



## **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.

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School Year 2021-2022

Dear Norfolk Public Schools' Students,

The Course Description Guide for High School Students provides you and your parents/guardians information, including course descriptions and graduation requirements, that will assist you in selecting classes to successfully complete your high school diploma. The instruction available to you through Norfolk Public Schools is meant to challenge, inspire, and prepare you to achieve any dream you have set for yourself. Perhaps you plan to attend a community college or four-year institution, join the military, or immediately enter a workforce training program or the job market. The coursework you select will serve as a strong foundation for your future college and career goals.

Take time to carefully review the courses available to you within these pages. You are a unique individual with your own skills, talents, and interests. Consider taking electives that help you explore career possibilities. Most importantly, create an academic plan that supports your own path to achieve your personal goals while meeting the requirements for your high school graduation.

You are strongly encouraged to meet with your school counselor and your teachers to discuss your academic and career plans and goals. If you have any questions, please contact the Department of School Counseling at your school for assistance.

Sincerely,

Dr. Sharon I. Byrdsong  
Superintendent of Schools

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## **SCHOOL BOARD GOALS & PRIORITIES**

### **SCHOOL BOARD GOALS**

- Improve Student Academic Achievement and Outcomes
- Ensure Safe, Caring, and Healthy Learning Environments
- Strengthen Family and Community Engagement

### **SCHOOL BOARD PRIORITIES:**

1. Increase the percentage of schools earning full accreditation (100% fully accredited by 2022)
  2. Increase the percentage of VDOE Continuous Improvement Schools and NPS High Academic Performing Schools
  3. Decrease all subgroup achievement gaps (5% or less by 2024)
  4. Increase the On-Time graduation (85% by 2024)
  5. Provide Educational Equity, Options, and Opportunities
  6. Attract and retain highly qualified & effective staff (fully staffed at start of school)
  7. Expand Educational Planning and create a Five Year Capital Improvement Plan for facilities and technology
  8. Promote a culture of safety, high attendance rates, decreased dropout rate, positive organizational culture, and student behavior
  9. Attract and retain community partnerships and strengthen family engagements
  10. Strive to Improve Relationships and Increase Governance Capacity (School Board only)
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# **GENERAL INFORMATION**



# Graduation Requirements at a Glance

| <b>9TH GRADE CLASS OF 2018 – 2019 AND BEYOND</b>     |   |  |
|--|---|--|
| <b>Subjects</b>                                      | <b>Advanced Studies Credits</b>   | <b>Standard Credits</b>  |
| <b>English</b>                                       | 4<br>(Including one credit from English 9, 10, 11, and 12)  | 4<br>(Including one credit from English 9, 10, 11, and 12)   |
| <b>Mathematics</b>                                   | 4<br>(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<br>(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) |
| <b>History / Social Science</b>                      | 4<br>(Including two credits from World History/ Geography, 1 credit from US/VA History and 1 credit from US/VA Government)  | 3<br>(Including one credit each from World History/ Geography, US/VA History and US/VA Government)   |
| <b>Science (Laboratory)</b>                          | 4<br>(From three different science disciplines)   | 3<br>(From two different science disciplines)  |
| <b>Health &amp; Physical Education</b>               | 2<br>(Including certification in First Aid/CPR/AED)   | 2<br>(Including certification in First Aid/CPR/AED)  |
| <b>World Languages</b>                               | 3<br>(3 credits from one language or 2 from 2)  | 0  |
| <b>Fine Arts or Career &amp; Technical Education</b> | 1   | 2<br>(Credits from World Language, Fine Arts or CTE)   |
| <b>Economics and Personal Finance</b>                | 1   | 1  |
| <b>Electives</b>                                     | 3<br>(including 2 sequential electives)   | 4<br>(Including 2 sequential electives or a coherent sequence of career & technical courses)   |
| <b>Virtual Course</b>                                | 1<br>(Credit or non-credit)   | 1<br>(Credit or non-credit)  |
| <b>Fine Arts or Career and Technical Ed</b>          | 1   | 2  |
| <b>Standard Units of Credit</b>                      | <b>26</b>   | <b>22</b>  |
| <b>Verified Credits</b>                              | <b>5</b>  | <b>5</b>   |

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.

**See additional requirements for Standard and Advanced Diplomas:**



## Additional Requirements for Graduation for Advanced Studies and Standard Diploma

- **AP, Honors, IB, Dual Enrollment, Work-Based Learning, or CTE Credential** - Students shall (i) complete an Advanced Placement, honors, International Baccalaureate, or dual enrollment course; or (ii) complete a high-quality work-based learning experience, as established by Board guidance on work-based learning; or (iii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the advanced studies diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.
- **Virtual Course** - Students shall successfully complete one virtual course, which may be a non-credit-bearing course or a required or elective credit-bearing course that is offered online. Guidance on this requirement is provided in the Guidance Document Governing Certain Provisions of the SOA (8VAC20-131) (Word).
- **First Aid, CPR, and AED Training** - Students shall be trained in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED), including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement.
- **Demonstration of the 5 C's** - In accordance with the Profile of a Virginia Graduate, students shall acquire and demonstrate foundational skills in Virginia's 5 C's: critical thinking, creative thinking, collaboration, communication, and citizenship.



## Advanced Studies Diploma Course Requirements for Students Entering the Ninth Grade in 2018-2019 and Beyond

| Subject Area                         | Standard Credits | Verified Credits | Specifications  |
|--------------------------------------|------------------|------------------|---|
| English                              | 4                | 2                | N/A   |
| Mathematics                          | 4                | 1                | Courses completed to satisfy this requirement shall include at least three different course selections from among: algebra I, geometry, algebra II, or other mathematics courses above the level of algebra II. The board shall approve courses to satisfy this requirement. An approved <u>computer science</u> course credit earned by students may be considered a mathematics course credit.  |
| Laboratory Science                   | 4                | 1                | Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma and shall include interdisciplinary courses that incorporate Standards of Learning content from multiple academic areas. The board shall approve additional courses to satisfy this requirement. An approved <u>computer science</u> course credit earned by students may be considered a science course credit. |
| History and Social Sciences          | 4                | 1                | Courses completed to satisfy this requirement shall include Virginia and U.S. history, Virginia, and U.S. government, and two courses in either world history or geography or both. The board shall approve additional courses to satisfy this requirement.   |
| World Language                       | 3                | 0                | Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.  |
| Health and Physical Education        | 2                | 0                | N/A   |
| Fine Arts or Career and Technical Ed | 1                | 0                | An approved <u>computer science</u> course credit earned by students may be considered a career and technical credit.   |
| Economics & Personal Finance         | 1                | 0                | N/A   |
| Electives                            | 3                | 0                | Courses to satisfy this requirement shall include at least two sequential electives.  |
| <b>Total Credits</b>                 | <b>26</b>        | <b>5</b>         | N/A   |

### Additional Requirements for Graduation

- AP, Honors, IB, Dual Enrollment, Work-Based Learning, or CTE Credential** - Students shall (i) complete an Advanced Placement, honors, International Baccalaureate, or dual enrollment course; or (ii) complete a high-quality work-based learning experience, as established by Board guidance on work-based learning; or (iii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate

or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the advanced studies diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.

- **Virtual Course** - Students shall successfully complete one virtual course, which may be a non-credit-bearing course or a required or elective credit-bearing course that is offered online.
- **First Aid, CPR, and AED Training** - Students shall be trained in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED), including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement.
- **Demonstration of the 5 C's** – In accordance with the Profile of a Virginia Graduate, students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship.

## Electives

Fine Arts and Career and Technical Education – The Advanced Studies Diploma contains 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 Diplomas.

## Sequential Electives

**The Advanced Studies Diploma requires successful completion of two (2) sequential electives.**

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

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.

## World Language

The Advanced Studies Diploma contains a requirement for three years of one world 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 world Language credit toward an Advanced Studies Diploma; other world Languages will satisfy this requirement as well.

| Standard Diploma Course Requirements for Students Entering Ninth Grade in 2018-2019 and Beyond |                  |                  |  |
|--|------------------|------------------|--|
| Subject Area   | Standard Credits | Verified Credits | Specifications   |
| English  | 4                | 2                | N/A  |
| Mathematics  | 3                | 1                | Courses completed to satisfy this requirement shall include at least two different course selections from among: algebra I, geometry, algebra functions, and data analysis, algebra II, or other mathematics courses approved by the board to satisfy this requirement. An approved <u>computer science</u> course credit earned by students may be considered a mathematics course credit.                  |
| Laboratory Science   | 3                | 1<br>Footnote 1  | Courses completed to satisfy this requirement shall include course selection from at least two different science disciplines: earth sciences, biology, chemistry, or physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma and shall include interdisciplinary courses that incorporate Standards of Learning content from multiple academic areas. |
| History and Social Sciences  | 3                | 1<br>Footnote 1  | Courses completed to satisfy this requirement shall include Virginia and U.S. history, Virginia, and U.S. government, and one course in either world history or geography or both. The board shall approve courses to satisfy this requirement.  |
| Health and Physical Education  | 2                | 0                | N/A  |
| World Language, Fine Arts or Career and Technical Education                                    | 2                | 0                | Credits earned for this requirement shall include one credit in fine or performing arts or career and technical education. An approved <u>computer science</u> course credit earned by students may be considered a career and technical course credit.  |
| Economics & Personal Finance   | 1                | 0                | N/A  |
| Electives  | 4                | 0                | Courses to satisfy this requirement shall include at least two sequential electives.   |
| <b>Total</b>   | <b>22</b>        | <b>5</b>         | N/A  |

### Additional Requirements for Graduation

- **AP, Honors, IB, Dual Enrollment, Work-Based Learning, or CTE Credential** - Students shall (i) complete an Advanced Placement, honors, International Baccalaureate, or dual enrollment course; or (ii) complete a high- quality work-based learning experience, as established by Board guidance on work-based learning; or (iii) earn a career and technical education credential approved by the board, except when a

career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the advanced studies diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.

- **Virtual Course** - Students shall successfully complete one virtual course, which may be a non-credit-bearing course or a required or elective credit-bearing course that is offered online.
- **First Aid, CPR, and AED Training** - Students shall be trained in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED), including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement.
- **Demonstration of the 5 C's** – In accordance with the Profile of a Virginia Graduate, students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship.

#### **Footnote 1**

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 a science or history/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**

World Language, Fine Arts, and Career and Technical Education – The Standard Diploma contains a requirement for two standard units of credit in World Language, Fine Arts, or Career and Technical Education. The Standards of Accreditation do not require that courses used to satisfy the requirement of World Language, 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 Diplomas.

## **Sequential Electives**

The Standard Diploma requires successful completion of two (2) sequential electives.

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

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.

## 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.

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## Verified Credit Requirements for First Time Transfer Students

| <b>STUDENTS TRANSFERRING INTO A VIRGINIA PUBLIC SCHOOL FOR THE FIRST TIME</b> |  |  |  |
|---|--|--|--|
| <b>During 9th Grade or Beginning of 10th Grade</b>                            | <b>Must Earn</b>   | <b>Ninth Graders through 2017-2018</b> | <b>Ninth Graders in 2018-2019 and beyond</b> |
| <b>Verified Credits</b>   |  |  |  |
|   | English  | 2                                      | 2  |
|   | Mathematics  | 1                                      | 1  |
|   | Science  | 1                                      | 1  |
|   | History & Social Science   | 1                                      | 1  |
|   | Student Selected   | 1                                      | N/A  |
| <b>During 10th Grade or Beginning of 11th Grade</b>                           | <b>Must Earn</b>   | <b>Ninth Graders through 2017-2018</b> | <b>Ninth Graders in 2018-2019 and beyond</b> |
| <b>Verified Credits</b>   |  |  |  |
|   | English  | 1                                      | 2  |
|   | Mathematics  | 1                                      | 1  |
|   | Science  | 1                                      | 1  |
|   | History & Social Science   | 1                                      | 1  |
|   | Student Selected   | 0                                      | N/A  |
| <b>During 11th Grade or Beginning of 12th Grade</b>                           | <b>Must Earn</b>   | <b>Ninth Graders through 2017-2018</b> | <b>Ninth Graders in 2018-2019 and beyond</b> |
| <b>2 Verified Credits</b>   |  |  |  |
|   | English  | 1                                      | 1  |
|   | Student Selected   | 1                                      | 1  |
| <b>During 12th Grade</b>  | <b>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.</b> |  |  |

# 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. Available for all students entering high school prior to 2018-2019.

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**Board of Education's Diploma Seal for Science, Technology, Engineering, and Mathematics (STEM) Seal** – Awarded to students who earn either a Standard or Advanced Studies Diploma and satisfy all of the mathematics and science 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

- Successfully complete a 50 hour or more work-based learning opportunity in a STEM area
- Satisfy all requirements for a Career and Technology Education concentration AND
- Pass an examination in a career and technical education field that confers certification from a recognized industry, or trade or professional association
- OR pass an examination approved by the Board that confers college-level credit in a STEM field

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

- Awarded to students who entered the ninth grade for the first time in 2018-2019 and thereafter
- Satisfy the requirement to earn a Standard Diploma or an Advanced Studies Diploma
- Complete at least three different laboratory science courses and advanced level or post-secondary level laboratory science courses with a grade of "B" or higher
- Complete laboratory or field science research and present the research in a formal, juried setting
- Complete 50 hours of voluntary participation in community service or extracurricular activities that involve the application of science, such as environmental monitoring, protection, management or restoration.

**Board of Education's Biliteracy Seal** – Awarded to students who:

- Earn a Standard or Advanced Studies Diploma and
- Pass all required End-Of-Course Assessments in English reading and writing at the proficient level or higher
- Demonstrate proficiency at the intermediate mid-level or higher in one or more languages other than English through an assessment from a listing approved by the Superintendent of Public Instruction. American Sign Language qualifies as a language.

**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 [Guidance Document Governing Certain Provisions of the Regulations Establishing Standards for Accrediting Public Schools in Virginia](#).



## 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.

Interactions with teachers or appropriate school staff are structured to support daily engagement through a variety of formats, including synchronous group instruction, synchronous 1:1 instruction, email communications, assignment feedback, and engagement in a course discussion board, in addition to logging in to the VVA learning management system.

VVA secondary teachers provide daily synchronous instruction to students. Synchronous sessions are recorded for any students unable to attend, and recordings are posted in the Virtual Virginia courses. All students are responsible for the content presented during the synchronous sessions.

Monday–Thursday: Content exploration, practice, discussion, question-and-answer

Friday: Small-group and 1:1 sessions, by appointment

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](http://www.doe.virginia.gov/instruction/virtual_learning/index.shtml) or <https://www.virtualvirginia.org>)

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# 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, world 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.

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# Rigorous Extra-Curricular Programs or 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

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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 MU2304**

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.

## **NPS All City Jazz Ensemble MU2106**

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.

## Arts & Sciences After-School Enrichment Program

(formally known as the Arts & Sciences Extended Day Program)

The Arts and Sciences After School Enrichment Program provides an array of opportunities for motivated students to pursue academic or artistic interests, expand upon existing talents, and explore possible career options. Students are surveyed in their schools to determine areas of interest and teachers are invited to submit proposals for unique afterschool enrichment in STEM, the Visual and Performing arts, Leadership, or other areas that provide for students' personal and academic growth. Examples of offerings include Forensics and Debate, Future Problem Solving, Courtroom Law, Championship Chess, Robotics, Computer Coding, Word Masters, as well as various music, art, and World Language enrichment.

## 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

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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 high school years. 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:
  - 4 years of English
  - 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)
  - 2 years social science
  - 1 additional year of English, math or natural/physical science
  - 4 additional years from the areas of English, math, natural/physical science, social science, World 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
  - 3 years of English
  - 2 years of math (algebra 1 or higher)
  - 2 years of natural/physical science (including one year of lab science if your high school offers it)
  - 2 years of social science
  - 3 additional years of English, math or natural/physical science
  - 4 additional years of English, math, natural/physical science, social science, World 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](http://eligibilitycenter.org) or [NCAA.org/playcollegesports](http://NCAA.org/playcollegesports).

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## 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.
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- 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.

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# 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:

English..... (3) credits

Math..... (2) credits

### 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     | 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.)   |
| A-    | 90-92        |   |
| B+    | 87-89        | 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).  |
| B     | 83-86        |   |
| B-    | 80-82        |   |
| C+    | 77-79        | Designates the status of a student who demonstrates a satisfactory understanding and skill application in the content area (e.g., SOL and curriculum objectives for the grade/course level).  |
| C     | 73-76        |   |
| 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 skills specified in the content area (e.g., SOL and curriculum objectives for the grade/course level).                    |
| D     | 64-66        |   |
| 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 International Baccalaureate (IB) courses carry a weighted value of 0.06 because the rigorous content requires extra work. Honors credit-bearing courses carry a weighted value of 0.025.

## Honor Roll

The honor roll is a list of students who make exceptional grades each quarter. 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

Norfolk Public schools operates on yearlong scheduling. High school students earn grades in each subject they take. These grades are recorded on the credit sheet or high school transcript at the end of each academic year. 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 at the end of the school year.

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 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 at end of the year once final grades are submitted.

## 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 before 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.

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## 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.

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# **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

|  |  |   |  |   |   |
|--|--|---|--|---|---|
| <b>Photo I</b><br><b>AR1201</b> Prerequisite: None<br>(9 <sup>th</sup> graders—Intro to Art 1/2 recommended) |  | <b>INTRODUCTION TO ART</b><br>Prerequisite: None  |  |   |   |
| <b>INTRO CLASSES</b>   | <b>SEQUENTIAL UPPER LEVEL CLASSES</b>  | <b>Crafts I</b><br><b>AR1204</b><br>Prerequisite: Introduction to Art   | <b>Drawing &amp; Painting I</b><br><b>AR1202</b><br>Prerequisite: Introduction to Art  | <b>Sculpture and Ceramics I</b><br><b>AR1203</b><br>Prerequisite: Introduction to Art   | <b>Digital Media I</b><br><b>AR1205</b><br>Prerequisite: Introduction to Art<br><b>OR</b><br>Photo Foundations I  |
|  |  | <b>Crafts II</b><br><b>AR1305</b><br>Prerequisite: Crafts I   | <b>Drawing &amp; Painting II</b><br><b>AR1302</b><br>Prerequisite: Drawing & Painting I  | <b>Sculpture and Ceramics II</b><br><b>AR1304</b><br>Prerequisite: Sculpture and Ceramics I   | <b>Digital Media II</b><br><b>AR1207</b><br>Prerequisite: Digital Media I   |
|  |  | <b>Crafts III</b><br><b>AR2404</b><br>Prerequisite: Crafts II   | <b>Drawing &amp; Painting III</b><br><b>AR2402</b><br>Prerequisite: Drawing & Painting II  | <b>Sculpture and Ceramics III</b><br><b>AR2403</b><br>Prerequisite: Sculpture and Ceramics II   |   |
| <b>Advanced Art Photography</b><br>Prerequisite: Photography III   |  |   |  |   |   |
| <b>ADVANCED PLACEMENT</b>  | <b>Advanced Placement Studio Art 2-D</b><br><b>AR4501</b> Prerequisite: None<br>Recommendation of Instructor | <b>Advanced Placement Studio Art Drawing</b><br><b>AR4504</b><br>Prerequisite: None<br>Recommendation of Instructor | <b>Advanced Placement Studio Art 3-D</b><br><b>AR4502</b><br>Prerequisite: None<br>Recommendation of Instructor                          | <b>Advanced Placement Art History</b><br><b>AR4503</b><br>Prerequisite: None<br>Recommendation of Instructor                            | <b>For all schools without dedicated Advanced Placement classes, students should be assigned to classes individually according to the media they are primarily using.</b> |
|  | <b>IB (Granby HS Only)</b>   | <b>Pre-IB Introduction to Art</b><br><b>AR3102</b><br>Prerequisite: Acceptance to IB program                        | <b>IB Art and Design I (Junior Year-1<sup>st</sup> year of 2-year course)</b><br><b>AR3001</b><br>Prerequisite: Acceptance to IB program | <b>IB Art and Design II (Senior Year-2<sup>nd</sup> year of 2-year course)</b><br><b>AR3002</b><br>Prerequisite: IB Art I (Junior Year) |   |

**Art Intern  
AR2506**

Prerequisite: 2 Years of Art and Permission of the Instructor

|   |       |   |    |    |
|---|-------|---|----|----|
| AR1101  | 05154 | INTRO TO ART 1 & 2                      | FY | 1  |
| Prerequisites: None   |       |   |    |    |
| 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  |
| Prerequisites: None   |       |   |    |    |
| Only 9th 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. |       |   |    |    |
| AR1301  | 05167 | PHOTOGRAPHY 3 & 4                       | FY | 1  |
| Prerequisites: Photo 3: Photo ½: Photo 4: Photo 3   |       |   |    |    |
| 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.  |       |   |    |    |
| AR2401  | 05167 | PHOTOGRAPHY 5 & 6                       | FY | 1  |
| Prerequisites: Photo 5: Photo ¾: Photo 6: Photo 5   |       |   |    |    |
| 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 |
| Prerequisites: 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  |
| Prerequisites: Draw/Paint 1: Intro. to Art ½ 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.  |       |   |    |    |
| AR1302  | 05154 | DRAWING AND PAINTING 3 & 4              | FY | 1  |
| Prerequisites: Draw/Paint 3: Draw/Paint ½: 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  |
| Prerequisites: Draw/Paint 5: Draw/Paint ¾: 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.   |       |   |    |    |
| AR4502  | 99014 | ADVANCED PLACEMENT ART STUDIO 2-D 1 & 2 | FY | 1  |
| Prerequisites: Recommendation of Instructor (especially without Draw/Paint 3/4 or Photo 5/6)  |       |   |    |    |
| 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.   |       |   |    |    |
| AR4504  | 05172 | ADVANCED PLACEMENT STUDIO ART DRAWING   | FY | 1  |
| Prerequisites: Recommendation of Instructor (especially without Draw/Paint 3/4)   |       |   |    |    |
| 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

Prerequisites: 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

Prerequisites: 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.

AR2403 05154 SCULPTURE AND CERAMICS 5 & 6 FY 1

Prerequisites: 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

Prerequisites: 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.

AR1204 05165 CRAFTS 1 & 2 FY 1

Prerequisites: Crafts 1: Intro. to Art 1/2; Crafts 2: Crafts 1

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

Prerequisites: 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

Prerequisites: 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

Prerequisites: 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.

AR1205 05169 DIGITAL MEDIA FY 1

Prerequisites: 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.

AR1207 05162 DIGITAL MEDIA 2 FY 1

Prerequisites: 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.

AR2506 05154 ART INTERN FY 1

Prerequisites: 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.

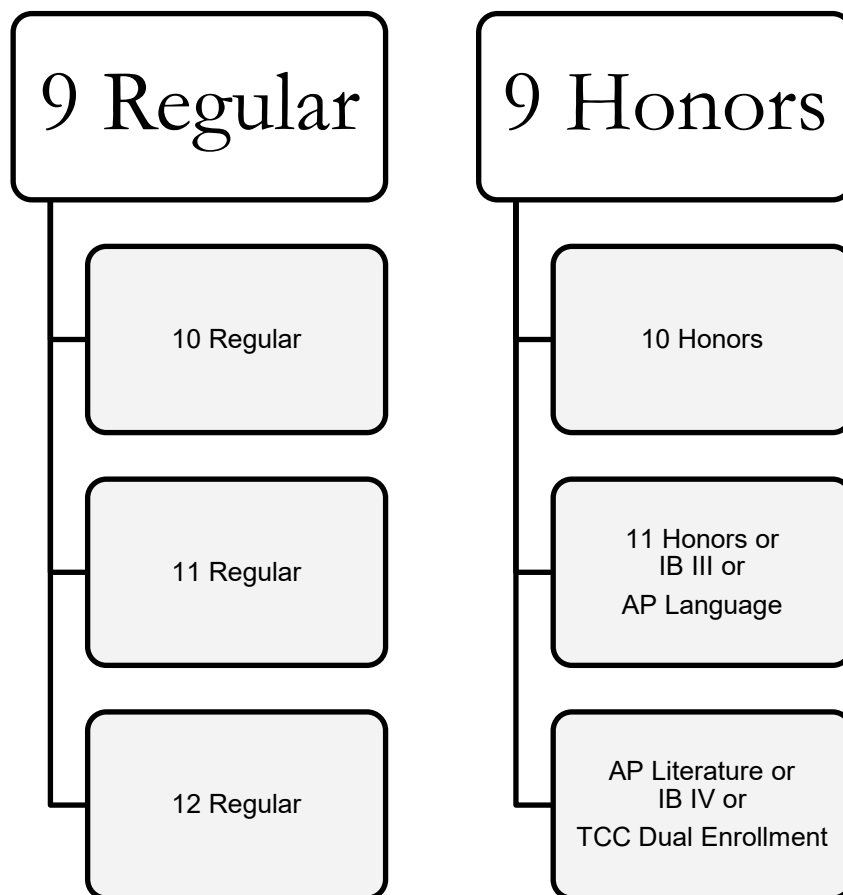


# English

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

LA1100 01001 ENGLISH 9 FY 1

Prerequisites: 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.

LA2100 01001 HONORS ENGLISH 9 FY 1

Prerequisites: 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

Prerequisites: 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

Prerequisites: 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 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.

LA1300 01003 ENGLISH 11 FY 1

Prerequisites: 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

Prerequisites: 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".

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.

LA1400 01004 ENGLISH 12 FY 1

Prerequisites: 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

Prerequisites: Honors English 9, 10, and 11

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 their 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

Prerequisites: Honors English 9, 10, and 11

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

Prerequisites: None

Course Description: In this course students will write various types of poetry and prose. They will draw on memories, emotions, experiences, and images to produce writing in various literary forms. Students will also share their writing through group interaction, oral readings, and publication.

LA1509 11101 JOURNALISTIC WRITING FY 1

Prerequisites: English 9

Course Description: Students in this course may function as the editorial-managerial staff of the school newspaper. In addition to the primary role of publishing, students will refine the techniques of basic news writing by employing different rhetorical and journalistic styles. Students will also explore journalistic ethics, First Amendment guarantees, and aspects of high school and professional journalism.

LA1507 01002 NEWS PRODUCTION FY 1

Prerequisites: None

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

Prerequisites: 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 thoughts 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

Prerequisites: None

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.

LA1505 22999 SAT PREP FY 1

Prerequisites: 10th grade status

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.

LA1506 99013 MULTIMEDIA PRODUCTION FY 1

Prerequisites: Teacher recommendation/approval

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 FY 1

Prerequisites: 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.

LA1501 11104 YEARBOOK PRODUCTION FY 1

Prerequisites: Teacher recommendation/ 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.

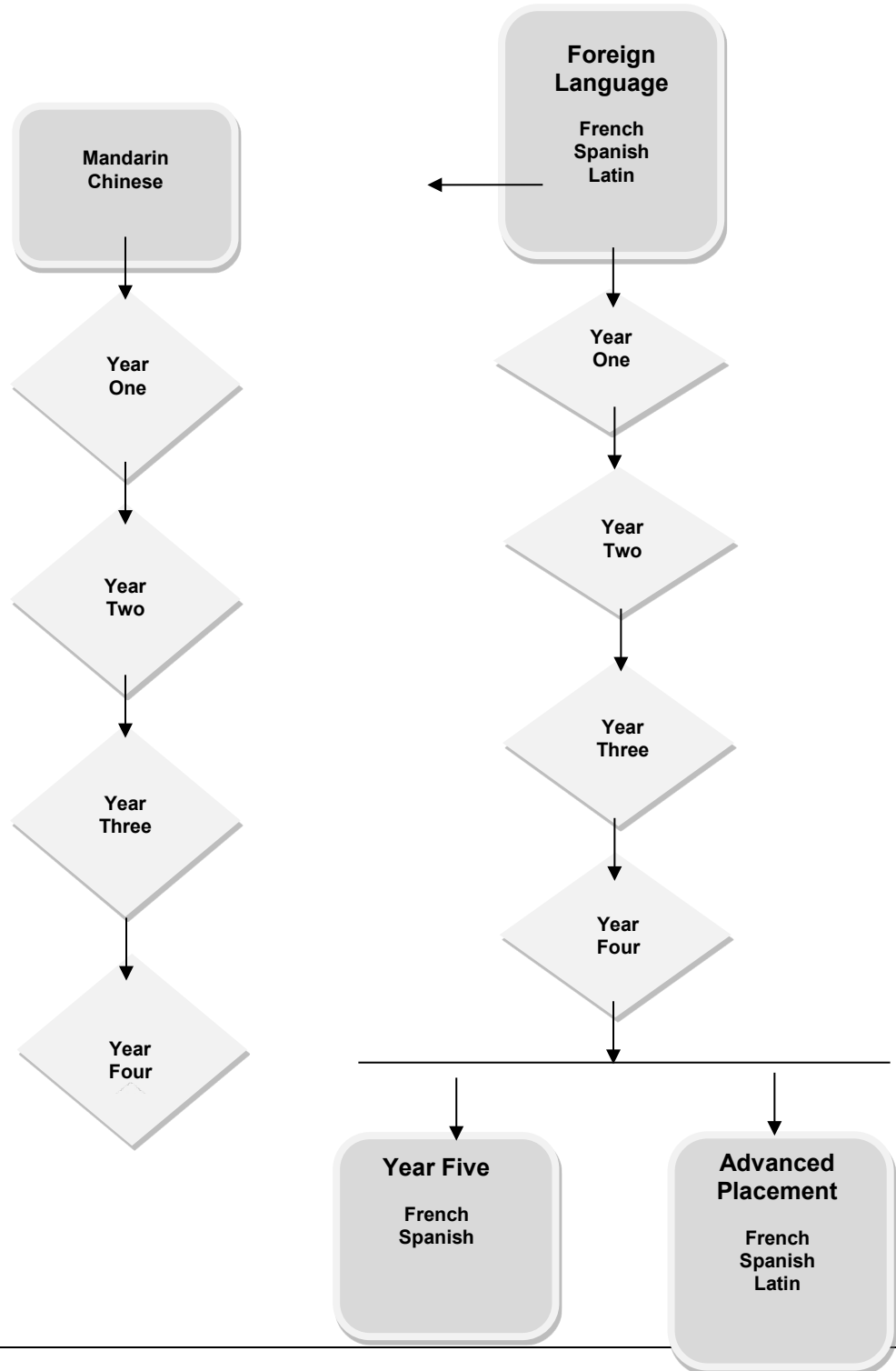




# World Language | ESL

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.

## World Language Course Sequence



## WORLD LANGUAGE

|  |       |                           |    |   |
|--|-------|---------------------------|----|---|
| FL1101   | 24102 | FRENCH YEAR 1             | FY | 1 |
| Prerequisites: None  |       |                           |    |   |
| Course Description: This course introduces the fundamentals of French by stressing the four skills of listening, speaking, reading, and writing. Students learn to manipulate important structures of the language within a basic vocabulary and idiom range. Relevant aspects of French culture are introduced as appropriate. The foundation of the French program is directed toward developing proficiency in students' use of the language.   |       |                           |    |   |
| FL1102   | 24103 | FRENCH YEAR 2             | FY | 1 |
| Prerequisites: Successful completion of FL1101   |       |                           |    |   |
| Course Description: This course continues introducing the fundamentals of French by stressing the development of the skills of listening, speaking, reading, and writing. Structures and vocabulary studied in French Year One are reviewed. Additional structures and vocabulary are introduced and mastered. Culture and customs of French speaking peoples also continue as a focus of learning. The development of proficiency in language usage remains the foundation of the French program.   |       |                           |    |   |
| FL1103   | 24104 | FRENCH YEAR 3             | FY | 1 |
| Prerequisites: Successful completion of French Year 2  |       |                           |    |   |
| Course Description: This course further develops the skills of listening, speaking, reading, and writing and reinforces the study of culture. A general review of appropriate aspects of French Year One and Two is presented. Students will expand their knowledge of idiomatic expression and vocabulary in spoken and written form. Oral expression will be expected and encouraged. The program is based on proficiency in the use of French.  |       |                           |    |   |
| FL2104   | 24105 | FRENCH YEAR 4             | FY | 1 |
| Prerequisites: Successful completion of French 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   | 24114 | Advanced Placement French | FY | 1 |
| Prerequisites: Successful completion of French Year 4 and teacher recommendation   |       |                           |    |   |
| 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   | 24342 | LATIN YEAR 1              | FY | 1 |
| Prerequisites: None  |       |                           |    |   |
| Course Description: This course introduces the fundamentals of Latin. The skills of listening and speaking are taught, but emphasis is placed on those of reading and writing. Students learn to manipulate important structures of the language within a basic vocabulary and idiom range. Source material for this introductory course centers around the customs and history of the Roman people. The foundation of the Latin program is directed toward developing concepts, skills, and positive attitudes in the areas of language usage, culture, and literature.                 |       |                           |    |   |
| FL1302   | 24343 | LATIN YEAR 2              | FY | 1 |
| Prerequisites: Successful completion of Latin Year 1   |       |                           |    |   |
| Course Description: This course continues introducing the fundamentals of Latin. Structure and vocabulary studied in Latin Year One are reviewed. The skills of reading and writing are emphasized as sentences and reading selections are used to learn more complex grammatical structures. Readings reflect the legendary history of Rome and its actual military expansion, in conjunction with social experiences. The development of concepts, skills, and positive attitudes in the areas of language usage, culture, and literature remains the foundation of the Latin program. |       |                           |    |   |
| FL1303   | 24344 | LATIN YEAR 3              | FY | 1 |
| Prerequisites: Successful completion of Latin Year 2   |       |                           |    |   |
| Course Description: This course develops Latin, focusing primarily on reading and writing. Students will develop and expand grammatical structures, and includes a general review of material from Latin One and Latin Two. Students will continue to develop concepts and skills in the areas of language usage, culture, and literature.   |       |                           |    |   |
| FL2304   | 24345 | LATIN YEAR 4              | FY | 1 |
| Prerequisites: Successful completion of Latin Year 3   |       |                           |    |   |
| 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.   |       |                           |    |   |
| FL4306   | 24355 | ADVANCED PLACEMENT LATIN  | FY | 1 |
| Prerequisites: Successful completion of Latin Year 4 and teacher recommendation.   |       |                           |    |   |
| 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   |       |                           |    |   |

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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.

FL1401 24052 SPANISH YEAR 1 FY 1

Prerequisites: None

Course Description: This course introduces the fundamentals of Spanish by stressing the four skills of listening, speaking, reading, and writing. Students learn to manipulate important structures of the language within a basic vocabulary and idiom range. Relevant aspects of Spanish culture are introduced as appropriate. The foundation of the Spanish program is directed toward developing proficiency in students' use of the language.

FL1402 24053 SPANISH YEAR 2 FY 1

Prerequisites: 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 24054 SPANISH YEAR 3 FY 1

Prerequisites: Successful completion of Spanish Year 2

Course Description: This course further develops the skills of listening, speaking, reading, and writing and reinforces the study of culture. A general review of appropriate aspects of Spanish Year One and Two is presented. Students will expand their knowledge of idiomatic expression and vocabulary in spoken and written form. Oral expression will be expected and encouraged. The program is based on proficiency in the use of Spanish.

FL2404 24055 SPANISH YEAR 4 FY 1

Prerequisites: Successful completion of Spanish 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 Spanish Year One, Two, and Three will be done according to individual needs. Self-expression in Spanish 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 Spanish program. This is an honors level class with weighted credit.

FL2405 24056 SPANISH YEAR 5 FY 1

Prerequisites: Successful completion of Spanish Year 4

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 24064 ADVANCED PLACEMENT SPANISH FY 1

Prerequisites: Successful completion of Spanish year 4 or Spanish year 5, and teacher 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.

FH1411 24057, I SPANISH FOR FLUENT SPEAKERS FY 1

Prerequisites: Spanish listening and speaking proficiency level at least an intermediate low level on ACTFL proficiency scale

Course Description: This course focuses on the development of communicative competence in reading, writing, speaking and listening and viewing, as well as on understanding Hispanic cultures and issues of identity of heritage speakers of Spanish in the United States. Students will develop an awareness and understanding of Hispanic cultures, including language variation, customs, geography, history, and current events. During this course, students will gain confidence using Spanish to express their own thoughts on social and academic themes, interact with other speakers of the language, understand oral and written messages, make oral and written presentations, reflect on language variation, and critically view and evaluate media resources and web sites. Students will be able to understand material presented on a variety of topics related to contemporary events and issues in Hispanic communities.

FH1412 24057,II SPANISH FOR FLUENT SPEAKERS FY 1

Prerequisites: Successful completion of SFS level I (above) or Spanish listening and speaking proficiency level at least an intermediate mid-level on ACTFL proficiency scale

Course Description: The second level of this course will expand upon the fundamental goals presented in level I, but will increase in complexity. See the course syllabus for specific grammar skills and language forms. The course will continue a strong focus on literacy. Students will read novels in Spanish and prepare to use strong, persuasive writing in the workplace or at the college level.

FL1501 24402 MANDARIN CHINESE YEAR 1 FY 1

Prerequisites: None

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  | 24403 | MANDARIN CHINESE YEAR 2 | FY | 1 |
| Prerequisites: Successful completion of Mandarin Chinese Year 1   |       |                         |    |   |
| Course Description: In Chinese II, students continue to develop their communicative and cultural competence by interacting orally and in writing with other speakers of the target language, understanding oral and written messages in the language, and making oral and written presentations in the language. They begin to show a greater level of accuracy when using basic language structures, and they are exposed to more complex features of the language. Students continue to focus on communicating about their immediate world and daily activities. They read material on familiar topics and write short, directed compositions. Emphasis continues to be placed on use of the target language in the classroom as exclusively as possible, as well as on use of authentic materials to learn about the Chinese language and culture(s).  |       |                         |    |   |
| FL1503  | 24404 | MANDARIN CHINESE YEAR 3 | FY | 1 |
| Prerequisites: 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  | 24405 | MANDARIN CHINESE YEAR 4 | FY | 1 |
| Prerequisites: 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  | 01008, I   | English as a World Language 1(EFL Year 1) Newcomer        | FY | 1 |
| Prerequisites: 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.  |            |   |    |   |
| FL1602  | 01008, II  | English as a World Language 2(EFL Year 2) Beginner        | FY | 1 |
| Prerequisites: 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  | 01008, III | English as a World Language 3(EFL Year 3) Intermediate FY |    | 1 |
| Prerequisites: 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. |            |   |    |   |
| FL1604  | 01008, IV  | English as a World Language 4(EFL Year 4) Advanced        | FY | 1 |
| Prerequisites: Completion of EFL Year 3 or relevant ACCESS score  |            |   |    |   |
| Course Description: 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 World Language (EFL Year 5) Advanced II      | FY | 1 |
| Prerequisites: 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 perfect 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.   |            |   |    |   |

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# 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.

PE1100 08052 HEALTH, SAFETY, AND PHYSICAL EDUCATION 9 FY 1

Prerequisites: 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.

PE1200 08201 CLASSROOM DRIVER EDUCATION AND PHYSICAL EDUCATION FY 1

Prerequisites: 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

Prerequisites: Completion of PE1200

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.

PE1300 08005 ELECTIVE - HEALTH, SAFETY, AND PHYSICAL EDUCATION 11 FY 1

Prerequisites: Successful completion of PE1100 and PE1200.

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.

PE1301 08005 PHYSICAL EDUCATION LEADERSHIP TRAINING AND PEER FACILITATOR  
(11th grade) FY 1

Prerequisites: Successful completion of PE1100 and PE1200. and teacher recommendation

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.

PE1400 08009 PHYSICAL EDUCATION LEADERSHIP TRAINING AND PEER FACILITATOR  
(12th grade) FY 1

Prerequisites: Successful completion of PE1100, PE1200, and PE1300, and teacher recommendation

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.

PE1302 08005 HEALTH, SAFETY AND PHYSICAL EDUCATION WEIGHT LIFTING FY 1

Prerequisites: Successful completion of PE1100, PE1200, and teacher recommendation

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 African American Seminar. 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

SS1100 04001 WORLD GEOGRAPHY

FY 1

Prerequisites: 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

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

Prerequisites: 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

Prerequisites: None. 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.

SS4150 04004 ADVANCED PLACEMENT HUMAN GEOGRAPHY

FY 1

Prerequisites: None. 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

Prerequisites: 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

Prerequisites: There are no prerequisites. 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

Prerequisites: There are no prerequisites. 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.

## SS1300 04101 VA/U.S. HISTORY

FY 1

Prerequisites: 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 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 meets the graduation requirement for US/VA History credit.

## SS4350 04104 ADVANCED PLACEMENT U.S. HISTORY

FY 1

Prerequisites: There are no prerequisites. Students are expected to read a college-level textbook and to possess strong writing skills.

Course Description: AP U.S. History is designed to be the equivalent of a two-semester introductory college or university U.S. history course. The course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and an understanding of content learning objectives organized around seven themes, such as identity, peopling, and America in the world. This course prepares students to take the Advanced Placement exam administered in May. This course carries weighted credit and meets the graduation requirement for US/VA History credit. An SOL end-of-course test may be given.

## SS1400 04151 GOVERNMENT

FY 1

Prerequisites: 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

## SS4450 04157 ADVANCED PLACEMENT AMERICAN GOVERNMENT AND POLITICS

FY 1

Prerequisites: There are no prerequisites. Students are expected to read a college-level textbook and to possess strong writing skills.

Course Description: AP United States Government and Politics is a college-level course that introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning assess causes and consequences of political events, and interpret data to develop evidence-based arguments. This course prepares students to take the AP exam administered in May. This course carries weighted credit and meets the graduation requirement for US/VA Government credit.

## SS4451 2445 ADVANCED PLACEMENT COMPARATIVE GOVERNMENT AND POLITICS

FY 1

Prerequisites: There are no prerequisites. Students are expected to read a college-level textbook and to possess strong writing skills.

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

## SS1301 04254 INTRODUCTION TO PSYCHOLOGY

FY 1

Prerequisites: None

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.

## SS4351 04254 ADVANCED PLACEMENT PSYCHOLOGY

FY 1

Prerequisites: There are no prerequisites. Students are expected to read a college-level textbook 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.

## SS1302 04258 INTRODUCTION TO SOCIOLOGY

FY 1

Prerequisites: None

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.

## SS4452 04203 ADVANCED PLACEMENT MICRO-MACRO ECONOMICS FY 1

Prerequisites: There are no prerequisites. Students should be able to read a college-level textbook and should possess basic mathematics and graphing skills.

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.

## SS1401 04107 SEMINAR IN AFRICAN AMERICAN STUDIES

FY 1

Prerequisites: VA/US History

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

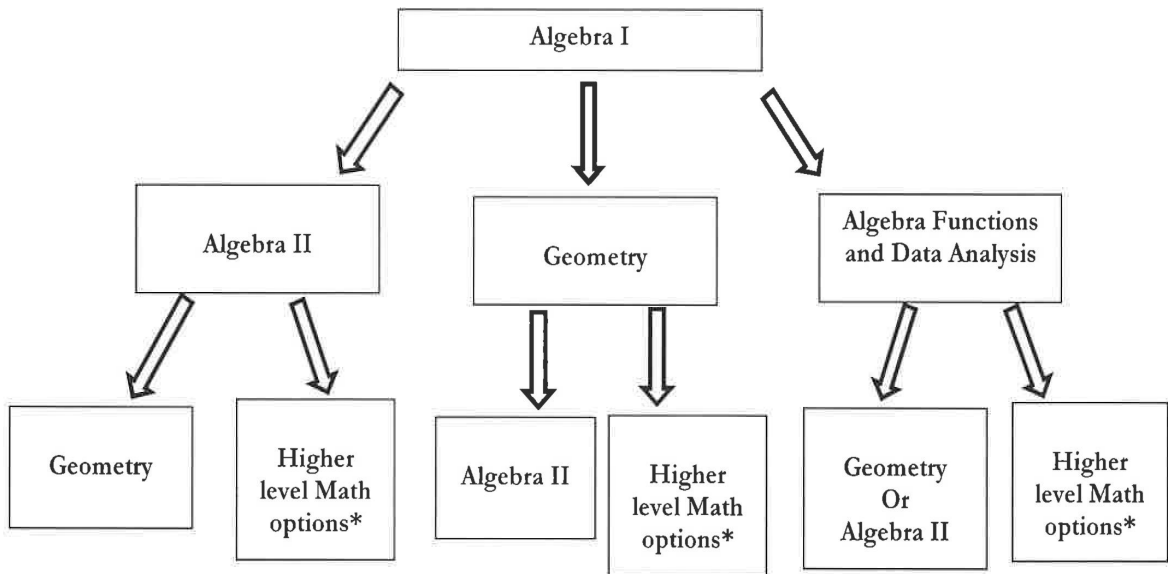
Prerequisites: There are no prerequisites. Students are expected to read a college-level textbook and to possess strong writing skills.

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 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

|   |       |                                      |                |    |   |
|---|-------|--------------------------------------|----------------|----|---|
| MA1102  | 02052 | ALGEBRA I                            |                | FY | 1 |
| Prerequisites: Pass Math 8 and score 375 or higher on Math 8 SOL.   |       |                                      |                |    |   |
| 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, simple 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 end-of-course test will be given. |       |                                      |                |    |   |
| MA1100  | 02053 | ALGEBRA I                            | 2-yr. Sequence | FY | 1 |
| Prerequisite: Math 8  |       |                                      |                |    |   |
| Course Description: This is the first part of a 2-year sequence to complete Algebra 1. Students with an IEP that expressly states the need will receive 2 credits upon completion of the 2-year sequence. Students without an IEP will receive 1 math credit at the completion of the 2-year sequence.  |       |                                      |                |    |   |
| MA1100  | 02053 | ALGEBRA I                            | 2-yr. Sequence | FY | 1 |
| Prerequisite: Math 8  |       |                                      |                |    |   |
| Course Description: This is the second part of a 2-year sequence to complete Algebra 1. Students with an IEP that expressly states the need will receive 2 credits upon completion of the 2-year sequence. Students without an IEP will receive 1 math credit at the completion of the 2-year sequence.   |       |                                      |                |    |   |
| MA1101  | 02054 | ALGEBRA I                            | 2-yr. Sequence | FY | 1 |
| Prerequisites: MA1100   |       |                                      |                |    |   |
| Course Description: This is the third part of a 2-year sequence to complete Algebra 1. Students with an IEP that expressly states the need will receive 2 credits upon completion of the 2-year sequence. Students without an IEP will receive 1 math credit at the completion of the 2-year sequence. A SOL Algebra I end-of-course test will be given.  |       |                                      |                |    |   |
| MA1200  | 02079 | GEOMETRY                             | 2-yr. Sequence | FY | 1 |
| Prerequisites: Algebra 1  |       |                                      |                |    |   |
| Course Description: This is the first part of a 2-year sequence to complete Geometry. Students with an IEP that expressly states the need will receive 2 credits upon completion of the 2-year sequence. Students without an IEP will receive 1 math credit at the completion of the 2-year sequence.   |       |                                      |                |    |   |
| MA1201  | 02079 | GEOMETRY                             | 2-yr Sequence  | FY | 1 |
| Prerequisites: MA1200   |       |                                      |                |    |   |
| Course Description: This is the third part of a 2-year sequence to complete Geometry. Students with an IEP that expressly states the need will receive 2 credits upon completion of the 2-year sequence. Students without an IEP will receive 1 math credit at the completion of the 2-year sequence.   |       |                                      |                |    |   |
| MA1202  | 02072 | GEOMETRY                             |                | FY | 1 |
| Prerequisites: Algebra I  |       |                                      |                |    |   |
| Course Description: 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 ruler to this course.  |       |                                      |                |    |   |
| MA1400  | 99001 | ALGEBRA, FUNCTIONS AND DATA ANALYSIS |                | FY | 1 |
| Prerequisites: Algebra or Geometry  |       |                                      |                |    |   |
| Course Description: This course is designed for students who have successfully completed the standards of Algebra One and Geometry. Algebra, Functions, and Data Analysis provides an opportunity for students to develop and strengthen mathematical ideas within the context of solving real-world problems. Within these real-world problems, students will investigate functions and their behaviors, systems of inequalities, probability, experimental design, and implementation and analysis of data. Students will use graphing calculators and other technology tools to analyze data, to determine regression equations, and to predict the placement of data points. Students will be immersed in the language of mathematics as they use symbols to represent and communicate their thinking throughout.   |       |                                      |                |    |   |
| MA1300  | 02106 | ALGEBRA II                           |                | FY | 1 |
| Prerequisites: Algebra I, Geometry, or AFDA   |       |                                      |                |    |   |
| Course Description: This course is the first semester of a two semester course which continues the study of formal algebra. The following topics are considered: field properties, linear functions and relations, linear inequalities, applications, matrices and determinates, and quadratic functions and their transformations. Graphing calculators and computer software will be used as primary tools for investigations, to assist in problem solving and for verifying algebraic solutions. A Standards of Learning (SOL Algebra II end-of-course test will be given.  |       |                                      |                |    |   |
| MA2300  | 02056 | HONORS ALGEBRA II                    |                | FY | 1 |
| Prerequisites: Geometry MA1201 and teacher recommendation   |       |                                      |                |    |   |
| Course Description: This course is designed to promote independent and creative thinking from the college bound student. The following topics are explored in depth by applying mathematical theory through problem solving activities: number theory, linear and quadratic relations and functions, linear inequalities, matrices and their applications, linear and quadratic transformations, and linear programming. A strong algebra and geometry background is required. Graphing calculators and computer software will be used as primary tools for investigations, to assist in problem solving and for verifying algebraic solutions.   |       |                                      |                |    |   |

|   |       |                                      |    |   |
|---|-------|--------------------------------------|----|---|
| MA1900  | 02057 | ALGEBRA III                          | FY | 1 |
| Prerequisites: Algebra II   |       |                                      |    |   |
| Course Description: This offering builds on the study of Algebra II and expands on the understanding of various function families. The course adds extensive study in trigonometry and some introductory study of math analysis. Successful completion of this course will best prepare a student for enrollment in a Pre-Calculus / Math Analysis course.  |       |                                      |    |   |
| MA1500  | 02201 | PROBABILITY AND STATISTICS           | FY | 1 |
| Prerequisites: Algebra II or Honors Algebra II  |       |                                      |    |   |
| Course Description: The extensive use of statistics in the modern world makes it essential that everyone understand the basic ideas that underlie decisions reached by statistical methods. The course is designed to acquaint the student with the theory of the mathematics of uncertainty and probability and to apply probability theory to practical and scientific problems. The student will begin to recognize the kinds of regularity that occur amid random fluctuations, associate probabilistic mathematical models with occurrences in the real world, and use the mathematical models to interpret these happenings. The student will work with statistical applications of probability to predict outcomes of related experiments, to gain insight into statistical inference and to view critically the collection, treatment and analysis of data... |       |                                      |    |   |
| MA1601  | 02102 | DISCRETE MATHEMATICS WITH STATISTICS | FY | 1 |
| Prerequisites: AFDA or Algebra II or Honors Algebra II  |       |                                      |    |   |
| Course Description: In this course, students will represent problem situations using distinct structures as finite graphs, matrices, recursive relations. Students will explore a variety of topics and techniques that arise in everyday life such as how to find the best route from one city to another, how computers store and retrieve arrangements of information on the screen; represent and solve optimization problems involving linear programming, develop and analyze algorithms.   |       |                                      |    |   |
| MA2700  | 02104 | ANALYSIS WITH TRIGONOMETRY           | FY | 1 |
| Prerequisites: Algebra II or Honors Algebra II  |       |                                      |    |   |
| 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 |
| Prerequisites: Analysis with Trigonometry (MA2700)  |       |                                      |    |   |
| Course Description: This offering continues the two-semester college level calculus course offered to those students who have completed four units of college preparatory mathematics. Mathematical topics included are applications of the indefinite and definite integral, e.g., area and volume; techniques of integration; transcendental functions; and aspects of plane analytic geometry. Optional topics include hyperbolic functions and series.  |       |                                      |    |   |
| MA4703  | 02125 | ADVANCED PLACEMENT CALCULUS BC       | FY | 1 |
| Prerequisites: Advanced Placement Calculus B  |       |                                      |    |   |
| Course Description: This first semester of a two-semester calculus course includes materials required for Advanced Placement BC syllabus as established by the College Entrance Examination Board. This course emphasizes a multi-representational approach to calculus, with concepts, results, and problems expressed geometrically, numerically, analytically, and verbally. Mathematical topics considered include parametric, polar, and vector functions and their applications; applications of derivatives; and geometric interpretation of differential equations. A graphing calculator is required.  |       |                                      |    |   |
| MA4600  | 02203 | ADVANCED PLACEMENT STATISTICS        | FY | 1 |
| Prerequisites: Honors Algebra II or Algebra II  |       |                                      |    |   |
| 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 |
| Prerequisites: Algebra II or Honors Algebra II  |       |                                      |    |   |
| 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.  |       |                                      |    |   |
| LA1505  | 22999 | SAT PREPARATION                      | FY | 1 |
| Prerequisites: 10th grade status  |       |                                      |    |   |
| Course Description: This is a one semester course which consists of two verbal segments and two math segments alternating every 4 ½ 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.   |       |                                      |    |   |

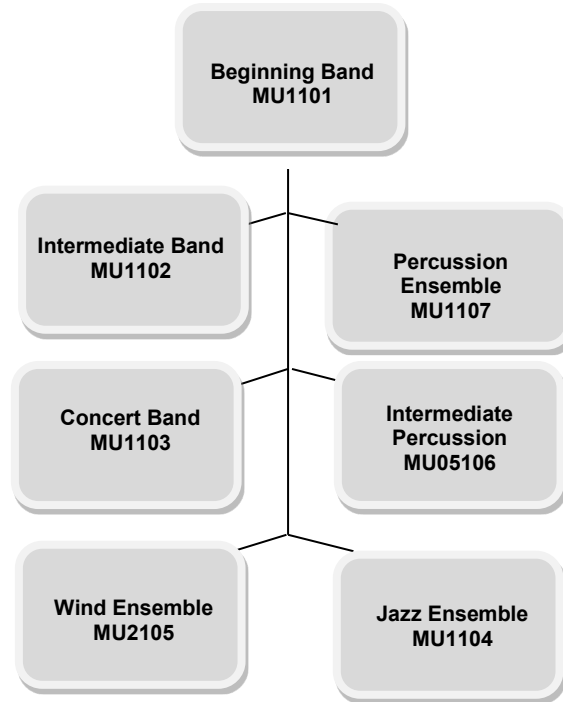
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# Music

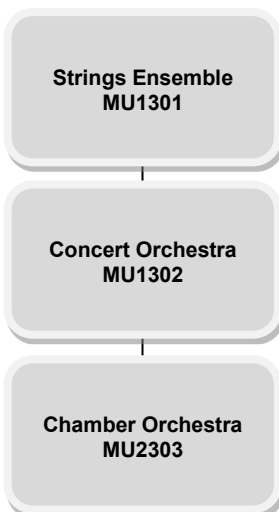
The goal of music education in NPS is to ensure that all interested students have the opportunity for meaningful musical experiences incorporating knowledge and skill for successful learning. The program is sequentially structured in order to provide high quality music instruction and cultural enrichment 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.

## Music Course Sequence

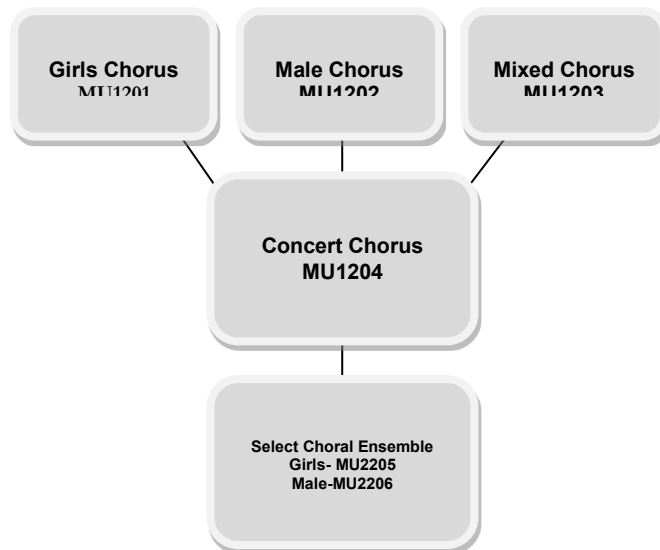
### Band Courses



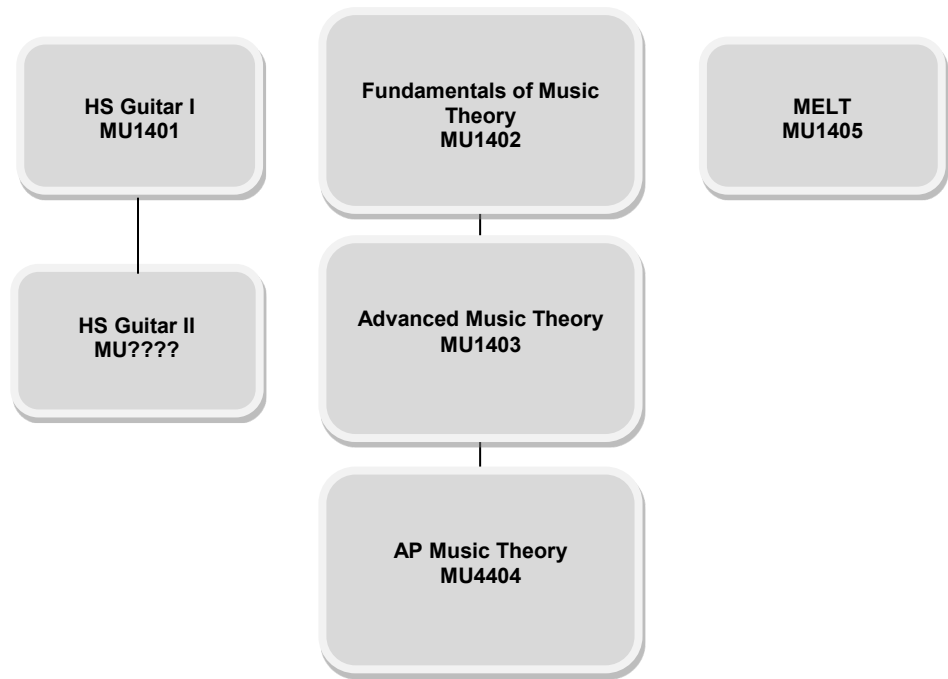
### Orchestra Courses



### Chorus Courses



## Non-Performance Courses



## MUSIC

MU1201 05110 GIRLS CHORUS FY 1

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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 department. 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 in-school 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

Prerequisite: Audition and/or 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.

GIRLS = MU2205

MALE = MU2206

MIXED=MU2207 05111 SELECT CHORAL ENSEMBLE FY 1

Prerequisite: 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

Prerequisite: 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. 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.

MU1102 05101 INTERMEDIATE BAND FY 1

Prerequisite: Middle School Band, Beginning Band or 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. 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.

MU1103 05101 CONCERT BAND FY 1

Prerequisite: Audition and/or 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 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.

MU1107 05106 PERCUSSION ENSEMBLE FY 1

Prerequisite: Audition and/or approval of instructor

Course Description: This course is open to students interested in developing percussion skills. Special attention will be given to techniques on all percussion instruments as expanded ensemble literature. A sense of rhythm and general knowledge of notation are necessary. 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.



MU1108 05106 INTERMEDIATE PERCUSSION FY

Prerequisite: Percussion Ensemble/Audition or Approval of instructor

Course Description: this class builds on the knowledge and skills acquired in the percussion ensemble. Expanded use of mallet and keyboard percussion instruments used in concert, popular and marching literature. Additional performance opportunities may be required for his ensemble. 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 meets the requirements for Fine Arts credit. This course may be repeated for credit.

MU2105 05101 WIND ENSEMBLE FY 1

Prerequisite: 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. 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.

MU1104 05106 JAZZ ENSEMBLE FY 1

Prerequisite: 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. Students who participate in this 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 Concert Band 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. 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.

MU1301 05104 STRING ENSEMBLE FY 1

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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.

MU1402 05116 FUNDAMENTALS OF MUSIC THEORY FY 1

Prerequisite: 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

Prerequisite: 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 FY 1

Prerequisite: Successful completion of Fundamentals of Music Theory or permission of instructor

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.

MU4404 05114 ADVANCED PLACEMENT MUSIC FY 1

Prerequisite: Successful completion of Fundamentals of Music Theory or permission of instructor

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

Prerequisite: 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.

MU1503 05108 INTERMEDIATE GUITAR FY 1

Prerequisite: 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

Prerequisite: 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 at different grade levels. The content of the standards, in conjunction with effective instruction, provide a platform for creating scientifically literate students. The Science Standards of Learning reflect a vertical progression of content and practices. The Standards of Learning contain content strands or topics that progress in complexity as they are studied at various grade levels in grades K-5 and are represented indirectly throughout the middle and high school courses. These strands are -



- Scientific and Engineering Practices
- Force, Motion, and Energy
- Matter
- Living Systems and Processes
- Earth and Space Systems
- Earth Resources

Six critical components for achieving science literacy are 1) Goals; 2) Investigate and Understand; 3) Nature of Science; 4) Science and Engineering Practices; 5) K-12 Safety; and 6) Instructional Technology. These six components support the Profile of a Virginia Graduate and an integrated instructional approach that incorporates science, technology, engineering, and mathematics (STEM).

## Science Course Sequence

| High School Option A |                              |                                   |                          |                          |                             |                         |                                |              |
|----------------------|------------------------------|-----------------------------------|--------------------------|--------------------------|-----------------------------|-------------------------|--------------------------------|--------------|
| Year 1               | Environmental science Bridge |                                   |                          |                          |                             |                         |                                |              |
| Year 2               | Earth science*               |                                   |                          |                          |                             |                         |                                |              |
| Year 3               | Biology*                     |                                   |                          |                          |                             |                         |                                |              |
| Year 4               | Chemistry*                   | Astronomy/<br>Meteorology         | Ecology                  | Forensic<br>science      | Oceanography                | Anatomy &<br>Physiology | AP<br>Environmental<br>science | AP Biology   |
| High School Option B |                              |                                   |                          |                          |                             |                         |                                |              |
| Year 1               | Earth science*               |                                   |                          |                          | Biology*                    |                         |                                |              |
| Year 2               | Biology*                     |                                   |                          |                          | Earth science*              |                         | Ecology                        |              |
| Year 3               | Chemistry*                   | Honors<br>Anatomy &<br>Physiology | Environmental<br>science | Ecology                  | Astronomy/<br>Meteorology   | Forensic science        |                                | Oceanography |
| Year 4               | Physics                      | AP Chemistry                      |                          | AP Biology               | AP Environmental<br>science | Chemistry*              | Advanced Astronomy             |              |
| High School Option C |                              |                                   |                          |                          |                             |                         |                                |              |
| Year 1               | Honors Earth<br>science*     | Honors Biology*                   |                          | Environmental<br>Science | Astronomy/<br>Meteorology   | Forensic science        |                                | Oceanography |
| Year 2               | Ecology                      |                                   |                          |                          | Chemistry*                  |                         |                                |              |
| Year 3               | Physics                      | AP Environmental science          |                          | AP Biology               | AP Chemistry                |                         | Anatomy & Physiology           |              |
| 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   |
| <p><b>Course Description:</b> 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.</p>  |           |                           |                     |                  |  |
| SC2100  | 03001     | HONORS EARTH SCIENCE      | 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"     |
| <p><b>Course Description:</b> 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.</p> |           |                           |                     |                  |  |
| SC1103  | 03004     | ASTRONOMY/<br>METEOROLOGY | FY                  | 1                | One unit of Earth Science  |
| <p><b>Course Description:</b> 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.</p>   |           |                           |                     |                  |  |
| SC1200  | 03051     | GENERAL BIOLOGY           | FY                  | 1                | None   |
| <p><b>Course Description:</b> Biology provides students with one unit of credit. 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. This course meets the graduation requirement for science. An SOL Biology end-of course test will be given.</p>  |           |                           |                     |                  |  |
| 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" |
| <p><b>Course Description:</b> 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</p>   |           |                           |                     |                  |  |

| SCIENCE  |           |   |                     |                  |  |
|--|-----------|---|---------------------|------------------|--|
| NPS Code   | SCED Code | NPS Course Title                            | Number of Semesters | Credits Per Year | Prerequisite(s)  |
| encouraged. This course meets the graduation requirement for science. An SOL Biology end-of course test will be given.   |           |   |                     |                  |  |
| SC4250   | 03056     | ADVANCED PLACEMENT BIOLOGY                  | FY                  | 1                | One unit of Chemistry and one unit of Biology                                |
| <p><b>Course Description:</b> Advanced Placement Biology is a college-level course designed to challenge the academically talented student and to prepare him/her to pass the Advanced Placement examination administered by the College Entrance Examination Board in May. Depending upon the test score, the student may be granted college credit and/or placement in an advanced biology course. Emphasis will be placed on the development of the student's ability to organize facts into concepts and to express these concepts in scientific composition, in preparation for the AP Biology exam. Independent student research is a requirement for the course.</p>  |           |   |                     |                  |  |
| SC2202   | 03053     | ANATOMY & PHYSIOLOGY                        | FY                  | 1                | One unit of Biology and one unit of Earth Science                            |
| <p><b>Course Description:</b> Anatomy and Physiology is a course designed for those interested in science-related fields. Anatomy and physiology is a discussion and laboratory based study of the human body. The study will range from molecules, cells, body systems, and processes. Laboratory dissection of organisms compliments course work. This course is designed for college preparation, especially for biology and health career majors.</p>  |           |   |                     |                  |  |
| SC1104   | 03005     | OCEANOGRAPHY                                | FY                  | 1                | One unit of Biology and one unit Earth Science<br>Algebra I is recommended   |
| <p><b>Course Description:</b> Oceanography is a course offering for students who have demonstrated aptitude and high interest in biology, earth science, and the marine environment. The course provides opportunities for personal growth and development while working with living organisms in the field and in a laboratory setting. Emphasis is placed on the geology and chemistry of sea water as well as other physical aspects of salt water systems. Students are required to choose topics for investigation through literature searches and personal experimentation for science competitions and presentations. The rigor of this course satisfies the requirements for the Advanced Studies Diploma.</p> |           |   |                     |                  |  |
| SC1400   | 03151     | PHYSICS                                     | FY                  | 1                | Algebra 1 and Geometry<br>Completion of or enrollment in Algebra II required |
| <p><b>Course Description:</b> Physics will introduce students to the fundamental laws of their physical environment. Mechanics, energy and matter, electricity and magnetism, heat, light, sound, and nuclear physics will be explored through laboratory investigations, various technologies, problem-solving activities and independent research. Critical thinking and process skills will be emphasized. This course meets the graduation requirement for science.</p>  |           |   |                     |                  |  |
| SC4451   | 03155     | ADVANCED PLACEMENT PHYSICS 1: Algebra-Based | FY                  | 1                | Geometry and completion of or enrollment in Algebra II                       |
| <p><b>Course Description:</b> Advanced Placement Physics 1 is equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It also introduces electric circuits. The curriculum is devised by College Board to prepare students to take the Advanced Placement Examination in May each year.</p>   |           |   |                     |                  |  |

| SCIENCE   |           |  |                     |                  |                                      |
|---|-----------|--|---------------------|------------------|--------------------------------------|
| NPS Code  | SCED Code | NPS Course Title   | Number of Semesters | Credits Per Year | Prerequisite(s)                      |
| SC4452  | 03155     | ADVANCED PLACEMENT PHYSICS 2: Algebra-Based                              | FY                  | 1                | AP Physics 1 and Math Analysis       |
| <p><b>Course Description:</b> 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.</p>  |           |  |                     |                  |                                      |
| SC4450  | 03156     | ADVANCED PLACEMENT PHYSICS C: Mechanics (Calculus-Based)                 | FY                  | 1                | AP Physics 1 and Calculus            |
| <p><b>Course Description:</b> Advanced Placement Physics C is a second level physics course which follows the curriculum devised by College Board to prepare students to take the Advanced Placement Examination in May each year. This course covers kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation.</p>   |           |  |                     |                  |                                      |
| SC4450  | 03156     | ADVANCED PLACEMENT PHYSICS C: Electricity and Magnetism (Calculus-Based) | FY                  | 1                | AP Physics C: Mechanics and Calculus |
| <p><b>Course Description:</b> Advanced Placement Physics C is a one-semester second level physics course which follows the curriculum devised by College Board to prepare students to take the Advanced Placement Examination in May each year. This course covers electrostatics; conductors; capacitors and dielectrics; electric circuits; magnetic fields; and electromagnetism.</p>  |           |  |                     |                  |                                      |
| SC1201  | 03999     | FORENSICS SCIENCE  | FY                  | 1                | Biology and Chemistry                |
| <p><b>Course Description:</b> The Forensic Science course is designed around the idea that in the real world all learning is interrelated and interdependent. This class blends all of the sciences with the core subject areas. Students will be asked to read, research, hypothesize, interview, compute and use deductive reasoning to propose crime solutions. With an ever increasing use of technology, the students will record data, draw conclusions, and formulate the best method for communicating results.</p>   |           |  |                     |                  |                                      |
| SC1101  | 03003     | ENVIRONMENTAL SCIENCE  | FY                  | 1                | None                                 |
| <p><b>Course Description:</b> Environmental Science allows students to explore the environment and consider environmental issues. It includes the mathematical, ethical, and economic concepts needed to develop a basic understanding of current environmental problems facing today's society. Students will use current technology and problem-solving techniques to gather and interpret real data. Seven cohesive units include epistemology, systems thinking, earth's systems, population dynamics, environmental quality, and social, economic, and political factors. Activities include laboratory and field research and the construction and manipulation of models. With additional technical training in the environmental field, students will be qualified to take advantage of local employment opportunities.</p> |           |  |                     |                  |                                      |
| SC1102  | 03003     | ENVIRONMENTAL SCIENCE BRIDGE   | FY                  | 1                | None                                 |

| SCIENCE   |           |  |                     |                  |  |
|---|-----------|--|---------------------|------------------|--|
| NPS Code  | SCED Code | NPS Course Title                         | Number of Semesters | Credits Per Year | Prerequisite(s)  |
| <p><b>Course Description:</b> Environmental science Bridge is designed for first-year students. The course allows students to explore the environment and consider environmental issues. It includes the mathematical, ethical, and economic concepts needed to develop a basic understanding of current environmental problems facing today's society. Students will use current technology and problem-solving techniques to gather and interpret real data. Seven cohesive units include epistemology, systems thinking, earth's systems, population dynamics, environmental quality, and social, economic, and political factors. Activities include laboratory and field research and the construction and manipulation of models. With additional technical training in the environmental field, students will be qualified to take advantage of local employment opportunities.</p>                      |           |  |                     |                  |  |
| SC4150  | 03207     | ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE | FY                  | 1                | One unit of Earth Science, one unit of Biology and one unit of Chemistry |
| <p><b>Course Description:</b> 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.</p> |           |  |                     |                  |  |
| SC1300  | 03101     | CHEMISTRY                                | FY                  | 1                | Completion of or enrollment in Algebra II                                |
| <p><b>Course Description:</b> 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.</p>  |           |  |                     |                  |  |
| SC2300  | 03102     | HONORS CHEMISTRY                         | FY                  | 1                | Completion of or enrollment in Algebra II                                |
| <p><b>Course Description:</b> 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.</p>  |           |  |                     |                  |  |
| SC4350  | 03106     | ADVANCED PLACEMENT CHEMISTRY             | FY                  | 1                | One unit of Chemistry, one unit of Biology, and one unit of Algebra II   |
| <p><b>Course Description:</b> 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.</p>   |           |  |                     |                  |  |

| SCIENCE  |           |                  |                     |                  |                     |
|--|-----------|------------------|---------------------|------------------|---------------------|
| NPS Code   | SCED Code | NPS Course Title | Number of Semesters | Credits Per Year | Prerequisite(s)     |
| SC1203   | 03063     | ECOLOGY          | FY                  | 1                | One unit of Biology |
| <p><b>Course Description:</b> Ecology is a second level biology course that surveys the relationships between people and the environment. This course emphasizes the significance of ecosystems [pollution, food webs, endangered species], food, water, air, soil, mineral, energy resources, and recycling. Laboratory investigations, computer applications, and problem-solving activities will be used to explore the essential scientific process skills and concepts related to the course.</p> |           |                  |                     |                  |                     |

## Career and Technical Education

Career and Technical Education (CTE) programs provide students with an array of rigorous and relevant educational options and opportunities to support their college, career, and civic readiness journey. All of our CTE programs/pathways, which are aligned with the National Career Clusters® Model, integrate academic and technical content while providing robust work-based learning experiences. Each program/pathway is based on national and statewide research that allows us to prepare our students for high-skill, in-demand, and high-wage postsecondary endeavors. CTE related graduation requirements 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 within a selected career pathway

## Business & Information Technology (IT) and Marketing

### BUSINESS & INFORMATION TECHNOLOGY AND MARKETING

FI1204 22210 ECONOMICS AND PERSONAL FINANCE FY 1

Prerequisite: Recommended for grades 10-12

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. Work-based learning may be an option for this course. The WISE Financial Literacy Certification is administered at the conclusion of this course.

FI1205 12104 ACCOUNTING FY 1

Prerequisite: None

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.

FI1206 12104 ADVANCED ACCOUNTING FY 1

Prerequisite: 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 1

Prerequisite: 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.

IT1212 10005 COMPUTER INFORMATION SYSTEMS FY 1

Prerequisite: None

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. Approved work-based learning is an option for this course. Recommended for grades 9-12. Certifications are offered.

IT1213 10005 ADVANCED COMPUTER INFORMATION SYSTEMS FY 1

Prerequisite: Computer 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. Approved work-based learning is an option for this course.

IT1202 10203 DESIGN, MULTIMEDIA AND WEB TECHNOLOGY FY 1

IT1202 10203 DESIGN, MULTIMEDIA AND WEB TECHNOLOGY FY 1

Prerequisite: None

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. Approved Work-based learning may be available for this course. Recommended for grades 11-12. Industry certifications are offered.

IT1203 10203 ADVANCED DESIGN, MULTIMEDIA AND WEB TECHNOLOGY FY 1

Prerequisite: Design, Multimedia, and Web Technologies, Recommended for grades 11-12

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. Approved Work-based learning may be available for this course. Recommended for grades 11-12. Certification testing is offered.

BA1208 12052 BUSINESS MANAGEMENT FY 1

Prerequisite: 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.

IT5801 10005 COMPUTER INFORMATION SYSTEMS (DUAL ENROLLMENT) FY 1

Prerequisite: Approval Required

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. Approved work-based learning may be an option for this course. Students who successfully complete this sequence (IT5801) will earn college credit through TCC. Recommended for grades 11-12. Certifications are offered.

IT5802 10005 ADVANCED COMPUTER INFORMATION SYSTEMS (DUAL ENROLLMENT) FY 1

Prerequisite: CIS (Dual Enrollment) Approval Required

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. Approved work-based learning may be an option for this course. Upon completion of this sequence (IT5802) students will be awarded college credit through TCC. Recommended for grades 11-12. Certification testing is offered.

HT1607 12163 SPORTS, ENTERTAINMENT, AND RECREATION MARKETING FY 1

Prerequisite: None

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.

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BA1200 12053 ENTREPRENEURSHIP EDUCATION FY 1

Prerequisite: None

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 10-12. Certification testing is offered.

MK1601 12164 MARKETING FY 1

Prerequisite: None

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.

MK1602 12152 ADVANCED MARKETING FY 1

Prerequisite: 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.

MK1603 12153 FASHION MARKETING FY 1

Prerequisite: None

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.

MK1604 12513 ADVANCED FASHION MARKETING FY 1

Prerequisite: 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

Prerequisite: 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

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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.

MK1605 12162 DIGITAL MARKETING FY 1

Prerequisite: 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. Work-based learning may be taken in sequence with this course. Certification testing is offered. Recommended for grades 10-12.

WB1225

WB1226

WB1229 22999 COOPERATIVE OFFICE EDUCATION

(WORK-BASED LEARNING) FY 1

Prerequisite: Enrolled in a business course

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

Prerequisite: 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

HT1401 16051 INTRODUCTION TO CULINARY ARTS FY 1

Prerequisite: 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 9-10.

HT1402 16052 CULINARY ARTS I FY 1

Prerequisite: Introduction to Culinary Arts

Course Description: The Culinary Arts I curriculum provides students with the foundations for a comprehensive knowledge of the food service industry and with opportunities to build technical skills. Students examine and practice basic rules and procedures related to kitchen and food safety, kitchen sanitation procedures, and emergency measures. Students explore the purchasing and receiving of goods and study fundamental nutritional principles and guidelines. As they explore food-preparation techniques, students practice applying these techniques to the preparation and serving of basic food products. The curriculum places a strong emphasis on science and mathematics knowledge and skills. Recommended for grades 10-12. Certifications are offered.

HT1403 16052 CULINARY ARTS II FY 1

Prerequisite: Culinary Arts I

Course Description: The Culinary Arts II curriculum provides students with continuing opportunities to acquire a comprehensive knowledge of the food service industry as well as to expand their technical skills. Students practice kitchen safety and sanitation, apply nutritional principles to food preparation and storage, perform a wide range of more advanced food-preparation techniques including 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.

HU1404 22202 NUTRITION AND WELLNESS FY 1

Prerequisite: 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. Note: This course may be offered to middle school students for high school credit if approved by the local school division. Recommended for 8th grade students.

BA1200 CULINARY ARTS ENTREPRENEURSHIP FY 1

Prerequisite: Culinary Arts 1 or Instructor approval, offered at Lake Taylor High School only

Course Description: This course introduces students to the exciting world of creating, owning and launching a culinary business. Students will learn concepts and techniques for planning an innovative culinary business and living the entrepreneurial lifestyle of running a related “start up” business. Work based learning is component of this this course. Recommended for grades 10-12. Taught only at Lake Taylor High.

# STEM (Technology Education)

## TECHNOLOGY EDUCATION

ST1307 21005 ENGINEERING EXPLORATION FY 1

Prerequisite: Algebra I (Recommended)

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

Prerequisite: 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

Prerequisite: 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. Approved work-based learning may be available. Recommended for grades 10-12. Certifications are offered.

Pending ENGINEERING CONCEPTS AND PROCESSES III FY 1

Prerequisite: Engineering Analysis and Applications II

Course Description: Engineering Concepts and Processes III is the third course of a four-course sequence that will enable students to solve real-world problems. This course focuses on building an engineering team, working with case studies, managing projects, applying logic and problem-solving skills, delivering formal proposals and presentations, and examining product and process trends. In addition, students continue to apply their engineering skills to determine whether they are good candidates for 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 FUNDAMENTALS I FY 1

Prerequisite: None

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.

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Students explore ethical issues related to computers and Internet technology and develop teamwork and communication skills that will enhance their employability. Certifications are offered. Recommended for grades 9-12

ST1305 17106 ELECTRONICS SYSTEMS I FY 1

Prerequisite: Algebra I (Recommended)

Course Description: Electronic devices are everywhere in modern life and business, and, as a result, opportunities abound for any who should master the knowledge and skills required to design, alter, repair, and construct them. This course allows students the opportunity to explore principles of electricity, apply knowledge in mathematics and science, and conduct experiments with electronics. Students solve problems using simple electrical devices and circuits and build electronic projects using DC and AC devices and circuits. Recommended for grades 9-12.

ST1306 17106 ELECTRONICS SYSTEMS II FY 1

Prerequisite: Electronics Systems I

Course Description: Students work with electronics devices, instruments, and circuits, building projects to apply theories and laws with electronic components such as resistors, capacitors, and transistors. They also study integrated circuits used in computers, amplifiers, television, and other equipment. Recommended for grades 10-12. Certifications are offered.

ST1301 21101 TECHNICAL DRAWING AND DESIGN FY 1

Prerequisite: None

Course Description: In this foundation course, students learn the basic language of technical design. They design, sketch, and make technical drawings, models, or prototypes of real design problems. The course is especially recommended for future engineering and architecture students. Recommended for grades 9-12.

ST1302 21106 ENGINEERING DRAWING AND DESIGN FY 1

Prerequisite: 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. Approved work-based learning option may be available. 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

Prerequisite: 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. Approved work-based learning option may be available. Recommended for grades 10-12. Certifications are offered.

ST2314 21006 INTRODUCTION TO ENGINEERING DESIGN

(PLTW)

(MAURY ONLY) 2 1



Prerequisite: Algebra I (Recommended)

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

Prerequisite: 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

Prerequisite: 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.

ST2316 21007 ENGINEERING DESIGN AND DEVELOPMENT (PLTW)

(MAURY ONLY) FY 1

(PLTW)

Prerequisite: Introduction to Engineering Design/ Principles of Engineering

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 team-oriented 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.

AT1320 11153 DIGITAL VISUALIZATION FY 1

Prerequisite: None

Course Description: 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 11-12.

ST1319 21015 MODELING AND SIMULATION TECHNOLOGY FY 1

Prerequisite: None

Course Description: Students will explore the use of modeling, simulation and game development software to solve real 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 grades 11-12. Certifications are offered.

ST1304 99010 COMPUTER CONTROL AND AUTOMATION FY 1

Prerequisite: None

Course Description: Students engage in a broad study of the technical aspects of computers and their applications to production, transportation, and communication systems. Topics include computer equipment and operating systems, programming, control processing information, and social/cultural impact of computers. Problem-solving activities challenge students to plan, program, and interface devices with computer systems. Learning activities include experiences with robotics and control systems, computer-aided design, and computer-aided manufacturing. Recommended for grades 9-12

ST1351 21003 TECHNOLOGY FOUNDATIONS FY 1

Prerequisite: Approval if taken at middle school level

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.

ST1321 03153 PRINCIPLES OF TECHNOLOGY I FY 1

Prerequisite: 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. Recommended for grades 10-12.

NST132203153 PRINCIPLES OF TECHNOLOGY II FY 1

Prerequisite: 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

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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. Recommended for grades 11-12. Certifications are offered.

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## Norfolk Technical Center Offerings

### Trade and Industrial Education at NTC

TR1902 20104 AUTOMOTIVE TECHNOLOGY I 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." Approved work-based learning is an available option.

TR1903 20104 AUTOMOTIVE TECHNOLOGY II FY 3

Prerequisite: Automotive Technology I

Course Description: This course represents the advanced competencies from National Automotive Technician's Education Foundation's (CNATEF's) Maintenance and Light Repair accredited program without redundancy from the prerequisite course. 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." Successful completion of this course will result in program completion and prepare students to pass the equivalent NATEF student exam and ultimately attain certification. Work-based learning option is available in this course. ASE Certification testing is are offered for eligible students.

AT1938

05163 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.

AT1939 05163 ADVERTISING DESIGN II FY 3

Prerequisite: Advertising Design I

Course Description: Students build on the theoretical principles and practical skills gained in Advertising Design I and explore advanced applications. Elements covered are design and illustration techniques, typography, photography, Web graphics and computer animation, advertising techniques, and preparation of print-ready materials. In addition, students assemble a portfolio and explore careers in advertising design. Work-based learning is available in this course. Certification tests are offered.

AT1900 20117 AUTO BODY TECHNOLOGY I COLLISION AND REPAIR FY 3

Prerequisite: None

Course Description: In the global automotive repair industry, there is a growing demand for qualified auto body technicians. In this course, students are taught non-structural analysis, damage repair, and welding. Students work with a variety of materials, using metal finishing and body filling techniques to prepare surfaces and repair panels. In addition, students practice shop safety and gain 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 post-secondary education opportunities.

TR1901 20117 AUTO BODY TECHNOLOGY II PAINTING AND REFINISHING (CERTIFIED) FY 3

Prerequisite: 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 and other requirements may be eligible to take the respective ASE/NATEF industry exam. Work-based learning option is available in this course.

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. Industry certifications and assessments are offered.

HU1927 19101 COSMETOLOGY I FY 3

Prerequisite: 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.

HU1928 19101 COSMETOLOGY II FY 3

Prerequisite: Cosmetology I

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 to sit for the related certifications/licensures.

PS1933 15051 CRIMINAL JUSTICE I FY 3

Prerequisite: Student must have a C average in English.

Course Description: Students are introduced to the principles, techniques, and practices for pursuing careers within the criminal justice services system.

PS1934 15051 CRIMINAL JUSTICE II FY 3

Prerequisite: Criminal Justice I

Student must have a C average in English.

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Course Description: Students learn the principles, techniques, and practices for pursuing careers within the criminal justice services system. Students combine classroom instruction and supervised work-based learning in an approved position with continuing supervision during the second semester of the school year. Certifications are offered.

AC1908 17102 ELECTRICITY I FY 3

Prerequisite: 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

Prerequisite: Electricity I

Course Description: Students continue to develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. They also study electrical theory and mathematical problems related to electricity, navigate the National Electrical Code Book, select and install conductors, examine lighting, communication, and power systems, and work with conduit and raceways, panel-boards, switchboards, grounding systems, and generators. Work-based learning is available in this course. Industry certification tests are offered.

ST1961 21009 ENGINEERING TECHNOLOGY I FY 3

Prerequisite: Algebra I

Course Description: This course provides instruction in basic computer programming, electronics, motor control, and feedback systems used in assembly and manufacturing settings. In addition, students learn how to program a microcontroller for robotic manipulation.

ST1962 21009 ENGINEERING TECHNOLOGY II FY 3

Prerequisite: Engineering Technology I

Course Description: This course provides advanced instruction in computer programming, electronics, motor control, and feedback systems used in assembly and manufacturing settings. In addition, students program a microcontroller for robotic manipulation. Work-based learning is available for this course. Industry certifications testing is offered

PS1931 15152 FIREFIGHTING I FY 3

Prerequisite: 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

Prerequisite: 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

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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. 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

Prerequisite: 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

Prerequisite: 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. Work-based learning is available for this course. Certifications are offered.

ST1331

ST1333 21009 NORSTAR ROBOTICS FOR THE 21ST CENTURY FY 1

Prerequisite: 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.

ST1334 21009 MECHATRONICS FY 3

Prerequisite: 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

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Prerequisite: 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.

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MF1924 13207 WELDING I FY 3

Prerequisite: 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.

MF1925 13207 WELDING II FY 3

Prerequisite: Welding I

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. Work-based learning activities are infused within this course. Industry certification and assessments are offered.

## **BUSINESS AND INFORMATION TECHNOLOGY AT NTC**

IT1971

IT1972 10109 COMPUTER NETWORK SOFTWARE OPERATIONS FY 3

Prerequisite: 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

Prerequisite: 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**

HT1988 16052 CATERING II FY 3

Prerequisite: 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. Industry certification testing offered.

HT1989 16052 CULINARY ARTS SPECIALIZATION FY 3

Prerequisite: Catering I or Culinary Arts II



Course Description: Culinary 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. Dual Enrollment option available. This course is part of the National ProStart program.

ED1993 19153 EARLY CHILDHOOD EDUCATION, AND SERVICES I FY 3

Prerequisite: 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

Prerequisite: 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. Work-based learning is available in this class. Industry certification and assessments are offered. Dual Enrollment option pending.

AT1943 22205 FASHION CAREERS I FY 3

Prerequisite: None

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.

AT1944 22205 FASHION CAREERS II FY 3

Prerequisite: Fashion Careers 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 EDUCATION AT NTC

HS1917 14054 DENTAL CAREERS I FY 3

Prerequisite: 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.

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HS1918 14054 DENTAL CAREERS II FY 3

Prerequisite: Dental Careers I, Student must have a 2.0 GPA

Course Description: Units of study include medical emergencies, coronal polishing, oral pathology, dental roentgenology, 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.

HS1922 14151 MEDICAL ASSISTANT I FY 3

Prerequisite: 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.

HS1923 14151 MEDICAL ASSISTANT II FY 3

Prerequisite: Medical Assistant I, 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 different healthcare settings.

HS1701 14062 SPORTS MEDICINE I FY 1

Prerequisite: 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. Work-based learning option available in this course. Recommended for grades 11-12. Taught only on the high school level.

HS1702 14062 SPORTS MEDICINE II FY 1

Prerequisite: 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. Work-based learning available in this course. Recommended for grades 12. Taught only on the high school level.

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HS1951 14152 PHARMACY TECHNICIAN FY 3

Prerequisite: 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 National Healthcare Association. . Students who pass the examination will hold the title of Certified Pharmacy Technician.

HS1991 14052 PRACTICAL NURSING I/ PRACTICAL NURSING II FY 3

Prerequisite: Minimum 2.25 GPA and Senior Status. Application, exam, and interview.

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. Work-based learning (clinical) are required in this class.

HS1992 14052 PRACTICAL NURSING III FY 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. Clinicals are required in this class. 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.

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CD7255 19154 GOT HEALTH FY

Prerequisite: 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

Prerequisite: Student can identify basic sight words

Course Description: This one-year course is designed to increase the student's knowledge of current events. A variety of resources are used to cover a variety of topics from national and local politics, to sports, to the stock market. The course also covers U.S. and World Geography as it relates to improving functioning in the real world.

CD7257 19154 "MY RIGHTS" FY

Prerequisite: 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 refine 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 personal goals and develop an understanding of their disability as well as their rights and responsibilities as adult citizens.

CD7258 19154 "SOCIAL CONNECTIONS" FY

Prerequisite: 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 diagnostic and instructional scenarios. Students will practice simulated real life activities to problem solve an array of leisure and job-related situations.

CD7259 19154 MOBILITY "COMMUNITY EXPLORATIONS" FY

Prerequisite: 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.

Course Description: The semester course is designed to provide training for certain students to develop the knowledge and skills necessary for independent mobility. (This course is repeatable.)

CD7260 19154 "GETTING SOCIAL" FY

Prerequisite: NONE

Course Description: This year-long course is designed to introduce students to appropriate social skills in a variety of settings. Topics for consideration include introductions, social interactions, personal hygiene, telephone and Internet etiquette, table manners, behavior appropriate for ladies and gentleman, conduct in public places, and social skills for the workplace.

CD7241 19154 UNLOCKING LITERATUREFY

Prerequisite: Failure to pass 8th grade English SOLs due to deficits in decoding skills.

Course Description: This year-long course is designed to address the needs of certain students with mild disabilities who need to develop an understanding of our rule based language system and lack basic decoding skills. A highly structured, multi-sensory approach to reading will be used.

CD7242 19154 WRITING THAT MAKES SENSE FY

Prerequisite: NONE

Course Description: This course is designed to reinforce grammar and mechanics (spelling, punctuation, capitalization) in writing and introduce an organized method of writing that is research based.

The student will learn how to break down the writing process into logical steps using graphic organizers.

CD7243 19154 BASIC COMPUTER LITERACY I FY

Students are able to identify alpha-numeric keyboard.

Course Description: This yearlong course will provide students with essential computer knowledge and skills including how to use the mouse, work with Windows, understand key functions, computer concepts and terminology, manipulate files, use the Internet and e-mail and perform data entry level tasks..

CD7244 19154 BASIC COMPUTER LITERACY II FY

Prerequisite: 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

Prerequisite: Ability to perform simple addition and subtraction

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.

CD7247 19154 NUMBERS FY

Prerequisite: 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

Prerequisite: Students can write/verbalize a five-sentence paragraph.

Course Description: This year-long developmental course focuses on grammar, usage, vocabulary, composition and writing skills. The course progresses to critical thinking skills such as identifying main idea, citing evidence to support point of view and drawing valid conclusions from data.

CD7249 19154 MONEY, MONEY, MONEY FY

Prerequisite: Students can perform basic operations with or without a calculator.

Course Description: This is a year-long course that is designed to familiarize students with a large variety of resources and tools used for personal finance. The course examines, budgeting, wise spending, avoiding frauds/swindlers, consumer protection, financial planning, and making purchases as well as other issues affecting personal financial decision-making.

CD7252 19154 ON MY OWN FY

Prerequisite: NONE

Course Description: This year-long course is designed to enable the student to develop skills required for functional independence in the home, school and community.

CD7261 19154 PRE-EMPLOYMENT FY

Prerequisite: NONE

Course Description: This course is designed for students to be introduced to the world of work. Students will receive instruction to develop soft skills and explore/investigate career options and the steps necessary for preparing for entry into the workforce based upon the Virginia's 21 Workplace Readiness Skills.

CD7262 19154 WORK EXPERIENCE FY

Prerequisite: Pre-Employment Course

Course Description: This year-long course will introduce students to the workforce through work-based learning activities including job shadows, service learning and unpaid internships within the school and community.

CD7263 19154 READY, SET, WORK FY

Prerequisite: Pre-Employment Course

Course Description: This one-year course prepares students for employment by focusing on problem solving, teamwork and self-management. Students will develop a resume and cover letter, interview techniques, work ethics, professional image, interpersonal skills, and business etiquette in the workplace.

CD7264 19154 BEYOND EMPLOYMENT FY

Prerequisite: Ready, Set, Work; Work Experience

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.

T97 SUPPORTED EMPLOYMENT FY 1.5

Prerequisite: 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

Prerequisite: 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 Career Development Course 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.

## 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.

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## ACADEMY OF LEADERSHIP AND MILITARY SCIENCE (LAKE TAYLOR HS) FY 1

Prerequisite: None

Course Description: 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, world Language, naval science and leadership classes, as well as year-round internships with community partners.

RO1505 22999 NAVAL 1 FY 1

Prerequisite: none

Course Description: Naval Science 1 introduces students to the meaning of citizenship, the elements of leadership, and the value of scholarship in attaining life goals; engender a sound appreciation for the heritage and traditions of America, with recognition that the historically significant role of sea power will be important in America's future; develop in each cadet a growing sense of pride in his/her organization, associates, and self. These elements are pursued at the fundamental level. The course includes introduction to the NJROTC program; Introduction to Leadership, Naval Ships; Mission and Organization, The Nation, Navy and the People in American Democracy, Maritime Geography, Seapower and Challenge, Naval History through 1815, Introduction to Navigation and Time, Basic Seamanship, Oceanography, Health Education, First Aid, and Drugs, Alcohol and Tobacco Abuse Prevention.

RO1501 09101 NAVAL 2 FY 1

Prerequisite: Naval 1

Course Description: Naval Science 2 builds on the general introduction provided in Naval Science 1, to further develop the traits of citizenship and leadership in cadets, introduce cadets to technical areas of naval science, and engender a deeper awareness of the vital importance of the world oceans to the continued well-being of the United States. The course provides ongoing instruction in leadership theory, Naval Orientation and Career Planning, Citizenship in the U.S. and Other Countries, Naval History: 1815 through 1930, Naval Ships and Shipboard Evolutions, Naval Weapons: Gunnery, Guided Missiles and Mines, Navigation Fundamentals and Rules of the Road, Small Boat Seamanship, Meteorology and Weather, and Survival Training and Orienteering.

RO1503 09102 NAVAL 3 FY 1

Prerequisite: Naval 2

Course Description: Naval Science 3 broadens the understanding 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

Prerequisite: 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.

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# International Baccalaureate Diploma Program at Granby High School

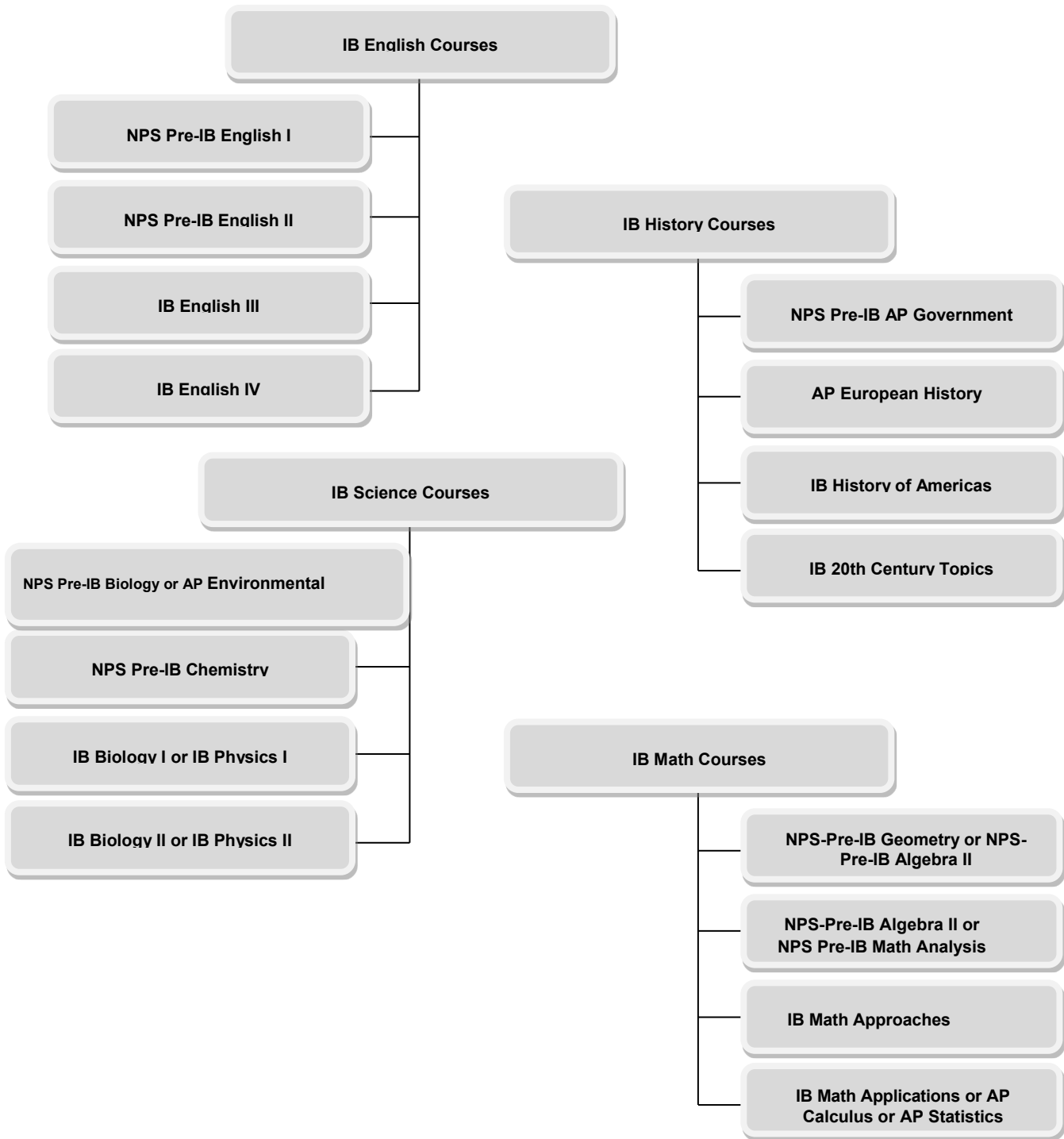
[Granby High School](#) is a member of the [International Baccalaureate Organization](#) (IBO) and has been authorized to offer the International Baccalaureate Diploma Program since 1998. This program is a two-year “academically challenging and balanced program” intended for juniors and seniors who desire 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).

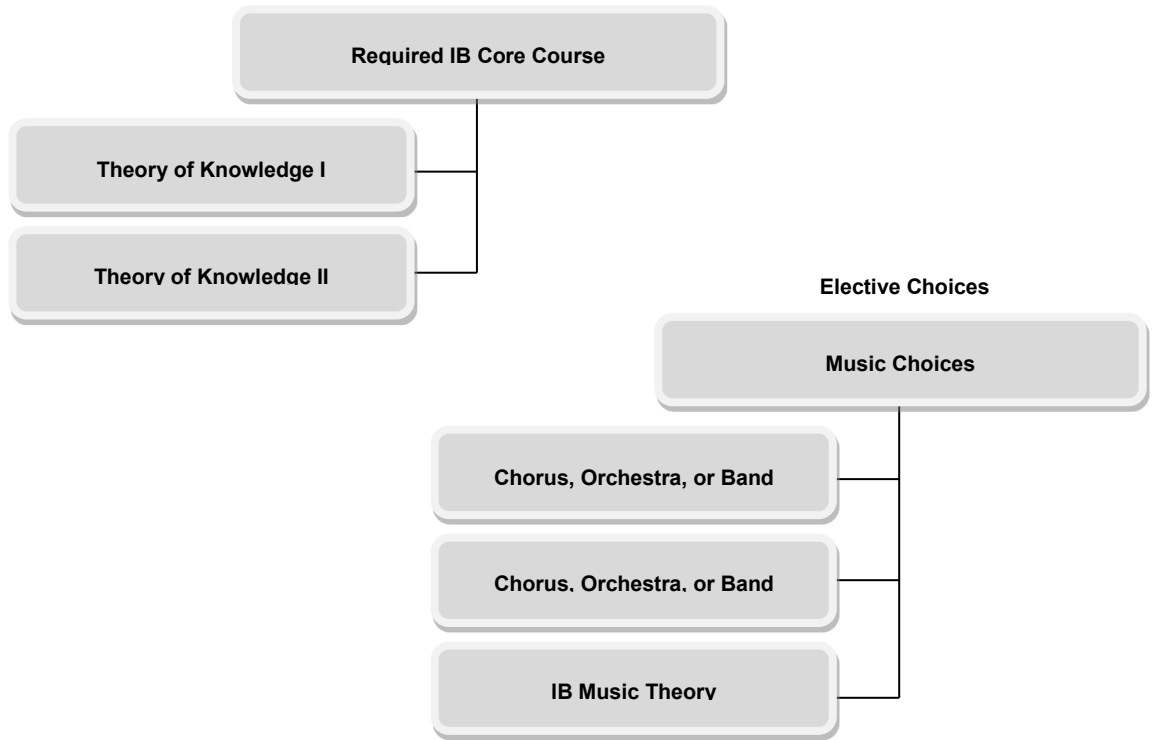
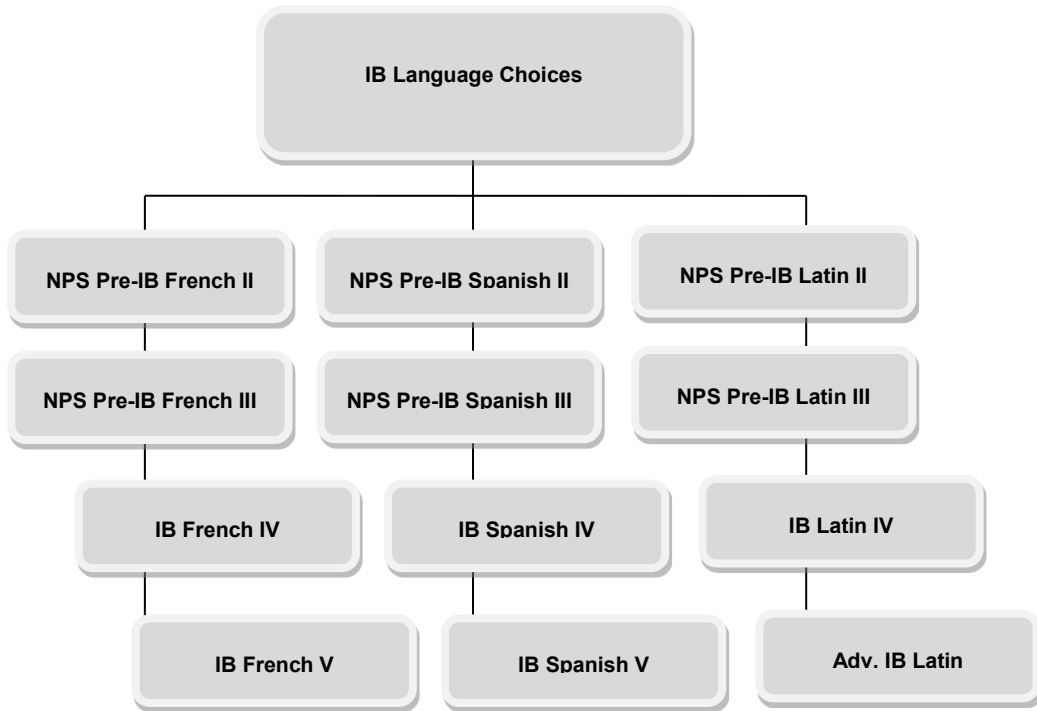
Students apply for our preparation program as rising 9th graders through their current middle school and our application deadline is always in February.

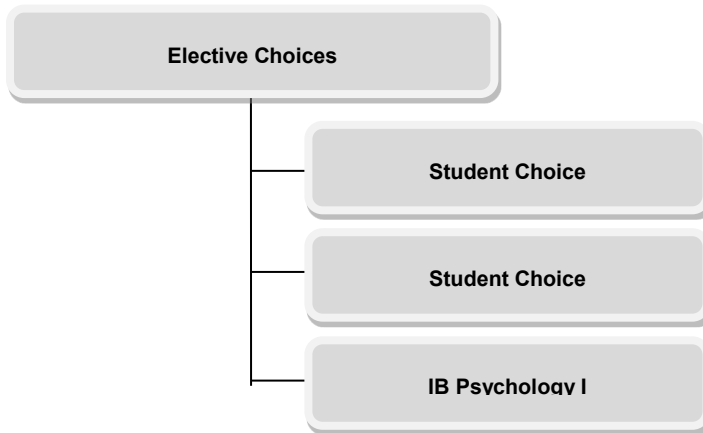
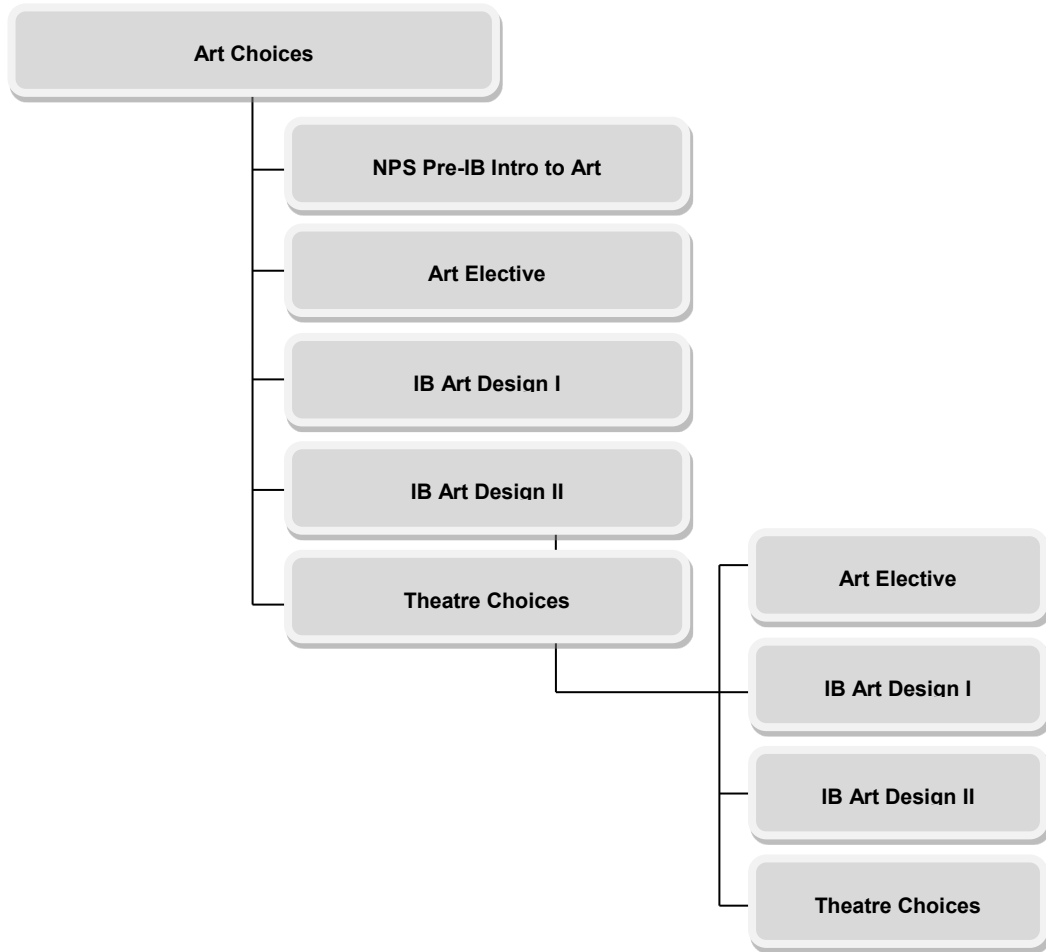
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# IB Course Flow Chart







## INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM

LA3110 01001 NPS PRE-IB ENGLISH I FY 1

Prerequisite: Acceptance into the IB

Course Description: This course helps students improve their reading, writing, and critical thinking skills. Students read literature from a variety of cultures and all genres, write expository papers using a variety of methods of development, write research-based information papers, participate in large and small group discussions, and improve oral communication skills through dramatic and oral presentations. Using problem-solving techniques, students complete independent study projects.

LA8210 01002 NPS PRE-IB/AP ENGLISH LANGUAGE FY 1

Prerequisite: NPS Pre-IB English I

Course Description: In this course the students trace the development of American Literature from 1607 to the present, reading representative works of each period and works from other countries and cultures with similar themes or styles. Students extend their knowledge of expository writing to the formal essay and argumentative writing as well as informal essays. They continue to refine their knowledge of sentence structure through the study of verbal, nominative absolutes, pronoun reference, and parallel structure. This course is aligned with the AP English Language & Composition course.

LA3310 01007 IB ENGLISH III FY 1

Prerequisite: NPS Pre-IB English II

Course Description: This course is the first year of a two-year sequence designed to prepare students for both the oral and written portions of the Language A1 Higher Level Examination. The study of world literature offers students a diversified knowledge of their own and other societies. Students acquire skills in critical thinking, oral and written discourse, and in analyzing language and literature for linguistic structure, cultural awareness and heightened appreciation.

LA3410 01007 IB ENGLISH IV FY 1

Prerequisite: IB English III

Course Description: The IB English course is designed to prepare students for both the oral and written portions of the IB Language A1 Higher Level Examination as well as the AP English Literature Exam. Students continue to refine skills acquired in IB English III. These skills include critical thinking, analyzing language and literature for linguistic structure, cultural awareness, and heightened appreciation. This course carries weighted credit.

FL3112 06122 NPS PRE-IB FRENCH II FY 1

Prerequisite: Acceptance into the IB Program

Course Description: Students continue to develop the fundamental skills of French through listening, speaking, reading and writing activities. Previously learned structures and vocabulary are reviewed and reinforced. Additional structures and vocabulary are introduced with continued emphasis on thematic topics. Students acquire a linguistic and cultural competence of French which provides a multicultural awareness of and sensitivity to French speaking peoples.

FL3113 06123 NPS PRE-IB FRENCH III FY 1

Prerequisite: NPS Pre-IB French II

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 activities. Text handling through use of authentic documents and regalia is stressed.

FL3114 06124 IB FRENCH IV FY 1

Prerequisite: NPS Pre-IB French III

Course Description: This course provides students extensive practice to perfect skills of French through listening, reading, writing and speaking in a variety of activities. Intensive treatment of text handling through use of authentic documents and regalia is a primary focus to prepare students for the IB French Standard Level Examination. Additionally, as preparation for the internal assessment portion of the IB exam, students record numerous speaking activities, both prepared and spontaneous. Further, students receive extensive practice with writing activities to prepare for the written portion of the IB exam. Students acquire a linguistic and cultural competence of French which provides a multi-cultural awareness of and sensitivity to Francophone peoples. This course carries weighted credit.

FL3412 06102 NPS PRE-IB SPANISH II FY 1

Prerequisite: Acceptance into the IB Program

Course Description: Students continue to develop the fundamental skills of Spanish through listening, speaking, reading and writing activities. Previously learned structures and vocabulary are reviewed and reinforced. Additional structures and vocabulary are introduced with continued emphasis on thematic topics. Students acquire a linguistic and cultural competence of Spanish which provides a multicultural awareness of and sensitivity to Spanish speaking peoples.

FL3413 06103 NPS PRE-IB SPANISH III FY 1

Prerequisite: NPS Pre-IB Spanish II

Course Description: This course provides students considerable practice in developing fundamentals skills of Spanish 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 activities. Text handling through use of authentic documents and regalia is stressed.

FL3414 06104 IIB SPANISH IV FY 1

Prerequisite: NPS Pre- IB Spanish III

Course Description: This course provides students extensive practice to perfect skills of Spanish through listening, reading, writing and speaking in a variety of activities. Intensive treatment of text handling through use of authentic documents and regalia is a primary focus to prepare students for the IB Spanish Standard Level Examination. Additionally, as preparation for the internal assessment portion of the IB exam, students record numerous speaking activities, both prepared and spontaneous, on cassette. Further, students receive extensive practice with writing activities to prepare for the written portion of the IB exam. Students acquire a linguistic and cultural competence of Spanish which provides a multi-cultural awareness of and sensitivity to Spanish speaking peoples. This course carries weighted credit.

FL3415 06111 IB SPANISH V FY 1

Prerequisite: IB Spanish IV

Course Description: This course continues the extensive practice to perfect skills of Spanish through listening, reading, writing and speaking in a variety of activities. The focus of this year of study encompasses all activities of IB Spanish IV and is designed to allow students to gain the confidence needed to complete the b Spanish Standard Level Examination. A continued emphasis on the thematic topics of exploring change, exploring groups, and exploring leisure is stressed in the areas of the four basic skills. Students gain an appreciation for and a cultural competence of Spanish speaking peoples. This course carries weighted credit.

FL3313 06303 NPS PRE-IB LATIN 3-1/3-2 FY 1

Prerequisite: Latin II

Course Description: IB Latin includes the study of advanced Latin grammar, a close textual study of Cicero's In Catilinam. historical background for the First Century B.C. and an introduction to Roman rhetoric.

FL3314 06304 NPS PRE-IB LATIN 4-1/4-2 FY 1

Prerequisite: NPS Pre-IB Latin III

Course Description: IB Latin IV focuses on the literature of Virgil and Ovid. The students read Aeneid 4 and extensive selections from Ovid's Metamorphoses and his other works. They study literary devices and historical background in addition to continuing a review of pertinent grammar and vocabulary. This course is designed to prepare students for the IB Latin Standard Level Examination and carries weighted credit.

FL3315 06359 ADVANCED IB LATIN 1/2 FY 1

Prerequisite: IB Latin 4-1/4-2

Course Description: Advanced IB Latin 1 & 2 continues a focus on the literature of Virgil and Ovid. The students read a variety of selections to enhance their understanding of Latin. They study literary devices and historical background in addition to continuing a review of pertinent grammar and vocabulary. Students complete the required assessments for the IB Diploma. This course is designed to prepare students for the IB Latin Standard Level Examination and carries weighted credit.

SS8110 04151 NPS PRE-IB/AP GOVERNMENT FY 1

Prerequisite: Recommendation of the Instructor

Course Description: This course is designed to give students both a critical perspective on politics & government in the United States and Virginia. To help students gain knowledge of the world's diverse political structures and practices. Students study general concepts used to interpret American politics, analyze specific case studies, and the historical roots of governments other than selected countries. Students use primary sources to conduct in-depth research, and present the results. Designed to prepare the students for the AP Exam in American government, this course carries weighted credit.

SS3310 04054 IB HISTORY OF THE AMERICAS FY 1

Prerequisite: NPS Pre-IB /AP Government

Course Description: IB History of the Americas is a college level United States history course integrated with key topics of Latin American history. Students analyze the significance of historical events and learn to express their ideas clearly and concisely in verbal and written form. Students analyze and interpret primary and secondary sources. This course is designed to prepare students for the AP Exam in American history and carries weighted credit.

SS3410 04106 IB TWENTIETH CENTURY WORLD TOPICS FY 1

Prerequisite: IB History of the Americas

Course Description: This course provides to students an opportunity to examine 20th century topics from an international, holistic approach and to evaluate the reliability of historical evidence. During the first semester students examine the concepts of nationalism, imperialism, communism, fascism, and World War I. The second semester focuses on the post World War I historical events. IB Twentieth Century World Topics and its prerequisite, IB History of the Americas, comprise the sequence designed to prepare the students for the IB History Higher Level Examination. This course carries weighted credit.

SC3210 03051 NPS PRE-IB BIOLOGY FY 1

Prerequisite: Acceptance into the IB Program

Course Description: This course is designed as an entry-level course for those students who wish to take IB Biology I and II 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)

SC3310 03101 NPS PRE-IB CHEMISTRY FY 1

Prerequisite: Acceptance into the IB Program

Course Description: Pre-IB Chemistry is a rigorous course designed to prepare students for IB Biology I and II. The topics range from the basics of atomic models to the areas of nuclear, organic, and environmental chemistry. In addition, laboratory techniques, mathematical applications and problem solving skills are developed. An independent Scientific Research Investigation (SRI) is required.

SC3211 03057 IB BIOLOGY I FY 1

Prerequisite: NPS Pre-IB Chemistry

Course Description: IB Biology I is the first segment of a two-year biology sequence designed to prepare students for the IB Biology Higher Level Examination. The curriculum concentrates on the biochemical and cellular basis of life, and the origins and adaptations of microorganisms. The approach to this course is investigatory, emphasizing hands-on experiences, independent research, and higher-level thinking skills.

SC3212 03057 IB BIOLOGY II FY 1

Prerequisite: IB Biology I

Course Description: IB Biology II continues the two-year biology sequence designed to prepare students for the IB Biology Higher Level Examination as well as the optional AP Biology exam. The curriculum concentrates on structure and function in plants and animals, evolution of plants and animals, ecology and human biology. The approach to this course is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skills. This course carries weighted credit.

SC3411 03157 IB PHYSICS I FY 1

Prerequisite: 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 Higher Level Examination. Students analyze the concepts which explain the features of the natural world primarily in terms of the interactions between matter and energy. They conceptualize physical principles and make technical applications. The approach to this course is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skills.

SC3412 03157 IB PHYSICS II FY 1

Prerequisite: IB Physics I

Course Description: This course continues and completes the study of the IB Physics curriculum. The approach to this course is investigatory, emphasizing hands-on experiences, independent research, and higher level thinking skills. The two IB Physics courses are designed to prepare students for the IB Physics Higher Level Examination and/or AP Physics (optional). This course carries weighted credit.

MA3204 02072 NPS PRE-IB GEOMETRY FY 1

Prerequisite: Acceptance into the IB

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.

MA2301 02106 NPS PRE-IB HONORS ALGEBRA FY 1

Prerequisite: 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

Prerequisite: NPS Pre-IB Algebra II with Trigonometry

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  
 Prerequisite: 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 02134 IB MATH SL 1-1/1-2 FY 1  
 Prerequisite: 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  
 Prerequisite: NONE  
 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  
 Prerequisite: 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.
- AR3002 05154 IB ART/DESIGN 2-1/2-1 FY 1  
 Prerequisite: 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 ARTS1-1/1-2 2 .5  
 Prerequisite: 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 ARTS2-1/2-2 2 .5  
 Prerequisite: 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  
 Prerequisite: 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.
- SS3311 04257 IB PSYCHOLOGY FY 1  
 Prerequisite: NONE  
 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
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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

Prerequisite: 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.

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# 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

|  |
|--|
| <b>GRADE 9</b>   |
| BIOLOGY WITH MEDICAL APPLICATIONS  |
| ACCELERATED HEALTH AND PHYSICAL EDUCATION  |
| <b>GRADE 10</b>  |
| CHEMISTRY WITH MEDICAL APPLICATIONS  |
| <b>GRADE 11</b>  |
| ANATOMY AND PHYSIOLOGY   |
| <b>GRADE 12</b>  |
| BIOETHICS<br>FORENSIC SCIENCE<br>EMERGENCY MEDICAL RESPONDERS<br>SPORTS MEDICINE |

## MEDICAL AND HEALTH SPECIALTIES PROGRAM

SC2220 03051 BIOLOGY WITH MEDICAL APPLICATIONS FY 1 Program students only

Course Description: This course is the first in the sequence of required science classes. Included in the curriculum will be cell theory, biochemical 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.

PE1101 08052 ACCELERATED HEALTH & PHYSICAL EDUCATION 9 FY 1 Program students only

Course Description: All ninth grade MHSP students are required to take the specially designed Accelerated Health component integrated into PE 9. Essentially, this course is an introduction to anatomy and will provide students an overview of the human body. Special focus will include medical applications as they pertain to the human body systems, including the integumentary system, the cardiovascular system, the respiratory system, the skeletal system, the muscular system and the reproductive system. Specific diseases, conditions and treatments as they relate to each of these areas will be covered. Varied enrichment opportunities will enhance the career awareness of the students.

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

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.

SC2221 03053 ANATOMY/  
PHYSIOLOGY FY 1 Junior level program students only. ChemMed required

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.

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

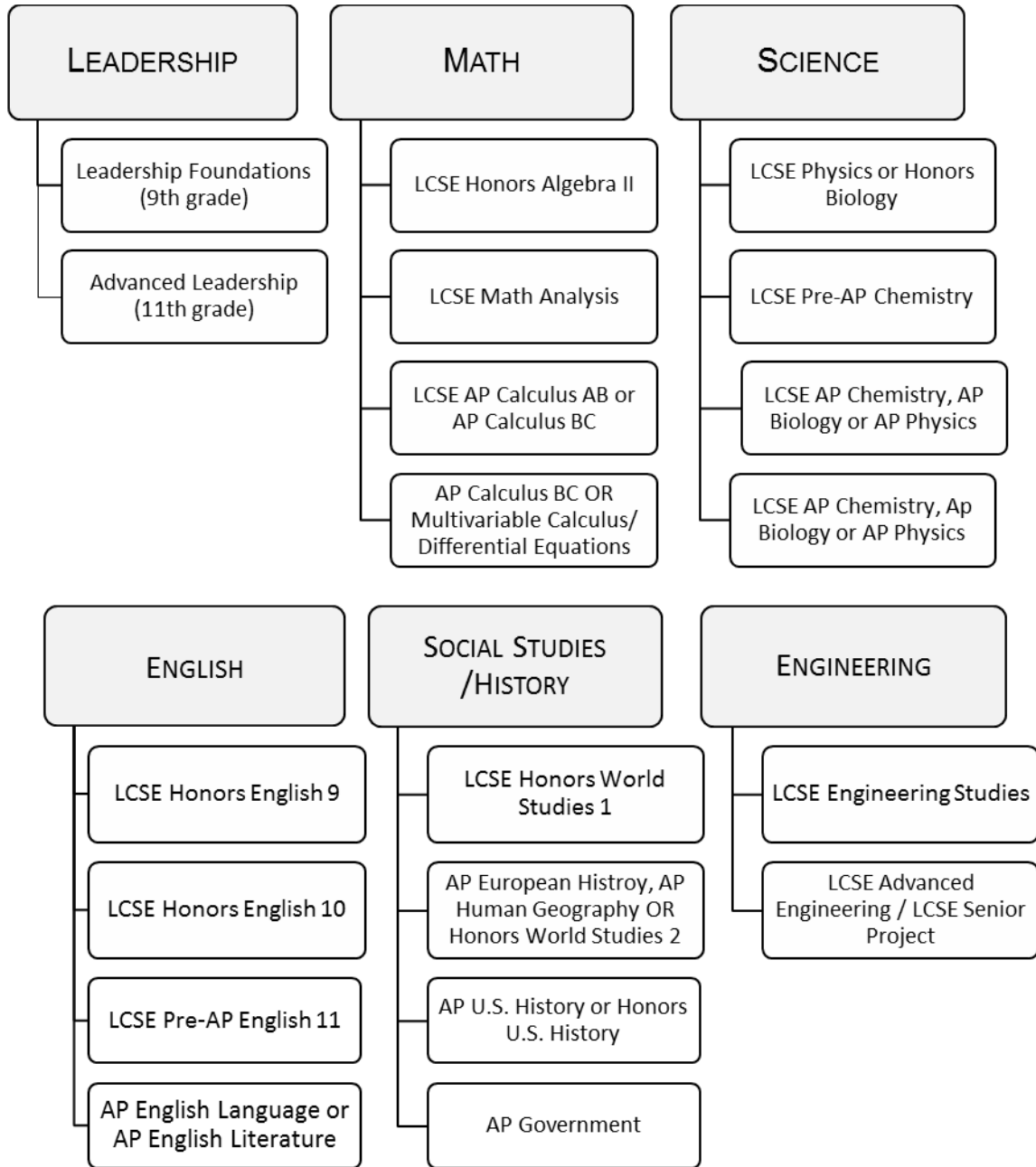
**To graduate from the LCSE program at Norview High, students must:**

- 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 world 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
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# LSCE Course Sequence



## THE LEADERSHIP CENTER FOR THE SCIENCES AND ENGINEERING

### SL1403 22999 LEADERSHIP

FOUNDATIONS FY 1 Must be enrolled in the LCSE specialty program as a 9th 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!

### SL1401 22999 ADVANCEDLEADERSHIP

(POWER CODE) FY 1 Must be enrolled in the LCSE specialty program as an 11th grader.

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 9th or 10th grader.

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 an 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 gain 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 12th 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.

### LA4352 01003 LCSE PRE-AP ENGLISH 11

(Technical Writing) FY 1

Must be enrolled in the LCSE program as an 11th 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.

### LA4554 22999 LCSE SENIOR PROJECT INDEPENDENT STUDY FY

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Must be enrolled in the LCSE specialty program as a 12th grader

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

### ACADEMY OF VISUAL AND PERFORMING ARTS

MU1401 05149 MUSIC LITERATURE AND SOUND FY 1

Prerequisite: Membership in the Academy

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 is of benefit to prospective music majors and performers.

MU1402 05116 FUNDAMENTALS OF MUSIC THEORY FY 1

Prerequisite: Membership in The Academy, performing organization and approval of the music staff

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, is useful to all music performers (instrumental and vocal).

MU4404 05114 ADVANCED PLACEMENT MUSIC FY 1

Prerequisite: Music Theory

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. 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

Prerequisite: Foundations of Arranging and Orchestration

Course Description: The course is a study of the principles of conducting; technique of the baton; methods of adapting to musical 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

Prerequisite: 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.

MU1202 05110 GIRLS CHORUS FY 1

Prerequisite: 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 eligible 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 FY 1

Prerequisite: 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.

MU2205 05111 SELECTED CHORAL ENSEMBLE FY 1

Prerequisite: Membership in Concert Chorus and 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 05101 BEGINNING BAND FY 1

Prerequisite None

Course Description: This class provides an opportunity for students who have not had any prior instruction on wind or percussion instruments.

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MU1102 05101 INTERMEDIATE BAND FY 1 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.

MU1103 05101 CONCERT BAND FY 1

Prerequisite: 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.

MU1104 05106 JAZZ ENSEMBLE FY 1

Prerequisite: Membership in Concert Band or Orchestra 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 FY 1

Prerequisite: Approval of instructor

Course Description: 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 FY 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.

MU2303 05106 CHAMBER ORCHESTRA FY 1

Prerequisite: One year of intermediate Strings or 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

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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.

A1603 05099 PERFORMANCE ENSEMBLE FY 1

Prerequisite: Performing organizations, Approval of Instructor

Course Description: This course is comprised of acting, singing and dancing techniques. Choreography is staged and produced from various Broadway musicals.

A1508 01151 ORAL COMMUNICATION FY 1

Prerequisite: Membership in the Academy and 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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, world Language, naval science and leadership classes, as well as year-round internships with community partners.

## Academy Course Sequence

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

## U.S. NAVY JROTC

Ro1505 22999 ACADEMY OF LEADERSHIP AND MILITARY SCIENCE FY 1 None

Course Description: 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, world Language, naval science and leadership classes, as well as year-round internships with community partners.

Ro1501 09101 NAVAL 1 FY 1 None

Course Description: Naval Science 1 introduces students to the meaning of citizenship, the elements of leadership, and the value of scholarship in attaining life goals; engender a sound appreciation for the heritage and traditions of America, with recognition that the historically significant role of sea power will be important in America's future; develop in each cadet a growing sense of pride in his/her organization, associates, and self. These elements are pursued at the fundamental level. The course includes introduction to the NJROTC program; Introduction to Leadership, Naval Ships; Mission and Organization, The Nation, Navy and the People in American Democracy, Maritime Geography, Sea power and Challenge, Naval History through 1815, Introduction to Navigation and Time, Basic Seamanship, Oceanography, Health Education, First Aid, and Drugs, Alcohol and Tobacco Abuse Prevention.

Ro1502 09102 NAVAL 2 FY 1 Naval 1

Course Description: Naval Science 2 builds on the general introduction provided in Naval Science 1, to further develop the traits of citizenship and leadership in cadets, introduce cadets to technical areas of naval science, and engender a deeper awareness of the vital importance of the world oceans to the continued well-being of the United States. The course provides ongoing instruction in leadership theory, Naval Orientation and Career Planning, Citizenship in the U.S. and Other Countries, Naval History: 1815 through 1930, Naval Ships and Shipboard Evolutions, Naval Weapons: Gunnery, Guided Missiles and Mines, Navigation Fundamentals and Rules of the Road, Small Boat Seamanship, Meteorology and Weather, and Survival Training and Orienteering.

RO1503 09103 NAVAL 3 FY 1 Naval 2

Course Description: Naval Science 3 broadens the understanding 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.



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