intermediate orchestra techniques. Performances are scheduled during each semester. These performances include classroom performances, school assemblies, annual winter and spring concerts, and any other concert dates which the group accepts. Special uniforms may be necessary and performance requirements may include in-school and out-of-school hours. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MU1302 05104 CONCERT ORCHESTRA FY 1 Approval of instruct	MU1302	05104	CONCERT ORCHESTRA	FY	1	Approval of instructor
--	--------	-------	-------------------	----	---	------------------------

Course Description: This orchestra is for the more advanced string players. In schools with more than one level of orchestra, enrollment may be limited to sophomores, juniors, and seniors. A wide range of orchestral music literature is studied and performed. Required activities may include participation in school concerts, District Festival and Regional Orchestra Auditions. Advanced members are encouraged to audition for and participate in the Strolling Strings. Home practice and attendance outside of school hours/concerts are required. Special uniforms may be necessary. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MU2303 05104 CHAMBER ORCHESTRA FY 1 Approval of instructor
--

Course Description: Chamber Orchestra is designed for the self-motivated string player. The teacher selectively controls membership, which is limited by instrumental balance. This is an advanced performing ensemble and students must be able to exhibit advanced technical proficiency on their instruments. These students will already exhibit motivation, self-discipline, and responsibility to the group. The Chamber Orchestra will assume many responsibilities for serving community and civic organizations. Required activities may include District Festival and Senior Regional Orchestra. Students are encouraged to study privately and to audition for and participate in the Strolling Strings. Home practice and attendance outside of school hours/concerts are required. A spring trip/competition may be scheduled. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MUSIC										
NPS Code	SCED	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)					
MU1402	05116	FUNDAMENTALS OF MUSIC THEORY	FY	1	1 year of HS Band, Chorus, or Orchestra					

**Course Description:** This course provides study of: the structure of music (notation, scales, intervals, chords, part-writing, form); rhythm and meter, basic sight-singing and ear training skills; introductory harmony and composition; exposure to keyboard and conducting. Students in all grades are eligible. This course is of particular value to prospective music majors and is useful to all music performers (instrumental and vocal). This course meets the requirements for Fine Arts credit.

MU1401	05149	MUSIC LITERATURE AND SOUND	FY	1	None
--------	-------	----------------------------	----	---	------

**Course Description:** This course explores various styles and periods of music—from pop and jazz to classical. Activities include: listening to different kinds of music; comparing styles and nationalities; studying various artists and composers; experimenting with making music through the use of various equipment, technology, and creative activities; becoming acquainted with how elements of music are put together to create compositions; exploring students' special interest areas in music including careers; appropriate field trips. This course meets the requirements for Fine Arts credit.

MU1403	05113	ADVANCED MUSIC THEORY	FY	1	Successful completion of Fundamentals of Music Theory
1					

**Course Description:** This class is for the second year music theory student who has successfully completed Fundamentals of Music Theory. More emphasis will be placed on harmony and composition. It will be especially valuable to college-bound music majors. This course meets the requirements for Fine Arts credit.

Course Description: This is a college level, sequential course in music theory and literature. It is designed to challenge the talented music student and the talented academic student with a music background. The course prepares the student to pass the Advanced Placement examination administered by the College Entrance Examination Board in May. The ultimate goal is to develop understanding listeners who respond fully to music. The course stresses aural and visual understanding of musical structure and compositional procedures; the development of rigorous listening techniques; acquaintance with a variety of styles and a broad repertory; vocabulary appropriate for describing responses and value judgments. This course meets the requirements for Fine Arts credit.

MU1502	05108	BEGINNING GUITAR	FY	1	NONE
--------	-------	------------------	----	---	------

Course Description: The standards for High School Guitar I enable students to begin receiving instruction on acoustic guitar at any high school grade level. Students demonstrate proper care of the instrument and become familiar with its history and technology, including different types of guitars. They demonstrate basic positions, right-hand and left-hand techniques, and tone production. Students read and perform music of varying styles and levels of difficulty. They describe, respond to, interpret, and evaluate works of music and create basic variations of simple melodies. They investigate career options in music. Students may use standard method books in class settings. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MUSIC									
NPS Code	SCED	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)				
MU1503	?	INTERMEDIATE GUITAR	FY	1	Beginning Guitar				

Course Description: The standards for High School Guitar I enable students to begin receiving instruction on acoustic guitar at any high school grade level. Students demonstrate proper care of the instrument and become familiar with its history and technology, including different types of guitars. They demonstrate basic positions, right-hand and left-hand techniques, and tone production. Students read and perform music of varying styles and levels of difficulty. They describe, respond to, interpret, and evaluate works of music and create basic variations of simple melodies. They investigate career options in music. Students may use standard method books in class settings. This course meets the requirements for Fine Arts credit. This course may be repeated for credit.

MU1405	05149	MUSIC EDUCATION LEADERSHIP TRAINING (MELT)	FY	1	Successful completion of at least 2 years in most advanced level band, orchestra, or chorus; current enrollment in advanced music class; recommendation of teacher, senior status
--------	-------	--	----	---	---

Course Description: Music Education Leadership Training (MELT) is an elective course designed specifically for students who have successfully completed at least two years of the most advanced level of band, orchestra, or chorus and completed the MELT preparation program; have director's recommendation; and wish to pursue leadership training in the Music Education and Peer Facilitator program. The MELT program provides leadership opportunities for eligible twelfth grade music students to assist with instruction in elementary, middle, and high schools. Music Education Leadership Training students receive training and supervision from their music director and the cooperating music teacher. The MELT program is designed to further the development of students' musical training by providing opportunities for leadership and communication skills development. The program enables students to grow in confidence and self-concept while providing younger music students individualized assistance. Upon completion of requirements established for the program, students will assist with instruction in an assigned school. Participants will receive a grade as outlined for the regular grading period. Full elective credit for graduation may be earned. This course meets the requirements for Fine Arts credit.

## **Science**

The *Science Standards of Learning* for Virginia Public Schools identify academic content for essential components of the science curriculum which progress in complexity as they are studied at various grade levels. Standards are identified for a core set of high school courses — Earth Science, Biology, Chemistry, and Physics. Additionally, the high school science curriculum includes five key components of the science standards – 1) Goals; 2) K-12 Safety; 3) Instructional Technology; 4) Investigate and Understand; and 5) Application – which are critical to student success in achieving science literacy.

### **Science Course Sequence**

	Option 1											
Year 1		Environmental Science										
Year 2						Eartl	n Science					
Year 3						В	iology					
Year 4	Ch	emistry			tronomy teorology		Fore	nsics			Ocean	ography
					(	Optio	on 2					
Year 1	Earth Science											
Year 2	Biology											
Year 3		Cł	emist	ry			rironmental Science		tronomy teorolog		ensics	Oceanography
Year 4	Physics	AP Environme Science	ntal	AP Biology	AP Chemistry				Cher	nistry		
					(	Optio	on 3					
Year 1	_	nors Science		nors logy	Environme Science		Astronon Meteorolo	-	Forer	isics	О	ceanography
Year 2						Ch	emistry	<u>.</u>				
Year 3	Physics AP Environmental Science AP Biology Chemistry											
Year 4						AP	Physics					

SCIENCE									
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)				
SC1100	03001	EARTH SCIENCE	FY	1	None				

Course Description: Earth Science involves the study of the earth and those areas directly associated with it. This course of study deals with materials of our natural environment, and the processes that bring about changes. Geology, map reading, surface processes, plate tectonics, and environmental resources are covered extensively. Process skills and critical thinking will be emphasized throughout the study of the content. Laboratory investigations, problem solving activities, classroom discussions, demonstrations, lecture and research (during the instructional period and at home) are used to explore major Earth Science concepts. This course meets the graduation requirement for science. An SOL Earth Science end-of course test will be given.

SC2100	03001 HONORS EARTH SCIENCE	03001	FY	1	Student must have a grade of "B" or better in 8 <sup>th</sup> grade science and teacher and/or administrator recommendation if below "B"
--------	----------------------------	-------	----	---	--

Course Description: Honors Earth Science is a rigorous curriculum designed to allow highly motivated students to conduct an in-depth study of our natural environment, and the processes that bring about changes. In Honors Earth Science, students are expected to work independently on a variety of assignments and accept greater responsibility for their learning. In order to develop a greater understanding of the processes that shape our everyday lives, the curriculum will integrate inquiry investigations and a variety of technologies with the study of the earth as a system. The impacts of human activities on the earth systems will also be a focus. The results of student investigations are communicated through student presentations and formal laboratory reports. This course meets the graduation requirement for science. A Standard of Learning (SOL) Earth Science end-of course test will be given.

**Course Description:** Astronomy is the study of the origin and history of the Universe, the formation of the Earth and the solar system, stellar evolution, solar and lunar cycles, constellations and their mythological stories, planetary comparisons, the tools astronomers use, and current topics such as black holes, the expansion of the universe and the search for water on other planets. Meteorology topics introduced include atmospheric properties and processes that control temperature, wind, precipitation, and storm systems, weather forecasting and warning systems, air pollution, and climate change. This course also includes current topics such as global warming, ozone depletion, El Nino/La Nina, and the impacts of climate change on human society.

SC1200	03051	GENERAL BIOLOGY	FY	1	None

**Course Description:** Biology provides students with one unit of credit. Such major topics as the cellular and chemica bases for life, systems in plants and animals, reproduction and development, genetics, evolution, and ecology are included. These topics will be explored through lecture, laboratory investigations, critical thinking and problem solving activities, demonstrations, and classroom discussions with an emphasis on the development of scientific process skills. This course meets the graduation requirement for science. An SOL Biology end-of course test will be given.

SC2200	03051	HONORS BIOLOGY	FY	1	Student must have a grade of "B" or better in 8 <sup>th</sup> grade science or have teacher and/or administrator recommendation if below "B"
--------	-------	----------------	----	---	--

Course Description: Honors Biology provides students with one unit of credit and preparation for AP Biology. Such major topics as the cellular and chemical bases for life, systems in plants and animals, reproduction and development, genetics, evolution, and ecology are included. These topics will be explored through lecture, laboratory investigations, critical thinking and problem solving activities, demonstrations, and classroom discussions with an emphasis on the development of scientific process skills. Student initiated investigations are strongly encouraged. This course meets the graduation requirement for science. An SOL Biology end-of course test will be given.

		so	CIENCE		
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)
SC4250	03056	ADVANCED PLACEMENT BIOLOGY	FY	1	One unit of Chemistry and one un of Biology
talented st Entrance E placement facts into c	udent and to Examination in an advar concepts and	Advanced Placement Biology is a prepare him/her to pass the Adva Board in May. Depending upon the need biology course. Emphasis will d to express these concepts in science esearch is a requirement for the contents.	anced Placeme e test score, the be placed on the entific composition	ent examination ne student may the developme	n administered by the College y be granted college credit and/or ent of the student's ability to organiz
SC2202	03053	ANATOMY & PHYSIOLOGY	FY	1	One unit of Biology and one unit of Earth Science
					One unit of Biology and one unit
SC1104	03005	OCEANOGRAPHY	FY	1	Earth Science Algebra I is recommended
Course De biology, ea developme and chemis for investig	escription: arth science, ent while wo stry of sea wation through	Oceanography is a course offering and the marine environment. The rking with living organisms in the fivater as well as other physical aspe	g for students v course provide eld and in a lal ects of salt war I experimentati	who have demes opportunition boratory setting ter systems. Sion for science	Earth Science Algebra I is recommended  nonstrated aptitude and high interes
Course De biology, ea developme and chemis for investig	escription: arth science, ent while wo stry of sea wation through	Oceanography is a course offering and the marine environment. The rking with living organisms in the fivater as well as other physical aspign literature searches and persona	g for students v course provide eld and in a lal ects of salt war I experimentati	who have demes opportunition boratory setting ter systems. Sion for science	Earth Science Algebra I is recommended  nonstrated aptitude and high interestes for personal growth and lighting. Emphasis is placed on the geological students are required to choose topic ecompetitions and presentations. The second students are required to choose topic ecompetitions and presentations.
biology, ea developme and chemis for investig	escription: arth science, ent while wo stry of sea wation through	Oceanography is a course offering and the marine environment. The rking with living organisms in the fivater as well as other physical aspign literature searches and persona	g for students v course provide eld and in a lal ects of salt war I experimentati	who have demes opportunition boratory setting ter systems. Sion for science	Earth Science Algebra I is recommended  nonstrated aptitude and high intereses for personal growth and an ing. Emphasis is placed on the geological to the same required to choose top
Course De biology, ea developme and chemis for investig rigor of this SC1400  Course De energy and investigation	escription: arth science, ent while wo stry of sea v gation throug s course sat  03151  escription: d matter, ele ons, various	Oceanography is a course offering and the marine environment. The rking with living organisms in the fivater as well as other physical aspign literature searches and persona isfies the requirements for the Adv	g for students v course provide eld and in a lal ects of salt wai I experimentati anced Studies  FY  the fundament sound, and no ivities and indes	who have demes opportunities boratory setting ter systems. So ion for science Diploma.  1  tal laws of their uclear physics oppondent rese	Earth Science Algebra I is recommended  nonstrated aptitude and high interestes for personal growth and ag. Emphasis is placed on the geological decompetitions and presentations. The second of the competitions and presentations. The second of the competitions and presentations. The second of the
Course De biology, ea developme and chemis for investig rigor of this SC1400  Course De energy and investigation	escription: arth science, ent while wo stry of sea v gation throug s course sat  03151  escription: d matter, ele ons, various	Oceanography is a course offering and the marine environment. The rking with living organisms in the fivater as well as other physical aspign literature searches and personal isfies the requirements for the Adverger Physics will introduce students to extricity and magnetism, heat, light, technologies, problem-solving act	g for students v course provide eld and in a lal ects of salt wai I experimentati anced Studies  FY  the fundament sound, and no ivities and indes	who have demes opportunities boratory setting ter systems. So ion for science Diploma.  1  tal laws of their uclear physics oppondent rese	Earth Science Algebra I is recommended  nonstrated aptitude and high interestes for personal growth and ag. Emphasis is placed on the geological development of the second
Course De biology, ea developme and chemis for investig rigor of this SC1400  Course De energy and investigation skills will be SC4451  Course De physics. Tand power	escription: arth science, ent while wo stry of sea v gation throug s course sat  03151  escription: d matter, ele ons, various e emphasiz  03155  escription: the course of gation mecha	Oceanography is a course offering and the marine environment. The rking with living organisms in the fivater as well as other physical aspign literature searches and persona isfies the requirements for the Adv  PHYSICS  Physics will introduce students to extricity and magnetism, heat, light, technologies, problem-solving act ed. This course meets the gradual ADVANCED PLACEMENT PHYSICS 1: Algebra-Based  Advanced Placement Physics 1 is	g for students v course provide eld and in a lal ects of salt wait anced Studies  FY  the fundament sound, and notivities and indetion requireme  FY  a equivalent to ding rotational produces electr	who have demes opportunities or systems. So ion for science Diploma.  1  tal laws of the cuclear physics expendent resent for science.  1  a first-semest dynamics and ic circuits. The	Earth Science Algebra I is recommended  Inonstrated aptitude and high interested for personal growth and presentations. The second growth and presentations and presentations. The second growth and g
Course De biology, ea developme and chemis for investig rigor of this SC1400  Course De energy and investigation skills will be SC4451  Course De physics. Tand power	escription: arth science, ent while wo stry of sea v gation throug s course sat  03151  escription: d matter, ele ons, various e emphasiz  03155  escription: the course of gation mecha	Oceanography is a course offering and the marine environment. The rking with living organisms in the fivater as well as other physical aspign literature searches and persona isfies the requirements for the Adv  PHYSICS  Physics will introduce students to extricity and magnetism, heat, light, technologies, problem-solving act ed. This course meets the gradual ADVANCED PLACEMENT PHYSICS 1: Algebra-Based  Advanced Placement Physics 1 is sovers Newtonian mechanics (incluancial waves and sound. It also interested as the properties of	g for students v course provide eld and in a lal ects of salt wait anced Studies  FY  the fundament sound, and notivities and indetion requireme  FY  a equivalent to ding rotational produces electr	who have demes opportunities or systems. So ion for science Diploma.  1  tal laws of the cuclear physics expendent resent for science.  1  a first-semest dynamics and ic circuits. The	Earth Science Algebra I is recommended  Inonstrated aptitude and high interestes for personal growth and ag. Emphasis is placed on the geological department of the peological department of t

**Course Description:** Advanced Placement Physics 2 is equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics. The curriculum is devised by College Board to prepare students to take the Advanced Placement Examination in May each year.

		SC	CIENCE		
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)
SC4450	03156	ADVANCED PLACEMENT PHYSICS C: Mechanics (Calculus-Based)	FY	1	AP Physics 1 and Calculus
devised by covers kine	College Boardics; New		Advanced Place	cement Exam	rse which follows the curriculum ination in May each year. This cour les and linear momentum; circular momentum
SC4450	03156	ADVANCED PLACEMENT PHYSICS C: Electricity and Magnetism (Calculus-Based)	FY	1	AP Physics C: Mechanics and Calculus
curriculum	devised by e covers ele		to take the Adv	vanced Placei	el physics course which follows the ment Examination in May each year uits; magnetic fields; and
	03999	FORENSICS SCIENCE	FY	1	Biology and Chemistry
Course De nterrelated read, resea ncreasing	escription: d and interdearch, hypoth	The Forensic Science course is dependent. This class blends all of the esize, interview, compute and use nology, the students will record data	esigned around he sciences wi deductive reas	d the idea that ith the core su soning to prop	t in the real world all learning is ubject areas. Students will be asked pose crime solutions. With an ever
Course De interrelated read, resea increasing	escription: d and interdearch, hypoth use of techi	The Forensic Science course is dependent. This class blends all of the esize, interview, compute and use nology, the students will record data	esigned around he sciences wi deductive reas	d the idea that ith the core su soning to prop	t in the real world all learning is ubject areas. Students will be asked pose crime solutions. With an ever
interrelated read, resea increasing	escription: d and interdearch, hypoth use of techi	The Forensic Science course is dependent. This class blends all of the esize, interview, compute and use nology, the students will record data	esigned around he sciences wi deductive reas	d the idea that ith the core su soning to prop	t in the real world all learning is ubject areas. Students will be asked pose crime solutions. With an ever
Course De interrelated read, resea increasing communication in the course De issues. It in environme gather and dynamics, research a	escription: d and interdearch, hypoth use of techn ating results  03003  escription: ncludes the ntal problem l interpret re environmen and the cons	The Forensic Science course is dependent. This class blends all of the esize, interview, compute and use nology, the students will record date.  ENVIRONMENTAL SCIENCE  Environmental Science allows sturn mathematical, ethical, and economis facing today's society. Students	esigned around he sciences wi deductive reas a, draw conclus FY  dents to exploratic concepts ne will use current ide epistemolo and political facilis. With additio	the idea that the core suspending to propie sions, and for a second of the core suspending to propie sions, and for a second of the core suspending to the core	t in the real world all learning is ubject areas. Students will be asked cose crime solutions. With an ever resultate the best method for  None  ment and consider environmental lop a basic understanding of currer and problem-solving techniques to hinking, earth's systems, populations include laboratory and field
Course De nterrelated read, resea ncreasing communication de la communication de la course De ssues. It in environme gather and dynamics, research a	escription: d and interdearch, hypoth use of techn ating results  03003  escription: ncludes the ntal problem l interpret re environmen and the cons	The Forensic Science course is dependent. This class blends all of the esize, interview, compute and use nology, the students will record date.  ENVIRONMENTAL SCIENCE  Environmental Science allows sturn mathematical, ethical, and economis facing today's society. Students all data. Seven cohesive units inclutal quality, and social, economic, attruction and manipulation of model.	esigned around he sciences wi deductive reas a, draw conclus FY  dents to exploratic concepts ne will use current ide epistemolo and political facilis. With additio	the idea that the core suspending to propie sions, and for a second of the core suspending to propie sions, and for a second of the core suspending to the core	t in the real world all learning is ubject areas. Students will be asked coose crime solutions. With an ever remulate the best method for  None  ment and consider environmental lop a basic understanding of currer and problem-solving techniques to hinking, earth's systems, populations include laboratory and field

**Course Description:** The goal of the AP Environmental Science 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. Research is a major emphasis of this course of study. Due to the interdisciplinary nature of this course, it embraces a wide variety of topics from different areas of study. Yet there are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science. The curriculum devised by College Board prepares students to take the Advanced Placement Examination in May each year.

SCIENCE								
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)			
SC1300	03101	CHEMISTRY	FY	1	Completion of or enrollment in Algebra II			

**Course Description:** This course is designed for students to gain a better understanding of the world of matter and energy. Through extensive research and individual effort, students will study: measurement, metrics, atomic structure, the periodic table, bonding, states of matter, solutions, equilibrium, kinetics, gasses, thermodynamics, oxidation-reduction, organic, and acid-base chemistry. Honor students are expected to perform intricate lab procedures with accuracy. A strong math background is recommended for chemistry. This course meets the graduation requirement for science. A Standard of Learning (SOL) Chemistry end-of course test will be given.

**Course Description:** This course is designed for advanced students to gain a better understanding of the world of matter and energy. Through extensive research and individual effort, students will study: measurement, metrics, atomic structure, the periodic table, bonding, states of matter, solutions, equilibrium, kinetics, gasses, thermodynamics, oxidation-reduction, organic, and acid-base chemistry. Honor students are expected to perform intricate lab procedures with accuracy. A strong math background is recommended for honors chemistry. A Standard of Learning (SOL) Chemistry end-of course test will be given. This course meets the graduation requirement for science.

SC4350 03106 ADVANCED PLACEMENT FY 1 One unit of Chemistry, one Biology, and one unit of Alg
--

**Course Description:** Advanced Placement Chemistry is a second level chemistry course which follows the curriculum devised by the College Board to prepare students to take the Advanced Placement Examination in May of each year. Laboratory investigations, computer applications, problem-solving activities, and independent research assignments to be completed outside of the instructional setting will be used to develop scientific process skills and concepts.

## **Career and Technical Education**

Career and Technical Education (CTE) programs provide students with an array of rigorous and relevant education options and opportunities that support their college and career readiness journeys. All of our CTE programs, which are aligned with the National Career Clusters® Model, integrate academic and technical content while providing real-world experiences. Each program is based on national and statewide research that allows us to prepare our students for high-skill, high-demand, and high-wage postsecondary endeavors. Graduation requirements related to this include:

- Economics and Personal Finance (Required of all students)
- A Virtual Experience (Required of all students, embedded in Economics and Personal Finance course)
- One Industry Certification (Required for Standard Diploma)
- Student choice for completion of a CTE course sequence

## **B**usiness & Information Technology and Marketing

BUSINESS & INFORMATION TECHNOLOGY AND MARKETING								
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)			
FI1204	22210	ECONOMICS AND PERSONAL FINANCE	FY	1	None			

Course Description: Students learn how economies and markets operate and how the United States economy is interconnected with the global economy. Additionally, students learn how to navigate the financial decisions they must face and to make informed decisions relating to career exploration, budgeting, banking, credit, insurance, spending, financing postsecondary education, taxes, saving and investing, buying/leasing a vehicle, and living independently. They also learn the importance of investing in themselves in order to gain the knowledge and skills valued in the marketplace. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship, more effective participation in the workforce, and career success. The course incorporates all economics and financial literacy objectives included in the Code of Virginia §22.1-200-03B. Recommended for grades 10-12. This course is a graduation requirement. A Virtual Experience is offered in this course. The WISE Financial Literacy Certification test is available.

FI1205	12104	ACCOUNTING	FY	1	None
	12101	710000111110			110110

Course Description: Students study the basic principles, concepts, and practices of the accounting cycle for a service business and a merchandising business. Topics covered include analyzing transactions, journalizing and posting entries, preparing payroll records and financial statements, and managing cash systems. Ethics and professional conduct are emphasized. Students learn fundamental accounting procedures using both manual and electronic systems. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. Recommended for grades 10-12.

#### **BUSINESS & INFORMATION TECHNOLOGY AND MARKETING** Number Credits **NPS** SCED NPS Per of Prerequisite(s) Code Code **Course Title** Semesters Year FI1206 ADVANCED ACCOUNTING 12104 FY 1 Accounting Course Description: Students gain knowledge of advanced accounting principles, procedures, and techniques used to solve business problems and to make financial decisions. Students use accounting and spread-sheet software to analyze, synthesize, evaluate, and interpret business financial data. Students work in a technology-integrated environment using authentic workplace industry scenarios that reflect current industry trends and standards. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. Recommended for grades 11-12. Certifications are offered. **BA1207** 12054 **BUSINESS LAW** FY None Course Description: 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. Recommended for grades 9-12. **COMPUTER INFORMATION** 10005 FY IT1212 None **SYSTEMS** Course Description: 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. Recommended for grades 9-12. Certifications are offered. ADVANCED COMPUTER IT1213 10005 FY Computer Information Systems INFORMATION SYSTEMS Course Description: 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. Recommended for grades 10-12. Certifications are offered. DESIGN, MULTIMEDIA AND IT1202 10203 FY None WEB TECHNOLOGY Course Description: Students develop proficiency in creating desktop publications, multimedia presentations/projects, and Web sites using industry standard application software. Students incorporate principles of layout and design in completing publications and projects. Students design portfolios that may include business cards, newsletters, mini-pages, Web pages, multimedia presentations/projects, calendars, and graphics. The cooperative education model is available for this course. Recommended for grades 10-12. MOS certifications are offered.

**Course Description:** Students develop advanced skills in creating interactive media, web sites, and publications for print and electronic distribution. Students work with sophisticated hardware and software, applying skills learned to real-world projects. The cooperative education model is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. Recommended for grades 11-12. Certifications are offered.

FY

Design, Multimedia, and Web

**Technologies** 

ADVANCED DESIGN.

MULTIMEDIA AND WEB

**TECHNOLOGY** 

10203

IT1203

#### **BUSINESS & INFORMATION TECHNOLOGY AND MARKETING** Number Credits **NPS** SCED NPS of Per Prerequisite(s) Code Code Course Title Semesters Year **BA1208** 12052 FY **BUSINESS MANAGEMENT** 1 None Course Description: Students study basic management concepts and leadership styles as they explore business ownership, planning, operations, marketing, finance, economics, communications, the global marketplace, and human relations. Quality concepts, project management, problem solving, and ethical decision making are an integral part of the course. Offered in Evening School Only. COMPUTER INFORMATION IT5801 10005 SYSTEMS (DUAL FY Approval Required **ENROLLMENT**) Course Description: 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 who successfully complete this sequence (IT5801) will earn college credit through TCC. Recommended for grades 11-12. Certifications are offered. ADVANCED COMPUTER CIS (Dual Enrollment) Approval IT5802 10005 INFORMATION SYSTEMS FY Required (DUAL ENROLLMENT) Course Description: 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. Upon completion of this sequence (IT15802) students will be awarded college credit through TCC. Recommended for grades 11-12. Certifications are offered. SPORTS. ENTERTAINMENT. FY HT1607 12163 AND RECREATION None MARKETING Course Description: This introductory course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports, entertainment, and recreation industries. Students will investigate the components of branding, sponsorships and endorsements, as well as promotion plans needed for sports, entertainment and recreation events. The course also supports career development skills and explores career options. Work-based learning may be taken in sequence with this course. Recommended for grades 10-12. Certifications are offered **ENTREPRENEURSHIP BA1200** 12053 FY None **EDUCATION** Course Description: This course introduces students to the exciting world of creating, owning, and launching a business. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle. Work-based learning may be taken in sequence with this course. Recommended for grades 9-12. Certifications are offered. MK1601 12164 **MARKETING** FY None Course Description: Students examine activities in marketing/business important for success in employment and

**Course Description:** Students examine activities in marketing/business important for success in employment and postsecondary 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 will include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and the impact of technology on the marketplace. This course reinforces mathematics, science, English, and history/social science SOL's. Work-based learning may be taken in sequence with this course. Recommended for grades 11-12.

#### **BUSINESS & INFORMATION TECHNOLOGY AND MARKETING** Number Credits **NPS** SCED NPS of Per Prerequisite(s) Code Code **Course Title** Semesters Year MK1602 12152 ADVANCED MARKETING FY Marketing Course Description: Students pursue in greater depth the development 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 will prepare for advancement in marketing careers and postsecondary education. Work-based learning may be taken in sequence with this course. Recommended for grade 12. The NRF Customer Service Certification is offered. pendin MK1606 MARKETING MANAGEMENT None g Course Description: This course is designed for high school seniors who plan to attend college with a concentration in marketing, business, or management and/or who have plans to manage or own a business. Students will be exposed to all aspects of marketing and management. These skills will translate to small and large businesses, nonprofit organizations, service industries, and government agencies. This course will prepare students for the CLEP examination to earn potential college credit at many accredited colleges and universities across the country. MK1603 12153 **FASHION MARKETING** FY None Course Description: In this specialized course, students gain basic knowledge of the apparel and accessories industry

Course Description: In this specialized course, students gain basic knowledge of the apparel and accessories industry and skills necessary for successful employment in apparel businesses. Students develop general marketing skills necessary for successful employment in fashion marketing, general marketing skills applicable to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, market planning, and product/service technology as well as academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied. Work-based learning may be taken in sequence with this course. Recommended for grades 10-12.

r	MK1604	12513	ADVANCED FASHION MARKETING	FY	1	Fashion Marketing
---	--------	-------	-------------------------------	----	---	-------------------

Course Description: Students with a career interest in apparel and accessories marketing gain in-depth knowledge of the apparel and accessories industry and skills important for employment in apparel businesses and ownership. They develop advanced skills unique to fashion marketing and advanced general marketing skills applied to the apparel and accessories industry. Professional selling, sales promotion, buying, merchandising, marketing research, product/service technology, and supervision as well as academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied. Work-based learning may be taken in sequence with this course. Recommended for grades 11-12. The NRF Customer Service Certification is offered.

MK1608	12051	PRINCIPLES OF BUSINESS & MARKETING	FY	1	None
--------	-------	------------------------------------	----	---	------

**Course Description:** Students discover the roles of business and marketing in the free enterprise system and the global economy. Basic financial concepts of banking, insurance, credit, inheritance, taxation, and investments are investigated to provide a strong background as students prepare to make sound decisions as consumers, wage earners, and citizens. The real-world impact of technology, effective communication, and interpersonal skills is evident throughout the course. This course also supports career development skills and explores career options. Recommended for grades 9-10.

#### **BUSINESS & INFORMATION TECHNOLOGY AND MARKETING**

NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)
MK1605	12162	DIGITAL MARKETING	FY	1	None

**Course Description:** Students receive an introduction to marketing functions and the business plan and study Internet marketing's role in the global economy. Students gain knowledge of the tools and techniques used in Internet marketing and learn how to design a website. They explore ethical, legal and security aspects and prepare for a career in Internet marketing. Work-based learning may be taken in sequence with this course. Certifications are offered.

**Course Description:** Cooperative Office Education (COE) is a method of instruction that combines career and technical classroom instruction with paid employment directly related to the classroom instruction. Both student instruction and employment are planned and supervised by the school and the employer so that each contributes to the student's career objectives and employability.

WB1625 WB1626 WB1627 WB1628 WB1629	22999	COOPERATIVE ON-THE-JOB TRAINING (WORK-BASED LEARNING)	FY	1	Enrolled in a Marketing Course
--	-------	---	----	---	--------------------------------

**Course Description:** Work based learning is offered in Marketing, Advanced Marketing, and Advanced Fashion Marketing. The student is given the opportunity to expand or reinforce what has been learned in the classroom through supervised, paid, on-the-job training in a local marketing business. A minimum of 180 hours per semester is required for credit.

# Family & Consumer Sciences Education

NPS Code	SCED Code	NPS Course Title	Number of	Credits Per	Prerequisite(s)				
Code	Code	Course Title	Semesters	Year					
IT1401	16051	INTRODUCTION TO CULINARY ARTS	FY	1	None				
Course Description: The Introduction to Culinary Arts curriculum provides students with opportunities to explore career options and entrepreneurial opportunities within the food service industry. Students investigate food safety and sanitation, explore culinary preparation foundations, practice basic culinary skills, explore diverse cuisines and service styles, investigate nutrition and menu development, and examine the economics of food. The curriculum places a strong emphasis on science and mathematics knowledge and skills. Recommended for grades 9-12.									
IT1402	16052	CULINARY ARTS I	FY	1	Introduction to Culinary Arts				
reparation tec	hniques, stu places a str	g of goods and study fundamental dents practice applying these techong emphasis on science and mated.  CULINARY	niques to the pr	eparation an	d serving of basic food products.				
IT1403	16052	ARTS II	FY	1	Culinary Arts I				
Course Description: The Culinary Arts II curriculum provides students with continuing opportunities to acquire a comprehensive knowledge of the food service industry as well as to expand their technical skills. Students practice kitchen safety and sanitation, apply nutritional principles to food preparation and storage, perform a wide range of more advanced food-preparation techniques including garden manager and baking, refine their dining room serving skills, develop menus, perform on-site and off-site catered functions, and strengthen their business and math skills. The curriculum continues to place a strong emphasis on science and mathematics knowledge and skills. Recommended for grades 11-12.  Certifications are offered.									
IU1404	22202	NUTRITION AND WELLNESS	FY	1	None				
Course Description: Students enrolled in Nutrition and Wellness focus on understanding wellness, investigating principles of nutrition, using science and technology in food management, ensuring food safety, planning menus and preparing food, and exploring careers in the field of nutrition and wellness. Recommended for grades 9-12. Certifications are offered.									
	00004	DESCUIDES MANAGEMENT	<b>5</b> 1						
IU1451	22201	RESOURCE MANAGEMENT	FY	1	None				
Course Decer	intion: This	course allows students to explore	successful stra	ategies for li	ving independently by actively				

## **STEM (Technology Education)**

	TECHNOLOGY EDUCATION								
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)				
ST1307	21005	ENGINEERING EXPLORATION	FY	1	None				

**Course Description:** In Engineering Explorations, 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 team-based presentations, proposals, and technical reports. Recommended for grades 9-12.

ST1308 21002 ENGINEERING STUDIES FY 1 Engineering Exploration

**Course Description:** Designed for students who intend to pursue engineering studies in college, Engineering Studies prepares students by emphasizing integration of mathematics, science, and English concepts and skills into engineering problems in a curriculum demanding rigorous study habits and other college-level skills. Students are encouraged to become routinely inquisitive through brainstorming and prototyping. Students practice basic engineering skills and communication of technical information while applying the engineering design process to complete an engineering project. Recommended for grades 10-12. Certifications are offered.

ST1309 21005 ENGINEERING ANALYSIS AND APPLICATION II FY 1 Engineering Exploration

**Course Description:** Engineering Analysis and Applications II is the second of a possible four-course sequence that will allow students to apply the engineering design process to areas of the designed world, explore ethics in a technological world, and examine systems in civil, mechanical, electrical, and chemical engineering. Students will participate in STEM-based, hands-on projects as they communicate information through team-based presentations, proposals, and technical reports. Recommended for grades 10-12. Certifications are offered.

Pending ENGINEERING CONCEPTS
AND PROCESSES III FY 1 Engineering Analysis and Applications II

Course Description: Engineering Concepts and Processes III is the third course of a four-course sequence that will enable students to solve real-world problems. This course focuses on building an engineering team, working with case studies, managing projects, applying logic and problem-solving skills, delivering formal proposals and presentations, and examining product and process trends. In addition, students continue to apply their engineering skills to determine whether they are good candidates for postsecondary educational opportunities in engineering. Students will participate in STEM-based, hands-on projects as they communicate information through team-based presentations, proposals, and technical reports. Recommended for 11-12 grades. Certifications are offered.

IT1209 6670 INFORMATION TECHNOLOGY FY 1 None FUNDAMENTALS I

Course Description: Information Technology (IT) Fundamentals introduces the essential technical and professional skills required for students to pursue programs leading to professional careers and IT certifications. Students investigate career opportunities and technologies in four major IT areas: Information Services and Support, Network Systems, Programming and Software Development, and Interactive Media. Students will evaluate the impact of IT on other career clusters. The focus of the IT Fundamentals course is the introduction of skills related to information technology basics, Internet fundamentals, network systems, computer maintenance/upgrading/troubleshooting, computer applications, programming, graphics, Web page design, and interactive media. Students explore ethical issues related to computers and Internet technology and develop teamwork and communication skills that will enhance their employability. Certifications are offered.

TECHNOLOGY EDUCATION					
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)
ST1312	21056	GEOSPATIAL TECHNOLOGY II	FY	1	Geospatial I
mitations of Recommend	f such technologi led for grades 10	, interpreting, analyzing, and synt es. These experiences also includents. These experiences also includents. The control of t	de interfacing t	to network-ba	ased data management systems
ST1305	17106	ELECTRONICS SYSTEMS I	FY	1	None
abound for a course allow and conduct	any who should nows students the o	onic devices are everywhere in monaster the knowledge and skills reportunity to explore principles of the electronics. Students solve proband AC devices and circuits. Reconstructions	equired to desi electricity, appolems using si	ign, alter, rep ply knowledg mple electric	pair, and construct them. This go in mathematics and science, all devices and circuits and build
ST1306	17106	ELECTRONICS SYSTEMS II	FY	1	Electronics Systems I
and laws wit	th electronic com	nts work with electronics devices, ponents such as resistors, capac s, television, and other equipment	itors, and trans	sistors. They	also study integrated circuits
					1
ST1301	21101	TECHNICAL DRAWING AND DESIGN	FY	1	None
sketch, and	make technical of	foundation course, students lear lrawings, models, or prototypes o neering and architecture students	f real design p	roblems. The	e course is especially
CT4200	04400	ENGINEERING DRAWING			Technical Drawing and Design

ST1302	21106	ENGINEERING DRAWING AND DESIGN	FY	1	Technical Drawing and Design
--------	-------	-----------------------------------	----	---	------------------------------

**Course Description:** Students use a graphic language for product design, technical illustration, assembly, patent, and aeronautical drawings. They increase their understanding of drawing techniques learned in the prerequisite course. Students use computers, calculators, and descriptive geometry and adhere to established standards to solve design problems. Throughout the course, they hold seminars, meet engineers, and tour technical design firms in order to learn about the benefits of the course on their future study and career. Completion of this course may contribute to a student's preparation for AutoCAD certifications examination. Recommended for grades 10-12.

ST1303	21103	ARCHITECTURAL DRAWING AND DESIGN	FY	1	Technical Drawing and Design
--------	-------	-------------------------------------	----	---	------------------------------

**Course Description:** Students learn the principles of architecture and increase understanding of working drawings and construction techniques learned in the prerequisite course. Experiences include residential and commercial building designs, rendering, model making, structural details, and community planning. Students use computer-aided drawing and design (CAD) equipment and established standards or codes to prepare models for presentation. The course provides information helpful for the homeowner and is especially beneficial to the future architect, interior designer, or homebuilder. Recommended for grades 10-12. Certifications are offered.

	TECHNOLOGY EDUCATION						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)		
ST2314	21006	INTRODUCTION TO ENGINEERING DESIGN (PLTW) (MAURY ONLY)	2	1	None		

**Course Description:** This pre-engineering course is one of three core courses (along with Principles of Engineering and Digital Electronics) in a national engineering program. Using computer-modeling software, students learn the design process. They solve design problems as they develop, create, and analyze product models. Recommended for grades 9-12. Certifications are offered.

ST2315	21004	PRINCIPLES OF ENGINEERING (PLTW) (MAURY ONLY)	FY	1	Introduction to Engineering Design (PLTW)
--------	-------	--	----	---	---

**Course Description:** This pre-engineering course is designed to follow two core courses (Principles of Engineering and Introduction to Engineering Design) as part of a national engineering program. Students use computer simulations to learn about the logic of electronics as they design, test, and actually construct circuits and devices. They apply control system programming and explore sequential logic and digital circuitry fundamentals. Topics in computer circuitry are also presented, including circuitry analysis and an exploration into diodes, transistors, and operational amplifiers. Recommended for grades 10-12. Certifications are offered.

ST2318 21008	DIGITAL ELECTRONICS (PLTW) (MAURY ONLY)	FY	1	Introduction to Engineering Design (PLTW)
--------------	---	----	---	---

**Course Description:** This pre-engineering course is designed to follow two core courses (Principles of Engineering and Introduction to Engineering Design) as part of a national engineering program. Students use computer simulations to learn about the logic of electronics as they design, test, and actually construct circuits and devices. They apply control system programming and explore sequential logic and digital circuitry fundamentals. Topics in computer circuitry are also presented, including circuitry analysis and an exploration into diodes, transistors, and operational amplifiers. Recommended for grades 10-12 grads. Certifications are offered.

Pending PRODUCTION SYSTEMS FY 1 None	
--------------------------------------	--

**Course Description:** Students assess the relationship between production and society as they compose design portfolios, construct production prototypes, and apply automation to evaluate their solutions to technological problems. Recommended for grades 9-12.

**Course Description:** This pre-engineering course is designed to follow three core courses (Principles of Engineering, Introduction to Engineering Design, and Digital Electronics) as part of a national engineering program. Students enrolled in the Engineering Design and Development course synthesize knowledge, skills, and abilities through an authentic engineering experience. Students are expected to develop and formally present an independent study project and a teamoriented project, which are critiqued by an evaluation committee. Students interact and work with community mentors to research, design, and construct solutions to engineering problems. Recommended for grade 12.

		TECHNOLOGY	'EDUCA	ΓΙΟΝ		
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
AT1320	11153	DIGITAL VISUALIZATION	FY	1	None	
<b>Course Description:</b> Students will gain experiences related to computer animation by solving problems involving 3D object manipulation, storyboarding, texture mapping, lighting concepts, and environmental geometry. They will produce animations that include interdisciplinary projects related to science, engineering, and the entertainment industry. A major emphasis will be the production of a portfolio that showcases examples of original student work. Recommended for grades 10-12.						
ST1319	21015	MODELING AND SIMULATION TECHNOLOGY	FY	1	None	
Course Description: Students will explore the use of modeling, simulation and game development software to solve rea world problems in science, technology, engineering and math (STEM). The activities will include evaluating and testing engineering designs, modeling geospatial data, observing and analyzing physics simulations, programming games for educational purposes, creating visualization systems with 3D models. Students will develop an understanding of the systems, processes, tools and implications of the field of modeling and simulation. Recommended for grades11-12. Certifications are offered.						
Certification						
Certification	99010	COMPUTER CONTROL AND AUTOMATION	FY	1	None	

MF1310  13052  MATERIALS AND PROCESSES TECHNOLOGY (MATERIAL SCIENCE ENGINEERING)	FY	1	None
--	----	---	------

**Course Description:** Students focus on industrial/technical materials and processes as they fabricate usable products and conduct experiments. Learning experiences include career analysis as well as the use of tools and equipment related to analysis, testing, and processing of metals, plastics, woods, ceramics, and composite materials. This single-period laboratory course is recommended for students interested in technical careers and others wishing to improve their consumer knowledge and technological literacy. Recommended for grades 9-12.

ST1351	21003	TECHNOLOGY FOUNDATIONS	FY	1	None
--------	-------	---------------------------	----	---	------

**Course Description:** In this beginning high school course, students acquire a foundation in technological material, energy, and information and apply processes associated with the technological thinker. Challenged by laboratory activities, students create new ideas and innovations, build systems, and analyze technological products to learn further how and why technology works. They work in groups to build and control systems using engineering design in the development of a technology. **Note:** This course may be offered to middle school students for high school credit if approved by the local school division.

TECHNOLOGY EDUCATION						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
ST1321	03153	PRINCIPLES OF TECHNOLOGY I	FY	1	Algebra 1	

Course Description: Students in this single-period laboratory science course apply physics and mathematical concepts through a unified systems approach to develop a broad knowledge base of the principles underlying modern technical systems. Students study seven technical principles: force, work, rate, resistance, energy, power, and force transformers, emphasizing how each principle plays a unifying role in the operation of mechanical, fluid, electrical, and thermal systems in high-technology equipment. This "principles and systems" approach to studying these technical principles provides a foundation for further education and career flexibility as technology and technical systems advance. Note: Students who complete Principles of Technology I and Principles of Technology II may use these courses to satisfy one physics credit in laboratory science. A student must complete both courses in the sequence in order to receive laboratory science credit. The sequence of Principles of Technology I and Principles of Technology II will satisfy one unit of credit in laboratory science for physics and one elective credit. Students who enroll in Principles of Technology courses for a physics credit must have completed Algebra I and two other laboratory science courses as specified by the accrediting standards prior to enrolling in Principles of Technology.

NST1322	03153	PRINCIPLES OF TECHNOLOGY II	FY	1	Principles of Technology I
---------	-------	--------------------------------	----	---	----------------------------

**Course Description:** Students continue to apply physics and mathematical concepts through a unified systems approach to expand their knowledge base of the principles underlying modern technical systems. This course focuses on seven technical principles: momentum, waves, energy converters, transducers, radiation, optical systems, and time constants, emphasizing how each principle plays a unifying role in the operation of mechanical, fluid, electrical, and thermal systems in high-technology equipment. This "principles and systems" approach to studying these technical principles provides a foundation for further education and career flexibility as technology and technical systems advance.

**Note:** Students who complete Principles of Technology I and Principles of Technology II may use these courses to satisfy one physics credit in laboratory science. A student must complete both courses in the sequence in order to receive laboratory science credit. The sequence of Principles of Technology I and Principles of Technology II will satisfy one unit of credit in laboratory science for physics and one elective credit. Students who enroll in Principles of Technology courses for a physics credit must have completed Algebra I and two other laboratory science courses as specified by the accrediting standards prior to enrolling in Principles of Technology. Certifications are offered.

## **Norfolk Technical Center Offerings**

## **Trade and Industrial Education at NTC**

TRADE AND INDUSTRIAL EDUCATION AT NTC						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
ΓR1902	20104	AUTOMOTIVE TECHNOLOGY	FY	3	None	
Course Description: Due to recent technological advancements in automobiles, it is crucial that technicians are prepared with state-of-the-art technology and training. This course represents a large sampling of the competencies from National Automotive Technician's Education Foundation's (NATEF) Maintenance and Light Repair accredited program. Students are provided instruction in all systems as they prepare for the ASE (Automotive Service Excellence) Student Certification, "the first step in building a career as a service professional in the automotive industry."						
ΓR1903	20104	AUTOMOTIVE TECHNOLOGY	FY	3	Automotive Technology I	
AT1938	05163	certification. Work-based learning is  ADVERTISING DESIGN I	FY	3	None	
Course Description: Students explore the principles and skills involved in the development and function of advertising and the production process. In their course of study, students apply aesthetic theories and technical skills to graphic design objectives. Elements covered include principles of design and illustration, typography, photography, computer graphics, and pre-press theory.						
		ADVERTISING DESIGN II	FY	3	Advertising Design I	
AT1939	05163	ADVERTISING DESIGN II	11	3	Advertising Design 1	
Course Desc explore advan	ription: Studiced application computer animortfolio and exp	ents build on the theoretical principle ns. Elements covered are design ar nation, advertising techniques, and p plore careers in advertising design.	es and praction of illustration of	cal skills gaine techniques, ty f print-ready m	d in Advertising Design I and pography, photography, Web aterials. In addition, students	
Course Desc explore advan graphics and c assemble a po	ription: Studiced application computer animortfolio and exp	ents build on the theoretical principlens. Elements covered are design are action, advertising techniques, and p	es and praction of illustration of	cal skills gaine techniques, ty f print-ready m	d in Advertising Design I and pography, photography, Web aterials. In addition, students	

TRADE AND INDUSTRIAL EDUCATION AT NTC						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
TR1901	20117	AUTO BODY TECHNOLOGY II PAINTING AND REFINISHING (CERTIFIED)	FY	3	Auto Body Technology I	

**Course Description:** In the global automotive repair industry there is a growing demand for qualified auto body technicians. In this course, students are taught to repair, mask, and refinish auto body components and entire vehicles. In addition, they use spray guns and personal safety equipment while applying undercoats and topcoats, working with a variety of materials, and gaining career skills. Students who successfully complete this program sequence will be prepared to take and pass the respective ASE/NATEF exam and will be prepared for postsecondary education opportunities. Work-based learning is available in this course. Certifications are offered.

AC1904 17003 CARPENTRY I FY 3 None
------------------------------------

**Course Description:** Carpentry I is the building block for achieving high-level construction industry skills that can result in an exciting and lucrative career. With an emphasis on safety, students are taught to use hand and power tools, cut stock, apply construction mathematics, and interpret blueprints. Students will become proficient in identifying types of residential construction components to form foundations and frame walls, floors, ceilings, roofs, doors, and windows. Students will obtain the required OSHA 10 safety card.

AC1905	17003	CARPENTRY II	FY	3	Carpentry I
--------	-------	--------------	----	---	-------------

**Course Description:** Carpentry II leads to successful transition into postsecondary education for careers in carpentry and related fields, such as construction management, architecture, and others. Students are taught the safe use of hand and power tools common to the industry to complement their OSHA 10 safety credential earned in Carpentry I. Students will become proficient in assembling and installing various types of residential construction components that are current with industry standards, including rigging and job-estimating procedures, forming foundations, framing floors, walls, ceiling, roofs, trusses, roofing materials, stairs, exterior doors and windows, decks, and porches. Successfully passing this course leads to CTE program completion. Work-based learning is available in this course. Certifications are offered.

HU1927	19101	COSMETOLOGYI	FY	3	None
--------	-------	--------------	----	---	------

**Course Description:** In this introductory course, students study hair, skin, and nails and their related care. Students are grounded in theory as they prepare to practice procedures in a clinical lab setting or classroom, using mannequins for manipulative skill practice. The first-year course emphasizes personal safety, professionalism, and sanitation of equipment and facilities. Students develop skills in shampooing and conditioning hair as well as styling and cutting hair. They also receive an introduction to manicure and pedicure procedures.

Course Description: In this advanced course, students build on their theoretical foundation in cosmetology and increase proficiency in hair cutting and styling on live models, with attention to professionalism, client consultation, safety, and sanitation. Students are trained in safety and chemical processes related to permanent waves, relaxing, soft-curling, lightening, and coloring hair. They also develop artistic skills with artificial hair. In addition, students learn to care for skin, hands, and feet, developing expertise in providing facials, manicures, and pedicures. A business management unit focuses on managing the salon. Work based learning is part of this course. Work-based learning is available in this course. Competency completion prepares the student for the related certifications/licensures.

	IN	ADE AND INDUSTRIA			INIC
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)
PS1933	15051	CRIMINAL JUSTICE I	FY	3	Student must have a C average in English.
Course Descr criminal justice		ents are introduced to the principles em.	, techniques, a	and practices	for pursuing careers within the
PS1934	15051	CRIMINAL JUSTICE II	FY	3	Criminal Justice I Student must have a C average in English.
services syste	m. The cooper ork-based learr	ents learn the principles, techniques rative education model is available ning in an approved position with cored.	for this course	. Students co	mbine classroom instruction and
AC1908	17102	ELECTRICITY I	FY	3	None
Course Description: Students develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. They also study electrical theory, navigate the National Electrical Code Book, select and install conductors, and work with panel-boards, switchboards, and generators.					
AC1909	17102	ELECTRICITY II	FY	3	Electricity I
residential, co related to elec communication	mmercial, and stricity, navigat n, and power generators. Th	ents continue to develop skills in th I industrial electrical systems. They the the National Electrical Code Boo systems, and work with conduit and the cooperative education model is	also study ele k, select and i d raceways, pa	ectrical theory nstall conduct anel-boards,	y and mathematical problems tors, examine lighting, switchboards, grounding
	Certification t	ests are offered.			
	21009	ests are offered.  ENGINEERING TECHNOLOGY I	FY	3	Algebra I
in this course.  ST1961  Course Descr	21009 ription: This come used in as	ENGINEERING	FY computer pro	gramming, e	Algebra I

	TRADE AND INDUSTRIAL EDUCATION AT NTC						
	NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
P	S1931	15152	FIREFIGHTING I	FY	3	Student must have a C average in English.	

**Course Description:** Students are introduced to the equipment and procedures necessary to fight live fires, operate in simulated hazardous-materials incidents, and conduct search-and-rescue operations. Students react to multi-faceted situations (e.g., caused by simulated terrorism, accidents, and natural disasters) as part of an emergency-response team. Students become familiar with emerging technologies such as communications software (e.g., dispatch systems, GIS, mapping systems, incident reporting, and simulation programs), multimedia inputs, thermal imaging cameras, and hazardous gas detectors. Students acquire teamwork, critical-thinking, public-speaking, research, report-writing, and incident-management skills. This course challenges students academically, mentally, and physically.

PS1932	15152	FIREFIGHTING II	FY	3	Firefighting I Student must have a C average in English.
--------	-------	-----------------	----	---	--

Course Description: Students are introduced to the equipment and procedures necessary to fight live fires, operate in simulated hazardous-materials incidents, and conduct rescue operations including vehicle extrication. Students react to multi-faceted situations (e.g., caused by simulated terrorism, accidents, and natural disasters) by managing resources such as medivac helicopters, emergency medical personnel, technical rescue teams, and community-based organizations. Students become familiar with emerging technologies such as communications software (e.g., dispatch systems, GIS, mapping systems, incident reporting, and simulation programs), multimedia inputs, thermal imaging cameras, and hazardous gas detectors. Students will also focus on the role and responsibilities of emergency rescue workers, basic medical terminology, and health care skills that include first aid; cardiopulmonary resuscitation; aseptic technique; and related anatomy, physiology, and disease knowledge. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision during the second semester of the school year.

Note: Students must be at least 16 years old by the first day of the course offering.

AC1920	17056	AIR CONDITION AND REFRIGERATION I	FY	3	None

**Course Description**: This instructional program prepares students to install, repair, and maintain the operating conditions of heating, air conditioning, and refrigeration systems. Students work with piping and tubing, study heat and electricity, install duct systems, and comply with EPA regulations. Completion of this sequence may prepare students for a number of certification exams, helpful for employment in a variety of HVAC occupations.

AC1921 17056 AIR CONDITION AND REFRIGERATION II FY	3	Air Condition and Refrigeration I
--	---	-----------------------------------

**Course Description:** This instructional program prepares students to install, repair, and maintain the operating conditions of heating systems. Completion of this sequence may prepare students for a number of certification exams and is helpful for employment in a variety of HVAC occupations. The cooperative education method is available for this course. Work-based learning is available for this course. Certifications are offered.

ST1331 ST1333	21009	NORSTAR ROBOTICS FOR THE 21 <sup>ST</sup> CENTURY	FY	1	Acceptance into NORSTAR
------------------	-------	--	----	---	-------------------------

**Course Description:** This course is designed for the high ability learner who has a strong desire to learn about the programming and function of the modern age robots in a highly competitive global society. Students will learn the design process that includes a combination of mechanical, electrical, telecommunication, control and computer engineering. Recommended for grades 9-12.

TRADE AND INDUSTRIAL EDUCATION AT NTC						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
ST1334	21009	MECHATRONICS	FY	3	Robotics I	

**Course Description:** This course teaches the high ability learner the design of mechatronics in a synergistic combination of precision engineering, electronic control and robotic systems engineering. The students will use this relatively new approach for product design and developing emerging engineering systems. Recommended for grades 10-12. Certifications are offered.

ST1330 ST1332 ST1335Z	03999	RESEARCH, DESIGN, AND INNOVATIONS	FY	.5 1.0 3	Acceptance into NORSTAR
-----------------------------	-------	-----------------------------------	----	----------------	-------------------------

Course Description: The NORSTAR Research, Design, and Innovations program provides highly talented students with the opportunity to translate their study of science, technology, engineering, and math (STEM) into the creation of new and innovative products that may be built and eventually patented for use by the public. In addition, students will be given the opportunity to master basic engineering skills (using CAD, soldering, interpreting circuit diagrams, etc.), and participate in STEM based competitions with other high ability and gifted students from across the state and nation. Recommended for grades 9-12.

MF1924	13207	WELDING I	FY	3	None

**Course Description:** Students learn to use gases and electric arc processes to fabricate and weld metal parts according to diagrams, blueprints, and specifications. Students will also receive all safety-related practices and techniques including the OSHA 10 card.

**Course Description:** Students continue to apply the practices and techniques learned in Welding I using advanced welding techniques to fabricate and weld metal parts according to diagrams, blueprints, specifications, and industry certification. The cooperative education method is available for this course. Work-based learning is available in this course. Certifications are offered.

## **Business and Information Technology at NTC**

	BUSINE	SS AND INFORMATIO	N TECHN	OLOGY	AT NTC	
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
IT5802	10005	ADVANCED COMPUTER INFORMATION SYSTEMS	FY	3	Computer Information Systems	
<b>Course Description:</b> 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, web site development, programming, networking, emerging technologies, and employability skills. Work-based learning is available in this class. Certifications are offered.						

**Course Description:** 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. Certifications are offered.

IT1971 IT1972	10109	COMPUTER NETWORK SOFTWARE OPERATIONS	FY	3	None
------------------	-------	---	----	---	------

**Course Description:** Computer Network Software Operations is designed to teach many aspects of computer support and network administration. Students learn networking concepts, from usage to components, and set up peer-to-peer network systems and client server networks. Students install and configure network cards and connect them to networks. Students learn how to install operating systems, set up and manage accounts, load software, and set up and implement security plans. This course may include software-based network operating systems such as Novell Open Enterprise Server and SUSE Linux Desktop. Certifications are offered.

IT1973 IT1974 10152 JAVA PROGRAMMING AND GAMING	FY	3	None
---	----	---	------

**Course Description:** Students study Java programming and Java database applications. Java is becoming the programming language of choice because of its ability to provide a rich development environment that allows for effective program development and deployment. The basics of object-oriented programming and the Java programming language are emphasized in this instruction. Students will prepare for industry certification in database applications and programming. Students will develop Java applications, as well as, games using the game maker program. Work-based learning is available in this course. Certifications are offered.

## **Family and Consumer Sciences at NTC**

FAMILY AND CONSUMER SCIENCES AT NTC						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
HT1988	16052	CATERING II	FY	3	Culinary Arts I	

**Course Description:** Culinary Arts II provides students an opportunity to refine skills in serving, dining room management, and other skills learned in Culinary Arts I. Students prepare for occupations such as chef/cook, baker/pastry helper, pastry decorator, hospitality worker, dietetic aide/assistant, food demonstrator, and entrepreneur. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. Teachers highlight the basic skills of mathematics, science and communication when appropriate in content.

HT1989 16052 CULINARY ARTS SPECIALIZATION	FY	3	Catering I or Culinary Arts II
---	----	---	--------------------------------

**Course Description: Culi**nary Arts Specialization explore careers and refine their skills in implementing safety and sanitation standards, applying nutritional principles, planning menus, using business and math skills, and selecting and maintaining food service equipment. Students may be able to specialize in techniques in one of the following four areas: 1) Baking and Pastry; 2) Catering/Banquet; 3) Restaurant Operation; or 4) Quantity Food-Preparation. Work-based learning is available in this course. Recommended for grade 12. The Servsafe certification test is offered.

ED1993	19153	EARLY CHILDHOOD EDUCATION, AND SERVICES I	FY	3	None
--------	-------	---	----	---	------

**Course Description:** Students prepare to be primary providers of home-, family-, or institution-based child care services by focusing on the planning, organizing, and conducting of meaningful play and learning activities; child monitoring and supervision; record keeping; and referral procedures. Critical thinking, practical problem solving and entrepreneurship opportunities within the field of early childhood education are emphasized. Practical experiences (e.g., on-site lab, local daycare centers, elementary schools, other institutions) under the supervision of the instructor are required. Students also prepare for continuing education leading to careers in early childhood fields (e.g., medical, social services, and education).

ED1994	19153	EARLY CHILDHOOD EDUCATION AND SERVICES II	FY	3	Early Childhood, Education, and Services I
--------	-------	---	----	---	--

**Course Description:** Students focus on occupational skills needed by personnel employed in early childhood-related fields, such as education, medical/health care, social services, counseling, psychology, and entrepreneurship. Work-based learning experiences (e.g., on-site lab, local daycare centers, elementary schools, other institutions) under the supervision of the instructor are required. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of early childhood education are emphasized. Certifications are offered.

**Course Description:** Students investigate career opportunities in apparel design, production, and care. Students study the business of fashion including fabric technology, fashion design skills, and apparel-production techniques. Work-based learning opportunities within the fashion design industry are encouraged to provide opportunities for students to develop employability skills. Teachers emphasize skills in art, communication, mathematics, science and technology in this course.

FAMILY AND CONSUMER SCIENCES AT NTC						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
AT1944	22205	FASHION DESIGN II	FY	3	Fashion Design I	

**Course Description:** Students focus on occupational skills identified as essential for careers in the fashion industry as a fabric/notions clerk, alteration aide, seamstress, retail fabric demonstrator, costume aide, and mender. Students continue to develop skills in fashion illustrating, draping, pattern making, garment construction, and compilation of a portfolio. Opportunities for entrepreneurship within the field of fashion design are examined. Work-based learning is available in this course. Certifications are offered.

### **Health and Medical Services at NTC**

	HEALTH AND MEDICALSERVICES EDUCATION AT NTC						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)		
HS1917	14054	DENTAL ASSISTANT I	FY	3	Student must have a 2.0 GPA		

Course Description: Students are introduced to the careers in dentistry, including dentist (general and specialists), hygienist, dental assistant, dental laboratory technician, and dental receptionist. Students practice and learn about many of the skills utilized in these professions while attaining all the skills necessary to become a dental assistant. Study includes infection control and OSHA standards, anatomy and physiology, tooth morphology, oral histology, preventive dentistry, applied psychology, effective communication, office administration and management, use of dental software, operative dentistry techniques, and dental materials/laboratory skills.

Course Description: Units of study include medical emergencies, coronal polishing, oral pathology, dental roentgen ology, nutrition, schedule IV drugs and pharmacology, and advanced laboratory techniques. While attending classes for part of the week, students also have an opportunity to participate in internships in local private dental offices and public health dental facilities, where they participate in all phases of dental care delivery. At the end of the program, students are eligible to take the State Dental Board examination, which offers certification in Radiation Hygiene and Safety and in Schedule IV Drugs, qualifying those who pass to work as dental assistant, dental receptionist, patient educator, appointment controller, and dental office manager. After two years in the field, graduates of the program are eligible to take the national examination to become a certified Dental Assistant. Many graduates choose to continue their dental education at community colleges and universities. Work-based learning is available in this class. Certifications are offered.

HS1922	14151 MEDICAL ASSISTANT I	FY	3	Student must have a 2.0 GPA
--------	---------------------------	----	---	-----------------------------

**Course Description:** Students develop basic skills and techniques to assist the physician and/or other medical professionals in patient examinations, basic emergency care, simple laboratory tests, and administrative duties and will gain foundation knowledge in basic anatomy and physiology, medical ethics, and legal responsibilities. Students also explore medical assisting career pathways. On-the-job clinical instruction and/or observation may occur in a health care facility and is coordinated by the Health and Medical Sciences teacher.

#### HEALTH AND MEDICALSERVICES EDUCATION AT NTC Number Credits **NPS** SCED **NPS** Per Prerequisite(s) of Code Code **Course Title** Semesters Year Medical Assistant I HS1923 14151 MEDICAL ASSISTANT II FΥ Student must have a 2.0 GPA

**Course Description:** Students further develop medical-assisting skills and techniques learned in Medical Assistant I. They also learn management of patient records, cardiopulmonary resuscitation, care and use of equipment, collection and analysis of laboratory specimens, special diagnostic testing, diseases and disorders, basic knowledge of treatment and medication, and job preparedness skills. Work-based learning is available in this class. Successful completion of the program may lead to employment in physicians' offices or clinics. Certifications are offered.

HS1701	14062	SPORTS MEDICINE I	FY	1	None
--------	-------	-------------------	----	---	------

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

HS1702 14062 SPORTS MEDICINE II	FY	1	Sports Medicine I
---------------------------------	----	---	-------------------

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

HS1951	14152	PHARMACY TECHNICIAN	FY	3	Minimum 2.25 GPA

Course Description: This one-year course prepares students to assist pharmacists with delivering health care services to clients in a variety of settings. Students become skilled with preparing/dispensing medications, ordering, packaging, and stocking medications, and processing insurance payments. Clinical internship sites may include retail, hospital, and long-term care pharmacies. Students who successfully complete the requirements of the Pharmacy Technician Program will be eligible to take a national certification examination offered by the Pharmacy Technician Certification Board (PTCB). Students who pass the examination will hold the title of Certified Pharmacy Technician. Work-based learning is available in this course.

HS1991	14052	PRACTICAL NURSING I/ PRACTICAL NURSING II	FY	3	Minimum 2.25 GPA and Senior Status
--------	-------	---	----	---	------------------------------------

#### **HEALTH AND MEDICALSERVICES EDUCATION AT NTC**

NPS Code SCED Code NPS Course Title Number of Semesters Credits Per Year

Prerequisite(s)

**Course Description:** In the first semester of Practical Nursing, students learn the nursing process and care of patients of all ages, in various stages of sickness or wellness, and with a variety of disease conditions. They focus on fundamental nursing skills, communication, human anatomy, body function, nutrition, and community health. In the second semester of Practical Nursing, instruction emphasizes infection prevention and control, teaches normal life span (human growth and development), and introduces pharmacology. Advanced emergency procedures and application of nursing procedures are demonstrated in a laboratory setting. Certifications are offered.

HS1992

14052

PRACTICAL NURSING III

FΥ

Post-Grad Status Practical

Nursing I&II

**Course Description:** This post-grad course provides classroom instruction and clinical training in approved hospitals, licensed nursing homes, physician offices, licensed day care centers or home-care settings under the direction of a nurse educator. Instruction emphasizes administration of medication, holistic nursing care, and health-teaching as students apply concepts of physiology and communication to the care of patients of all ages. Upon successful completion of the total program, students qualify to take the Practical Nurse Licensing Examination.

# **Career Development Program**

The Career Development Program is designed for students with disabilities who are candidates for the Applied Studies Diploma and the Virginia Alternate Assessment Program (VAAP). An Applied Studies Diploma is available to students with disabilities who complete the requirements of their IEP and who do not meet the requirements for other diplomas. The Virginia Alternate Assessment Program (VAAP) is designed to evaluate the performance of students with significant cognitive disabilities. The Career Development Program is a self-contained departmentalized cross categorical program that provides services to students with intellectual or developmental disabilities.

Note: All courses under this program are non-credit bearing.

CAREER DEVELOPMENT PROGRAM								
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)			
CD7255	19154	GOT HEALTH	FY		This course is designed for the student who is currently taking a physical education class.			
Course Description: This course is designed to provide the student with information necessary to establish and maintain a healthy lifestyle.								
CD7256	19154	"WHAT'S HAPPENING NOW"	FY		Student can identify basic sight words			
esources	are used to		onal and local p	olitics, to sp	nowledge of current events. A variety of orts, to the stock market. The course eal world.			
CD7257	19154	"MY RIGHTS"	FY		The student is able to communicate thoughts and ideas to others			
Course Description: This one-year course is designed to provide students with the opportunity to learn, practice, and refir the skills, knowledge, and attitudes identified as necessary for self-advocacy and determination. Opportunities are provided for students to identify those personal characteristics that could help them take greater control over their lives, to set person goals and develop an understanding of their disability as well as their rights and responsibilities as adult citizens.								
CD7258	19154	"SOCIAL CONNECTIONS"	FY		Students who can benefit from skill training in developing appropriate interpersonal relationships, self-management, following directions and self-advocacy.			
Course Description: This one-year course is designed to prepare certain students for appropriate social interactions on the job and in the community. Focusing on either verbal or non-verbal cues, the student will participate in a series of liagnostic and instructional scenarios. Students will practice simulated real life activities to problem solve an array of eisure and job-related situations.								

		CAREER DEVEL	OPMEN	<b>PROG</b>	RAM		
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)		
CD7259	19154	MOBILITY "COMMUNITY EXPLORATIONS"	FY		Student has demonstrated that he/she is unable to negotiate within buildings and around the community (accessing appropriate transportation) due to his/her unique needs.		
		: The semester course is designed to for independent mobility. (This cours			in students to develop the knowledge		
CD7260	19154	"GETTING SOCIAL"	FY		NONE		
settings. T	Topics for cable mann	: This year-long course is designed to consideration include introductions, so ers, behavior appropriate for ladies a	ocial interaction	ns, persona			
CD7241	19154	UNLOCKING LITERATURE	FY		Failure to pass 8th grade English SOL due to deficits in decoding skills.		
need to de	velop an u				ertain students with mild disabilities who c decoding skills. A highly structured,		
CD7242	19154	WRITING THAT MAKES SENSE	FY		NONE		
writing and	l introduce	: This course is designed to reinforce an organized method of writing that in how to break down the writing process	is research ba	ised.	s (spelling, punctuation, capitalization) in graphic organizers.		
CD7243	19154	BASIC COMPUTER LITERACY I	FY		Students are able to identify alphanumeric keyboard.		
to use the	mouse, wo		nctions, comp		nputer knowledge and skills including hos and terminology, manipulate files, use		
CD7244	19154	BASIC COMPUTER LITERACY II	FY		Completion of Basic Computer Literacy I		
Course Description: This yearlong course will enable students to gain a working foundation for the critical computer skills needed to enter the workforce. Students will learn applications used for simple word processing, desktop publishing and navigation of the world wide web. Note: Students who require more in-depth keyboarding skills for employment are referred to the "Keyboarding" class.							
CD7246	19154	THE BASIC FOUR	FY		Ability to perform simple addition and subtraction		
problems i	Course Description: This one-year developmental math course is designed to use the four operations to solve basic math problems including one-step equations and inequalities with variables. Students will also identify key functions of a calculator and apply its use to solve equations related to real life experiences.						

CAREER DEVELOPMENT PROGRAM								
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)			
CD7247	19154	NUMBERS	FY		Students can perform four basic operations.			
Course Description: This year-long course in basic math concepts is designed to build student capacity to construct a simple graph, interpret data from graph, and use the concept of functions to solve problems.								
CD7248	19154	THE WRITE WAY	FY		Students can write/verbalize a five- sentence paragraph.			
writing skill	s. The cou	This year-long developmental cour urse progresses to critical thinking sk valid conclusions from data.			sage, vocabulary, composition and in idea, citing evidence to support point			
CD7249	19154	MONEY, MONEY, MONEY	FY		Students can perform basic operations with or without a calculator.			
and tools u	sed for per	rsonal finance. The course examines	s, budgeting,	wise spendir	ents with a large variety of resources ng, avoiding frauds/swindlers, consumer ng personal financial decision-making.			
CD7252	19154	ON MY OWN	FY		NONE			
		This year-long course is designed to the community.	to enable the	student to de	evelop skills required for functional			
CD7261	19154	PRE-EMPLOYMENT	FY		NONE			
instruction	to develop	This course is designed for student soft skills and explore/investigate ca upon the Virginia's 21 Workplace Rea	reer options	and the steps	world of work. Students will receive s necessary for preparing for entry into			
CD7262	19154	WORK EXPERIENCE	FY		Pre-Employment Course			
		This year-long course will introduces, service learning and unpaid interns			e through work-based learning activities d community.			
CD7263	19154	READY, SET, WORK	FY		Pre-Employment Course			
and self-ma	anagement	This one-year course prepares students will develop a resume an skills, and business etiquette in the w	nd cover letter		ocusing on problem solving, teamwork echniques, work ethics, professional			
CD7264	19154	BEYOND EMPLOYMENT	FY		Ready, Set, Work; Work Experience			
skills throu	Course Description: This year-long course will provide opportunities for students to further develop their job acquisition skills through extended internships and development of career portfolio, with the goal of placement in competitive employment with support as needed.							

#### CAREER DEVELOPMENT PROGRAM Credits Number NPS SCED NPS of Per Prerequisite(s) Code Code **Course Title** Semesters Year T97 SUPPORTED EMPLOYMENT FΥ 1.5 Beyond Employment/Work Experience

**Course Description:** Students receive on-the-job training through paid internship or part-time competitive employment with the support of a job coach or employment specialist during first semester. This is the only course under the Career Development Program for credit. Students must work a minimum of 20 hours per week for 18 weeks to receive 1.5 elective credits. (This course is for students seeking a non-standard diploma (GED, Modified Standard and/or Applied Studies diploma). Students who do not meet this criteria will be considered for enrollment on a case-by-case basis.

T98	SUPPORTED EMPLOYMENT	FY	1.5	Beyond Employment/Work Experience

**Course Description**: Students receive on-the-job training through paid internship or part-time competitive employment with the support of a job coach or employment specialist during first semester. <u>This is the only Career Development Course for credit.</u> Students must work a minimum of 20 hours per week for 18 weeks to receive 1.5 elective credits. (This course is for students seeking a non-standard diploma (GED, Modified Standard and/or Applied Studies diploma). Students who do not meet this criteria will be considered for enrollment on a case-by-case basis.

# **US Navy JROTC**

The NJROTC curriculum emphasizes citizenship and leadership development, as well as our maritime heritage, the significance of sea power, and naval topics such as the fundamentals of naval operations, seamanship, navigation and meteorology. The program is constructed to include three academic classroom sessions and two activity periods per week. The curriculum is based on 40-minute sessions of instruction for 36 weeks, with 180 teaching days. This equates to 7200 minutes of contact instruction (72 hours of classroom instruction and 48 hours of activities including military drill and athletics). Classroom instruction is augmented throughout the year by community service activities, drill competitions, field meets, flights, and visits to naval activities, marksmanship training, and other military training.

		U.S. NA	VY JRO	ГС	
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)
RO1505	22999	ACADEMY OF LEADERSHIP AND MILITARY SCIENCE (LAKE TAYLOR HS)	FY	1	None
Schools and learning com	a number on the munity of the	The Academy of Leadership and Mili of community, private sector, govern ne Academy is comprised of cluster well as year-round internships with c	ment, higher scheduling of	education, an core, foreign	d military agencies. The small
	09101	NAVAL 1	FY	1	None
RO1501	09101	NAVAL I			
Course Des the value of with recogni a growing se The course Organization Naval Histor	scription: N scholarship tion that the ense of pride includes into n, The Nation y through 1	Naval Science 1 introduces students in attaining life goals; engender a s historically significant role of sea po	s to the meani cound appreci- cower will be in s, and self. The introduction to n Democracy, Time, Basic S	ation for the h nportant in An ese elements Leadership, Maritime Geo	nerica's future; develop in each cade are pursued at the fundamental leve Naval Ships; Mission and ography, Seapower and Challenge,
Course Des the value of with recogni a growing se The course Organization Naval Histor	scription: N scholarship tion that the ense of pride includes into n, The Nation y through 1	Naval Science 1 introduces students in attaining life goals; engender a senistrorically significant role of sea precision in state of sea precision to the NJROTC program; on, Navy and the People in American 815, Introduction to Navigation and	s to the meani cound appreci- cower will be in s, and self. The introduction to n Democracy, Time, Basic S	ation for the h nportant in An ese elements Leadership, Maritime Geo	eritage and traditions of America, nerica's future; develop in each cade are pursued at the fundamental leve Naval Ships; Mission and ography, Seapower and Challenge,
Course Des the value of with recogni a growing se The course Organization Naval Histor	scription: N scholarship tion that the ense of pride includes into n, The Nation y through 1	Naval Science 1 introduces students in attaining life goals; engender a senistrorically significant role of sea precision in state of sea precision to the NJROTC program; on, Navy and the People in American 815, Introduction to Navigation and	s to the meani cound appreci- cower will be in s, and self. The introduction to n Democracy, Time, Basic S	ation for the h nportant in An ese elements Leadership, Maritime Geo	eritage and traditions of America, nerica's future; develop in each cade are pursued at the fundamental leve Naval Ships; Mission and ography, Seapower and Challenge,
Course Des the value of with recogni a growing se The course Organization Naval Histor First Aid, an  RO1502  Course Des the traits of of deeper awar provides ong Countries, N Missiles and	scription: Nescholarship tion that the ense of priddincludes into heart of priddincludes into heart of the constant of the con	Naval Science 1 introduces students in attaining life goals; engender a se historically significant role of sea pree in his/her organization, associates roduction to the NJROTC program; on, Navy and the People in America 815, Introduction to Navigation and cohol and Tobacco Abuse Prevention NAVAL 2  NAVAL 2  Naval Science 2 builds on the generand leadership in cadets, introduce of evital importance of the world ocean cition in leadership theory, Naval Orient 1815 through 1930, Naval Ships a	s to the meani cound apprecia cower will be in a self. The introduction to be mocracy, Time, Basic Son.  FY  all introduction addets to techning to the continuation and Cound Shipboard	ation for the h nportant in An ese elements b Leadership, Maritime Geo Seamanship,  1 n provided in N nical areas of inued well-bei Career Plannir Evolutions, N	eritage and traditions of America, nerica's future; develop in each cade are pursued at the fundamental level Naval Ships; Mission and ography, Seapower and Challenge, Oceanography, Health Education,  Naval 1  Naval Science 1, to further develop naval science, and engender a ng of the United States. The course ng, Citizenship in the U.S. and Other

#### **U.S. NAVY JROTC**

NPS SCED NPS Of Per Prerequisite(s)
Code Code Course Title Semesters Year

Course Description: Naval Science 3 broadens the under-standing of students in the operative principles of military leadership, the concept and significance of teamwork, the intrinsic value of good order and discipline in the accomplishment of objectives, the fundamentals of American democracy, and to expand their understanding of naval academic subjects. The course provides ongoing instruction in leadership and discipline, Military Justice, Astronomy, International Law and the Sea, National Strategy, Sea Power and Naval Operations, Naval History: 1930 through the Nuclear Age, Naval Intelligence and National Security, Maneuvering Board, Challenges of Future Navy Research, and Electricity and Naval Electronics.

**RO1504** 09104 NAVAL 4 FY 1 Naval 3

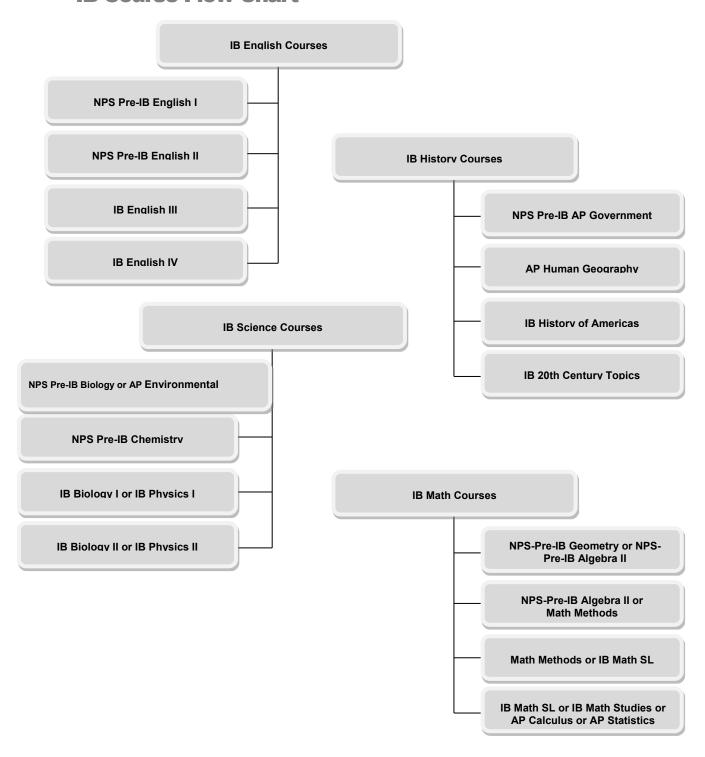
Course Description: Naval Science 4 focuses solely on practical leadership. The intent is to assist the senior in understanding leadership and improving their leadership skills by putting them in positions of leadership, under super-vision, then helping them analyze the reasons for their varying degrees of success through the year. Classroom activities include seminars, reading assignments, classroom presentations, & practical work with younger cadets. The course curriculum includes instruction in theoretical and applied aspects of leadership, training, and evaluation of performance. Students will become aware of the techniques used to create motivation, develop goals and activities for a work group, and the proper ways to set a leadership example. Cadets will also apply these principles when dealing with younger cadets in the areas of military drill and inspections, athletic events, and in other school activities.

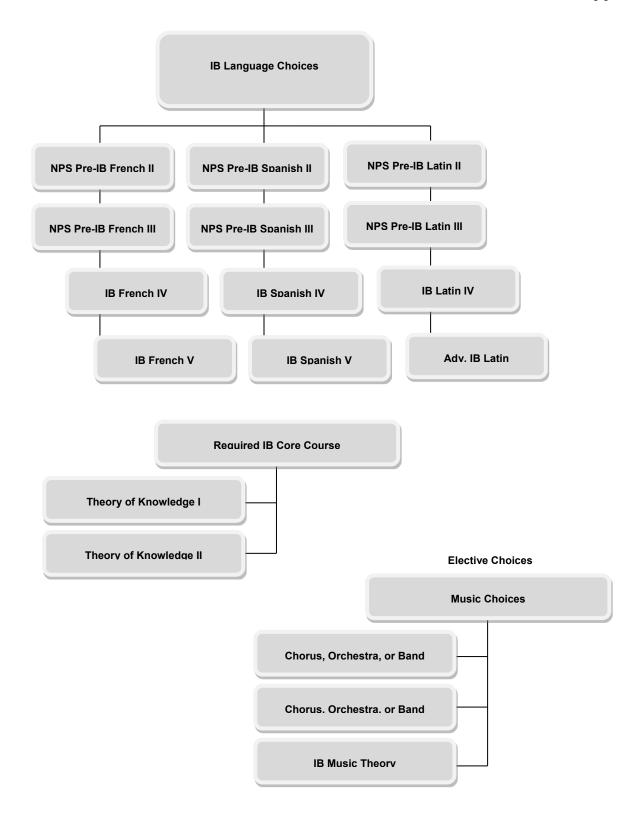
# International Baccalaureate Diploma Program at Granby High School

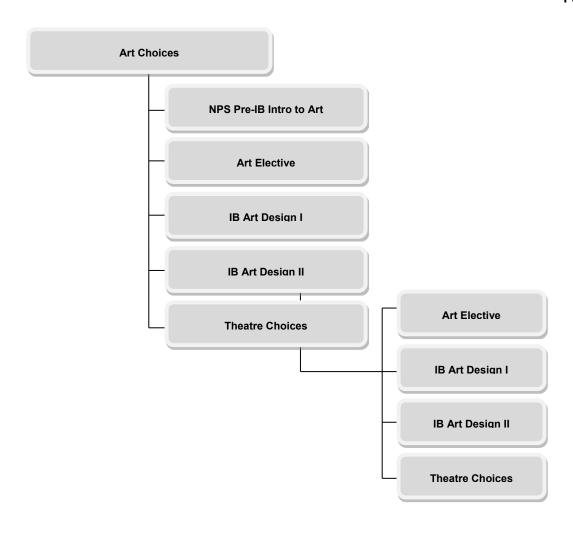
Granby High School is a member of the International Baccalaureate Organization (IBO) and has been authorized to offer the International Baccalaureate Diploma Program since 1998. This program is a two-year "academically challenging and balanced program" intended for juniors and seniors who desire in-depth scholastic preparation for college or university. The International Baccalaureate Organization "aims to develop inquiring, knowledgeable, and caring young people with adaptable skills to tackle society's complex challenges and who will help to make a better, more peaceful world." The IB program emphasizes teaching students how to learn and encourages them to "value learning as an essential, integral part of their everyday lives," and cultivates students' intellectual, social, emotional, and physical well-being in addition to their cognitive development. Students who complete the IB Diploma Program enter college with the communication and critical thinking skills needed to be successful in our global society. (IB Parent Pack, 2015). Teaching in the program is based on inquiry, focused on conceptual understanding, developed in local and global contexts, focused on effective teamwork and collaboration, differentiated to meet the needs of all learners, informed by formative and summative assessment (IB Approaches to Teaching).

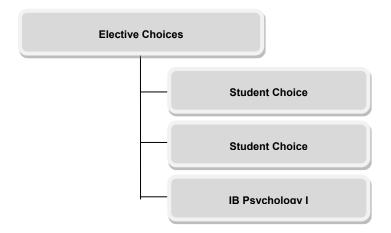
Students apply for our preparation program as rising 9th graders through their current middle school and our application deadline is always in February.

## **IB Course Flow Chart**









		RNATIONAL BACCAL	, (01(=)(1		
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)
LA3110	01001	NPS PRE-IB ENGLISH I	FY	1	Acceptance into the IB
iterature fr esearch-b	om a variety ased inform	of cultures and all genres, write a ation papers, participate in large a	expository pape and small group	ers using a va p discussions,	critical thinking skills. Students read riety of methods of development, writ and improve oral communication udents complete independent study
LA8210	01002	NPS PRE-IB/AP ENGLISH LANGUAGE	FY	1	NPS Pre-IB English I
_A3310	01007	IB ENGLISH III	FY	1	Language & Composition course.  NPS Pre-IB English II
and written diversified	portions of knowledge	the Language Al Higher Level Ex	amination. The tudents acquir	e study of work e skills in critic	cal thinking, oral and written discourse
LA3410	01007	IB ENGLISH IV	FY	1	IB English III
IB Languaç acquired in	ge Al Higher IB English	Level Examination as well as the	AP English Lit nking, analyzing	terature Exam g language an	h the oral and written portions of the . Students continue to refine skills d literature for linguistic structure, t.
L3112	06122	NPS PRE-IB FRENCH II	FY	1	Acceptance into the IB Program
Course De				e reviewed and	∥ ı through listening, speaking, reading d reinforced. Additional structures ar
and writing vocabulary	are introdu	ced with continued emphasis on the which provides a multicultural aw			
and writing vocabulary	are introdu	ced with continued emphasis on t			

**Course Description:** This course provides students considerable practice in developing fundamental skills of French through listening, reading, writing and speaking activities. Additional structures and vocabulary are introduced with an emphasis on the thematic topics of exploring change, groups in society, and leisure time activates. Text handling through use of authentic documents and regalia is stressed.

	INTER	RNATIONAL BACCAL	AUREAT	E DIPLO	MA PROGRAM
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)
FL3114	06124	IB FRENCH IV	FY	1	NPS Pre-IB French III
reading, wr documents as preparatorepared a portion of the	iting and sp and regalia tion for the i nd spontane he IB exam.	nternal assessment portion of the eous. Further, students receive ex	tensive treatm dents for the IB IB exam, stude tensive practic cultural comp	ent of text har B French Stand ents record nuce with writing etence of Frer	dling through use of authentic lard Level Examination. Additionally, merous speaking activities, both activities to prepare for the written ach which provides a multi-cultural
		ND0			
FL3412	06102	NPS PRE-IB SPANISH II	FY	1	Acceptance into the IB Program
and writing vocabulary	activities. F		vocabulary are nematic topics.	reviewed and Students acc	
". 0.440	00400	NDO DDE ID ODANIOU III	EV.		NIDO Des ID Ossessials II
	06103	NPS PRE-IB SPANISH III	FY	1	NPS Pre-IB Spanish II
Course De hrough liste emphasis o	scription: ening, readi	This course provides students cor ng, writing and speaking activities	nsiderable prac . Additional str	ctice in develop ructures and v	ping fundamentals skills of Spanish
Course De hrough liste emphasis o use of autho	scription: ening, readi on the thema entic docum	This course provides students corng, writing and speaking activities topics of exploring change, grounds and regalia is stressed.	nsiderable prac . Additional stroups in society	ctice in develop ructures and v , and leisure ti	oing fundamentals skills of Spanish ocabulary are introduced with an me activities. Text handling through
Course De hrough liste emphasis o use of autho	scription: ening, readi	This course provides students cor ng, writing and speaking activities atic topics of exploring change, gro	nsiderable prac . Additional str	ctice in develop ructures and v	oing fundamentals skills of Spanish ocabulary are introduced with an
Course De hrough liste emphasis o use of authorse De reading, wr documents as preparat prepared a the written	scription: ening, readii on the thema entic docum  06104  scription: iiting and sp and regalia tion for the i nd spontane portion of the	This course provides students corng, writing and speaking activities atic topics of exploring change, grown and regalia is stressed.  IIB SPANISH IV  This course provides students extending in a variety of activities. In its a primary focus to prepare students assessment portion of the	FY  tensive practice tensive treatm dents for the IB exam, studits receive extensivities and cui	etice in develor ructures and v , and leisure ti 1 e to perfect sk ent of text har 3 Spanish Star ents record nu ensive practice ltural compete	oing fundamentals skills of Spanish ocabulary are introduced with an me activities. Text handling through NPS Pre- IB Spanish III  Ills of Spanish through listening, dling through use of authentic idard Level Examination. Additionally merous speaking activities, both with writing activities to prepare for ince of Spanish which provides a
Course De hrough liste emphasis o use of authorise of authorise De reading, wrodocuments as preparat orepared a the written	scription: ening, readii on the thema entic docum  06104  scription: iiting and sp and regalia tion for the i nd spontane portion of the	This course provides students corng, writing and speaking activities atic topics of exploring change, grown and regalia is stressed.  IIB SPANISH IV  This course provides students extending in a variety of activities. In it is a primary focus to prepare students assessment portion of the evous, on cassette. Further, studente IB exam. Students acquire a lire	FY  tensive practice tensive treatm dents for the IB exam, studits receive extensivities and cui	etice in develor ructures and v , and leisure ti 1 e to perfect sk ent of text har 3 Spanish Star ents record nu ensive practice ltural compete	oing fundamentals skills of Spanish ocabulary are introduced with an me activities. Text handling through NPS Pre- IB Spanish III  Ills of Spanish through listening, dling through use of authentic idard Level Examination. Additionally merous speaking activities, both with writing activities to prepare for ince of Spanish which provides a
Course De hrough liste emphasis ouse of authorse De reading, wr documents as preparate prepared a the written multi-cultur	scription: ening, readii on the thema entic docum  06104  scription: iiting and sp and regalia tion for the i nd spontane portion of the	This course provides students corng, writing and speaking activities atic topics of exploring change, grown and regalia is stressed.  IIB SPANISH IV  This course provides students extending in a variety of activities. In it is a primary focus to prepare students assessment portion of the evous, on cassette. Further, studente IB exam. Students acquire a lire	FY  tensive practice tensive treatm dents for the IB exam, studits receive extensivities and cui	etice in develor ructures and v , and leisure ti 1 e to perfect sk ent of text har 3 Spanish Star ents record nu ensive practice ltural compete	oing fundamentals skills of Spanish ocabulary are introduced with an me activities. Text handling through NPS Pre- IB Spanish III  Ills of Spanish through listening, dling through use of authentic idard Level Examination. Additionally merous speaking activities, both with writing activities to prepare for ince of Spanish which provides a
hrough liste emphasis of use of authors of the authors of the authors of the emphasis of the authors of author	scription: ening, readii n the thema entic docum  06104  scription: iting and sp and regalia tion for the i nd spontane portion of th al awarenes  06111  scription: speaking in gned to allo d emphasis e four basic	This course provides students corng, writing and speaking activities attic topics of exploring change, grown and regalia is stressed.  IIB SPANISH IV  This course provides students exteaking in a variety of activities. In it is a primary focus to prepare students assessment portion of the eous, on cassette. Further, studente IB exam. Students acquire a lire is of and sensitivity to Spanish sports of the example of the exam	FY  tensive practice trensive treatments for the IB exam, students receive extensive and cue eaking peoples  FY  ve practice to of this year of needed to cong change, explicitions. Additional street to guitaria to the congression of the cong	tice in develop ructures and v , and leisure ti   1  e to perfect sk ent of text har sents record nuensive practice litural compete s. This course  1  perfect skills of study encomproplete the b Sporing groups, sent of text har sent of text har sents record nuensive practice litural compete sent of text har sen	oing fundamentals skills of Spanish ocabulary are introduced with an me activities. Text handling through  NPS Pre- IB Spanish III  Ills of Spanish through listening, dling through use of authentic idard Level Examination. Additionally merous speaking activities, both with writing activities to prepare for ince of Spanish which provides a carries weighted credit.
Course De hrough liste emphasis ouse of authorise of the authorise of the authorise of the authorise of authorise of authorise of authorise of authorise of the authorise of a	scription: ening, readii n the thema entic docum  06104  scription: iting and sp and regalia tion for the i nd spontane portion of th al awarenes  06111  scription: speaking in gned to allo d emphasis e four basic	This course provides students corng, writing and speaking activities atic topics of exploring change, grown and regalia is stressed.  IIB SPANISH IV  This course provides students exteaking in a variety of activities. In it is a primary focus to prepare students assessment portion of the eous, on cassette. Further, studente IB exam. Students acquire a life is of and sensitivity to Spanish speaking in a variety of activities. The focus with a variety of activities. The focus with students to gain the confidence on the thematic topics of exploring skills. Students gain an apprecia	FY  tensive practice trensive treatments for the IB exam, students receive extensive and cue eaking peoples  FY  ve practice to of this year of needed to cong change, explicitions. Additional street to guitaria to the congression of the cong	tice in develop ructures and v , and leisure ti   1  e to perfect sk ent of text har sents record nuensive practice litural compete s. This course  1  perfect skills of study encomproplete the b Sporing groups, sent of text har sent of text har sents record nuensive practice litural compete sent of text har sen	oing fundamentals skills of Spanish ocabulary are introduced with an me activities. Text handling through INPS Pre- IB Spanish III  Ills of Spanish through listening, dling through use of authentic idard Level Examination. Additionally merous speaking activities, both with writing activities to prepare for ince of Spanish which provides a carries weighted credit.  IB Spanish IV  If Spanish through listening, reading, asses all activities of IB Spanish IV panish Standard Level Examination. and exploring leisure is stressed in the

			Number	Credits	
NPS Code	SCED Code	NPS Course Title	of Semesters	Per Year	Prerequisite(s)
FL3314	06304	NPS PRE-IB LATIN 4-1/4-2	FY	1	NPS Pre-IB Latin III
selections addition to	from Ovid's continuing a	Metamorphoses and his other wo	rks. They stud vocabulary. T	ly literary devi	udents read <i>Aeneid 4</i> and extensive ces and historical background in designed to prepare students for the
FL3315	06359	ADVANCED IB LATIN 1/2	FY	1	IB Latin 4-1/4-2
addition to	continuing a	se is designed to prepare students	vocabulary. S	Students comp	ices and historical background in olete the required assessments for t evel Examination and carries weight
SS8110	04151	NPS PRE-IB/AP GOVERNMENT	FY	1	Recommendation of the Instructo
United Star Students s	tes and Virg tudy genera nents other t	inia. To help students gain know I concepts used to interpret Ameri	ledge of the wo can politics, ar use primary so	orld's diverse nalyze specific ources to cond	ctive on politics & government in the political structures and practices. case studies, and the historical roc duct in-depth research, and present
the results	Designed	to prepare the students for the AP	Exam in Ame	ncan governm	ent, this course carries weighted
the results credit.	Designed 04054	to prepare the students for the AP  IB HISTORY OF THE  AMERICAS	FY	ncan governm	NPS Pre-IB /AP Government
the results credit.  SS3310  Course De Latin Amer concisely in	04054 escription: rican history n verbal and	IB HISTORY OF THE AMERICAS  IB History of the Americas is a co	FY  llege level Unite of historical and interpret pr	1  ded States hist events and leading and sec	NPS Pre-IB /AP Government  ory course integrated with key topic arn to express their ideas clearly an ondary sources. This course is
the results credit.  SS3310  Course De Latin Amer concisely in designed to	04054 escription: rican history n verbal and	IB HISTORY OF THE AMERICAS  IB History of the Americas is a co. Students analyze the significance written form. Students analyze a	FY  llege level Unite of historical and interpret pr	1  ded States hist events and leading and sec	NPS Pre-IB /AP Government  ory course integrated with key topic arn to express their ideas clearly an ondary sources. This course is
the results credit.  SS3310  Course De Latin Amer concisely in designed to SS3410  Course De nolistic approncepts o World War the sequen	04054  escription: ican history n verbal and p prepare st  04106  scription: roach and to f nationalish I historical e	IB HISTORY OF THE AMERICAS  IB History of the Americas is a co. Students analyze the significance witten form. Students analyze a udents for the AP Exam in Americal IB TWENTIETH CENTURY WORLD TOPICS  This course provides to students a context of evaluate the reliability of historical, imperialism, communism, fascisevents. IB Twentieth Century World IB Twentieth Century	FY  llege level Unit te of historical and interpret pr an history and  FY  an opportunity al evidence. E m, and World Id Topics and i	1 to examine 20 buring the first War I. The sets prerequisites	NPS Pre-IB /AP Government  ory course integrated with key topic arn to express their ideas clearly an ondary sources. This course is ted credit.  IB History of the Americas
the results credit.  SS3310  Course De Latin Amer concisely in designed to SS3410  Course De holistic appropriet concepts o World War	04054  escription: ican history n verbal and p prepare st  04106  scription: roach and to f nationalish I historical e	IB HISTORY OF THE AMERICAS  IB History of the Americas is a co. Students analyze the significance witten form. Students analyze a udents for the AP Exam in Americal IB TWENTIETH CENTURY WORLD TOPICS  This course provides to students a context of evaluate the reliability of historical, imperialism, communism, fascisevents. IB Twentieth Century World IB Twentieth Century	FY  llege level Unit te of historical and interpret pr an history and  FY  an opportunity al evidence. E m, and World Id Topics and i	1 to examine 20 buring the first War I. The sets prerequisites	NPS Pre-IB /AP Government  ory course integrated with key topic arm to express their ideas clearly an ondary sources. This course is ted credit.  IB History of the Americas  the century topics from an internation semester students examine the cond semester focuses on the post at IB History of the Americas, compressions.

Course Description: This course is designed as an entry-level course for those students who wish to take IB Biology I and Il in their junior and senior years. An understanding and application of scientific processes, critical thinking skills, and research methods as they apply to a variety of topics are essential elements of this course. The course utilizes a variety of instructional techniques including: field trips, laboratory investigations, library investigations, lecture material, and textbook readings. During the first semester the students must complete an independent Scientific Research Investigation (SRI)

Code Code Code Course Title of Semesters Per Year Prerequisite(s)  SC3310 03101 NPS PRE-IB CHEMISTRY FY 1 Acceptance into the IB Pr  Course Description: Pre-IB Chemistry is a rigorous course designed to prepare students for IB Biology I and II. aboratory techniques, mathematical applications and problem solving skills are developed. An independent Science Research Investigation (SRI) is required.  SC3211 03057 IB BIOLOGY I FY 1 NPS Pre-IB Chemistry  Course Description: IB Biology I is the first segment of a two-year biology sequence designed to prepare stude B Biology Higher Level Examination. The curriculum concentrates on the biochemical and cellular basis of life, a preparence, independent research, and higher-level thinking skills.  SC3212 03057 IB BIOLOGY II FY 1 IB Biology I  Course Description: IB Biology II continues the two-year biology sequence designed to prepare students for the Siology Higher Level Examination as well as the optional AP Biology exam. The curriculum concentrates on struunction in plants and animals, evolution of plants and animals, ecology and human biology. The approach to this carries weighted credit.				N1	0	
PRE-IB CHEMISTRY In adoratory techniques, mathematical applications and problem solving skills are developed. An independent Scie Research Investigation (SRI) is required.  B BIOLOGY I PY 1 NPS Pre-IB Chemistry  Course Description: IB Biology I is the first segment of a two-year biology sequence designed to prepare stude B Biology Higher Level Examination. The curriculum concentrates on the biochemical and cellular basis of life, a origins and adaptations of microorganisms. The approach to this course is investigatory, emphasizing hands-on experiences, independent research, and higher-level thinking skills.  B Biology II B BIOLOGY II PY 1 IB Biology I  Course Description: IB Biology II continues the two-year biology sequence designed to prepare students for the biology Higher Level Examination as well as the optional AP Biology exam. The curriculum concentrates on struunction in plants and animals, evolution of plants and animals, ecology and human biology. The approach to this research, and higher level thinking skills. This coarries weighted credit.  B BHYSICS I PY 1 NPS Pre-IB Algebra II with Trigonometry  Course Description: This course begins the two-year sequence designed to prepare the students for the IB Physics to the analyze the concepts which explain the features of the natural world primari of the interactions between matter and energy. They conceptualize physical principles and make technical applic the approach to this course is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skills.						Prerequisite(s)
aboratory techniques, mathematical applications and problem solving skills are developed. An independent Scie Research Investigation (SRI) is required.    Course Description: IB Biology I is the first segment of a two-year biology sequence designed to prepare stude Biology Higher Level Examination. The curriculum concentrates on the biochemical and cellular basis of life, a brigins and adaptations of microorganisms. The approach to this course is investigatory, emphasizing hands-on experiences, independent research, and higher-level thinking skills.    Course Description: IB Biology II continues the two-year biology sequence designed to prepare stude by the properties of the students of the students for the sidogy Higher Level Examination as well as the optional AP Biology exam. The curriculum concentrates on struction in plants and animals, evolution of plants and animals, evol	SC3310	03101		FY	1	Acceptance into the IB Program
Course Description: IB Biology I is the first segment of a two-year biology sequence designed to prepare stude B Biology Higher Level Examination. The curriculum concentrates on the biochemical and cellular basis of life, a rigins and adaptations of microorganisms. The approach to this course is investigatory, emphasizing hands-on experiences, independent research, and higher-level thinking skills.  Course Description: IB Biology II continues the two-year biology sequence designed to prepare students for the biology Higher Level Examination as well as the optional AP Biology exam. The curriculum concentrates on struction in plants and animals, evolution of plants and animals, evolution in plants and animals, evolution of plants and animals weighted credit.  Course Description: This course begins the two-year sequence designed to prepare the students for the IB Physics and the features of the natural world primari of the interactions between matter and energy. They conceptualize physical principles and make technical applic for the interactions between matter and energy. They conceptualize physical principles and make technical applic the approach to this course is investigatory, emphasizing hands-on experiences, independent research, and highinking skills.  Course Description: This course continues and completes the study of the IB Physics curriculum. The approach ourse is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skills.	opics range aboratory te	e from the bechniques,	pasics of atomic models to the are mathematical applications and pr	as of nuclear,	organic, and e	environmental chemistry. In addition
Course Description: IB Biology I is the first segment of a two-year biology sequence designed to prepare stude B Biology Higher Level Examination. The curriculum concentrates on the biochemical and cellular basis of life, a prigins and adaptations of microorganisms. The approach to this course is investigatory, emphasizing hands-on experiences, independent research, and higher-level thinking skills.  Course Description: IB Biology II continues the two-year biology sequence designed to prepare students for the biology Higher Level Examination as well as the optional AP Biology exam. The curriculum concentrates on struunction in plants and animals, evolution of plants are search, and higher level thinking skills. This coarries weighted credit.  Course Description: This course begins the two-year sequence designed to prepare the students for the IB Phyligher Level Examination. Students analyze the concepts which explain the features of the natural world primari of the interactions between matter and energy. They conceptualize physical principles and make technical applic the approach to this course is investigatory, emphasizing hands-on experiences, independent research, and highinking skills.  Course Description: This course continues and completes the study of the IB Physics curriculum. The approach course is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skills.	SC3211	03057	IB BIOLOGY I	FY	1	NPS Pre-IB Chemistry
Tourse Description: IB Biology II continues the two-year biology sequence designed to prepare students for the iology Higher Level Examination as well as the optional AP Biology exam. The curriculum concentrates on struction in plants and animals, evolution of plants and animals, evology and human biology. The approach to this exestigatory, emphasizing hands-on experiences, independent research, and higher level thinking skills. This coarries weighted credit.    IB PHYSICS   FY   1   NPS Pre-IB Algebra II with Trigonometry					se is investiga	tory, emphasizing nanos-on
course Description: This course begins the two-year sequence designed to prepare the students for the IB Philipper Level Examination. Students analyze the concepts which explain the features of the natural world primari of the interactions between matter and energy. They conceptualize physical principles and make technical applications between matter and energy. They conceptualize physical principles and make technical applications wills.  Course Description: This course begins the two-year sequence designed to prepare the students for the IB Philipper Level Examination. Students analyze the concepts which explain the features of the natural world primari of the interactions between matter and energy. They conceptualize physical principles and make technical applications have been designed to the course is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skills.						
Course Description: This course begins the two-year sequence designed to prepare the students for the IB Phyligher Level Examination. Students analyze the concepts which explain the features of the natural world primari of the interactions between matter and energy. They conceptualize physical principles and make technical application to this course is investigatory, emphasizing hands-on experiences, independent research, and high hinking skills.  Course Description: This course continues and completes the study of the IB Physics curriculum. The approach course is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skills.	ourse Des	scription: ner Level E	IB Biology II continues the two-ye xamination as well as the optiona	ar biology sequ	uence designe	ed to prepare students for the IB iculum concentrates on structure ar
Higher Level Examination. Students analyze the concepts which explain the features of the natural world primari of the interactions between matter and energy. They conceptualize physical principles and make technical application in the approach to this course is investigatory, emphasizing hands-on experiences, independent research, and high hinking skills.    Course Description: This course continues and completes the study of the IB Physics curriculum. The approach course is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skills.	Course Des Biology High unction in p	scription: ner Level E lants and a v, emphasiz	IB Biology II continues the two-ye xamination as well as the optiona inimals, evolution of plants and ar zing hands-on experiences, indep	ar biology sequ I AP Biology ex nimals, ecology	uence designe kam. The curr	ed to prepare students for the IB iculum concentrates on structure ariology. The approach to this course
Course Description: This course continues and completes the study of the IB Physics curriculum. The approace course is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skill	Course Des Biology High unction in p nvestigatory arries weig	ecription: ner Level E lants and a y, emphasiz hted credit.	IB Biology II continues the two-ye xamination as well as the optiona nimals, evolution of plants and ar zing hands-on experiences, indep	ar biology sequ I AP Biology ex nimals, ecology endent researd	uence designe kam. The curr r and human b ch, and higher	ed to prepare students for the IB iculum concentrates on structure ariology. The approach to this course level thinking skills. This course
Course Description: This course continues and completes the study of the IB Physics curriculum. The approace course is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skill	Course Desicology Highunction in provestigatory arries weig  SC3411  Course Desiligher Leve of the intera	ocription: ner Level E lants and a v, emphasiz hted credit.  03157  scription: el Examinat ctions between to this or	IB Biology II continues the two-ye xamination as well as the optiona inimals, evolution of plants and arzing hands-on experiences, indep	ar biology sequinals, ecology endent research	uence designe tam. The curr and human b th, and higher  1  gned to prepai in the feature ysical principle	ed to prepare students for the IB iculum concentrates on structure ariology. The approach to this course level thinking skills. This course  NPS Pre-IB Algebra II with Trigonometry  re the students for the IB Physics of the natural world primarily in teles and make technical applications.
course is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skill	Course Des Biology High unction in p nvestigatory arries weig SC3411 Course Des Higher Leve of the intera	ocription: ner Level E lants and a v, emphasiz hted credit.  03157  scription: el Examinat ctions between to this or	IB Biology II continues the two-ye xamination as well as the optiona inimals, evolution of plants and arzing hands-on experiences, indep	ar biology sequinals, ecology endent research	uence designe tam. The curr and human b th, and higher  1  gned to prepai in the feature ysical principle	ed to prepare students for the IB iculum concentrates on structure ariology. The approach to this course level thinking skills. This course  NPS Pre-IB Algebra II with Trigonometry  re the students for the IB Physics of the natural world primarily in teles and make technical applications.
optional). This course carries weighted credit.	Course Desidology Highunction in provestigatory arries weig	ocription: ner Level E lants and a y, emphasiz hted credit.  03157  scription: el Examinat ctions between to this cols.	IB Biology II continues the two-ye xamination as well as the optiona inimals, evolution of plants and arzing hands-on experiences, indeposition.  IB PHYSICS I  This course begins the two-year sion. Students analyze the concepteen matter and energy. They coourse is investigatory, emphasizing	ar biology sequinals, ecology endent research FY  FY  sequence designates which explanceptualize phigh hands-on explance to the sequence designates which explance the sequence phigh hands-on explance the sequence designates which explance the sequence designates which explances the sequence designates are sequenced to the sequence designates and the sequence designates are sequenced to the sequence designates and the sequence designates are sequenced to the sequence designates are sequenced to the sequence designates and the sequence designates are sequenced to the sequ	uence designe cam. The curr and human b ch, and higher 1 gned to prepar in the feature ysical principle periences, inc	ed to prepare students for the IB iculum concentrates on structure are iology. The approach to this course level thinking skills. This course IPS Pre-IB Algebra II with Trigonometry  The students for the IB Physics is of the natural world primarily in teles and make technical applications. It is a superior in the iological properties and make technical applications. It is a superior in the iological properties and make technical applications. It is a superior in the iological properties and make technical applications.
NPS FV 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Course Des Biology High unction in p investigatory carries weig SC3411 Course Des Higher Leve of the intera The approachinking skill SC3412 Course Des course is in B Physics of	ocription: ner Level E lants and a y, emphasiz hted credit.  03157  scription: el Examinat ctions between to this colls.  03157  scription: vestigatory, courses are	IB Biology II continues the two-ye xamination as well as the optiona inimals, evolution of plants and arzing hands-on experiences, indeposition.  IB PHYSICS I  This course begins the two-year sion. Students analyze the concepteen matter and energy. They concurse is investigatory, emphasizing the physics of the course in the course is investigatory, emphasizing the course and complete designed to prepare students for	ar biology sequinals, ecology endent research FY  FY  sequence designates which explainceptualize phands-on explai	uence designe tam. The curr and human b th, and higher  1  gned to prepar in the feature ysical principle periences, inc	ed to prepare students for the IB iculum concentrates on structure are iology. The approach to this course level thinking skills. This course level thinking skills. This course INPS Pre-IB Algebra II with Trigonometry  The students for the IB Physics is of the natural world primarily in terms and make technical applications. It is and make technical applications. It is and higher level is ics curriculum. The approach to the ind higher level thinking skills. The

Course Description: Pre-IB Geometry covers the regular geometry objectives as well as additional content and projects to prepare the students for the IB math sequence. This course emphasizes the development of logic, written and oral arguments, and the use of technology to investigate, explore, and verify mathematical properties. Students focus on problem solving, critical thinking, and real-world applications. Students must bring compasses, protractors, and rulers to this class. Graphing calculators are available for class use.

	INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM							
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)			
MA2301	02106	NPS PRE-IB HONORS ALGEBRA	FY	1	NPS Pre-IB Geometry or Geometry with the Recommendation of the Instructor			

**Course Description:** This course covers the Algebra 2 / Honors Algebra 2 curricula during the first twenty-seven weeks. Additional IB topics are studied during this time frame. Students study trigonometry units through the study of trig identities during the last nine weeks of the course. Modeling assignments are given throughout each instructional unit, both as a discovery technique and as formal assessment. Each instructional unit concludes with a formal assessment component involving applications of concepts. Higher-level questioning strategies are consistently used in class and on assignments. The students are required to submit an in-depth, content-based project second semester. Graphing calculators are available for use during the class period.

MA3003 02131 IB MATH STUDIES FY 1 NPS Pre-IB Algebra II with Trigonor
---

**Course Description:** This course is designed to prepare students to take the IB Mathematical Studies Standard Level Examination and carries weighted credit. In addition to an in-depth study of the Analysis curriculum, this course integrates topics from the specified IB curriculum. Following the criteria specified by IBO, students prepare extensive projects, which are externally moderated by IBO examiners. The use of graphing calculators is required for this course. Students who take this course should plan on taking AP Calculus or AP Statistics during their senior year.

MA3001 02134 MATH METHODS 1-1/1-2	FY	1	NPS Pre-IB Algebra II with Trigonometry
-----------------------------------	----	---	--

**Course Description:** Math Methods is a pre-Calculus sequence intended to provide a sound basis for those students who plan to pursue studies requiring a mathematical background. The curriculum covers Analysis and begins topics from AP Calculus AB, with additional topics from international curricula integrated throughout. Emphasis is on problem solving, justification of results, and the development and demonstration of reasoning and critical thinking skills. The use of a graphing calculator is required for this course.

MA3002   02 134   15 MATH 32   FY   1   IB Math Methods I
---

**Course Description:** IB Mathematics SL is a course that completes the international curricula and AP Calculus content. Students complete their portfolios as part of the IB internal assessment process. This sequence is designed to prepare the students for the IB Mathematics Standard Level Examination and the AP Calculus AB Exam. The use of a graphing calculator is required for this course, which carries weighted credit.

AR3102	05154	NPS PRE-IB INTRO. TO ART I & II	FY	1	NONE
		TO ART I & II			

**Course Description:** This is an intensive preparatory course for the IB Program students who wish to pursue one of the IB Art/Design courses as their sixth group selection. Students work with a variety of art media, research the arts of different times and cultures, and gain an appreciation of their own cultural influences.

AR3001	05154	IB ART/DESIGN 1-1/1-2	FY	1	NPS Pre-IB Introduction to Art/ Design
--------	-------	--------------------------	----	---	---

**Course Description:** IB Art / Design 1-1/1-2 allows students to develop new perceptions of their work and self through exploration. Students analyze selected topics or concepts of art and design and the relationships of the cultural, historical and social context of the topics studied. This course is designed for students who are interested in the study of art but are not necessarily skilled in studio processes. The class work consists of a number of student written research workbooks which follow IBO criteria and will be evaluated by an external examiner in lieu of an exam.

	INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM							
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)			
AR3002	05154	IB ART/DESIGN 2-1/2-1	FY	1	NPS Pre-IB Introduction to Art/ Design			

**Course Description:** IB Art / Design 2-1/2-2 allows students to continue to develop perceptions of their work and self through exploration and portfolio development. Students analyze selected topics or concepts of art and design and the relationships of the cultural, historical, and social context of the topics studied. This course is designed for students to improve their skills in studio processes. The mix between group structured and self-structured work is flexible. The class work culminates in both a student-generated solo art exhibit and a number of student written research workbooks, which will be evaluated by an external examiner following IBO criteria in lieu of an exam.

AMJ/ AMK 05052 IB THEATRE ARTS 2 .5 Acting or Theatre	
--	--

**Course Description:** The theatre course emphasizes the importance of working individually and as a member of an ensemble. Students are encouraged to develop the organizational and technical skills needed to express themselves creatively in theatre. A further challenge for students following this course is for them to become aware of their own perspectives and biases and to learn to respect those of others" (IBO) Students study 4 components: theatre in the making, theatre in performance, theatre around the world, and independent project.

AML/ AMM         05052         IB THEATRE ARTS 2-1/2-2         2         .5         IB Theatre 1-1/1-2	
--	--

**Course Description:** In year two of the theatre course students "develop their personal research and practice in theatre, and extend their understanding of the ideas, practices and concepts encountered" (IBO) and continue to work on the required assessments from IBO.

MU3601 MU3602	05115	IB MUSIC 1-1/1-2 2-1/2-2	FY	1	Acceptance into the IB Program and participation in band, orchestra or chorus
------------------	-------	--------------------------------	----	---	---

**Course Description:** IB Music is a multi-faceted music fundamentals and appreciation class. Course topics include musical notation, harmony, form and analysis, music theory, orchestration, conducting, music technology, world music, and ear training. The main focus of the IB Music class is music performance and/or composition. IB Music students are required to be full-time members of a Granby High School performing organization. Additionally, these students are encouraged to pursue their major instrument or composition independent of their school activities.

**Course Description:** "IB psychology takes a holistic approach that fosters intercultural understanding and respect. In the core of the IB psychology course, the biological level of analysis demonstrates what all humans share, whereas the cognitive and socio-cultural levels of analysis reveal the immense diversity of influences that produce human behavior and mental processes. Cultural diversity is explored and students are encouraged to develop empathy for the feelings, needs and lives of others within and outside their own culture. This empathy contributes to an international understanding" (IBO)

SS3312 SS3412	04304	IB THEORY OF KNOWLEDGE	FY	1	Acceptance into the IB Program
------------------	-------	---------------------------	----	---	--------------------------------

Course Description:—The International Baccalaureate Theory of Knowledge course challenges students in the areas of critical thinking and the integration of knowledge. Students are taught to make connections among their classroom and non-classroom knowledge and experience as they examine the ethics, value judgments and belief systems of the various disciplines. Topics of study include comparing different ways of thinking, understanding the role of language and logical argument in knowledge, and contrasting different information systems: mathematics, natural sciences, human sciences, and history.

# Medical & Health Specialties Program at Maury High School

Entering its thirty first year, the Medical and Health Specialties Program at Maury High School was formed in 1986 to initiate early preparation of junior and senior level students, particularly minorities and females, for careers in the health professions through academic coursework and motivational counseling. Through a special collaboration between Norfolk Public Schools and the Eastern Virginia Medical School many unique experiences enrich and enhance the science coursework for select students. Admission to this program is by application and entry occurs ONLY for entering freshmen students.

### **Medical & Health Specialties Course Sequence**

GRADE 9						
BIOLOGY WITH MEDICAL APPLICATIONS						
ACCELERATED HEALTH AND PHYSICAL EDUCATION						
GRADE 10						
CHEMISTRY WITH MEDICAL APPLICATIONS						
GRADE 11						
ANATOMY AND PHYSIOLOGY						
GRADE 12						
BIOETHICS FORENSIC SCIENCE EMERGENCY MEDICAL RESPONDERS SPORTS MEDICINE						

SCED Code	NPS Course Title	Number	Credits				
	NPS SCED NPS of Per Prerequis						
03051	BIOLOGY WITH MEDICAL APPLICATIONS	FY	1	Program students only			
<b>Course Description:</b> This course is the first in the sequence of required science classes. Included in the curriculum will be cell theory, bio-chemical processes, scientific investigations and the study of life functions including theories of evolution and natural selection. Specially designed mini-labs will focus on special sense and body systems. Speakers, field trips and peer mentoring will support the curriculum.							
08052	ACCELERATED HEALTH & PHYSICAL EDUCATION 9	FY	1	Program students only			
	ription: Th , bio-chemic natural sele peer mento 08052	ription: This course is the first in the sequer, bio-chemical processes, scientific investigatinatural selection. Specially designed mini-lab peer mentoring will support the curriculum.  ACCELERATED HEALTH &	ription: This course is the first in the sequence of required a bio-chemical processes, scientific investigations and the stunatural selection. Specially designed mini-labs will focus on peer mentoring will support the curriculum.  ACCELERATED HEALTH & PHYSICAL EDUCATION 9	ription: This course is the first in the sequence of required science classes, bio-chemical processes, scientific investigations and the study of life functinatural selection. Specially designed mini-labs will focus on special sense a peer mentoring will support the curriculum.  ACCELERATED HEALTH & PHYSICAL EDUCATION 9  FY 1			

SC2320 03101 CHEMISTRY WITH MEDICAL APPLICATIONS FY 1 Sophomore-level program students only. BioMed and ACHEPE 9 are required.

will be covered. Varied enrichment opportunities will enhance the career awareness of the students.

**Course Description:** The study of chemistry will take on greater importance to the students in the MHSP as they explore in depth the intermingling between science and medicine. An introduction to the chemical basis of medications, chemical interactions within the body such as ion levels, issues of solubility in relationship to tooth decay as well as reaction rates as they related to body temperature and organic chemistry are but a few of the applications to be explored. Students will have specially arranged field trips to observe surgical procedures, clinical settings and specific lab techniques in practice.

Course Description: Building upon the introduction to anatomy in the accelerated health & PE class, this human anatomy and physiology class will provide a comprehensive, year-long examination encompassing topics covered in all prior MHSP science courses. Students will have an in-depth study of each body systems, including: anatomical structure, skeletal physiology as related to the muscular system; the sensory system, the endocrine, circulatory, lymphatic, immune, digestive, urogenital and respiratory systems as well as homeostasis, diagnostics, scientific terminology and development. Students will attend classes held in the labs of the Eastern Virginia Medical School and have unique learning experiences including working in the cadaver lab and clinical rotations.

SC2222	03052 BIOETHICS	FY 1	Senior level program students only
--------	-----------------	------	------------------------------------

**Course Description:** Students will study ethical issues as they apply to fields such as health care, medical science and medical technologies. Students will be asked to justify and/or refute answers to difficult ethical questions related to topics such as, but not limited to, human cloning, medical research, organ recipients, euthanasia, etc. Students will be given an in-depth look at moral philosophy as it relates to medical, scientific, technological and legal fields.

SC2201	03999	FORENSIC SCIENCE	FY	1	Seniors only Chemistry
--------	-------	------------------	----	---	---------------------------

**Course Description:** This course presents the scientific principles, laboratory and field methods forensic scientists use to solve problems. Students will take on the various roles of crime scene investigator, scientist and medical examiner in order to collect and evaluate evidence in a problem-solving environment. Topics include DNA technology and its uses, toxicology, anthropology, entomology, evidence law, criminalities and career opportunities.

	MEDICAL AND HEALTH SPECIALTIES PROGRAM							
NPS SCED NPS Of Per Prerequisite(s) Code Code Course Title Semesters Year								
HS1701	14062	SPORTS MEDICINE	FY	1	Seniors only			

This course is designed to introduce the student to the field of sports medicine. Students will look at issues associated with athletic training and sports medicine; focus on anatomy, recognition and treatment of various injuries and conditions related to the athlete. Labs will introduce the student to hands-on evaluation and treatment of injuries.

HS1703	14062	EMERGENCY MEDICAL RESPONDER	FY	1	Seniors by application only
--------	-------	--------------------------------	----	---	-----------------------------

Specifically geared for students who have an interest in pursuing studies in a health or medical related career, the Commonwealth of Virginia EMS Emergency Medical Responder (EMR) curriculum will be taught in this class. Lectures, group-work, projects, practical lab work and other activities will prepare students to sit for two exams; students who successfully complete the course and pass these exams will be awarded national and state level certification in EMR.

# The Leadership Center for the Sciences and Engineering at Norview High School

The Leadership Center for the Sciences and Engineering (LCSE) is a smaller learning community within Norview High School, geared for gifted, high-achieving students from across the district. LCSE students are enrolled in a four-year rigorous curriculum consisting of Honors and Advanced Placement courses, with considerable emphasis in math and science. The program culminates with the students' LCSE Senior Project, providing the opportunity for students to practice independent research, collaborative teamwork, and communication skills. In addition, LCSE students receive two years of formal instruction and training in leadership development, and contribute to their school and community through extracurricular involvement and volunteer work.

The overall design of the LCSE program guides students towards possible college degrees and careers in science, technology, engineering, and/or math (STEM). However, an ultimate goal is to not only graduate students fully prepared to be successful in college, but also equip them with the skills necessary to become effective leaders within our communities.

The majority of LCSE core classes are cohorted, especially during 9th and 10th grade. LCSE students also take custom courses unique to the LCSE program which are described below, following the LCSE Course Sequence.

### LCSE Program Requirements

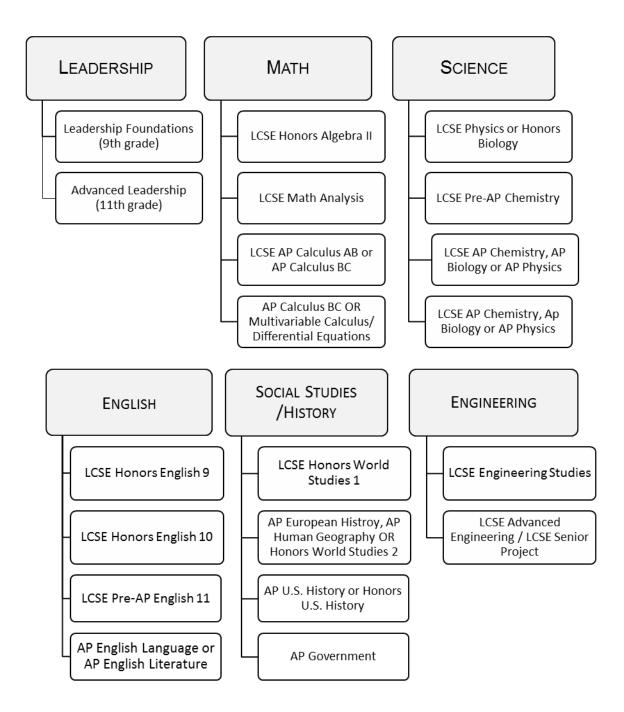
### To graduate from the LCSE program at Norview High, students must:

- Enroll in at least one high-level math and one high-level science course in each of the four years within the LCSE program
- Complete LCSE Leadership Foundations and LCSE Advanced Leadership
- Complete LCSE Engineering Studies course and LCSE Advanced Engineering
- Complete three STEM-related course elective credits
- Complete/present a LCSE Senior Research project
- Complete a minimum three years of one foreign language or two years of two languages
- Maintain a minimum GPA of 2.5+ in math and science, with no failing grades
- Complete 200+ volunteer hours within the community and within Norview High
- Participate in at least one VHSL extra-curricular activity or sport each year
- Maintain a clean discipline history

## Upon successful completion of all the above, the LCSE students will receive the following:

- LCSE Award certificate, noting the student's accomplishments within the program
- This certificate is also sent to colleges the student applies to, along with a special LCSE Transcript Addendum outlining the components of the program
- LCSE seal on the student's high school diploma
- LCSE graduation cord and patch
- Recognition at the annual LCSE Graduation Ceremony

## **LSCE Course Sequence**



THE LEADERSHIP CENTER FOR THE SCIENCES AND ENGINEERING						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)	
SL1403	22999	LEADERSHIP FOUNDATIONS	FY	1	Must be enrolled in the LCSE specialty program as a 9 <sup>th</sup> grader.	

**Course Description:** This class challenges the students to define leadership in all its forms. Students explore leadership theories and philosophies. The teacher then releases the students to prepare power point presentations on various leadership topics. Students design and present various personal presentations including a leadership lesson that they design and present as though they were the teacher. The course challenges students to get to know themselves and students, learners, individuals, and ultimately, leaders!

Course Description: This course challenges the advanced student to fully define leadership on their own terms. They explore leadership theory more deeply and then create their own theories about leadership and its execution. Next the students begin to apply the concepts of servant leadership that they first learned in Leadership Foundations. The students work together to design a leadership project that will be done either in the school or in the community. They both design and execute the project during the rest of the school year. The remainder of the year is spent developing their personal leadership through financial literacy training, protocol and etiquette training, and the development of personal marketing tools: a resume and portfolio capable of getting them into the university of their choice. They will also create and design leadership lessons to present to their classmates. The year will culminate with a presentation to teachers, parents, and administrators to showcase their leadership development to this point.

ST1307	21005	LCSE ENGINEERING STUDIES	FY	1	Must be enrolled in the LCSE specialty program as a 9 <sup>th</sup> or 10 <sup>th</sup> grader.
--------	-------	-----------------------------	----	---	---

Course Description: Course Description: The purpose of the LCSE Engineering Studies course is to explore and engage in the engineering design process. Students will learn how to define, assess, and solve problems in a logical manner. To do this, students study laws of physical systems (Electromagnet, Thermal, Mechanical, Fluid), but apply these laws to solve a challenge. Students also learn what it will take to become and engineer on both an educational and professional level. Although the course has "engineering" in the title, students do not have to desire to become an engineer to benefit from this class. This is meant as a career exploration opportunity to allow LCSE students to again a better idea on future aspirations to pursue. The course is also in preparation for NOCTI's pre-engineering certification, which students complete at the end of the year. (Required 9th or 10th grade).

ST1308	21002	LCSE ADVANCED ENGINEERING	FY	1	Must be enrolled in the LCSE specialty program as a 12 <sup>th</sup> grader
--------	-------	------------------------------	----	---	---

**Course Description:** The LCSE Advanced Engineering course provides senior LCSE students the opportunity to design and create a new services or product that meet a personal or community need. Working within the Engineering Design Process, students integrate and apply their understanding of mathematics, science, and technology across a variety of personally meaningful projects that will draw out their individual and team leadership skills. The course is an active, creative, hands-on course, and incorporates the students' required LCSE Senior Project. (Required 12th grade).

MF1310	13052	LCSE MATERIALS ENGINEERING	FY	1	Must be enrolled in the LCSE specialty program any year 9-12.
--------	-------	-------------------------------	----	---	---

Course Description: Materials Engineering (aka materials science) is the science of all materials – ceramics, composites, electronic materials, metals and polymers with emphasis on the study of the properties and uses of all engineering materials. The materials scientist determines what materials to use, and how to process the material into a useful component; this is a critical part of all manufacturing. This specific LCSE Materials Engineering course was designed specifically for LCSE students and taught at a higher level. Students apply both complex math and physics principals to real world problems and solutions. This course counts as one of the three required STEM electives all LCSE students take throughout the four year curriculum.

THE LEADERSHIP CENTER FOR THE SCIENCES AND ENGINEERING					
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)
LA4352	01003	LCSE PRE-AP ENGLISH 11 (Technical Writing)	FY	1	Must be enrolled in the LCSE program as an 11 <sup>th</sup> grader.

**Course Description:** The Pre-AP LCSE English 11 / Technical Writing class provides LCSE students instruction and practice in the technical writing process. The course focuses on the basic steps of analysis, development, and revision, including instruction and practice on basic forms of technical communications, business correspondence, and procedures for research writing. The course will also include instruction and practice in oral communication/presentation skills. At the year's end, LCSE students will have finished and presented a research proposal in preparation for a capstone LCSE senior project.

**Course Description:** The LCSE (Leadership Center for the Sciences and Engineering) Senior Capstone Project Class is independent study time during which students meet in an assigned classroom to do research, build respective project presentations and/or displays, meet with assigned mentors, possibly visit a worksite or college research facility, and complete additional field work or other research requirements associated with their project. This course/independent study is unique to LCSE seniors only, and all seniors are required to complete the project as part of the LCSE graduation requirements.

# Academy of Visual and Performing Arts at Booker T. Washington High School

The Visual and Performing Arts Academy of Booker T. Washington High School, offers the opportunity for students who have an interest in the arts to select courses that prepare them for postsecondary advanced studies or for a faster entry into arts-related occupations. The balance between artistic development and academic preparation is at the heart of the Academy program. Students are exposed to the humanities and have the opportunity to select a course of study that will best meet their needs and interests.

### **Academy of the Arts Course Sequence**

CATEGORY					
Draw/Paint	Ceramics/Sculpture	Photography	Theatre	Dance	
Intro to Art	Intro to Art	Photo Foundations 1,2	Oral Communication	Intro to Dance	
Draw/Paint 1,2	Ceramics/Sculpture 1,2	Photo 3,4	Theatre	Dance Explorations 1,2	
Draw/Paint 3,4	Ceramics/Sculpture 3,4	Photo 5,6	Art of Acting or Performance Ensemble	Dance Explorations 3,4	
AP Studio Art Drawing	AP Studio Art 2-D	AP Studio Art 2-D	Technical Theatre	Dance Ensemble	

#### **CATEGORY**

Music Lecture	Vocal Music	Band	Orchestra
Music Literature	Girls' Chorus Males' Chorus (Non-Academy)	Beginning Band (Non-Academy)	Concert Orchestra
Fundamentals of Music Theory	Performance Ensemble or Piano Lab	Intermediate Band or Jazz Ensemble or Percussion Ensemble	Chamber Orchestra
AP Music Theory	Concert Chorus	Concert Band or Jazz Ensemble or Percussion Ensemble	Chamber Orchestra
Foundations of Arranging & Orchestration/ Basic Conducting	Selected Choral Ensemble	Concert Band or Jazz Ensemble or Percussion Ensemble	Chamber Orchestra

	ACADEMY OF VISUAL AND PERFORMING ARTS						
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)		
MU1401	05149	MUSIC LITERATURE AND SOUND	FY	1	Membership in the Academy		
include: list experiment acquainted	<b>Course Description:</b> This course explores various styles and periods of music—from pop and jazz to classical. Activities include: listening to different kinds of music; comparing styles and nationalities; studying various artists and composers; experimenting with making music through the use of various equipment, technology, and creative activities; becoming acquainted with how elements of music are put together to create compositions; exploring students' special interest areas in nusic including careers; appropriate field trips. This course is of benefit to prospective music majors and performers.						
MU1402	05116	FUNDAMENTALS OF MUSIC THEORY	FY	1	Membership in The Academy, performing organization and approval of the music staff		
form); rhyth keyboard a	<b>Course Description:</b> This course provides study of: the structure of music (notation, scales, intervals, chords, part-writing, orm); rhythm and meter, basic sight-singing and ear training skills; introductory harmony and composition; exposure to seyboard and conducting. Students in all grades are eligible. This course is of particular value to prospective music majors, is useful to all music performers (instrumental and vocal).						
MU4404	05114	ADVANCED PLACEMENT MUSIC	FY	1	Music Theory		
talented method Advance to develop structure a styles and consider or recommen	Course Description: This is a college level, sequential course in music theory and literature. It is designed to challenge the alented music student and the talented academic student with a music background. The course prepares the student to pass he Advanced Placement examination administered by the College Entrance Examination Board in May. The ultimate goal is o develop understanding listeners who respond fully to music. The course stresses aural and visual understanding of musical structure and compositional procedures; the development of rigorous listening techniques; acquaintance with a variety of styles and a broad repertory; vocabulary appropriate for describing responses and value judgments. Note: Candidates should consider one or any combination of the following as helpful prerequisites: music literature courses, theory courses, special recommendation by the music teacher, current enrollment in one of the advanced school performing groups, or active involvement in private study/performance.						
MU1503	05116	BASIC CONDUCTING	FY	1	Foundations of Arranging and Orchestration		
musical or	Course Description: The course is a study of the principles of conducting: technique of the baton; methods of adapting to nusical organizations of various sizes and abilities; transpositions; score study, non-verbal communication from the podium, and program building. Skills will be developed through practice with choral and instrumental recordings and/or live groups.						
MU1405	05149	MUSIC EDUCATION LEADERSHIP	FY	1	Successful completion of at least 2 years in most advanced level band, orchestra, or chorus; current enrollment in advanced music class; recommendation of teacher, senior status		

Course Description: Music Education Leadership Training (MELT) is an elective course designed specifically for students who have successfully completed at least two years of the most advanced level of band, orchestra, or chorus and completed the MELT preparation program; have director's recommendation; and wish to pursue leadership training in the Music Education and Peer Facilitator program. The MELT program provides leadership opportunities for eligible twelfth grade music students to assist with instruction in elementary, middle, and high schools. Music Education Leadership Training students receive training and supervision from their music director and the cooperating music teacher. The MELT program is designed to further the development of students' musical training by providing opportunities for leadership and communication skills development. The program enables students to grow in confidence and self-concept while providing younger music students individualized assistance. Upon completion of requirements established for the program, students will assist with instruction in an assigned school. Participants will receive a grade as outlined for the regular grading period. Full elective credit for graduation may be earned. This course may be repeated for credit.

will assist with instruction in an assigned school. Participants will receive a grade as outlined for the regular grading period. MU1202 05110 **GIRLS CHORUS** FΥ None Course Description: This is a preparatory class for concert chorus or select ensemble. No previous choral experience is necessary. Emphasis is placed on learning to use the voice correctly and strengthening part singing. Instruction includes development of basic music skills and choral techniques. On the recommendation of the director, students may be eliqible for District Chorus audition. Performance requirements may include both in-school and out-of-school hours. This course may be repeated for credit. MU1204 05110 **CONCERT CHORUS** FΥ Approval of instructor Course Description: This is the advanced choral performing group. It is an advanced training level for all students enrolled. Membership is by audition or by choral teacher recommendation. At least one required performance is scheduled during each semester. These performances include classroom assignments, school assemblies, annual winter and spring concerts, and any other concert dates which the group accepts. Attendance outside of school hours is required. Optional opportunities available through audition are: District Chorus, All-Virginia Chorus for selected eligible juniors and seniors who have participated in the District event, and Honors Choir for eligible seniors. This course may be repeated for credit. SELECTED CHORAL Membership in Concert Chorus and MU2205 05111 FΥ **ENSEMBLE** approval of instructor Course Description: Teacher selectivity controls membership in these small groups which are limited by vocal balance and by established numbers. In addition to performances provided by Concert Chorus, these groups assume most of the responsibility for serving civic and community organizations. Performances will be more numerous and will contain a high degree of seasonal demands. Special outfits may be necessary and attendance outside of school hours is required. Optional opportunities available through audition are: District Chorus, All-Virginia Chorus for selected eligible juniors and seniors who have participated in the District event, and Honors Choir for eligible seniors. This course may be repeated for credit. MU1101 FΥ 05101 **BEGINNING BAND** None Course Description: This class provides an opportunity for students who have not had any prior instruction on wind or percussion instruments. INTERMEDIATE BAND MU1102 05101 FΥ Approval of instructor Course Description: This class provides an opportunity for students to continue their development of the basic skills and understanding of music fundamentals which will prepare them for participation in the school's advanced performing groups. It also provides an opportunity for students who were started on basic instruments to select one of many other instruments not considered as basic but needed for complete instrumentation in all instrumental music organizations. This group provides limited opportunity to participate in the music activities of the school. This course may be repeated for credit. 05101 **CONCERT BAND** MU1103 FY Approval of instructor

Course Description: The membership of this organization consists of the advanced performers in the school. Students in this group have demonstrated knowledge of the basic skills necessary for performance and have been recommended for membership by their instrumental music teacher. The organization will provide an opportunity for students to participate in the musical activities of their school, city, and various musical activities throughout the Tidewater area sponsored by local and state organizations. The basic fundamentals of marching techniques may be incorporated in the instructional program of the band class. Students will be provided an opportunity to participate in local and school sponsored parades. Attendance outside of school hours is required. This course may be repeated for credit. Membership in MU1104 FΥ Concert Band or Orchestra 05106 JAZZ ENSEMBLE and consent of instructor Course Description: Jazz Ensemble is a performing arts class. It is made up of students who have an interest in this American art form. The course uses appropriate musical arrangements to teach the sound and style of jazz. This course may be repeated for credit. MU1107 05106 PERCUSSION ENSEMBLE FΥ Approval of instructor This class is open to students interested in developing percussion skills. Special attention will be given to techniques on all percussion instruments as well as expanded ensemble literature. A sense of rhythm and a general knowledge of notation are necessary. This course may be repeated for credit. MU1302 05104 CONCERT ORCHESTRA FΥ 1 Approval of instructor Course Description: This orchestra in the senior high school is for the more advanced string players. In schools with more than one level of orchestra, enrollment may be limited to sophomores, juniors, and seniors. A wide range of orchestral music literature is studied and performed. Group activities include participation in school concerts, district music festival, and Regional Orchestras. Advanced members are encouraged to audition for and participate in the Strolling. Home practice and attendance outside of school hours are required. This course may be repeated for credit. One year of intermediate Strings or MU2303 05106 CHAMBER ORCHESTRA FΥ Concert Orchestra and approval of instructor Course Description: Chamber Orchestra is designed for the self-motivated string player. The teacher selectively controls membership, which is limited by instrumental balance. This is an advanced performing ensemble and students must be able to exhibit advanced technical proficiency on their instruments. These students will already exhibit motivation, self-discipline, and responsibility to the group. The Chamber Orchestra will assume many responsibilities for serving community and civic organizations. Group activities include District Festival, and Senior Regional Orchestra. Students are encouraged to study privately and to audition for and participate in the Strolling Strings. Home practice and attendance outside of school hours are required. A spring trip/competition may be scheduled. This course may be repeated for credit. Performing organizations, Approval A1603 05099 PERFORMANCE ENSEMBLE FΥ of Instructor Course Description: This course is comprised of acting, singing and dancing techniques. Choreography is staged and produced from various Broadway musicals. Membership in the Academy and A1508 01151 ORAL COMMUNICATION FΥ approval by the instructor Course Description: This course will help you refine your speaking skills. You will write and present several kinds of speeches, participate in discussion groups and debates, and practice reading aloud to communicate the thoughts and feelings of others. You will critique your own speeches as well as those of your classmates. LA1602 05099 THEATRE FY 1 None

**Course Description:** In this course, you will examine the historical framework of the theater and of selected plays; you will be involved in performance activities; you will participate in production activities to mount the plays, and you will write about varied aspects of the theater, including reviews of plays.

LA1600 05059 THE ART OF ACTING FY 1 Theatre

**Course Description:** In this course, you will acquire skills in voice, body movement, interpretation, and delivery. Because acting is the most demanding form of the performing arts, this course is designed to exercise sensitivity, concentration, illusion, voice, memory, and body movement, culminating in the presentation of scenes and various skits. In addition to other writing assignments, you will be required to keep a journal.

A1604 05056 TECHNICAL THEATRE FY 1 Theatre

**Course Description:** This course encompasses a hands-on experience in backstage rigging of lights, use of fly system, cyclorama, and set design.

# The Academy of Leadership and Military Science at Lake Taylor High School

The Academy of Leadership and Military Science is a collaborative venture between Norfolk Public Schools and a number of community, private sector, government, higher education, and military agencies. The small learning community of the Academy is comprised of cluster scheduling of core, foreign language, naval science and leadership classes, as well as year-round internships with community partners.

### **Academy Course Sequence**

GRADE 9					
NAVAL 1					
GRADE 10					
NAVAL 2					
GRADE 11					
NAVAL 3					
GRADE 12					
NAVAL 4					
The Academy of Leadership course is taken all four years as an after-school commitment.					

U.S. NAVY JROTC					
NPS Code	SCED Code	NPS Course Title	Number of Semesters	Credits Per Year	Prerequisite(s)
Ro1505	22999	ACADEMY OF LEADERSHIP AND MILITARY SCIENCE	FY	1	None
Schools ar learning co	nd a number ommunity of	The Academy of Leadership and M of community, private sector, gover the Academy is comprised of cluste well as year-round internships with	nment, higher r scheduling	r education, a of core, foreig	
Ro1501	09101	NAVAL 1	FY	1	None
The course Organizati Naval Hist	e includes in on, The Nati ory through	troduction to the NJROTC program	; Introduction an Democrac d Time, Basic	to Leadership y, Maritime G	eography, Sea power and Challenge,
Ro1502	09102	NAVAL 2	FY	1	Naval 1
the traits of deeper awa provides or Countries, Missiles an	f citizenship areness of th ngoing instru Naval Histor nd Mines, Na	and leadership in cadets, introduce ne vital importance of the world ocea action in leadership theory, Naval Or y: 1815 through 1930, Naval Ships	cadets to tec ans to the cor rientation and and Shipboa	hnical areas of tinued well-bare Career Planr d Evolutions,	eing of the United States. The course ning, Citizenship in the U.S. and Other
	09103	NAVAL 3	FY	1	Naval 2
O1503					
Course Deleadership of objective course pro	, the conceptes, the fundation of the fu	amentals of American democracy, a ng instruction in leadership and disc	intrinsic value and to expand ipline, Military al History: 193	e of good orde their understa Justice, Astr 30 through the	er and discipline in the accomplishme anding of naval <u>academic</u> subjects. T conomy, International Law and the Se e Nuclear Age, Naval Intelligence and

Course Description: Naval Science 4 focuses solely on practical leadership. The intent is to assist the senior in understanding leadership and improving their <a href="Leadership skills">Leadership skills</a> by putting them in positions of leadership, under super-vision then helping them analyze the reasons for their varying <a href="degrees">degrees</a> of success through the year. Classroom activities include seminars, reading assignments, classroom presentations, & practical work with younger cadets. The course curriculum includes instruction in theoretical and applied aspects of leadership, training, and evaluation of performance. Students will become aware of the techniques used to create motivation, develop goals and activities for a work group, and the proper ways to set a leadership example. Cadets will also apply these principles when dealing with younger cadets in the areas of military drill and inspections, athletic events, and in other school activities.

### School Board Members

Dr. Noëlle M. Gabriel Board Chair

Mr. Carlos Clanton Vice Chair

Mrs. Tanya Bhasin Member

Ms. Lauren D. Campsen Member

Mr. Rodney A. Jordan Member

Ms. Adale M. Martin Member

Ms. Christine Smith Member

#### •••••

Dr. Sharon Brydsong Acting Superintendent

Dr. Michael Cataldo Acting Deputy Superintendent of Academic Affairs

Mr. Bruce Brady
Acting Executive Director, Curriculum & Instruction

Mr. John Coleman Executive Director, Secondary Education

Mrs. April C. Harmon Senior Coordinator, School Counseling & Guidance