North Hunterdon-Voorhees Regional High School District

COURSE SELECTION GUIDE

Welcome to the 2019-2020 School Year

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North Hunterdon-Voorhees Regional High School District Mission

The North Hunterdon-Voorhees Regional High School District, a district committed to innovation, personal excellence, high achievement, and community partnership, provides all students with personalized opportunities through a broad spectrum of exemplary educational experiences to develop their fullest potential, to foster lifelong learning, and to become responsible citizens in a continually changing society.

TABLE OF CONTENTS

SCHOOL BOARD MEMBERS

Franklin Township/ Town of Clinton/ Glen Gardner
Shelley Crisologo - 2020
Jessica Viotto - 2019

Califon/Tewksbury
Cheryl Allen-Munley - 2020
John Melick (VP 2018) - 2018

Union Township
Lisa Diederich - 2021

Bethlehem/Hampton
Francis Goger (P 2018) - 2019

Clinton Township /Lebanon Borough
Robert Kirchberger - 2020
Rachel McLaughlin - 2021
Heather Richards - 2020
Roger Straight – 2019

High Bridge/Lebanon Township
Tara Hintz - 2021
Thomas Roll - 2019

AFFIRMATIVE ACTION

It is the policy of the North Hunterdon and Voorhees High School District not to discriminate on the basis of race, color, creed, religion, sex, ancestry, national origin, social or economic status in its educational programs or activities and employment policies as is required by Title IX of the Educational Amendments of 1972 and NJAC 6.4-1.1.

INTRODUCTION GUIDANCE

TABLE OF CONTENTS

WHY A COURSE SELECTION GUIDE?

The faculty and administration of Voorhees and North Hunterdon High Schools have designed this guide as an aid in planning your academic program. Our course offerings provide a wide variety of learning opportunities and require you to make discriminating selections because decision making is an important part of the total learning process. The offerings should be carefully reviewed by parents and students in consultation with counselors and teachers in order to create a schedule which will best meet the needs and goals of each individual student. Counselors will meet with students to discuss course options and the scheduling process.

USING THE GUIDE

In planning your high school program, you must be realistic about the courses you select in terms of your goals, abilities, interests, and past performance. You must also look at this year's choices as part of a total four year sequence.

Since we offer a wide variety of courses in each department, it is extremely important that you and your parents/guardians consult your counselor to be sure the courses you select will be the best ones for achieving your goals. You may arrange parental conferences by calling the Counseling Centers at Voorhees High School at 638-2130 and North Hunterdon High School at 713-4130.

This guide contains a brief summary of each course with notations about credits, length, prerequisites, and content. Course selections for the entire year must be made now.

In deciding upon the level placement, please be reminded that placement is determined by performance. In order to move up a level (CP to ADV , ADV to Honors or Honors to AP, etc.), a student must have a grade of A, or a B and a teacher's recommendation in current level course. In order to maintain a level, a student must have a grade of C or better in current course level. Placements will be based upon students' grades at the mid-term; however, students may petition to move up should grades improve by the end of the third marking period.

Low enrollments or budgeting limitations may prevent certain listed courses from running during a particular year. The master schedule is built on initial student requests; accommodating scheduling changes requested at a later time is extremely difficult. Once scheduling is completed, students may request additional classes that have space available during their scheduled study halls.

CRITERIA FOR CHANGING STUDENT SCHEDULES

Students are expected to honor their commitments by attending and satisfactorily completing the courses

in which they enroll.

Schedule changes will not be made for reasons of convenience or because of teacher preference. Only changes that are educationally beneficial for the student will be considered.

Schedule changes will be considered only for the following reasons:

1. The correction of a clerical error in the schedule. Examples might include a missing course, a conflict between two or more courses, failure of a prerequisite course or a serious imbalance in the course load assigned for each semester.
2. A recommendation from the Child Study Team.
3. A recommendation from a building administrator for disciplinary, attendance or instructional reasons.*
4. If a student is repeating a course and is assigned to a teacher with whom he or she previously received a failing grade.
5. A student wishing to take additional courses which do not entail the dropping of any other course.
6. A teacher recommends a change based on the fact that the student is misplaced in a particular course or that a change in level would be beneficial to the student. This must be done in consultation with the counselor and with the approval of the Department Supervisor.

*Regulation 2624 Grading System:

4. A grade of "withdrawal-passing" (WP) or "withdrawal-failing" (WF) will be given to each student who withdraws from a course of study after the fifth week of that class.

a. A grade of "withdrawal-passing" (WP) will be given to each student who withdrew after having demonstrated satisfactory achievement and attendance in the course.

b. A grade of "withdrawal-failing" (WF) will be given to each student who is withdrawn after having demonstrated unsatisfactory achievement and/or poor attendance in the course or who was removed from the course by administrative action.

c. The "withdrawal-passing" or "withdrawal-failing" grade will be listed on the student transcript, but it will not impact the calculation of the student's grade point average.

Schedule changes **will not** be considered for any of the following reasons:

1. Course content or standards differing from student expectation.
2. Dropping a course because it is not needed for graduation.
3. Inability of a student to relate well to a given teacher.
4. Preference for some other subject.
5. Dropping a course in order to lighten one's load.

GUIDE ABBREVIATIONS

ADV - Advanced Level
CP – College Preparatory
H – Honors
Cr. – Credits
wks. – Weeks
Wt. – Weighted
AP – Advanced Placement
Sug. Pre – Suggested Prerequisites

V – Voorhees Only
N – North Only
N/V – North and Voorhees
PARCC – Partnership for Assessment of Readiness for College and Careers
NJSLA - New Jersey Student Learning Assessment

AWARD OF DIPLOMA

TABLE OF CONTENTS

In attempting to prepare students for American society and to define the needs of each citizen of our society, the Board of Education has established the following graduation requirements:

I. Successful completion of **120 credits** including the following:

ENGLISH LANGUAGE ARTS LITERACY – 20 credits
(English I, English II, English III and English IV are required.)

FINANCIAL LITERACY – 2.5 credits

PHYSICAL EDUCATION, HEALTH and SAFETY – 20 credits
As required by New Jersey Administrative Code.

MATHEMATICS – 15 credits including algebra I and geometry or the content equivalent and a third year of math that builds on the concepts and skills of algebra and geometry and prepares students for college and 21st century careers.

SOCIAL STUDIES – 15 credits (Early American History, Modern American History, World History)

SCIENCE – 15 credits, 5 credits in each Biology, Chemistry and Physics are recommended

FINE ARTS (ART, MUSIC) & PRACTICAL ARTS – 10 credits total with a 5.0 credit minimum for each of the two areas

WORLD LANGUAGES – 5 credits required. Although the district requirement is one year, it is highly recommended that students study their chosen language for at least three consecutive years in order to gain a global appreciation and to present more competitively when applying to colleges and universities.

II. State Assessments (PARCC or NJSLA-Mathematics and NJSLA-ELA)
On August 3, 2016, the State Board of Education approved updated state regulations for the high school graduation assessments requirements in both English language arts (ELA) and mathematics for the Classes of 2016 through 2021, and beyond.

Students graduating as members of the classes of 2016 through 2019 can meet graduation assessment requirements through a variety of ways, including:

(1) Achieving passing scores on certain PARCC/state assessments;
(2) Achieving certain scores on alternative assessments such as the SAT, ACT, or Accuplacer; or
(3) The submission by the district of a student portfolio through the Department's portfolio

appeals process. (Special Education students whose Individualized Education Plans (IEPs) specify an alternative way to demonstrate proficiencies will continue to follow the graduation requirements set forth in their IEPs.)

Students in the Class of 2020 can demonstrate graduation assessment proficiency through the same alternative means as those in the Classes of 2016 through 2019, provided that students in the Class of 2020 take all PARCC/state assessments associated with the high-school level courses for which they were eligible, as of the effective date of when the amendments were adopted by the State Board of Education.

For students in the Class of 2021 and thereafter, students who have not demonstrated proficiency on the ELA 10 and Algebra 1 assessments, and have taken all PARCC/state assessments associated with the high-school level courses for which they were eligible, can demonstrate graduation assessment proficiency by meeting the criteria of the portfolio appeals process.

Complete (and potentially updated) information on the New Jersey assessment graduation requirements can be found HERE.

ATHLETIC ELIGIBILITY

It is every student-athlete's responsibility to check his/her schedule to be sure that they are passing at least 15 credits during the fall semester for spring sports and 30 credits during the previous school year for fall and winter sports to meet school board athletic eligibility requirements.

NCAA ELIGIBILITY

Students who are planning to play sports in college should visit the NCAA eligibility center at http://www.ncaa.org/student-athletes/future to learn about high school course requirements. Students are also encouraged to meet with their counselor to determine if the student will be eligible for college athletic programs.

PREPARING FOR COLLEGE ADMISSION TESTS

In addition to academic courses, both schools offer preparatory sessions for college admissions tests. Students should contact their counselors for information regarding these programs.

PREPARING FOR COLLEGE

TABLE OF CONTENTS

Since entrance requirements vary among colleges, we recommend that college-bound students take the strongest academic program possible, consistent with their ability to perform at an acceptable level. Performance (the high school record) rather than potential is still the single most important indicator used by colleges for the selection process. At many schools, the stated minimum entrance requirements are often not sufficient for admission because of the competitiveness of the admissions.

CONSULT THE SPECIFIC COLLEGE CATALOGS FOR MORE DETAILS, AND BE SURE TO USE THE NAVIANCE COLLEGE AND CAREER PLANNING TOOLS AVAILABLE TO ALL OUR STUDENTS.

- For Voorhees High School, the web address is http://connection.naviance.com/voorhees. You may sign in using your username & password or as a guest. For guest, click on "I'm a guest" and enter password: "vhs" (lower case).

- For North Hunterdon, go to North Hunterdon guidance department website & look up college searching. You may sign in using your username & password or as a guest. For guest, the username is "guest" and the password is "nhhs" (lower case for both).

STEM Career Path (Science, Technology, Engineering & Math)

Careers in Science, Technology, Engineering and Math are some of the highest paying and fastest growing in the United States. Students planning to major in a STEM field need to select courses that prepare them for success in college. Students should enroll in the required 15 credits of math and science at the highest level in which they can be successful and supplement the curriculum by enrolling in Science and Math elective classes. Additionally, STEM focused students should fulfill their practical arts graduation requirement by enrolling in courses from the Technology Education Department.

STEM-focused classes in this guide are highlighted with the following icon: 

These classes all take an interdisciplinary approach to the STEM fields and challenge students to solve problems using STEM concepts and skills.

Suggested Math and Science Class Selection for STEM Career Path

Math Courses	Science Courses
9th grade – Honors Geometry 10th grade – Honors Algebra 2 11th grade – Honors Pre-calculus 12th grade – AP Calculus AB or BC	9th Grade – Honors Biology 10th Grade – Honors Chemistry/ AP Biology 11th Grade – Honors Physics/ AP Chemistry 12th Grade – AP Physics "C"

Students interested in a STEM Career should consider the following elective classes:

Math Electives	Science Electives	Technology Ed. Electives
544 – COMPUTER SCIENCE BASICS THROUGH GAMING 545 - INTRO TO COMPUTER PROGRAMMING 546 - AP COMPUTER SCIENCE PRINCIPLES 547 - AP COMPUTER SCIENCE	629 AP BIOLOGY 639 AP CHEMISTRY 668 AP PHYSICS 1 669 AP PHYSICS "C"	453 - ENGINEERING/CAD I 458 - ARCHITECTURAL DRAFTING & DESIGN 484 - APPLIED TECHNOLOGY & DESIGN 492 - WEBPAGE DESIGN/ ANIMATION 495 - ROBOTICS & AUTOMATION

OPPORTUNITIES FOR ADVANCED STUDY AND OTHER OPTIONS TABLE OF CONTENTS

ADVANCED PLACEMENT

Advanced standing in college via awarding of credit and/or placement may be possible by taking Advanced Placement courses and performing successfully on the Advanced Placement Examinations administered by Educational Testing Service in May. Advanced Placement courses are taught at the equivalent of a freshman level college course. A score of 4 or 5 on a scale of 1 to 5 may result in placement and/or credit as determined by the college the student attends. Students enrolled in Advanced Placement courses are encouraged to take all the appropriate AP Examinations.

Please see the course descriptions under the departmental headings for more information. Students who participate in the entire AP experience, including the AP exam, will receive AP/Wt. Students who successfully pass an AP course but do not participate in the AP exam will receive (H/Wt.) for GPA calculation.

Independent Study and Cooperatively Planned Units

Students may encounter situations in which a desired course does not meet at a time available in the individual's schedule. In these situations, an independent study contract may be written which provides a plan for students to complete requirements for a particular course. A sponsoring teacher must agree to supervise the independent study project and it must be approved by the Assistant Principal for the department, school counselor, parent and Assistant Principal. In rare situations, a student may desire a course not offered in the Course Selection Guide. Cooperatively Planned Units are designed with a specific vocational objective such as a community service project or an apprenticeship sponsored by a teacher within the school.

The procedures for developing Cooperatively Planned Unit contracts are similar to those used for Independent Study. Independent Study contracts & CPUs will not be approved for required courses. No Independent Study course or CPU can be weighted as per school board policy.

Weighted Courses

All Honors and AP courses are weighted. This means that upon successful completion a student may obtain a grade advantage for purposes of GPA. Expectations for student performance in honors and AP courses are much higher than general and CP level courses.

Withdrawal Policy:

A grade of "Withdrawal" will be given to each student who withdraws from a course of study after the fifth week of classes.

A. A grade of "withdrawal-passing" (WP) will be given to each student who withdrew after having demonstrated satisfactory achievement and attendance in the course.

B. A grade of "withdrawal-failing" (WF) will be given to each student who withdrew after having demonstrated unsatisfactory achievement and/or poor attendance in the course or who was removed from the course by administrative action.

C. Grades of WP and WF will not impact the calculation of the student's grade point average.

Freshman Electives Credits:

069 Power Technology I (N) 2.5
070 Power Technology II (N) 2.5
103 Color and Design 2.5
104 Color and Design II 2.5
113 Ceramics I 2.5
114 Ceramics II 2.5
118 Drawing I 2.5
119 Drawing II 2.5
139 Video I 2.5
140 Video II 2.5
146 Photography I 2.5
147 Photography II 2.5
156 Business Sports Management 2.5
158 Intro to Business and Marketing 2.5
159 Fashion Media and Communications (N) 2.5
171 Business Computer Applications I 2.5
172 Business Computer Applications II 2.5
216 Digital Media and Communication
412 Fashion Design/ Merchandising 2.5
413 Sewing For Fashion I 2.5
414 Sewing For Fashion II 2.5
424 Interior Design 2.5
429 Preschool Education (V) 2.5
430 Early Childhood Education (V) 2.5
450 Drafting and Design 2.5
453 Engineering/CAD I 2.5
457 Architectural Drafting and Design I 2.5
470 Intro to Engineering Design (PLTW) 5
484 Applied Technology and Design (N) 2.5
490 Graphic Communication Technology I 2.5
491 Graphics Communication Technology II 2.5
492 Web-page Design/Animation 2.5
495 Robotics and Automation 2.5
499 Introduction to STEM
544 Computer Science Basics Through Gaming 2.5 (Prereq-Alg-1)
545 Intro. to Computer Prog. 2.5(Prereq-Alg-1)
550 Python Programming 2.5
580 History of Rock & Roll 2.5
585 Music Theory 2.5
588 Electronic Music I 2.5
589 Electronic Music II 2.5 (Prerequisite 588)
591 Freshman Band 5.0
592 String Ensemble 5.0
599 Jazz Ensemble 2.5 (by audition)
600 Beginning Instrumental Lessons 1.0
601 Advanced Instrumental Lessons 1.0
609 Voice Lessons 1.0
610 Concert Choir (Males) 5.0
611 Freshman Choir (Females) 5.0
618 Beginning Guitar 2.5
619 Guitar II 2.5 (Prerequisite 618)

Suggested Courses for Specific Career Pathways

Courses will vary with interest of student. The courses listed below are suggestions for discussion between the student, parent, teacher and counselor. Courses listed in the far left column are either required or strongly suggested for graduation.

Students Considering: Community Colleges (with possible transfer to 4 year college) and/or Technical Schools <u>Suggested Courses:</u> *4 years English *3-4 years Math *3-4 years Science *4 yrs. Social Studies *2-3 years of one World Language Students may also wish to consider concurrent enrollment at local colleges.	**Health & Social Services** Psychology Forensic Science Human Anatomy & Physiology Pre-School Education Early Childhood Ed Cooking Classes Fitness & Wellness BSA: Biomedical Sciences Academy Nursing Health Science Animal Science	**Science, Technology, Engineering & Math** Environmental Science Astronomy Earth Science Zoology Biology Forensic Science Computer Programming BSA: Biomedical Sciences Academy Nursing Health Science Animal Science PLTW Series	**Arts, Humanities & Communications** Public Speaking Creative Writing Roots of Intolerance Webpage Design Art Classes Photo I, II, III, IV Drafting & Design Video Production Advanced TV Production Fashion Design/Sewing Cosmetology Culinary Arts 3D Design Graphic Arts	**Business & Law** Public Speaking Crime & Justice Business Law Environmental Science Psychology Roots of Intolerance Intro to Business & Management Accounting Fin Lit Money Matters Entrepreneurship Commercial Arts Bus. Sport Man International Bus

4 Year Degrees <u>Suggested Courses:</u> *4 years English *4 years Math *3-4 years Lab Science (physics, chemistry, biology, elective) *4 years Social Studies *2/3 years World Language *students may wish to consider honors courses as well Students may also wish to consider concurrent enrollment at local colleges.	English IV Honors Honors College Writing Psychology Calculus Organic Chemistry Biology Food & Fitness Fitness & Wellness BSA: Biomedical Sciences Academy Nursing Health Science Zoology	English IV Environmental Science Calculus Organic Chemistry Biology Computer Programming BSA: Biomedical Sciences Academy Nursing Health Science Zoology PLTW Series	Creative Writing Newspaper Production Public Speaking Roots of Intolerance Drafting & Design Video Production Music Electives Art Electives Computer Programming 3D Design Graphic Arts	Public Speaking AP Micro/Macro Economics Business Law Environmental Studies Crime and Justice Commercial Arts Bus. Sport Man International Bus. Accounting Entrepreneurship

Students Considering: Advanced Degrees Suggested Courses: *4 years honors/AP English *4 years honors/AP Math *4 years honors/AP Lab Science (physics, chemistry, biology, elective) *4 years honors/AP Social Studies *2-3 years one World Language Student may also wish to consider concurrent enrollment at local colleges	**Health Social Services:** AP Eng. Lit. & Comp. AP Psychology AP Calculus AP Biology AP Chemistry AP Environmental AP Physics C Organic Chemistry Biomedical Sciences Academy Nursing Health Science Animal Science	**STEM** AP Eng. Lit. & Comp Environmental Science AP Calculus AP Statistics Discrete Math AP Biology AP Chemistry AP Environmental AP Physics C Organic Chemistry AP Computer Science Computer Programming Nursing Health Science Zoology PLTW Series	**Arts, Humanities and Communications** AP Eng. Lit. & Comp Creative Writing Public Speaking Newspaper Pro. Honors College Wr. AP US Government AP History Calculus AP Computer Science Arch. Draft/Design AP Music Theory Music Electives Art Electives 3D Design Graphic Arts	**Business & Law** AP Lang. & Comp. Public Speaking AP History AP Micro/Macro AP US Government Environmental Science Calc. or AP Calculus AP Statistics Business Law Crime and Justice International Bus. Intro to Business and Marketing Commercial Arts Bus. Sport Man Accounting Entrepreneurship

Suggested Courses for Specific Career Pathways

Courses will vary with interest of student. The courses listed below are suggestions for discussion between the student, parent, teacher, and counselor. Courses listed in the far left column are either required or strongly suggested for graduation.

4 PATHWAYS	**Health & Social Services**	**STEM**	**Arts, Humanities & Education**	**Business & Law**
	This is a pathway that includes a large and diverse group of careers. Human services involves careers that help people and families meet their needs, including education, social services, and mental health needs. The health and medicine career pathway includes careers that promote health, wellness, and diagnosis as well as treatment of injuries and diseases. Some of the careers involve working directly with people while others involve research into diseases or collecting and formulating data and information. Work locations are varied and may be in hospitals, medical or dental offices or laboratories,	Engineers and technicians design and build things. They are critical in all kinds of manufacturing, especially at the earliest stages when products and processes are being created and refined. A career in science is exciting, challenging, and ever changing. Learners who pursue one of these career fields will be involved in planning, managing and providing scientific research and professional and technical services including laboratory and testing services and research and development services. The agriculture pathway prepares learners for careers in the planning, implementation, production,	Careers in the Performing Arts, Visual Arts, or certain aspects of Journalism, Broadcasting and Film are careers that tap into students' creative talents. Careers in Audio-Video Communications Technology, Tele-communications or Printing Technology require strong backgrounds in computer and electronic-based technology and a solid foundation in science and math. All pathways require the ability to communicate effectively in both oral and written form. Information technology careers involve the design, development, support, and management of hardware, software,	The Business, Finance, and Law pathway includes careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. The finance portion of this pathway involves careers in financial and investment planning, banking, insurance, and business financial management. The legal system impacts us in many ways, from buying a home to safely driving a car. Careers in law keep the legal system running smoothly and include public service, jobs that serve and protect people, including law enforcement,

	cruise ships, medevac units, sports arenas, space centers, or within the community.	management, processing, and/or marketing of agricultural commodities and services.	multimedia and systems integration services.	firefighting, legal services and the military.

COURSE OFFERINGS BY DEPARTMENT

N/V Elective offerings contingent upon enrollment, staffing & facility space.

ART (Fine Arts)

TABLE OF CONTENTS

INTRODUCTION

All students are required to complete 5 credits of the Fine Arts to fulfill their Fine/Performing Arts graduation requirement.

The arts are an important part of each student's education; they give students the opportunity to learn new methods of creative problem solving, communication and self-expression.. Working visually develops perception, creative risk taking and technical skill. The arts encourage critical and analytic thinking which are extremely important to a variety of professions.

103 COLOR AND DESIGN Gr. 9-12 2.5 cr., 18 wks

This introductory art course focuses on basic drawing and design principles through the use of a variety of art media including pencil, pen and ink, paint and more. Students increase their technical skills while learning to recognize and solve visual problems. Some basic digital image manipulation will be explored.

104 COLOR AND DESIGN II Gr. 9-12 2.5 cr., 18 wks

Prerequisite: Color and Design I

This secondary level art course builds on the foundation created in Color and Design I. The course will continue to focus on basic design principles and their application to the creative process through the use of various art media. Students learn to use the elements and principles of design to recognize and solve visual problems while continuing to grow and refine their artistic skills.

113 CERAMICS I Gr. 9-12 2.5 cr., 18 wks

In this introductory ceramics class, students will explore various construction techniques and learn the properties of clay. Students are taught the fundamentals of hand-building and wheel throwing; students also learn how to plan for and glaze their finished pieces.

114 CERAMICS II Gr. 9-12 2.5 cr., 18 wks

Prerequisite: Ceramics I

Students continue to develop techniques and skills learned in Ceramics I. Although students will continue to improve hand building techniques, emphasis will be on developing skill on the pottery wheel. Craftsmanship, design and specialized throwing techniques will be emphasized.

115 CERAMICS IIIA Gr. 10-12 2.5 cr., 18 wks

Prerequisite: Students must complete Ceramics II or be admitted by permission of instructor.

This semester-long, advanced level course will enable students to continue developing technical skills learned in Ceramics II. Each student will create their own program that will enable them to concentrate on a specific area of interest; the instructor will encourage creativity and connections to art history and contemporary ceramics.

116 CERAMICS IIIB Gr. 10-12 5.0 cr., 36 wks

Prerequisite: Students must complete Ceramics II or be admitted by permission of instructor.

This year-long, advanced level course will enable students to continue developing technical skills learned in Ceramics II. Each student will create their own program that will enable them to concentrate on a specific area of interest; the instructor will encourage creativity and connections to art history and contemporary ceramics.

117 CERAMICS IV Gr. 10-12 5 cr., 36 wks

Prerequisite: Students must complete Ceramics III or be admitted by permission of the instructor.

An advanced level course that continues to develop more involved techniques and skills into a body of ceramic work that the student can include in a portfolio. Each student is encouraged to concentrate on a specific area of interest., and the instructor guides them through this process.

118 DRAWING I Gr. 9-12 2.5 cr., 18 wks

In this introductory drawing class students will learn the fundamentals of drawing. Techniques, materials, subject matter, and skills will be taught while students learn the Elements of Design.

119 DRAWING II Gr. 9-12 2.5 cr., 18 wks

Prerequisite: Drawing I

This course is for students with an interest in drawing beyond an introductory level. In this course students explore techniques, materials, subject matter, and skills at a more advanced level. Students develop more confidence in their skills through in depth projects using more advanced drawing skills including figure drawing, landscape, still life and more.

120 DRAWING III Gr. 10-12 5 cr., 36 wks

Prerequisites: Drawing I & Drawing II

Designed for students who would like to move their drawing skills to an even more advanced level, this class is for the art student interested in building a drawing portfolio. Drawing materials, subject matter, and techniques will be further explored through a variety of projects.

121 DRAWING IV Gr. 11-12 5 cr., 36 wks

Prerequisite: Drawing III or be admitted by Instructor.

This course emphasizes portfolio development and advanced drawing techniques combined with challenging subject matter. Students learn to hone their skills and subject matter to create a meaningful and creative body of work.

122 PAINTING I Gr. 10-12 2.5 cr., 18 wks

In this course students will learn the fundamentals of painting including techniques and materials. Lessons are taught to develop both drawing and painting skills; a variety of different painting media will be explored.

123 PAINTING II Gr. 10-12 2.5 cr., 18 wks

Prerequisite: Painting I

Painting II is a secondary level course for those students who wish to continue their study of painting through the use of varying mediums, subject matter, and techniques. Historical reference, style and expressive quality will be the focus of this course.

125 AP ART HISTORY (H/Wt.) (AP/Wt.) Gr. 11-12 5 cr., 36 wk

Prerequisite: Students must carry at least a "B" average in both English and History classes or may be admitted by permission of instructor.

This course gives students an understanding of past and present cultures through the study of painting, sculpture, and architecture. Lectures, group & independent projects will be used to illustrate how specific cultures developed and how individual artists contributed to that development. Students will become familiar with the major artists and art movements. No prior experience in Art History is necessary for those students taking this course. Students who have done well in other humanistic studies, such as history, literature, foreign language, and art are especially encouraged to enroll.

126 AP DRAWING PORTFOLIO (H/Wt.) (AP/Wt.) Gr. 11-12 5 cr., 36 wk

Prerequisite: Drawing I, II, and III -or- students must submit a portfolio. Students may also be admitted by permission of instructor. An application must be submitted for this course.

The AP Drawing course is for students interested in a rigorous and focused study in art. Students will develop a quality portfolio that demonstrates a mastery of concept, composition and execution in drawing. This course is based on a student creating a body of work that demonstrates quality, concentration and breadth. This portfolio will be submitted to the College Board for college credit. As in any college level course students will be expected to spend time outside of class in order to complete assignments and doing homework and sketchbook assignments.

127 AP 2-D DESIGN PORTFOLIO (H/Wt.) (AP/Wt.) Gr. 11-12 5 cr., 36 wks

Prerequisite: Drawing I, II, and III -or- Photography I, II, and III -or- Students may submit a portfolio. Students may also be admitted by permission of instructor.

The AP 2D Studio Art course is for students interested in a rigorous and focused study in 2D design and art. Students will develop a quality portfolio that demonstrates a mastery of concept, composition and execution in 2D design. This course is based on a student creating a body of work that demonstrates quality, concentration and breadth. This portfolio will be submitted to the College Board for college credit. As in any college level course students will be expected to spend a considerable amount of time outside of class in order to complete assignments and doing homework and sketchbook assignments.

128 AP 3-D DESIGN PORTFOLIO (H/Wt.) (AP/Wt.) Gr. 11-12 5 cr., 36 wks

Prerequisite: Ceramics I & II and/or sculpture, or by permission of instructor.

The AP 3D Design course is for students interested in exploring sculptural and three-dimensional problems in depth and space. These may include mass, volume, form, plane, light and texture. Such elements and concepts may be articulated through multiple media and techniques: such as additive, subtractive, and/or fabrication processes.

These might include traditional sculpture, architectural models, apparel, ceramics, three-dimensional fiber arts or metal work, among others. This portfolio will be submitted to the College Board for college credit. As in any college level course students will be expected to spend a considerable amount of time outside of class in order to complete assignments and doing homework and sketchbook assignments.

130 YEARBOOK PRODUCTION I Gr. 10-12 5 cr., 36 wks

Yearbook Production enables the student to gain "hands-on" experience in photography, design, layout, advertising, and writing. Students will be part of the yearbook staff and responsible for making decisions regarding the production of the yearbook.

Any student interested in becoming a yearbook editor should take Yearbook as a sophomore or junior so they can qualify for an Editor position in Yearbook Production II.

131 YEARBOOK PRODUCTION II Gr. 11-12 5 cr., 36 wks

Prerequisite: Yearbook Production I

Students will further develop the publishing and design skills they acquired in Yearbook Production I including: layout design, writing and editing, and photography. Students will play an active role in the organizational aspects involved in planning and producing the yearbook. Students taking this course will develop leadership skills through serving in editor positions. The positions of editor-in-chief, section editors, and photo editors may be awarded to the students enrolled in this class.

132 YEARBOOK PRODUCTION III – Gr. 11-12 5 cr., 36 wks

Prerequisite: Yearbook 1 & 2 an application must be submitted for this course.

This course is essentially an Independent Study for the student who would like to continue working on the yearbook and has taken both Yearbook 1 & 2 and has submitted an application to the course instructor. The successful Yearbook III student will be an independent worker and a leader interested in publishing and production.

139 VIDEO PRODUCTION I Gr. 9-12 2.5 cr., 18 wks

In this course students become familiar with the television studio and the video format. Movement, lighting, editing and video techniques are emphasized and explored through the live action projects.

140 VIDEO PRODUCTION II Gr. 9-12 2.5 cr., 18 wks

Prerequisite: Students must complete Video Production I or be admitted by permission of instructor.

Students will continue to explore and experiment with the video medium through individual video projects. Special attention will now be given to the development of more involved live action, creative video projects.

142 VIDEO PRODUCTION III Gr. 10-12 2.5 cr., 18 wks

Prerequisite: Students must complete Video Production I and Video Production II or be admitted by permission of the instructor.

In this course students will continue to explore and experiment with the video medium through individual and group projects. This course requires the operational mechanics of storyboarding, planning and filming with an emphasis on video editing to produce professional quality projects.

143 ADVANCED VIDEO PRODUCTION Gr. 11-12 5 cr., 36 wks

Prerequisite: Students must complete Video Production I and Video Production II or be admitted by permission of the instructor.

Students will continue to explore and experiment with the video medium through teamwork in a professional setting. Students must work together to conceive, plan and execute a format for a video program to be broadcast on a regular basis (i.e. daily, weekly, bi-weekly, depending on the complexity of the student devised format). Special attention will now be given to the entire process of pre-production, production and post-production.

146 PHOTOGRAPHY I Gr. 9-12 2.5 cr., 18 wks

In this course students will learn to use both digital and film cameras, they will learn the concept of developing and printing 35 MM film in the darkroom. Students will also learn to edit digital photos using Adobe Photoshop. Basic photographic techniques, with an emphasis on composition, craftsmanship, and the elements of design, will be explored through a variety of projects.

147 PHOTOGRAPHY II Gr. 9-12 2.5 cr., 18 wks

Prerequisite: Photography I.

Using the basic elements of photography learned in Photography 1, students will further explore photography as an expressive art making medium. Both digital and darkroom photography will be explored through a variety of projects.

148 PHOTOGRAPHY III Gr. 10-12 5 cr., 36 wks

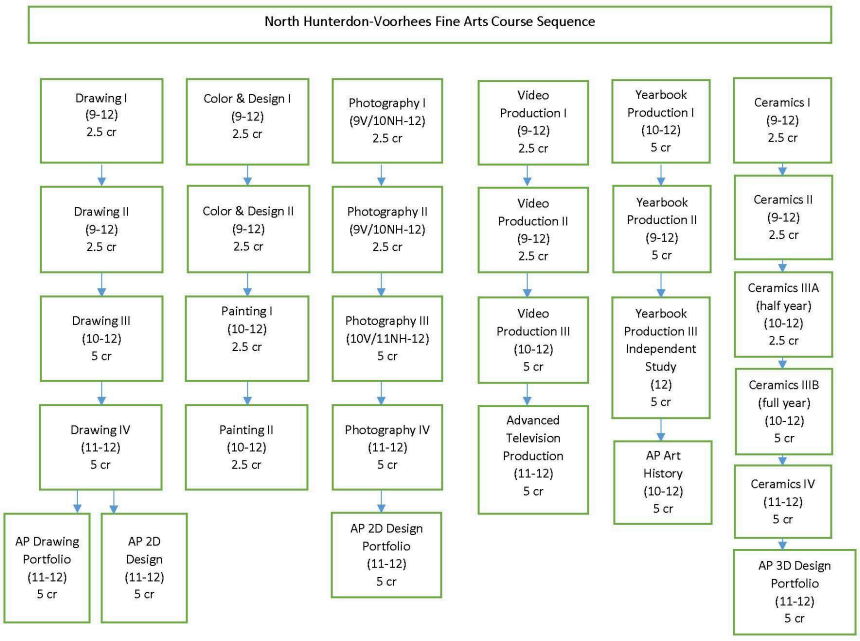
Prerequisite: Photography II.

This full-year course offers opportunities for the highly motivated individual to work at an advanced level in photography. Students will experiment with advanced lighting and composition techniques. Digital imaging and manipulation will be explored in this class using Photoshop and darkroom techniques will be further advanced.

149 PHOTOGRAPHY IV Gr. 11-12 5 cr., 36 wks

Prerequisite: Photography III or instructor permission

An advanced level course designed for students who want a rigorous and challenging experience in photography. Students interested in signing up for Photography IV should consider course #127 AP 2D Design.



BUSINESS

TABLE OF CONTENTS

Independence, pride, money. You can gain it all through the courses offered in the Business Education Department. The main objectives of Business Education are to develop, in each student, the knowledge and skill needed for college, entry-level employment and for advancement in a business career. All students should have the opportunity to gain the knowledge, attitudes, and skills needed to be effective in their personal money management and in their understanding of our economic system.

Business education has a great deal to offer you – relevant, challenging and exciting classes taught with an emphasis on enhancing your technological skills for the 21st century. Business Education – it makes sense. Any successfully completed course in this department can be used to fulfill the graduation requirement for PRACTICAL ARTS.

155 FINANCE Gr. 11-12 2.5 cr., 18 wks (NHHS Only)

Students will learn how to evaluate the risks involved in making personal and business financial decisions and how to develop and implement a sound financial plan. Students should have an interest in a finance or a business career. Topics covered are planning personal finances, banking and credit, investing financial resources, protecting finances, business finance basics and business ownership financials.

156 BUSINESS AND SPORTS MANAGEMENT Gr. 9-12 2.5 cr., 18 wks

The course will focus on the importance of management, marketing and the developing of strategies in business and sports-related industries. The students will analyze the nature, structure and impact of professional and amateur sports organizations in a business environment. This includes developing a marketing plan for a professional team such as designing names, and logos, segmenting the fan market, pricing tickets, designing a team stadium and implementing a team promotional strategy.

At Voorhees students will be able to practice management skills while working in the school store. They will be able to practice personal selling techniques, product packaging, pricing and distribution, along with marketing strategies geared toward successfully marketing products involved in operating a merchandise business (the school store).

157 INTERNATIONAL BUSINESS Gr. 10-12 2.5 cr., 18 wks

The business world today is immersed in a global economy. Even the smallest of businesses deal with other nations. This course prepares students for today's business world that provides goods and services worldwide. Students will learn about marketing, customs, currency, import and export and other vital tools for international trade.

158 INTRODUCTION TO BUSINESS and MARKETING Gr. 9-12 2.5 cr., 18 wks

Course Description: This marketing course is for students who are preparing for careers in marketing, merchandising, and management. The students will study basic marketing concepts such as promotion, advertising, merchandising, salesmanship, event planning and more. The

marketing course is project based which will allow students the opportunity to develop marketing plans, advertising campaigns, and event planning in one of the following specialized areas: sports and entertainment marketing, fashion marketing, travel, tourism, and hospitality marketing, or entrepreneurship and management. Students are encouraged to develop leadership skills, good citizenship traits, social intelligence, and career understanding through participation in Future Business Leaders of America and other organizations.

159 FASHION MEDIA AND COMMUNICATIONS Gr 9-12 2.5 cr., 18wks *(NHHS Only)*
This course is designed to acquaint the student with different activities in fashion media, promotion, and communication technology tools related directly to creating specific strategies used in fashion environments. With advancing technology and the importance of digital communications, students will develop appropriate technology and digital citizenship skills. Students learn to develop an integrated marketing plan through a combination of communication tools using different advertising media, direct mail, sales promotion, publicity, public relations, direct selling, special events, and visual merchandising.

171 BUSINESS COMPUTER APPLICATIONS I Gr. 9-12 2.5 cr., 18 wks
This course will develop skills to be successful in college and in the workplace. Learn to key touch, format reports and presentations, and increase your ability to communicate rapidly on the Internet. An introduction of the Microsoft Office Suite software package is taught in this course. The reports and presentations taught will focus on software in the Microsoft suite. It is highly recommended that all students take this course. Use Business Computer Applications I as a stepping stone to the next level-Business Computer Applications II.

172 BUSINESS COMPUTER APPLICATIONS II Gr. 9-12 2.5 cr., 18 wks
Sug. Pre: Business Computer Applications I

A hands-on approach gives students the skills needed to meet the demands of today's technological world. The core of this course is building on skills taught in Business Computer Applications I to more advanced levels. Students will be learning to integrate Google Drive with the Microsoft Office Suite. Students prepare a portfolio of assignments using Word, Access, Excel, etc. This course is ideal for students using the computer at home, in college, or in business. Skills and knowledge acquired can be used immediately.

185 ACCOUNTING I Gr. 10-12 5 cr., 36 wks
This course gives the student a thorough background in the basic accounting procedures used to operate a business. Accounting offers an important and necessary foundation for students who plan to go on to college or enter the business world upon graduation. Students will learn the universal language of all businesses by experiencing how to set up and maintain records for a business using the double entry accounting method. Computerized accounting will also be introduced in this class. Accounting is a must for any college-bound student planning to major in business administration.

186 ACCOUNTING II Gr. 11-12 5 cr., 36 wks
Sug. Pre: Accounting I
This hands-on course reviews Accounting I principles and introduces new accounting concepts; such as, depreciation, notes, partnerships, uncollectible accounts, inventory controls and

corporation accounting. Accounting II is strongly recommended for students planning to major in any area of business in college and to the student who plans to gain employment after high school in the accounting field or a related business field. Some activities will be completed on the microcomputer.

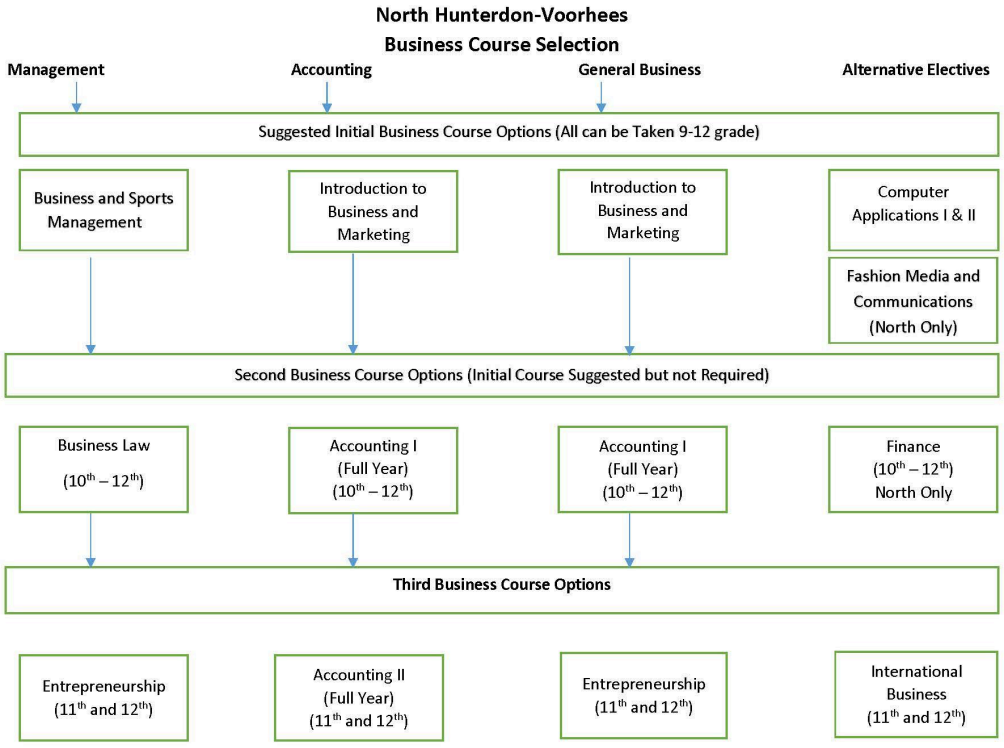
191 BUSINESS LAW Gr. 10-12 2.5 cr., 18 wks

This course deals with legal rights as well as with legal duties and responsibilities of individuals in their personal and business transactions. Laws covering contracts, insurance, renting, property ownership and laws which affect teenagers will be studied. Existing statutes, case studies, and current events will be discussed regularly.

154 ENTREPRENEURSHIP (CP) Gr. 11 & 12 2.5 cr., 18 wks

*****_Prereq: One prior Business course or teacher permission_

The Entrepreneurship course focuses on recognizing a business opportunity and developing the opportunity into a business. The business controlling functions—accounting, finance, marketing, management—as well as legal and economic considerations are applied. Student responsibility and initiative are encouraged as business strategies are created, planned, and presented in a final project—a business plan for an actual business venture. Through the process of developing the business plan, students acquire skills necessary to operate a successful business.



ENGLISH

TABLE OF CONTENTS

FRESHMEN take a full year of English I (5 credits), which is designed to provide each student with a sound basis in reading, writing, speaking, listening, and viewing. Although course levels may differ in focus and/or depth, they all provide instruction in English fundamentals that will prepare the student for success in upper-class programs. Core literature includes a Shakespeare play*, Great Expectations*, *The Catcher in the Rye, King Arthur,* and the *Odyssey,* as well as a selection of short stories.

SOPHOMORES take a full year of English II (5 credits), which is designed to develop and enhance their reading, writing, listening, speaking, and viewing skills. Core works include *Things Fall Apart, Antigone, Macbeth,* and selections from Edith Hamilton's *Mythology*.

JUNIORS must take 5 credits of English. There are several options by which to achieve this requirement:

A - AP Language and Composition (287): full year, 5 credits (by recommendation only)
B - English III Honors (250): full year, 5 credits (by recommendation only)
C - English III ADV (242): full year, 5 credits
D - English III CP (241): full year, 5 credits

SENIORS must take 5 credits of English. There are several options by which to achieve this requirement:

A - AP Literature and Composition (287): full year, 5 credits (by recommendation only)
B - English IV Honors (H/Wt.) (246) (CEP with RVCC) (246): (by recommendation only)
C - English IV ADV (245)
D - English IV CP (244)

In order to graduate in North Hunterdon-Voorhees Regional High School District, students must successfully complete the above requirements and must earn both 20 credits of English and 2.5 credits of Communication and Digital Literacy.

211 ENGLISH I CP Grade 9 5 cr., 36 wks

This course is designed for students who need to develop competency in basic listening, speaking, reading, writing, viewing, studying, and critical-thinking skills. Fundamental vocabulary and reading comprehension skills receive heavy emphasis, as do grammar usage and mechanics, spelling, punctuation, and sentence structure. Students learn to write effectively and to understand basic elements of literary texts.

212 ENGLISH I ADV Grade 9 5 cr., 36 wks

Students of average to above-average abilities who want to develop fluency in listening, speaking, reading, writing, viewing, studying, and critical-thinking skills should register for this course. The course focuses on vocabulary, grammar usage and mechanics, spelling, punctuation, sentence structure, paragraph logic, fundamentals of writing, and major literary genres.

213 ENGLISH I (H/Wt.) Grade 9 5 cr., 36 wks

This course is offered to students of above-average ability and performance who want to pursue excellence and sophistication in listening, speaking, reading, writing, viewing, studying and critical-thinking skills. The course includes skills dealing with vocabulary, grammar usage and mechanics, spelling, punctuation, sentence structure, and essay writing. Fundamentals of expository and creative writing receive careful attention. Major literary genres are introduced,

studied, interpreted, and analyzed.

228 ENGLISH II CP Grade 10 5 cr., 36 wks

Students who need to continue developing fluency in listening, speaking, reading, writing, viewing, studying, and critical-thinking skills should register for English II. Writing and world literature are combined to help students develop greater understanding of the relationship between artists and cultures, and of literature as a vehicle for exploring human experiences and expressing human ideals. Students develop proficiency in the basic forms of discourse, including description, narration, argumentation/persuasion, and exposition, as well as experience-based, expressive writing. Fundamental techniques for clear, focused, structured writing are developed through literature-based analytical essays. As students write in a variety of modes, for various purposes and audiences, they practice all stages of the writing process (prewriting, drafting, revising, editing, and reflecting). Proper research procedures are developed through a research paper.

229 ENGLISH II ADV Grade 10 5 cr., 36 wks

Students of average to above-average abilities who want to continue developing fluency in listening, speaking, reading, writing, viewing, studying, and critical-thinking skills should register for English II (CP). Writing and world literature are combined to help students develop greater understanding of the relationship between artists and cultures, and of literature as a vehicle for exploring human experiences and expressing human ideals. Students develop proficiency in the basic forms of discourse, including description, narration, argumentation/persuasion, and exposition, as well as experience-based, expressive writing. Fundamental techniques for clear, focused, structured writing are developed through literature-based analytical essays. As students write in a variety of modes, for various purposes and audiences, they practice all stages of the writing process (prewriting, drafting, revising, editing, and reflecting). Proper research procedures are developed through the writing of a formal research paper.

230 ENGLISH II (H/Wt.) Grade 10 5 cr., 36 wks

This course is offered to students of above-average ability and performance who want to continue pursuing excellence and sophistication in listening, speaking, reading, writing, viewing, studying, and critical-thinking skills. Writing and world literature are combined to help students develop greater understanding of the relationship between artists and cultures, and of literature as a vehicle for expressing human experiences and ideals. Students learn to appreciate literature and other arts in personal, cultural, social, and historical contexts. Students develop proficiency in the basic forms of discourse, including description, narration, argumentation/persuasion, and exposition, as well as experience-based, expressive writing. Fundamental techniques for clear, focused, structured writing are developed through literature-based analytical essays. As students write in a variety of modes, for various purposes and audiences, they practice all stages of the writing process (prewriting, drafting, revising, editing, and reflecting). Proper research procedures are developed through each student's preparation of a formal research paper.

241 ENGLISH III CP Gr. 11, 36 wks

Students who have average abilities and need more guided study to continue developing fluency in reading, writing, speaking, listening and viewing should register for English III. Through the

study of American literature, students will develop a greater understanding of the cultural factors affecting American life, as well as broaden their civic, global and economic perspectives. Further development of students' writing skills will include formal and informal reactions to and analyses of the literature studied, as well as a research-based assignment and the use of digital communication tools.

242 ENGLISH III ADV Gr. 11 5 cr., 36 wks

Students who want to continue developing fluency in reading, writing, viewing, studying, and critical thinking skills should register for this survey course. This course will include the study of significant works of pre-20th-century authors, as well as works important to the twentieth century. Although a chronological approach may be employed, various themes may be reviewed. Wherever possible, attempts will be made to place the key literary concepts into an historical context. Vocabulary study will be fundamental to the course. This will be achieved through vocabulary texts, as well as through literary contexts. Critical and analytical writing and reaction papers will be integral to the course. Research skills will also be emphasized. English III (CP) is for students with average to above-average ability and performance.

250 ENGLISH III (H/Wt.) Gr. 11 5 cr., 36 wks

This course for students of above-average ability and performance surveys important works of American literature and selected inter-related works from world literature. Frequent writing assignments and a research paper are integral parts of the curriculum. The literature and supplemental texts are sources of vocabulary enrichment, and speaking skills are developed through formal speeches and informal discussions.

287 AP ENGLISH LANGUAGE AND COMPOSITION (H/Wt.) (AP/Wt.) Gr. 11 5 cr., 36 wks

AP English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way generic conventions and the resources of language contribute to effectiveness in writing. Students are strongly encouraged to take the AP English Language and Composition Examination administered by The College Board. Admission is limited to students who have demonstrated excellence in English as evidenced by their success in the underclass foundation courses, who are avid readers, and who have demonstrated ability and enthusiasm for English studies. A writing sample and teacher recommendations may be required for the final selection process. Summer reading will be assigned.

AP English Language and Composition fulfills grade 11 English requirements.

244 English IV CP Gr. 12 5 cr., 36 wks
245 English IV ADV Gr. 12 5 cr., 36 wks

English IV, English IV (CP), and English IV (H/Wt.) are full-year, comprehensive courses that examine the human experience, especially as it relates to the human's role in society and the impact decisions have while transitioning into another part of life. These issues will be studied through a variety of texts of differing genres, and further explored through writings that emphasize advanced writing skills and critical thinking skills. Students will also improve their

speaking, listening, and viewing skills through a variety of activities. English IV (CP) is for students of average to above-average abilities; English IV (H/Wt.) is offered to students of above-average ability and performance.

246 ENGLISH IV (CEP) (H/Wt.) Gr. 12 5 cr., 36 wks

In conjunction with Raritan Valley Community College, the district is offering this college-level writing course to students who qualify. The curriculum is designed by the college and will include a series of papers and a research paper based upon reading assignments from the college text. This full year course will combine both informational and literary texts, and all writing will be text-based. Students may choose to take the course for college credit if they demonstrate proficiency on the RVCC screening test or score 450 or above on the Evidence-Based Reading Writing section of the SAT. A minimum GPA of 3.0 is required in order to be eligible to earn the college credits. The cost to receive the college credits is a reduced rate from normal three-credit courses at RVCC. In addition, students will be expected to purchase the required texts. Students who satisfactorily complete the course will receive credits transferable to a number of colleges. Students and parents of students interested in taking this course are strongly encouraged to attend an orientation session. Summer reading will be assigned.

288 AP ENGLISH LITERATURE AND COMPOSITION (H/Wt.) (AP/Wt.) Gr. 12 5 cr., 36 wks

AP English Composition and Literature involves analysis of literature and the study and practice of writing. Students will examine individual work's language, characters, action, and themes. They consider each work's structure, meaning, value, and relationship to contemporary and project historical experience, and they scrutinize representative works from several genres and concentrate on reading and writing about challenging works of recognized literary merit. Students are encouraged to take the AP English Composition and Literature Examination administered by The College Board. Admission is limited to students who are avid readers and who have demonstrated an exceptional ability and enthusiasm for English studies. A writing sample and teacher recommendation may be required for the final selection process. Summer reading will be assigned.

AP CAPSTONE

"AP Capstone™ is a diploma program from the College Board. It's based on two year-long AP courses: AP Seminar and AP Research. Rather than teaching subject-specific content, these courses develop students' skills in research, analysis, evidence-based arguments, collaboration, writing, and presenting. Students who complete the two-year program can earn one of two different AP Capstone awards, which are valued by colleges across the United States and around the world" (https://apcentral.collegeboard.org/courses/ap-capstone).

278 AP SEMINAR (H/Wt.) (AP/Wt.) Gr. 10-12 5 cr., 36 wks

"AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources,

develop their own perspectives, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments" (https://apcentral.collegeboard.org/pdf/ap-seminar-course-and-exam-description.pdf?course=ap-seminar).

279 AP RESEARCH (H/Wt.) (AP/Wt.) Gr. 11-12 5 cr., 36 wks

Pre: 278

"AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their process, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense" (https://apcentral.collegeboard.org/pdf/ap-research-course-and-exam-description.pdf?course=ap-research).

The following are elective courses available and may be taken in addition to your English course.

216 DIGITAL MEDIA AND COMMUNICATIONS
Grade 9-12, 2.5 cr., 18 wks

Digital Media and communications encourages students to develop basic skills across the curriculum, including basic literacy in reading, writing, speaking, listening, informational literacies, economics, technology, visual, global, 21st Century and multicultural studies. Students will gain the skills and knowledge necessary to become lifelong learners. The methods of instruction will include collaboration, consensus building, and cooperative learning. This course will focus on identifying a social issue or a challenge within the community and providing a research-based solution. The purpose of this course is to provide students with real world experiences through project-based learning that develop a foundation for community involvement, critical thinking, cooperative learning, and public speaking to prepare students for college and career readiness.

232 PUBLIC SPEAKING (ADV) Gr. 10-12 2.5 cr., 18 wks

By familiarizing students with how to organize and deliver differing types of conventional public speeches, this course aims to increase student confidence, build student poise, and teach the student how to be an interesting and effective public speaker. In addition to establishing correct standards of good speech, the course focuses on listening excellence, group speaking situations, principles of interpersonal communication, appropriate use of body language, and principles of

delivery and critiquing. *The credits awarded for successful completion of this course are Public Speaking (rather than English) credits.*

235 NEWSPAPER PRODUCTION (ADV) Gr. 10-12 5 cr., 36 wks.

Prerequisite: approval of instructor.

This course is open to 10th, 11th, and 12th-grade college-preparatory students. The course focuses on teamwork in producing a newspaper, and on the skills of journalism: writing, editing, photography, art, sports coverage, and business management. Students hold working positions as part of the newspaper staff, assume responsibilities, make decisions relevant to their staff role, and experience hands-on practice in design, layout, and production of the newspaper. Producing the school newspaper often requires after-school responsibilities.

Students selecting this course must have at least a "B" average in previous English courses and must file the Newspaper Production instructor's signature of approval with their guidance counselor.

258 CREATIVE WRITING I (ADV) Gr. 11-12 2.5 cr., 18 wks.

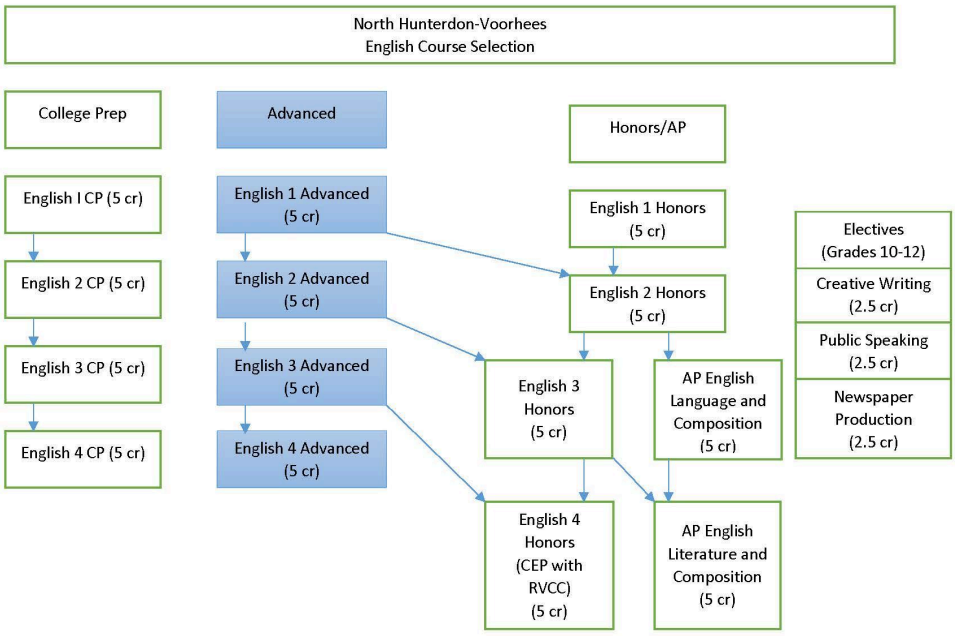
Creative Writing encourages students to develop individual artistic expression in a workshop setting. Responding to a variety of writing exercises and literary models, students create a portfolio that becomes the basis for their assessment. Students consider audience and purpose, and practice all stages of the writing process as they create poetry, fiction, and drama. Literature, personal experience, and observation form the basis for varied assignments that develop fundamental techniques of creative writing.

The following courses are taken by recommendation only.

892 READING/WRITING IMPROVEMENT II 0 Credit Directed Study

Grade 12

R/W Improvement II is designated for seniors who have demonstrated a need for remediation in preparation for standardized tests.



FAMILY AND CONSUMER SCIENCES

TABLE OF CONTENTS

Courses in the Family and Consumer Sciences Department meet the graduation requirement in PRACTICAL ARTS. Family and Consumer Sciences include six major content areas: foods and nutrition, child development, family relations, clothing and textiles, housing, and consumer education. These courses are all useful and necessary in our complex everyday lives and address 21st Century Life and Career Skills.

402 CULINARY FUNDAMENTALS Gr. 10-12 2.5 cr., 18 wks

This course is an introduction to basic food selection, preparation and use of technology in meal planning, nutrition and consumer skills are highlighted throughout the course. Students use the food laboratory on a regular basis.

404 INTERNATIONAL FOODS Gr. 11-12 2.5 cr., 18 wks

Students will learn about the methods of preparing foods from countries within the regions of Latin America, Europe, Mediterranean, Asia and regional cuisine of the United States. Emphasis is placed on the geographic, climatic and cultural factors that have influenced the food customs.

406 GOURMET CUISINE Gr. 11-12 2.5 cr., 18 wks

Beginning with the improvement of basic knowledge and skills, the student progresses to more advanced and sophisticated techniques in food planning, preparation and service. Emphasis is placed on creativity, presentation and experimentation.

408 NUTRITION & WELLNESS Gr. 10-12 2.5 cr., 18 wks

Students will explore the food and use technology as it relates to overall wellness. This course highlights the importance of healthy food choices as defined by the Dietary Guidelines and MyPlate.gov. Students will use the food laboratory to practice the principles discussed on a regular basis.

412 FASHION DESIGN AND MERCHANDISING Gr. 9-12 2.5 cr., 18wks

This course will deal with basic concepts in the fashion industry and their specific application. Major units in this course include: Fashion trends and design, fabrics and care, technology in fashion, merchandising, and the fashion industry. Projects will be completed utilizing the sewing techniques covered in class.

413 SEWING FOR FASHION Gr. 9-12 2.5 cr., 18wks

The focus of this course is to learn to sew clothing to extend your wardrobe as well as creative applications of sewing. Students select patterns and fabrics and construct garments. Students learn to work independently and collaboratively on sewing projects. No prior sewing experience is required.

414 SEWING FOR FASHION II Gr. 9-12 2.5 cr., 18 wks

The Sewing for Fashion II course will advance the sewing skills learned in the Sewing for Fashion I course while expanding the working knowledge of pattern making and reading. This course will allow students interested in fashion design to seek personal inspiration and apply it to his or her design.

424 INTERIOR DESIGN Gr. 9-12 2.5 cr., 18 wks

This course is an introduction to techniques of decorating and furnishing a home to meet individual needs. Students will learn principles and elements of design, use of color schemes, drawing, and evaluating floor plans. Types and styles of housing and career opportunities will be included. Students will produce items that can be used in a future portfolio.

429 PRE-SCHOOL EDUCATION (V) Gr. 9-12 2.5 cr., 18 wks

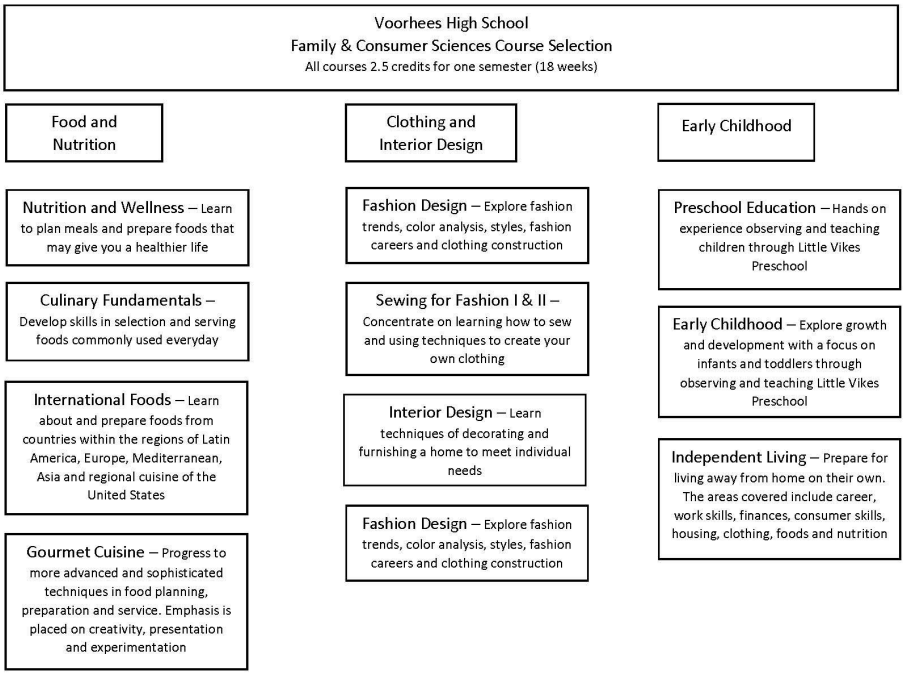
Students gain hands-on experience participating in Little Vikes Pre-School Programs. This course introduces students to the world of children through lessons about ages, stages, and appropriate activities to present to children. Employment opportunities in child care and education are explored. Students have hands on experiences observing and teaching children in a preschool setting. Students in this program prepare for a career in childcare and/or teaching.

430 EARLY CHILDHOOD EDUCATION (V) Gr. 9-12 2.5 cr., 18 wks

Students gain hands-on experience participating in Little Vikes Pre-School Programs, observing and teaching children in a preschool setting. Students will explore child growth and development with a focus on infants and toddlers and apply this knowledge in a hands on environment. Students in this program prepare for a career in childcare and/or teaching.

440 INDEPENDENT LIVING Gr. 10-12 2.5 cr., 18 wks

This is a practical course is designed to prepare students for living on their own. The areas covered include: career, work skills, finances, consumer skills, housing, clothing, foods and nutrition. The course will prepare students for adult living and decision making in today's society.



HEALTH AND PHYSICAL EDUCATION

TABLE OF CONTENTS

The Health and Physical Education program contributes to the total development of the individual emotionally, socially, culturally, mentally, and physically. Our curriculum offers "carryover" leisure time activities as part of the total program. According to N. J. Law, all students must take and pass physical education, health or driver education requirements. Every student must take the appropriate courses each year he/she is enrolled in school. The Physical Education Program is designed to develop knowledge and basic skills in a variety of lifetime sports and activities. The physical fitness and well-being of our students is addressed in all of the courses offered. We are determined to assess our students' own particular needs and to attempt to meet these needs by our instruction, facilities, and equipment.

Through the incorporation of a wide variety of selected activities, both of an individual and team nature, we hope to provide a sound foundation for physical, social and emotional fulfillment.

We seek to provide critical situations which enhance and/or challenge the students' judgment,

responsibility and overall attitude toward themselves and the environment. The leadership program in physical education is a program designed to gain hands-on experience. The overall purpose is to enhance leadership qualities and learn organizational skills. The Comprehensive Physical Education/Health program is designed to meet the N. J. state mandated program of Family Life Education and the newly adopted Core Curriculum Standards.

361 HEALTH 9 Gr. 9 2.5 cr., 18 wks

Freshman health is designed to help the student deal with the emotional and physical changes that take place during adolescence. This course explores the topics of stress, environmental health, communicable diseases and use and abuse of drugs, tobacco and alcohol. Sexually transmitted diseases and reproduction are also discussed in regard to the impact on their personal lives and society as a whole. Throughout each unit special emphasis is placed on being able to make responsible decisions and developing and practicing refusal skills.

356 DRIVER EDUCATION THEORY Gr. 10 2.5 cr., 18 wks

Classroom Driver Education is a required course for all sophomores. It is intended to familiarize the student with the necessary, basic information for learning how to drive properly and safely. The course investigates the history of transportation, offers an in-depth study of New Jersey driving statutes and Division of Motor Vehicles Regulations, including driver responsibilities. Law enforcement agencies offer input into the legalities involved in driving, traffic safety, and accident prevention. Upon completion of the course, the students will take the New Jersey State written exam which, if successfully passed, is valid for two years.

362 HEALTH 11 Gr. 11 2.5 cr., 18 wks

Junior Health is designed to increase self-awareness, improve self-image, further the decision making process and promote refusal skills. The students also explore the topics of life-long fitness, personal safety, CPR, and substance use, abuse and intervention. The physiological aspects of human sexuality are reviewed and expanded.

393 HEALTH 11 WHAT IS TEEN PEP Gr. 11 5 cr., 36 wks

Teen PEP is a coordinated, statewide strategy to increase knowledge, skills,
and behaviors that promote sexual health among high school students. Each year, ten schools are selected to implement a sexual health education course, based on the nationally recognized HiTOPS, Inc. (Health Interested Teens' Own Program on Sexuality) curriculum and the model of peer-to-peer education developed by the Princeton Center for leadership Training. ***This is a full-year course. One class is offered each year.***

363 HEALTH 12 Gr. 12 2.5 cr., 18 wks

This course will better prepare the student to assume his or her adult role in society. Special emphasis is given to understanding each individual and his/her role in the family. Areas covered are family planning, marriage, courtship and engagement, finances, society today, and parenting.

370 PHYSICAL EDUCATION 9 Gr. 9 2.5 cr., 18 wks

Physical Education I is an introductory program designed to develop students' physical abilities through a wide variety of activities, including Introduction to Project Adventure. This first year introduces students to sports and activities, which generally continue in sequence, through

Physical Education courses in 10th, 11th, and 12th grade.

375 PHYSICAL EDUCATION 10 Gr. 10 2.5 cr., 18 wks

382 PHYSICAL EDUCATION 11/12 Gr. 11/12 2.5cr., 18 wks

Physical Education 10, 11, and 12 provide lifetime carry-over sports activity programs for students. During the year, the elective program allows students to choose a variety of these activities in which they demonstrate an interest. Also, Project Adventure I, which consists of trust activities and low elements, is a sophomore requirement and Project Adventure II which consists of high elements is elected in either the junior or senior year.

390 PHYSICAL EDUCATION LEADERSHIP 1 Gr. 11-12 2.5 cr., 18 wks

Leadership I is designed to enable the student to successfully organize a class into squads, learn proper attendance procedure and be able to assist a substitute teacher. The student will also begin to learn different teaching methods with large and small groups, be able to lead a teacher-prepared calisthenic routine and to observe students' level of participation.

386 HIGH PERFORMANCE PE Gr. 11-12 2.5 cr., 18 wks

High Performance Physical Education is designed to allow students with advanced skills and stronger motivation to be involved at a more competitive level of activity with students of similar abilities and interest. This will be applied in both team and individual sport activities. The emphasis of the course will be the design, implementation, and analysis of effective strategies to enhance team and individual performance.

387 FITNESS & WELLNESS Gr. 10-12 2.5 cr., 18 wks

The primary focus of the Fitness and Wellness course will be the designing and performing of individual and group workouts. Activities will include walking, running/jogging, use of cardio machines in the fitness lab, aerobics, circuit training and weight training. In addition, the students will evaluate personal nutrition choices and the impact they have on overall health. The emphasis will be developing a wellness attitude the student can carry into adulthood.

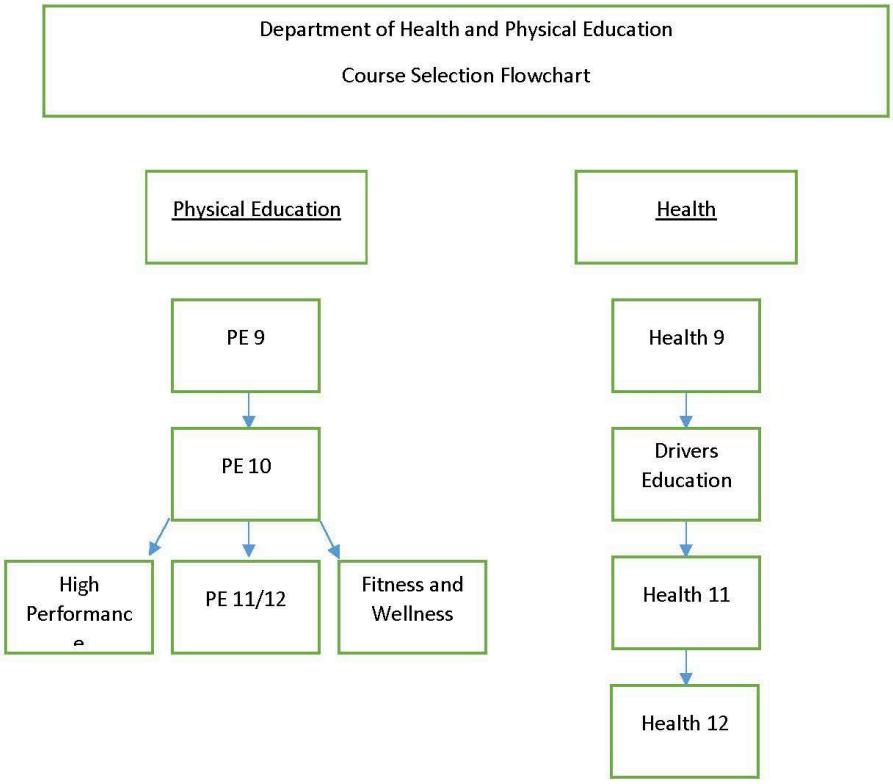
391 LEADERSHIP 2 Gr. 11-12 2.5 cr., 18 wks

Leadership I is a pre-requisite for this course.

Leadership II concentrates on preparing and leading calisthenic routines, assisting the teacher in skills taught for each activity, developing tools for pupil evaluation and becoming knowledgeable on use, care and storage of equipment.

395 UNIFIED PHYSICAL EDUCATION Gr. 9-12 5 cr., 36 wks
395B 2.5 cr., 18 wks

Unified Physical Education is a course designed for students with and without disabilities that will focus on the physical, intellectual, and social growth of all participants. This course will facilitate the development of meaningful social relationships while participating in physical activity and sport. All students will enter the class on an equitable social footing and be encouraged to use their unique skills to support each other. Students in this course will receive full credit in Physical Education.



MATHEMATICS

TABLE OF CONTENTS

The mathematics department encourages all students to take as many mathematics courses in high school as possible. Studying mathematics helps the student to develop problem solving abilities, abstract reasoning skills, and computational tools which are necessary for success in the world of work. There is a minimum fifteen credit mathematics graduation requirement including Algebra 1, Geometry, and a third year that builds on Algebra and Geometry. A student must have a grade of C or better in current course level to progress to the next course at the same level. College-bound students whose career goals may involve a curriculum requiring calculus, discrete math or statistics should absolutely take four years of advanced mathematics. Scientific and graphing calculators are required.

Computer courses offered by the department receive Practical Arts credit. These courses are Computer Science Basics through Gaming, Intro to Programming, Python Programming, AP Computer Science Principles, AP Computer Science A and Data Structures.

501 ALGEBRA IA (CP) Gr. 9-12 5 cr., 36 wks

Algebra IA (CP) is the first part of a two-year Algebra I course for students who may benefit from additional practice and support with prerequisite skills. This course will cover a solid review of pre-algebra skills and emphasize modeling and applications of linear functions. Real-life experiences and technology will be used to explore and enrich understanding. Students will not take the NJSLA-Mathematics Algebra I assessment at the conclusion of this course, but will

take it the following year when they are taking Algebra IB (CP). Passing the NJSLA-Mathematics Algebra I assessment is a New Jersey graduation requirement.

502 ALGEBRA IB (CP) Gr. 10-12 5 cr., 36 wks

Pre: 501

Students will enroll in this course upon successful completion of Algebra IA (CP). This is the second part of the two-year Algebra I curriculum. Topics in this course include operations with polynomials, radicals, and quadratic and other non-linear functions. Students will take the NJSLA-Mathematics Algebra I assessment near the end of this course. Passing the NJSLA-Mathematics Algebra I assessment is a New Jersey graduation requirement.

503 GEOMETRY (CP) Gr. 10-12 5 cr., 36 wks

Pre: 510, 512, 502

Geometry is designed to help student who have successfully completed Algebra 1. Students will explore and discover key geometric properties using a more hands-on approach with Geometry computer software applications used at times to assist with exploring concepts. Sample topics to be covered include: reasoning and proofs, parallel and perpendicular lines, relationships within triangles, two and three-dimensional figures, transformations, right triangle trigonometry, and circles. This course is designed to help make sense of the mathematics they encounter in and out of class each day. It will allow students to learn geometric principles and how they are connected to one another and to students' prior knowledge. This course prepares students for the New Jersey Student Learning Assessment in Geometry.

504 INTEGRATED ALGEBRA (CP) Gr. 11-12 5 cr., 36 wks

Pre: 503, or 522

Integrated Algebra is intended for students who have taken Algebra I and Geometry but who are not yet ready for Algebra II. This course will help solidify students' understanding by bridging conceptual gaps giving them an introduction to many Algebra II topics. With Integrated Algebra, students will model real-world applications with a functions approach, netting a deeper grasp of key concepts helping to provide success for those students who choose to explore these topics more in depth in Algebra II.

510 ALGEBRA I (CP) Gr. 9-12 5 cr., 36 wks

Algebra I builds upon the knowledge and skills gained in a Pre-Algebra course and is designed for students who may need the concepts presented in a more concrete manner. It covers all Algebra 1 topics including operations with polynomials and matrices, creation and application of linear functions and relations, algebraic representations of geometric relationships, probability, and nonlinear functions. It will give the student the opportunity to apply their mathematical knowledge to a number of real life experiences. Technology is used to explore, research and present data. All incoming freshmen who enroll in this course must earn a qualifying score on the Scholastic Math Inventory assessment. This course prepares students for the New Jersey Student Learning Assessment in Algebra 1. Passing the New Jersey Student Learning Assessment for Algebra 1 is a New Jersey graduation requirement.

512 ALGEBRA I (ADV) Gr. 9-12 5 cr., 36 wks

This course is a rigorous College Preparatory course that includes work with variables, simple

equations, and formulas, signed numbers, operations with polynomials, fractions and fractional equations, systems of linear equations, factoring, ratio and proportion, exponents, radicals, probability and statistics, and quadratic equations. This course helps the student develop a systematic approach to thinking while learning algebraic skills. All Incoming freshmen who enroll in this course must earn a qualifying score on the Scholastic Math Inventory assessment. This course prepares students for the New Jersey Student Learning Assessment in Algebra 1. Passing the New Jersey Student Learning Assessment for Algebra 1 is a New Jersey graduation requirement.

514 ALGEBRA II (CP) Gr. 12 5 cr., 36 wks

Pre: 512 AND 522 or 504

Algebra II is designed for student who need more time to process mathematical ideas and is taught at a slower pace than the Algebra II ADV course. It builds and expands upon the concepts taught in Algebra, Geometry and Integrated Algebra such as fundamental operations, functions, systems of linear equations, exponents, radicals, and quadratic equations. Additional topics such as exponential, logarithmic, and rational functions, sequences and series, conics, matrices, probability and statistics, and trigonometry will be introduced. Technology is used to explore, research and present data. This course prepares students for the New Jersey Student Learning Assessment for Algebra II.

516 ALGEBRA II (ADV) Gr. 10-12 5 cr., 36 wks

Pre: 512 and 522

Algebra II gives the student the mathematical background needed for continuing his/her studies in mathematics. The course increases understanding of facts and principles learned in Algebra I (ADV), including fundamental operations, functions, systems of linear equations, exponents, radicals, and quadratic equations. New topics, such as complex numbers, logarithms, advanced topics in trigonometry, and conic sections are taught. Word problems are used throughout, and a systematic approach to problem solving is emphasized. This course prepares students for the New Jersey Student Learning Assessment for Algebra II.

518 ALGEBRA II (H/Wt.) Gr. 10-12 5 cr., 36 wks

Pre: 523

This is an accelerated course which covers the topics of Algebra II. It thus requires that the student be able to solve problems rapidly and to spend additional time beyond that normally expected in mathematics courses to complete assignments. As an honors course, it is comprehensive and theoretical. This course prepares students for the New Jersey Student Learning Assessment for Algebra II.

522 GEOMETRY (ADV) Gr. 9-12 5 cr., 36 wks

Pre: 512

An introduction to plane geometry is provided. Students learn the nature of proof, and develop methods of critical thinking. Definitions and postulates are used as the foundation for the basic plane geometry theorems concerning parallel and perpendicular lines, congruent triangles, right triangle trigonometry (including the Law of Sines and Cosines), similar polygons, and arcs, and angles in circles. Solid geometry is handled informally where applicable. The basic concepts of coordinate geometry and compass and straightedge construction are included. This course

prepares students for the New Jersey Student Learning Assessment for Geometry.

523 GEOMETRY (H/Wt.) Gr. 9-10 5 cr., 36 wks

This is a geometry course for the accelerated mathematics student. It thus requires that the student be able to solve problems rapidly and to spend additional time beyond that normally expected in mathematics courses to complete assignments. Methods of critical and logical deductive thinking will be developed and used to investigate and solve problems. Many complicated geometric proofs will be presented to the student who will ultimately be able to make presentations on his/her own. Both solid and analytical geometry will be treated on a sophisticated level. This course also includes right triangle trigonometry as well as the study of the Law of Sines and Cosines. Applications of geometry to other fields are emphasized. This course prepares students for the New Jersey Student Learning Assessment for Geometry.

530 DISCRETE MATHEMATICS (ADV) Gr. 12 5 cr., 36 wks

Pre: 504, 514, 516

Discrete Mathematics will use problem solving and reasoning skills to explore areas of mathematics not traditionally covered in earlier courses of study. It is the study of mathematics dealing with objects that have distinct separate values that lends itself to a wide variety of "real world" applications. Topics will include counting and sorting techniques, the exploration of combinations, game strategies, the appropriate use of building tree diagrams, and the many applications of networking. Additional topics to be included are the mathematics of voting, problem solving, set theory, logic, and cryptography. This course is designed for the liberal arts student, but may also be of interest to the math/science focused student and taken concurrently with another math class after having completed Integrated Algebra or Algebra 2.

533 PRECALCULUS (ADV) Gr. 11-12 5 cr., 36 wks

Pre: 516

Precalculus (ADV) is rigorous course designed to prepare juniors and seniors for a first course in Calculus. It builds upon the concepts taught in Algebra II (ADV) such as functions, trigonometry, polynomials, and rational expressions. Topics to be introduced include limits, unit circle trigonometry, graphs of trigonometric functions and their inverses, trigonometric identities and proofs involving those identities, and conic sections. Additional topics may include polar coordinates, sequences and series, matrices and work with continuity. The course will offer opportunities for students to build problem solving and mathematical modeling skills.

534 PRECALCULUS (H/Wt.) Gr. 10-12 5 cr., 36 wks

Pre: 518

Precalculus (H/Wt.) is designed to continue, maintain, sharpen and improve mathematical skills attained through Algebra II and Trigonometry (H/Wt.). It also extends many of the topics in more depth than covered in previous math courses and prepares students for a formal course in AP Calculus. The course includes topics such as: functions, analytical geometry, vectors, and matrices, probability, statistics, limits, series, and introduction to Calculus. Some of the applications of the above topics will involve computer solutions.

536 AP STATISTICS (H/Wt.) (AP/Wt.) Gr. 11-12 5 cr., 36 wks

Pre: 518 Sug. Pre/co: 534

The Advanced Placement course in statistics is equivalent to a one-semester, introductory, non-calculus based, college course in statistics. Upon successful completion of the course, students will take the Advanced Placement Exam for possible college credit. The purpose of the course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploratory analysis, planning a study, probability, and statistical inference.

AP Statistics is a laboratory-like course which engages students in explorations and analysis of data. *Note: Students taking this Advanced Placement course will be encouraged to take the AP examination near the conclusion of the course. Please see the explanation of the Advanced Placement Program under General Information in this Course Selection Guide.*

537 CALCULUS (ADV) Gr. 12. 5 cr., 36 wks

Pre: 533 or 534

This course is an introductory calculus course which covers the equivalent material of a first semester college calculus course. Students study limits, differential and integral calculus, and applications of the above. Topics include properties of continuity and limits, the slope of a curve, the rate of change of a function, techniques for finding derivatives of algebraic and trigonometric functions, extrema, the Mean Value Theorem, integration, area, and volume. This course is does not prepare students for an AP examination in calculus.

538 AP CALCULUS AB (H/Wt.) (AP/Wt.) Gr. 12 5 cr., 36 wks

Pre: 534

AP Calculus AB is equivalent to a college-level Calculus course primarily concerned with developing the students' understanding of the concepts of calculus and providing experiences with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being represented geometrically, numerically, analytically, and verbally. Topics covered include functions, limits, derivatives and their applications, Riemann sums, definite and indefinite integrals and their applications, the Fundamental Theorems of Calculus, and numerical approximations to integrals. The work is exceptionally rigorous and demanding and covers the topics included in the nationally approved Advanced Placement curriculum. In connection with the Common Core Standards, this course examines the concepts of; Number and Quantity, Algebra, Functions, Modeling and Probability and Statistics. This course will also incorporate the Eight Standards for Mathematical Practices as identified by the Common Core.

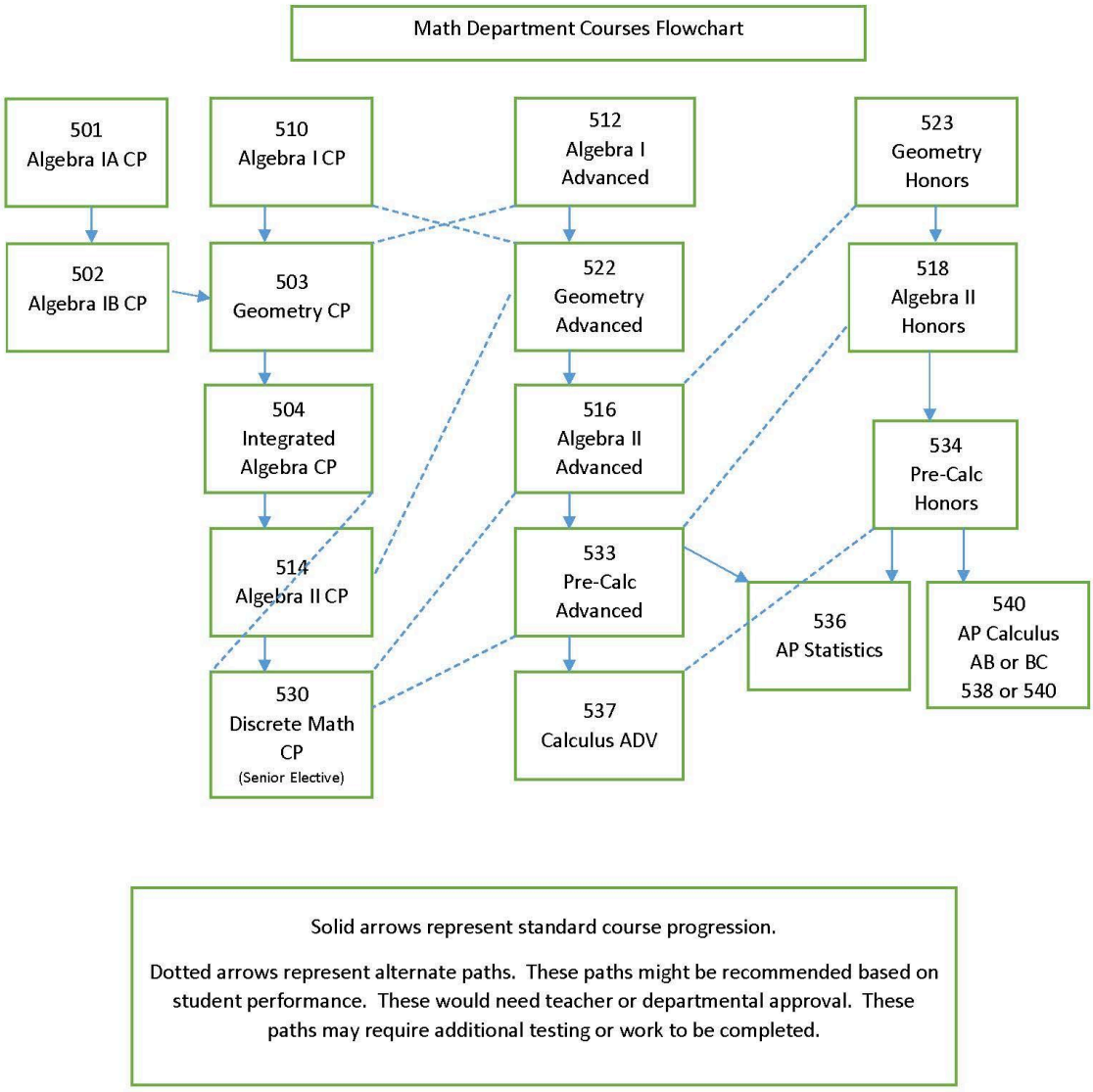
Note: Students taking this Advanced Placement course will be encouraged to take the AP examination of the Advanced Placement near the conclusion of the course. Please see the explanation program under the General Information section of this Course Selection Guide.

540 AP CALCULUS BC (H/Wt.) (AP/Wt.) Gr. 12 5 cr., 36 wks

Sug. Pre: 534

Calculus BC has the same general objectives as Calculus AB and it covers all the topics of Calculus AB plus the following topics: derivatives of parametric, polar and vector functions, slope fields, Euler's Method, L'Hopital's Rule and its applications, length of a curve, integration by parts, integration using partial fractions, improper integrals, logistic modeling, series, series of constants and Taylor series. The content of the BC course is designed to qualify a student for placement and credit in a college course that is one course beyond that granted for the AB course.

Note: Students taking this Advanced Placement course will be encouraged to take the AP examination of the Advanced Placement near the conclusion of the course. Please see the explanation program under the General Information section of this Course Selection Guide.



544 COMPUTER SCIENCE BASICS THROUGH GAMING 2.5 cr in Practical Arts 18 wks

Pre/co-requisite: 512

This STEM based course engages students with project-based learning to introduce students to programming and design concepts through the development of computer games. Students will learn technical skills like programming, graphic design, and animation, testing/debugging and other computer programming skills. They will also learn how to form and work in project development teams, and how the same engineering cycle used to design bridges and buildings is used to design games and solve many types of problems. In addition to the programming aspect of this class, students will be provided with an "Overview" framing the bigger picture of Computer Science fundamentals including career opportunities. There are no programming prerequisites for students who take this course but they should have a strong background in algebra and experience in problem solving.

545 INTRO TO COMPUTER PROGRAMMING (ADV)
Gr. 9-12 2.5 cr. in Practical Arts, 18 wks
Pre/co-requisite: 512
The course is designed to introduce the student to the computer approach to solving problems. The Java language will be taught that will directly transfer to future coursework in computer science. The students will get "hands-on" experience with the computer from the earliest stages of the course. They will work on a wide variety of problems, many of which will reflect the students' backgrounds and interests, as they cover the topics in the course outline.

546 AP COMPUTER SCIENCE PRINCIPLES (H/Wt.) (AP/Wt.)
Gr. 10-12 5 cr in Practical Arts 36 wks
Students who enroll in this course will be introduced to the foundational concepts of computer science and will challenge them to explore how computing and technology can impact the world. This course is unique in its focus on student creativity. There are seven main ideas that will be explored throughout the course: Creativity, Abstraction, Data Information, Algorithms, Programming, Internet, and Global Impact. With a unique focus on creative problem solving and real-world applications, AP Computer Science Principles prepares students for college and career.
Note: Students taking this Advanced Placement course will be encouraged to take the AP examination of the Advanced Placement near the conclusion of the course. Please see the explanation program under the General Information section of this Course Selection Guide.

547 AP COMPUTER SCIENCE A (H/Wt.) (AP/Wt.)
Gr. 11-12 5 cr. in Practical Arts 36 wks
Pre: 545 AND 516 with a minimum grade of C or 518 with a minimum grade of C or better

AP Computer Science using the Java programming language emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development, and is meant to be the equivalent of a first-semester college-level course in computer science. Students will write computer programs that should be understandable, adaptable, and, when appropriate, reusable. At the same time, the design and implementation of computer programs is used as a context for introducing other important aspects of computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods. In addition, the responsible use of these systems is an integral part of the course. This is rigorous course that requires time and commitment outside of the classroom.
Pre: 545 with a C or better and/or 516 with a C or better
Note: Students taking this Advanced Placement course will be encouraged to take the AP examination of the Advanced Placement near the conclusion of the course. Please see the explanation program under the General Information section of this Course Selection Guide.

550 PYTHON PROGRAMMING ADV Gr. 9-12 2.5 cr. in Practical Arts, 18 wks
pre/Co-requisite: 512

Python is a language with a simple syntax, and a powerful set of libraries. It is an interpreted language, with a rich programming environment, including a robust debugger and profiler. While it is easy for beginners to learn, it is widely used in many scientific areas for data exploration. This course is an introduction to the Python programming language for students with limited programming experience. We cover data types, control flow, object-oriented programming, and graphical user interface-driven applications. The examples and problems used in this course are drawn from diverse areas such as text processing, simple graphics creation and image manipulation, HTML and web programming, and genomics.

551 DATA STRUCTURES Gr. 12 (NHHS) 5 cr. in Practical Arts, 36 wks

Pre: 547 or recommendation of teacher

This year-long course continues and deepens students' understanding and practice of object oriented programming. Students are expected to have familiarity with programming in Java at the AP Computer Science A level. Core topics in the context of the Java programming language include practical implementations of fundamental and more advanced data structures (linked lists, hash encoded storage, binary search tree and red-black trees, algorithms for organizing and manipulating data - including sorting, searching, and traversal algorithms), and time complexity of algorithms in a problem-solving oriented context. In-depth exploration of graph traversal algorithms (depth first search, breadth first search, shortest paths, and connected components) and string processing algorithms (substring search and string compression) is also included. Much of the course is project-based, with assignments stressing the design of classes and algorithms appropriate to a particular problem.

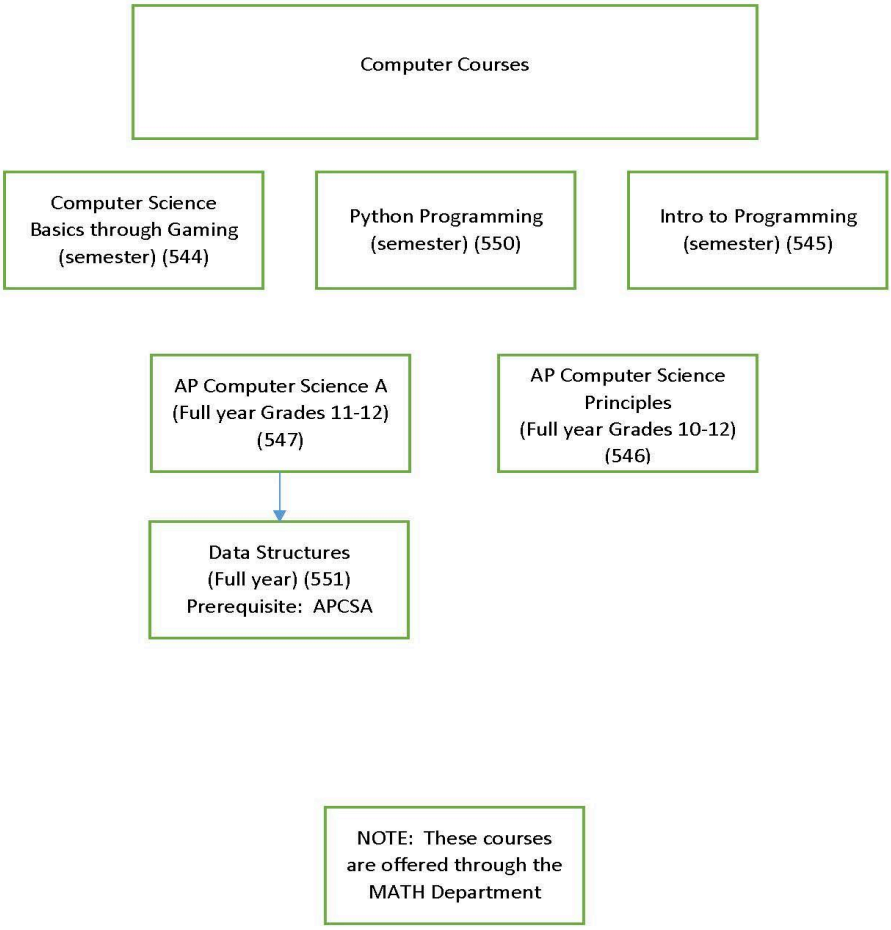
495 ROBOTICS AND AUTOMATION Gr. 9-12 2.5 cr. in Practical Arts, 18 wks

Note: Description in Technology on pg. 52

499 INTRODUCTION TO STEM

Grade 9-12, Credits 2.5 cr. ,18 weeks

Introduction to STEM encourages students to develop basic skills across the curriculum, including basic literacy in reading, writing, listening, speaking, informational literacies, economics, science, technology, mathematics, and visual studies. Students will gain the skills and knowledge necessary to become lifelong learners. The methods of instruction will include collaboration, consensus building, and cooperative learning. This course will focus on developing literacy through the fields of science, technology, engineering and mathematics. The purpose of this semester long course is to introduce students to Science, Engineering and Technology in a real-world context. Starting with a foundational investigation of the engineering process, students will explore how their world is affected by Science, Engineering and Technology. Students will collaborate on projects and build critical 21st Century and College and Career Readiness skills.



893 ALGEBRA 1 WORKSHOP
Gr. 10-12 Semester Directed Study

The directed study is for students who have not yet passed the Algebra 1 state assessment. During this workshop, students will review Algebra 1 topics in preparation to retake the Algebra 1 state assessment during the re-test window near the end of the first semester.

893 S SENIOR MATH WORKSHOP Gr. 12 0 cr., Directed Study

This workshop is designed for seniors who have not yet met their math graduation requirement and who will need to meet it using the Portfolio Appeal Process. Students will remain in this directed study until the Portfolio Appeal has been submitted and accepted by the state for graduation.

MUSIC

TABLE OF CONTENTS

North Hunterdon and Voorhees High Schools offer a varied and comprehensive program for all students who have an interest in music. Many of our ensembles have a state-wide reputation for musical excellence, and have won a variety of awards and citations. Your enrollment in the Music Program will offer you an exciting and stimulating high school career.

Courses in music will complete the Fine/Performing Arts requirement needed for graduation.

**Students are required to participate in all performances.*

580 HISTORY OF ROCK AND ROLL Gr. 9-12 2.5 cr., 18 wks
Students in this course study rock and roll music beginning with its roots in 1900. Students listen to a variety of musical examples from the earliest popular music forms through the progression of contemporary rock and roll. They research the music, the technology used to make it, the people responsible for creating it, and the political and social motivation for the birth and evolution of rock and roll music.

585 MUSIC THEORY Gr. 9-12 2.5 cr., 18 wks
Get involved in the language of music. Students interested performing, composing, or arranging should take this course to improve their knowledge of music and their musical skills. Sight reading, ear training, listening, and analysis will help you to better understand the complex language of music.

588 ELECTRONIC MUSIC I Gr. 9-12 2.5 cr., 18 wks
Learn to create music like the professionals! You will learn to use the software programs and be able to compose your own music. Entrance in this course requires a desire to create music and use technology to do so.

589 ELECTRONIC MUSIC II Gr. 9-12 2.5 cr., 18wks.
Prerequisite: Electronic Music I or permission from instructor.
The focus of this course includes: modern musical applications, such as composition for video and film, digital recording and editing techniques, and score/parts generation. Students will master the above musical applications as well as advanced MIDI editing not covered in Electronic Music I.

593 ELECTRONIC MUSIC III (N) Gr. 10-12 5 cr., 36wks.
Prerequisite: Electronic Music I, II
This course is designed to give students hands on experience in sound recording and audio post production. Students will explore sound theory (acoustics) and human perception of sound (psychoacoustics), along with the tools and technology used in sound recording and manipulation. Practical applications will include recording live instruments and voices in both controlled and uncontrolled environments, as well as audio post production for video. This class parallels Video III.

590 *CONCERT BAND Gr. 10-12 5 cr., 36 wks
Concert Band is a large performing ensemble open to all students who play a woodwind, brass,

or percussion instrument. Formal concerts are held at various times throughout the year. Band students will learn basic and advanced concepts in musicianship, instrumental techniques, theory, and performance practice. The band performs both traditional and contemporary music.

591 *FRESHMAN BAND Gr. 9 5 cr., 36 wks
Freshman band is a large performing ensemble open to all students who play a woodwind, brass, or percussion instrument. Formal concerts are held at various times throughout the year. Freshman band students will learn basic and advanced concepts in musicianship, instrumental techniques, theory, and performance practice. The freshman band performs both traditional and contemporary music.

592 *STRING ENSEMBLE Gr. 9-12 5 cr., 36 wks
A performing ensemble, String Ensemble will provide an opportunity for experienced string players to hone their skills while preparing challenging literature. Not intended for beginners, the course will provide instruction in warm-up materials, scales, sight-reading and ensemble playing. The course is limited to students who perform on violin, viola, cello or upright bass. Students must provide their own instruments. The ensemble will be featured in performances throughout the year.

599 *JAZZ ENSEMBLE Gr. 9-12 2.5 cr., 36 wks
Prerequisite: Audition
Students pursue the jazz idiom by rehearsing and performing in this ensemble. The Jazz Ensemble is open to students who play trumpet, trombone, saxophone, drums, keyboard, guitar and bass.

600 BEGINNING INSTRUMENTAL LESSONS Gr. 9-12 Each 1 cr., 36 wks
Prerequisite: Enrollment in an instrumental ensemble.

Individualized or small group lessons for all instruments. Lessons are scheduled individually at the convenience of both the student and the teacher.

601 ADVANCED INSTRUMENTAL LESSONS Gr. 9-12 Each 1 cr., 36 wks
Prerequisite: Successful completion of 600.
Individualized or small group lessons for all instruments. Lessons are scheduled individually at the convenience of both the student and the teacher.

609 VOICE LESSONS Gr. 9-12 1 cr., 36 wks
Prerequisite: Enrollment in vocal ensemble
Students will learn the physiology of the vocal mechanism and study proper vocal techniques. Additionally, students will sing classical, jazz, and/or popular solo literature.

610 *CONCERT CHOIR Gr. 10-12 5 cr., 36 wks
Concert Choir is a large performance ensemble for students who enjoy singing. Students receive instruction in musicianship, choral skills, and performance skills. Choral music ranging from the classics to the contemporary is explored. At times the choir sings in Latin, German, French, Italian and other languages. The ensemble performs multiple times throughout the year.

Freshmen males who are interested in singing should sign up for Concert Choir.

611 *FRESHMAN CHOIR Gr. 9 5 cr., 36 wks

Freshman Choir is a large performing ensemble for all female freshmen students who enjoy singing. Students receive instruction in the basic elements of music. Musicianship, choral and performance skills are covered. Students explore vocal music from light classical to modern. An introduction will be given to proper diction in English and other languages.

612 *CHAMBER CHOIR (N) Gr. 10-12 2.5 cr., 36 wks

Prerequisite: Audition

Chamber choir is a small auditioned choir for serious choral students. The choir, which performs frequently, focuses on a cappella and classical choral literature.

615 *SHOW CHOIR Gr. 10-12 2.5 cr., 36 wks

Prerequisite: Audition

Show choir is a small singing ensemble for serious music students. The repertoire will include advanced rhythms, music from musicals, and jazz/pop idiom.

616 *MADRIGAL SINGERS Gr. 10-12 2.5 cr., 36 wks

Prerequisite: Audition

A specialized course, Madrigals recreates the music of the European Renaissance and choral chamber music. The singing includes madrigals and motets in many languages. The Madrigals perform frequently.

617 AP MUSIC THEORY (H/Wt.) (AP/Wt.) Gr. 10-12 5 cr., 36 wks

This is a college level course in music theory. Students will learn to read, notate, compose, sight-read, and hear music. Vocal, instrumental, and rock musicians will benefit from this course. This course will train students to increase their knowledge of the language of music, their ability to understand what they hear in music, and their ability to perform music at an increased skill level. Students must receive the recommendation of a music teacher to be placed in A.P. Music Theory.

Upon completion of the course, students will be encouraged to take the AP Music Theory Exam for possible waiver of the first year college music requirement for both music and non-music majors. Please see the explanation of the Advanced Placement program under the General Information section of this Course Selection Guide.

618 BEGINNING GUITAR Gr. 9-12 2.5 cr., 18 wks

Students in this introductory guitar course will learn how chords are structured and how to play the guitar. Tuning, strumming, and finger-picking patterns, note-reading and melodic playing will be addressed. Students must provide their own acoustic guitar.

619 GUITAR II Gr. 9-12 2.5 cr., 18 wks

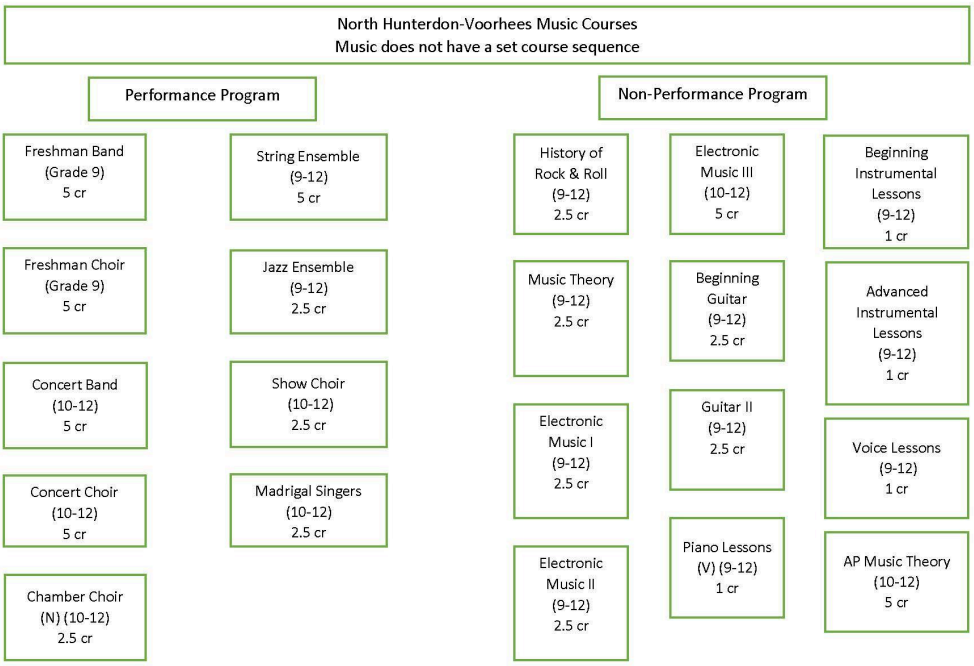
Prerequisites: Beginning Guitar and/or instructor approval

This course is designed for the more serious guitar student. Students will continue to develop their guitar skills with a more in-depth study of chords, tuning, note reading, finger picking, and solo performance. Students in this course will be given the opportunity to work both on guitar solos as well as working as part of a guitar ensemble. Classical, jazz, and rock music will be performed in addition to original student compositions. Students must provide their own acoustic

guitar.

602 PIANO LESSONS (V) Gr. 9-12 1 cr., 36 wks

Individualized lessons for piano. Lessons are scheduled at the convenience of both the teacher and the student. Students will learn basic musicianship skills and proper piano technique. Repertoire will be selected by the teacher from the classic piano repertoire.



SCIENCE

TABLE OF CONTENTS

The Science Departments at both North Hunterdon and Voorhees believe that to be a responsible member of today's technical society, a comprehensive knowledge of science is required. To achieve this goal, students are required, by Board of Education policy, to successfully complete 15 credits (a three-year sequence) of Science classes. We suggest the following sequence: Biology in grade 9, Chemistry in grade 10, and Physics in grade 11.

621 BIOLOGY (CP) 6 cr., 36 wks

Fundamental biological concepts are fully examined in this course. This basic life science course is designed for those students not planning further studies in science related courses. Through a variety of exercises, demonstrations, and laboratory experiences the student will discover new concepts and interests in the biological sciences.

622 BIOLOGY (ADV) 6 cr., 36 wks

This course provides students with the fundamentals of the life sciences and insight into the nature of scientific research, its achievements and applications. Lab Biology is intended for

college bound students who may or may not major in science.

623 BIOLOGY (H/Wt.) 6 cr., 36 wks

This course is intended to lead to further study in biology or a related field. The course provides a conceptual understanding of the biological sciences. It aims itself towards an understanding of all sciences as a process of inquiry. Some consideration will be given to species development through an in-depth study of a variety of laboratory specimens. Active participation by each student is required. Independent study of related materials will be encouraged to further enhance course content.

628 AP ENVIRONMENTAL SCIENCE (H/Wt.) (AP/Wt.) 6 cr., 36 wks

Pre.: Biology, Chemistry, ADV or higher

The AP Environmental Science course is equivalent of a one semester, introductory college course in Environmental Science. It is a rigorous science course that stresses scientific principles and analysis in all areas of environmental science. Students will use the concepts and methods necessary to understand the interrelationships in the natural and human modified world as specified in the AP national curriculum. Additional independent projects are part of the course load. Applicants may be screened using criteria of prior science grades, present science teacher recommendations, and/or standardized test results when available.

Note: All students taking this course will be encouraged to take the Advanced Placement Examination which is administered in the first two weeks of May. Please see the explanation of the Advanced Placement Program under the General Information section of the Course Selection Guide.

629 AP BIOLOGY (H/Wt.) (AP/Wt.) 6 cr., 36 wks

Pre.: Biology H/Wt and suggested co/prerequisite Chemistry H/Wt

This rigorous college level course, taught from a college textbook, is the equivalent of an introductory Biology course required of science majors at most universities. This course should be considered by those students who have demonstrated high achievement in previous science courses. Applicants may be screened using criteria of prior science grades and PSAT results.

Note: All students taking this course will be encouraged to take the Advanced Placement Examination which is administered in the first two weeks of May. Please see the explanation of the Advanced Placement Program under the General Information section of the Course Selection Guide.

682 ZOOLOGY (ADV) Gr. 10-12 3 cr., 18 wks

Pre.: Biology

Zoology is a one semester course that focuses on animal biology. Students will study the major divisions of the animal kingdom. Additionally, the students investigate animal anatomy, classification, and identification. Zoology is a college-preparatory course that will develop study methods that will be beneficial in college.

631 CHEMISTRY (CP) 6 cr., 36 wks

Pre.: Biology

This fundamental chemistry course will develop a conceptual knowledge of chemistry principles. The course is designed for students not planning further studies in science-related courses. Through a variety of exercises, classroom demonstrations and laboratory experiments, students will discover an interesting and useful knowledge base in chemistry.

632 CHEMISTRY (ADV) 6 cr., 36 wks

Pre.: Biology ADV or teacher recommendation, co-requisite of Geometry ADV or higher

Important concepts in chemistry needed for future courses in chemistry or related fields will be presented. Study habits and problem solving techniques acquired during the course should benefit the student in future study. Lab work is an important part of the course. The student will be expected to learn basic lab skills and to become familiar with lab equipment and its proper use.

633 CHEMISTRY (H/Wt.) 6 cr., 36 wks

Sug. Pre.: Biology H/Wt, consideration for ADV with teacher recommendation

Sug. Co-/Prerequisite: Geometry H/Wt or higher

This course is a study of the basic laws of chemistry, including the study of the elements, their structure, interactions, and energy relationships. Qualitative and quantitative analytical thinking will be developed based on laboratory experiences. This course is intended for students who have a strong command of math and who plan a career in chemistry or related fields, or who desire an academically challenging course.

636 ORGANIC CHEMISTRY (H/WT) Gr. 11 & 12 (V) 3 cr., 18 wks.

Pre.: Chemistry H/Wt or AP

Prerequisite: Honors or AP Chemistry. This is an honors level introduction to organic chemistry targeted at students who wish to pursue further study in chemistry or health related fields. This course examines the structure and reactivity of carbon containing compounds. Students will learn how to physically characterize and identify organic molecules. Everyday applications of organic chemistry in areas such as energy, food, medicine, personal care, and polymers will also be explored through lecture and laboratory activities.

639 AP CHEMISTRY (AP/Wt.) 6 cr., 36 wks

Pre.: Chemistry H/Wt, consideration for ADV with teacher recommendation, Algebra II ADV or higher

This rigorous college level course, taught from a college textbook is the equivalent of the general chemistry course required of science majors at most universities. This course should be considered by those students who have demonstrated high achievement and ability in science courses. Applicants may be screened using criteria of prior science grades and PSAT results.

Note: All students taking this course will be encouraged to take the Advanced Placement Examination which is administered in the first two weeks of May. Please see the explanation of the Advanced Placement Program under the General Information section of the Course Selection Guide.

650 HUMAN ANATOMY AND PHYSIOLOGY (H/Wt.) 6 cr., 36 wks

Pre.: Biology ADV or higher, Chemistry ADV or higher

This is a systematic study of the human body and related areas of health and disease. Laboratory work is a part of the course and students will perform various experiments and dissections of representative animals. The student will need to devote more time in study than is provided by the regular classroom meetings.

652 FORENSIC SCIENCE (ADV) 3 cr., 18 wks

Pre.: Biology, Chemistry CP or higher

This course is intended for those planning further study in forensic science or a related field. This course provides a conceptual understanding of forensic science through the process of inquiry. Included in this study are extensions of concepts learned in physics, chemistry, and biology. The laboratory experience will be a key component of this course. Independent study of related materials will be encouraged to further enhance course content.

655 ASTRONOMY (ADV) 3 cr., 18 wks

Astronomy is a hands-on course that has no prerequisite. Topics presented include constellations and mythologies, labs that investigate the planets, moons and mysterious nebula, videos that use computer simulations with actual images, black holes and exploding stars. The class also does some daytime solar observing. There is an extensive discussion of extraterrestrial life. Class discussions are common and always welcome. A community service project is part of the class and extra credit at the NJAA is regularly available.

658 BEHAVIORAL ECOLOGY: PRINCIPLES AND TECHNIQUES (CP) (V) Gr. 10-12 3 cr., 18 wks

Pre.: Biology

Behavioral Ecology is the science that deals with the interactions between organisms and their living and nonliving environment. This course offers a broad overview of behavioral ecology principles that govern these interactions. A variety of instructional practices and individual independent projects are used to investigate these principles.

661 PHYSICS (CP) 6 cr., 36 wks

Pre.: Biology and Chemistry

A fundamental, activity-based physics course covering the topics of kinematics, dynamics, energy, power, heat, light, electricity and magnetism. This physics course, which meets the requirements for a laboratory science course, will seek to improve students' math skills and introduce students to higher order thinking as well as provide a foundation for chemistry and biology. This course is not designed for students considering careers in science related areas.

662 PHYSICS (ADV) 6 cr., 36 wks

Prerequisite.: Biology ADV and Chemistry ADV or teacher recommendation
Co-/Prerequisite: Algebra II ADV or higher

A laboratory based physics course covering the topics of kinematics, dynamics, energy, power, heat, light, electricity and magnetism. This physics course is designed to provide students with a knowledge base in physics for careers in the students interested in attending a four year college but not majoring in a science, healthcare or related technologies.

663 PHYSICS (H/Wt.) 6 cr., 36 wks

Sug. Pre.: Chemistry H/Wt, consideration for ADV with teacher recommendation
Sug. Co-/Prerequisite: Algebra II H/Wt
A comprehensive, laboratory-based physics course covering the topics of kinematics, dynamics, energy, power, electricity, and magnetism. This physics course is designed to prepare students for careers in life sciences, healthcare, and other related technical areas. Emphasis is on laboratory work from which the theory is developed and mathematical concepts applied. These students are strongly recommended to elect AP science in senior year.

668 AP PHYSICS 1 (H/Wt.) (AP/Wt.) 6 cr., 36 wks
Prerequisite: Chemistry H/Wt

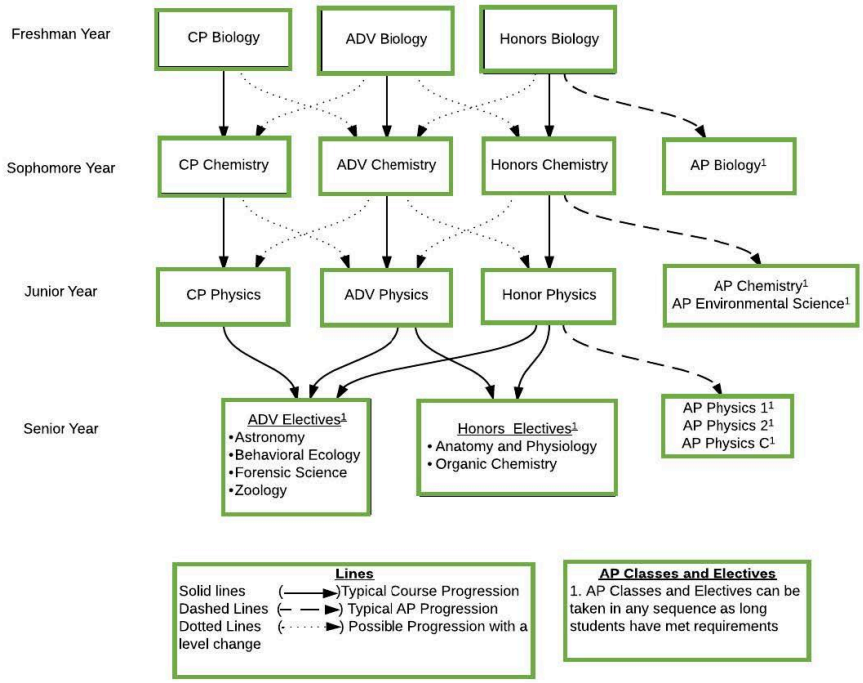
Co-/Prerequisite Algebra II H/Wt

This AP Physics 1 course is a non-calculus based physics course which includes topics kinematics; dynamics: Newton's laws; circular motion and universal law of gravitation; simple harmonic motion; impulse and linear momentum; work, energy and conservation of energy; rotational motion; electrostatics; DC currents; mechanical waves and sound. This course provides a comprehensive and systematic introduction to the main principles of physics. Understanding and applying physical principles to solve problems is a major goal of the course. This course is strongly recommended for students who are not taking calculus and who are planning on majoring in college in any of the sciences, computer science, mathematics, or health fields. Applicants may be screened using criteria of prior science grades, present science teacher recommendation, and standardized test results when available. *Note: All students taking this course will be encouraged to take the Advanced Placement Examinations which are administered in the first two weeks of May. Please see the explanation of the Advanced Program under the General Information section of the Course Selection Guide.*

669 AP PHYSICS "C" Mechanics (H/Wt.) (AP/Wt.) 6 cr., 36 wks
Pre.: Physics H/Wt or AP Physics 1, co-requisites of AP Calculus AB or BC.
This rigorous college level course, taught from a college textbook is the equivalent of one semester of a three semester introductory physics course required of science majors at most universities. Those students who have demonstrated high achievement in previous science courses should consider this course. Strong emphasis will be placed on solving a variety of challenging problems in mechanics, and on analysis in the laboratory and classroom. Methods of calculus will be used extensively. Applicants may be screened using criteria of prior science grades, present science teacher recommendation and standardized test results when available. *Note: All students taking this course will be encouraged to take the Advanced Placement Examination which is administered in the first two weeks of May. Please see the explanation of the Advanced Placement Program under the General Information section of the Course Selection Guide.*

670 AP PHYSICS 2 (H/Wt.) (AP/Wt.) 6 cr., 36 wks

Pre: AP Physics 1, Honors Algebra II
This AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. *Note: All students taking this course will be encouraged to take the Advanced Placement Examinations which are administered in the first two weeks of May. Please see the explanation of the Advanced Placement Program under the General Information section of the Course Selection Guide.*



SOCIAL STUDIES

TABLE OF CONTENTS

All students are required to complete 15 credits of Social Studies to fulfill their graduation requirement. The required courses include two years of United States History and one year of World History. Additionally, the Social Studies Department offers a comprehensive elective program for students desirous of expanding their knowledge of the content field. The elective program includes courses in history, government, economics, psychology, and the social sciences.

9TH GRADE: EARLY AMERICAN HISTORY
10TH GRADE: MODERN AMERICAN HISTORY
11TH GRADE: WORLD HISTORY / SOCIAL STUDIES ELECTIVES

12TH GRADE: SOCIAL STUDIES ELECTIVES

Students who are college bound and are interested in a concentration in history or the social sciences are strongly recommended to take 4 years (20 credits) of social studies, with an emphasis on honors and/or AP programs. Students who are college bound but not interested in a concentration in the above areas should consider taking at least 31/2 years of social studies. Students not attending college should also consider expanding their social studies understanding by taking more than the required 3 years.

730 EARLY AMERICAN HISTORY (CP) Gr. 9 5cr., 36 wks

This course emphasizes the continued development of competency in reading, writing, speaking, and critical thinking skills. Students enrolled in this course will complete a variety of assessments designed to strengthen their ability to analyze the historical development of the United States. This United States history course focuses on the growth of the nation from colonization and settlement to the emergence of modern America. The role of the United States in the world is considered through the lenses of historical, political, economic, socio/cultural, and geographical developments. The creation and evolution of the American system of government and the rights and responsibilities of citizenship are emphasized. This course satisfies the first half of the New Jersey state requirement for United States History.

731 EARLY AMERICAN HISTORY(ADV) Gr.9 5cr., 36 wks

Students will be challenged in the Advanced level course to increase and deepen their understanding of United States History. However, this course is not as demanding as the Honors or the Advanced Placement level. Students will be expected to read with comprehension, analyze primary sources, and engage in class discussions. Projects, varied writing assignments, research papers, and frequent assessments serve to reinforce the concepts and themes taught in the course. Homework on a regular basis is an expectation of students enrolled in this course. This United States history course focuses on the growth of the nation from colonization and settlement to the emergence of modern America. The role of the United States in the world is considered through the lenses of historical, political, economic, socio/cultural, and geographical developments. The creation and evolution of the American system of government and the rights and responsibilities of citizenship are emphasized. This course satisfies the first half of the New Jersey state requirement for United States History.

732 EARLY AMERICAN HISTORY (H/Wt.) Gr.9, 5cr., 36 wks

The student who undertakes Honors level Early American History should have a very strong foundation in reading, writing, and critical thinking. The workload will be rigorous. Students should be mature enough to handle voluminous notes, long reading assignments of text, primary sources, and outside reading. Frequent and varied writing assignments are incorporated into the course on a regular basis. Active participation is an expectation of students at this level.
This United States history course focuses on the growth of the nation from colonization and settlement to the emergence of modern America. The role of the United States in the world is considered through the lenses of historical, political, economic, socio/cultural, and geographical developments. The creation and evolution of the American system of government and the rights

and responsibilities of citizenship are emphasized. This course satisfies the first half of the American History requirement for New Jersey.

710 MODERN AMERICAN HISTORY (CP) Gr.10 5 cr., 36 wks

This course is designed to support students who need to develop competency in the basic skills of listening, speaking, reading, writing, studying, and critical thinking skills. Emphasis will be placed on helping students learn basic skills to be successful not only in the Modern American History course, but future Social Studies courses as well. 710 Modern American History is a chronological survey from World War I to today. The course emphasizes basic social studies skills to accommodate the needs of learners.

711 MODERN AMERICAN HISTORY Gr.10 (ADV) 5 cr., 36 wks

Students of average to above average ability and performance will be challenged to deepen their understanding of United States History and refine their skills of reading, writing, speaking, and analysis. Employing a multifaceted approach that includes history, culture, economics, geography, government, and diplomatic perspectives, students will build on their previous knowledge of United States History to investigate the key concepts, movements, events, and personalities of the history of the United States from World War I to today. With an emphasis on critical thinking, interpretation, analysis, and historiography, this course is designed to provide students with analytical skills and factual knowledge that will allow them to understand the historical development of the United States and make global connections as well.

712 MODERN AMERICAN HISTORY Gr.10 (H/Wt.) 5 cr., 36 wks

This course is geared to the student who is desirous of delving deeper into the study of United States History through intensive reading and writing assignments related to the course content. It is important that students enrolled in this course read above grade level and demonstrate well-developed writing skills. Students should also be self-motivated learners interested in expanding and deepening their understanding of United States History. Employing a multifaceted approach that includes history, culture, economics, geography, government, and diplomatic perspectives, students will build on their previous knowledge of United States History to investigate the key concepts, movements, events, and personalities of the history of the United States from World War I to today. With an emphasis on critical thinking, interpretation, analysis, and historiography, this course is designed to provide students with analytical skills and factual knowledge that will allow them to understand the historical development of the United States and make global connections as well. Numerous writing assignments will be given to help students analyze major themes and historical events in United States History.

740 AP UNITED STATES HISTORY (H/Wt.) (AP/Wt.) Gr.10, 11 or 12 5cr., 36 wks

Prerequisite-732 Honors Early American and English placement of Honors or AP for next academic year (Sophomore)

This course offers students a rigorous survey of United States History from exploration to the present day. Although the subject matter is factual, emphasis will be placed on the critical evaluation of issues and on the analysis of primary source documents. Students should possess a strong foundation in reading, writing, and critical thinking skills as the workload will be very extensive and demanding. Students must commit to undertaking the equivalent of a freshman college level course while in high school and all the demands that such a course entails. There is an expectation that students enrolled in the course will take the Advanced Placement United

States History exam in the spring for possible college credit. This course fulfills the second year requirement of United States History for sophomores and juniors. This course may also be taken as an elective for senior students.

700 WORLD HISTORY/ CULTURES (CP) Gr.11 5 cr., 36 wks

This comprehensive full year required course focuses on both Western and Non-Western History and cultures of the world. From the Renaissance and the Age of European domination, and into Modern Times, the emphasis is placed on historical themes, cultural influences, and geographic concepts.

The subject matter of this required course, although similar to the Advanced and Honors/AP courses, will not be as demanding in terms of workload. By the end of the course, the students will be able to comprehend the basic concepts of World History, and a strong emphasis will be placed on improving the student's basic social studies skills.

701 WORLD HISTORY/ CULTURES (ADV) Gr.11 5 cr., 36 wks

The subject matter is similar to the previously listed World History course description. Although students will face a rigorous learning experience, this required course will not be as demanding as the Honors or AP levels. Students will be expected to read with comprehension, and to complete projects, written and oral reports, and essays which reinforce the concepts and the historical and cultural themes taught in the course.

702 WORLD HISTORY/ CULTURES (H/Wt.) Gr.11 5 cr., 36 wks

The subject matter is similar to the previously listed World History/Cultures description. Students should possess a strong foundation in reading, writing, and critical analysis skills since the workload will be very extensive and demanding in this Honors level course.

703 AP WORLD HISTORY (H/Wt.) (AP/Wt.) Gr.11 & 12 5 cr., 36 wks

Prerequisite-712 Honors Modern American or 740 AP United States History and English placement of Honors or AP for next academic year (Junior)

This AP World History course offers motivated students and their teacher the opportunity to immerse themselves in the processes that, over time, have resulted in the knitting of the world into a tightly integrated whole. AP World History offers an approach that lets students "do history" by guiding them through the steps a historian would take in analyzing historical events and evidence worldwide over a millennium. The course offers balanced coverage with Asia, Africa, the Americas, and Europe each represented. AP Students will be encouraged to take the Advanced Placement World History Test in May. Students who elect to take this course should possess a strong foundation in reading, writing, and critical thinking skills since the workload will be very extensive and demanding in this AP course. Students should be mature enough to handle voluminous notes, long reading lists, and frequent papers and tests. Students who are seniors may also select this course as an elective.

ELECTIVES

733 AP UNITED STATES GOVERNMENT AND POLITICS(H/Wt.) (AP/Wt.) Gr.11 & 12 5 cr., 36 wks

The course presents an analytical perspective on the historical development of American government, politics, and citizenship. Students will study the general concepts used to interpret American politics, and will analyze case studies. Extensive preparation is required, and the students will be encouraged to take the Advanced Placement Test offered in the spring for possible college credit. In addition to the above, all students will be required to complete a historical research project during the second semester of the course.

741 AP PSYCHOLOGY (H/Wt.) (AP/Wt.) Gr.11 & 12 5 cr., 36 wks
This full year course traces the development of psychological theory and practice. Scientific and social science methods will be emphasized and the student is expected to prepare extensively for this advanced course. All students are encouraged to take the Advanced Placement Test in this area in the spring for possible college credit.

742 AP MICRO/MACRO ECONOMICS (H/Wt.) (AP/Wt.) Gr.11 & 12 5 cr., 36 wks
To facilitate a better understanding of economic principles, economists divide the study of economics into two branches: Microeconomics, which examines the behaviors of individual businesses and individual households in economic decision-making; and macroeconomics, which focuses on the analysis of the economy as a whole dealing with the determination of national output, including national income, price levels, and total employment. The first area offers a microscopic view of economic decision-making, whereas the latter looks at the big picture. Students will be encouraged to take the Advanced Placement tests offered in the spring for possible college credit. Students have the opportunity to take one or both of the AP exams offered by the College Board.
Note: This is a full-year course, and students cannot sign up for just one of the segments. One of the two AP tests required for AP weighting. This course meets the graduation requirement for Financial Literacy.

746 AP HUMAN GEOGRAPHY (H/Wt.) (AP/Wt.) Gr.11 & 12 5 cr., 36 wks
AP Human Geography is the systematic study of geographic patterns and processes that have shaped human understanding. Students will learn how landscape analysis and spatial concepts are used to evaluate human social organizations. Economic development and its environmental consequences will also be evaluated along with the methods and tools geographers use in their research and applications to formulate evaluations. The AP Human Geography course provides the content of a typical introductory college course in human geography. Students use and think about maps and spatial data which helps them understand and interpret implications of associations among phenomena in places. Students also learn to define regions, evaluate the regionalization process and what they reveal about the changing character of the world in which we live in. Finally, students will learn to develop critical thinking skills through using systematic, analytical decision making skills in discussing and solving problems. Students will be encouraged to take the Advanced Placement test offered in the spring for possible college credit.

743 PSYCHOLOGY (ADV) (VHS) Gr.10, 11 & 12 2.5 cr., 18 wks
College Prep Psychology is an introductory course to the field of psychology with an emphasis on understanding human behavior from various perspectives. Topics covered are: history of psychology, research methods, learning and memory, human growth and development, social

behavior and normal and abnormal behavior. Students will also get a chance to understand how their own personality has developed and through studying familial patterns and birth order. Open to juniors and seniors only.

744 INTRODUCTION TO THE SOCIAL SCIENCES (CP) (NHHS Gr. 11 & 12) (VHS Gr. 10, 11 & 12) 2.5 cr., 18 wks

By focusing on the related fields of sociology, anthropology, economics, and psychology, students will have an opportunity to investigate areas of current interest to the social scientist. Topics may include the following: culture and ethnicity, the changing family, social class and the American dream, conformity and deviance, gangs and organized crime, death, dying and old age, as well as minority and group relations. Through this course, students will be exposed to the study of human behavior and will have an opportunity to gain an understanding of modern day society.

745 CRIME AND JUSTICE (CP) (NHHS Gr. 11 & 12) (VHS Gr. 10, 11 & 12) 2.5 cr., 18 wks

This course examines all aspects of crime and justice in America. It surveys the causes of crime, crime statistics, and controversial areas such as the death penalty. Special emphasis is placed on the Constitutional amendments that relate to criminal law and the student has the opportunity to participate in mock trials to gain a better understanding of the legal process. The student also has an opportunity to participate in a field trip to a prison.

747 ANCIENT HISTORY (CP) (NHHS Gr. 11 & 12) (VHS Gr. 10, 11 & 12) 2.5 cr., 18 wks

This course is a study of the ancient civilizations of Egypt, Mesopotamia, and the classical periods of Greece, and Rome, including the findings of archaeological expeditions.

748 ROOTS OF INTOLERANCE Gr. 10, 11 & 12 (CP) (VHS) 2.5 cr., 18 wks

This half year course, Roots of Intolerance, will explore the historical, psychological, socio-economic, and political forces that have bred intolerance towards groups of people based on their race, religion, and ethnicity. Particular emphasis will be placed on outcomes of such intolerance that led to genocide. Case studies will include, but not be limited to: Native Americans, the Irish, the Armenians, the Holocaust, Khmer Rouge in Cambodia, Communist purges, and Rwanda. A variety of teaching methods will be employed. Students will be expected to analyze primary sources. Including: first-hand accounts, photographs, documents, and artifacts. Students will utilize research and presentation skills in this interactive course. Highlights of the course will include guest speakers, an assessment of Hollywood treatments of genocide, and class trips to sites such as the Holocaust Museum in Washington, DC.

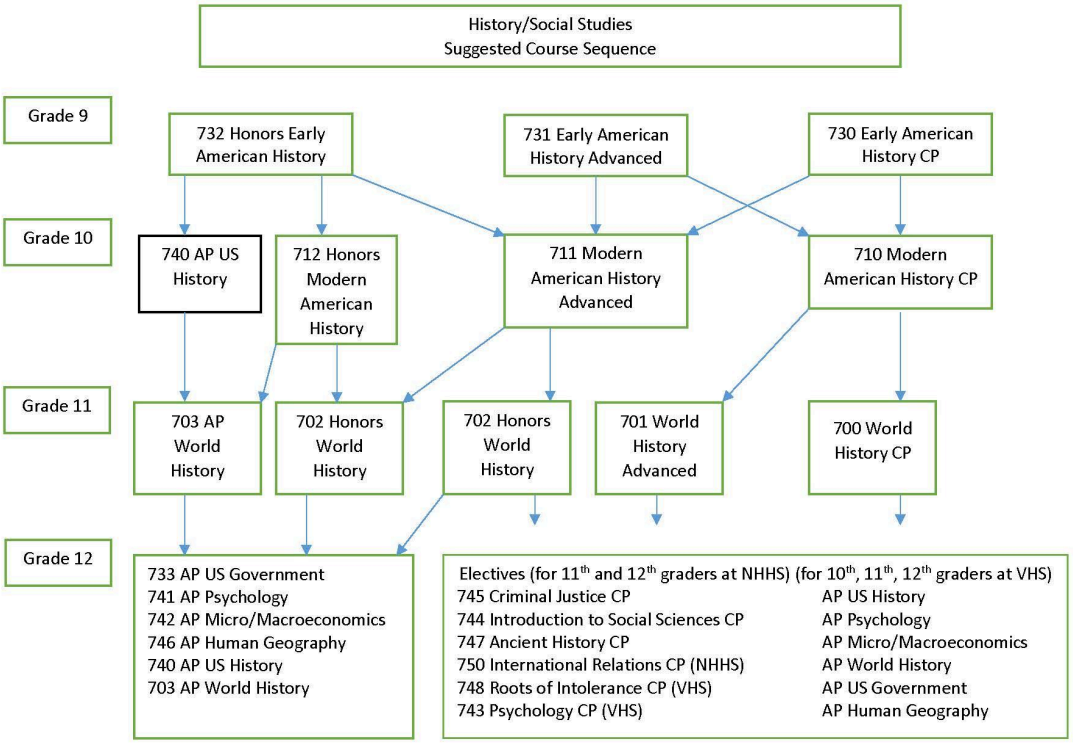
750 INTERNATIONAL RELATIONS (CP) (NHHS) Gr.11 & 12 2.5 cr., 18 weeks

This course will provide students with specific instruction regarding the complexities of the post 9/11 world and American diplomacy with international institutions, organizations, and nations. Consideration will be given to the international political system's major actors, the nature of conflict and war, and how countries cooperate and why. Students will learn that the 20th century conflict of ideologies has been replaced today by the conflict between competitive civilizations. Topics of study include conflicts between the Western and non-Western world, the proliferation

of weapons of mass destruction, the globalization of the international economy, the management of international conflict, and terrorism from Al Qaeda to ISIS.

770 FINANCIAL LITERACY Gr.9-12 (Req.) 2.5 cr., 18 wks

This state mandated personal financial literacy course is designed to alert, inform, and educate students in concepts of personal finance and money management. Students will begin to develop the skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy. Effective money management is a disciplined behavior. It is difficult to master, and much easier when learned earlier in life. This course will start students on a path toward being in control of their financial futures. Five broad topics will be the foundation of the course: college and career planning, money management, savings and investing, income, and spending. The course will teach students to search and assess college and career opportunities, identify and prioritize their personal money management goals, develop personal spending and savings plans, comprehend the impact of time on the value of money, understand the cost of using credit, and protect assets. Please note: this a standalone, independent, state mandated graduation requirement that does not count toward the 15 credit State Social Studies or Math requirement or 5 credit requirement in Practical Arts. (Note: AP Micro/Macroeconomics will satisfy the Financial Literacy graduation requirement for students.)



SPECIAL EDUCATION

TABLE OF CONTENTS

The Special Education Program is structured to address the goals and objectives in each student's Individual Educational Plan. Classes are designed to meet the unique needs and abilities of the diverse adolescent learner. Within the high school setting, the continuum of options offered to students with special needs includes general education classes, resource programs and special class programs. Classes are designed to facilitate skill development supporting transition to adult life in the least restrictive environment.

All special education program placements for students are determined via the IEP team process.

840 ACADEMIC CONSULTATION

This course is designed to increase independence and self-advocacy for students while simultaneously providing the least restrictive environment. Students can access their modifications, receive help with organization, assistance with test preparation and projects, and reinforcement of concepts and skills for designated academic courses. As needed, students will receive support in organizing, planning, and self advocacy for current classes in a small group setting.

840SS ACADEMIC CONSULTATION/ STUDY SKILLS Gr. 9 2.5 cr., 36 wks

This course is designed for freshmen to encourage students to define, explore, and understand their learning styles. Students will focus on developing a variety of communication skills which will allow them to formulate solutions for problem solving and decision making. Students will be provided with the tools necessary to effectively transition to post-secondary education through the evaluation of personal interests, abilities, skills and personal presentation. This course will also provide students an opportunity to access their modifications, receive help with organization, assistance with test preparation and projects, and reinforcement of concepts and skills for designated academic courses.

IN-CLASS SUPPORT PROGRAM COURSES Gr. 9-12 5 cr., 36 wks

English I, English II, English III and English IV

Algebra I, Geometry, Integrated Algebra and Algebra II

Physics, Chemistry and Biology

U.S. History I, U.S. History II, and World History

An in-class program is provided in the general education class environment. The program provides students, who require specially designed instruction, the support of a special education teacher as well as the content area teacher.

REPLACEMENT RESOURCE CENTER PROGRAM Gr. 9-12 5 cr., 36 wks

851-854 ENGLISH I, ENGLISH II, ENGLISH III, ENGLISH IV-12
855-858 ALGEBRA 1, GEOMETRY, INTEGRATED ALGEBRA
859-861 PHYSICS, CHEMISTRY, BIOLOGY

863-865 UNITED STATES HISTORY I, UNITED STATES HISTORY II, WORLD HISTORY

English, math, science and social studies instruction are provided to students requiring a highly individualized learning program to commensurate with their specific needs and abilities. The program's focus is on remediating, developing, and improving skills in the core curricular areas.

850 READING I 10 cr., 36 wks

Two intensive intervention programs created by Scholastic, System 44 and READ 180, are used in the class to help accelerate academic achievement for struggling readers. System 44 systematically integrates lessons on sounds, sound spellings, high-utility sight words, and strategies for unlocking multisyllabic words, providing deep instruction and systematic, adaptive practice. Read 180 is an intensive reading intervention program designed to meet the needs of students whose reading achievement is below the proficient level. Both directly address individual needs through adaptive and instructional software, high-interest literature, and direct instruction in reading and writing skills. These instructional models enable the acceleration of struggling readers toward grade-level reading proficiency through a proven balance of direct instruction, small-group differentiation, and individual practice.

850B READING II 10 credits, 36 wks

This course is a continuation of Reading I. Students will continue to increase fluency, reinforce phonemic approaches and practice decoding.

ALTERNATIVE LEARNING CENTER Gr. 9-12 15-30 cr., 36 wks

871-874 English I, English II, English III and English IV

875-878 Algebra I, Geometry, and Integrated Algebra II

879-881 Physics, Chemistry and Physics

883-886 U.S. History I, U.S. History II and World History

887 (N) Physical Education – This course is taught by a physical education teacher.

The Alternative Learning Center is a program for students whose primary concern is the resolution of emotionally related issues.

LEARNING AND/OR LANGUAGE DISABILITIES PROGRAM Gr. 9-12 (N) 5 cr., 36 wks

8111-8114 English I, English II, English III and English IV

8121-8124 Algebra I, Geometry, Integrated Algebra II and Math12

8131-8134 Physics, Chemistry, and Biology

8151-8154 U.S. History I, U.S. History II and World History

English, math, science, and social studies are offered within the special class program designed to meet the academic needs of each individual student. Instruction is varied to include both individual and group teaching. The structured learning environment encourages success while promoting student responsibility and self-discipline.

803 EMPLOYMENT ORIENTATION PROGRAM (EOPI) Gr. 9-10 (N) 15 cr., 36 wks

The Employment Orientation Program (EOP 1) is focused on teaching students skills that are necessary in the workplace. The program will run similar to a Kinko's Center where the students

will be learning skills such as copying, engraving, printing, laminating, and poster making. Aside from the hands-on-experience they will receive in the classroom, they will be learning important skills that are relevant to the employment world.

804 EMPLOYMENT ORIENTATION PROGRAM (EOP II) Gr. 11-12 (N) 15 cr., 36 wks
The employment Orientation II Program (EOP II) is focused on providing acquisition, maintenance, and generalization of employment skills that can be utilized in future work settings while instilling self-confidence in each student.

ADULT TRANSITIONAL COMMUNITY (V) Gr. 9-12
This program is designed to address the goals and objectives in each student's individualized Education Plan. Students receive instruction in a small group and/or individual setting. The classroom is intended to facilitate skill development supporting transitional needs for adult life.

1011-1014 English I, English II, English III and English IV

1020-1023 Algebra I, Geometry, and Integrated Algebra II, Math 12

1030-1033 Physics, Chemistry and Physics

1040-1043 U.S. History I, U.S. History II and World History

805 PREPARING for INDEPENDENT LIVING OPPORTUNITIES AND TRANSITION (PILOT) Gr. 12 (N) 15 cr., 36 wks
Preparing for Independent Living Opportunities and Transition is designed to provide naturally occurring life experiences for students with special needs. Transitional and life skill instruction is provided in the classroom as well as in the community. This small group instructional setting is designed to promote independence for students.

895 UNIFIED LEADERSHIP I Gr. 09-12 2.5 cr., 18 weeks

Leadership I is designed to enable the student to successfully assist, guide, and coach students with special needs during their school day. The Unified Leaders will assist the students with special needs in all areas throughout the day including academics, elective courses, lunch, and employment orientation. Unified Leaders will work with special class program teachers on specific prompting levels, data collection, social skill instruction, and overall growth in independence.

896 UNIFIED LEADERSHIP II Gr. 09-12 2.5cr., 18 weeks

Leadership II is designed for students to continue their work with students with special needs. Students would further develop the skills and tasks listed in Unified Leadership I. Many of the students who take this course are interested in careers in special education and/or working with individuals with special needs.

818 CAREER EXPLORATION/MENTORING (N) Gr. 11-12 15 cr., 36 wks
The career exploration program is a community based vocational training program. This course affords students the opportunity to be mentored at approximately eight different businesses. The job sampling component helps students transfer job related skills across work settings, and make an informed decision regarding their future vocation.

Prerequisite: EOP II

819 CAREER DEVELOPMENT (N) Gr. 11-12 15 cr., 36 wks

The Career Development program is for students previously enrolled in the Career Exploration program. Students are provided opportunities to further refine their skills in career areas of student interest.

Prerequisite: EOP II

NORTH STAR ACADEMY (N) Gr. 9-12

The North Star Academy provides a program for students with disabilities operating in a public school, offering academic instruction for high school students with in-district clinical counseling and supports for students with social-emotional difficulties. Students served are aged 13 to 18, referred by boards of education from area school districts. Enrollment in the school's diversified program includes academic instruction geared toward meeting graduation requirements, as well as a transition to post-secondary life choices including work, continuing education, and community involvement. The program offers numerous community-based instruction and job experiences.

TECHNOLOGY EDUCATION

TABLE OF CONTENTS

What is Technology Education?
The Technology curriculum is a dynamic, hands-on program of study that teaches students about the development and applications of technology and the effects technology has on individuals, society, and the environment. Its goal is to develop the technological literacy and capabilities of all students so that they will be better prepared for success in a highly technological society. The course curriculums are delivered through an articulated series of *design and problem solving activities* in which students apply knowledge to solve practical real-world problems. It teaches students *how to think,* not what to think, and *how to learn,* not what to learn.

Successful completion of any of these courses meets the practical arts graduation requirement.

499 INTRODUCTION TO STEM

Grade 9-12, Credits 2.5 cr., 18 weeks

Introduction to STEM encourages students to develop basic skills across the curriculum, including basic literacy in reading, writing, listening, speaking, informational literacies, economics, science, technology, mathematics, and visual studies. Students will gain the skills and knowledge necessary to become lifelong learners. The methods of instruction will include collaboration, consensus building, and cooperative learning. This course will focus on developing literacy through the fields of science, technology, engineering and mathematics. The purpose of this semester long course is to introduce students to Science, Engineering and Technology in a real-world context. Starting with a foundational investigation of the engineering process, students will explore how their world is affected by Science, Engineering and Technology. Students will collaborate on projects and build critical 21st Century and College and Career Readiness skills.

450 DRAFTING AND DESIGN 2.5 cr., 18 wks

This exciting introductory course to Drafting and Engineering Design introduces students to basic graphic communication techniques that are broad in scope and exploratory in nature. Students are introduced to engineering, drafting and design skills necessary for effective technical communication found in today's top industries and businesses. Fundamental drafting techniques are covered including: technical sketching, traditional drafting, orthographic projection, pattern making, isometric and perspective drawings, and CAD. This course is for students interested in design, engineering, architecture, mathematics or science as well as other related careers.

453 ENGINEERING/CAD I Gr. 9-12 2.5 cr., 18 wks

This is a half year course where students acquire the basic skills necessary to discover solutions to design problems using hands-on activities. Students will explore engineering design concepts

using two dimensional and three-dimensional CAD software as well as hands-on modeling, product aesthetics, and the ergonomics of product design. An individual approach will be used to enable students to express their ideas with creativity, clarity, and precision. Students interested in design, engineering, architecture, mathematics or science should consider taking this course.

454 ENGINEERING/CAD II Gr. 10-12 2.5 cr., 18 wks

Prerequisite: Engineering/CAD I

This half year course is designed to have students use hands-on skills to complete solutions to design problems. Through the use of computers, students will be exposed to technical communication software that includes 3D modeling and animation programs. In addition, this course provides students with the opportunity to develop advanced 3D modeling, printing and presentation skills with the study and application of material mapping, lighting techniques, shadowing, perspective viewing, rendering, photo image output, slideshows, 3D animation, and hands-on material modeling. Students interested in design, engineering, architecture, mathematics or science should consider taking this course.

456 ENGINEERING/CAD III Gr. 10-12 5 cr., 36 wks

Prerequisite: Engineering/CAD II

Taking Engineering Drawing/CAD II I will give students an advantage of a hands-on course designed to prepare them for an engineering or a related field of study for college. Students will use CAD software to solve engineering design problems through advanced design challenges. Students will be required to create portfolios for their designs or redesigned products and then develop prototypes using solid molding techniques. Design activities involve graphic, mechanical, structural and electronic systems. It is highly recommended for students interested in any technical field such as engineering, science, physics, mathematics, or computer science. This approach to technical communication and problem solving gives students an advantage in post high school studies.

457 ARCHITECTURAL DRAFTING & DESIGN I 2.5cr., 18 wks

Prerequisite: Drafting and Design #450

The Architectural Design I course introduces students to the fundamental skills and concepts used by architects, civil engineers, and builders. Through the use of architectural design software and hands-on design challenges, students will produce architectural house plans, CAD drawings, and presentations of their designs. Emphasis is placed on the planning and design of residential structures with the efficient use of space and room layout. Site development, construction techniques, historical style periods and aesthetic considerations are also explored. Students will develop their own floor plans, cross sections, elevations, and two-point perspective drawings.

458 ARCHITECTURAL DRAFTING & DESIGN II 2.5cr., 18 wks

Prerequisite: Architectural Drafting and Design I 457

Architectural Design II is an advanced hands-on course that combines the drafting and CAD skills from the prerequisite courses with additional knowledge and skills related to the Architectural field. Students are taught advanced drawing techniques, the design loop, the construction of scale models, and design considerations. Students solve long-range problems through the interaction with the American Institute of Architects via design competitions that require the application of critical thinking skills. This course is highly recommended for students planning a career in architecture, engineering, construction trades or related design fields.

484 APPLIED TECHNOLOGY AND DESIGN (N) 2.5 cr., 18 wks

This course is designed to give students the opportunity to try new ideas and generate creative solutions to technical problems. The problem-solving design process is used along with the application of basic skills related to math, science and other related subjects to try new ideas and solve *"real world"* problems. Group and individual hands-on activities will be used that encourage creative and critical thinking skills. Modeling and prototyping will be used to present solutions to problems.

490 GRAPHIC COMMUNICATION TECHNOLOGY I 2.5 cr., 18 wks

Graphic Communication Technology provides students with the knowledge and techniques that will be used throughout their high school years and beyond to present ideas to others using various forms of media. Students will learn about the principles of design, basic color theory, and typography. Students will use these concepts as well as creative and critical thinking skills to solve design problems. Activities include: t-shirt design, web page design, product design, billboards, CD covers, posters, and more. Students will use design software such as Photoshop and Fireworks to create graphics. this course is recommended for students interested in the printing and publishing industry, communications, web design, or other related fields.

491 GRAPHIC COMMUNICATION TECHNOLOGY II 2.5 cr., 18wks

Prerequisite: Graphic Communication Technology I #490

This course allows students to use advanced presentation techniques to solve practical, real world design problems. Student's present ideas using computer graphics, animation, printing and various forms of media to gain skills and knowledge of what effective communication is. Hands-on activities are used that encourage creative and critical thinking skills. Activities include: logo design, resume design, and product design. This course is primarily designed to further students' interests for the many varied careers available in the commercial printing, newspaper and advertising fields.

492 WEBPAGE DESIGN/ANIMATION 2.5 cr., 18 wks, Gr 9-12

This is an introductory course to the software, techniques, and theory of building a web site for school, personal use, or for employment opportunities. Students also learn several basic methods

used to animate graphics. Hands-on experience will involve using cutting-edge software such as FrontPage, Dreamweaver, Fireworks, Flash, Adobe Photoshop, and other related products. Web Page Design and Animation are skills that will benefit any student going to college or starting their own business.

494 WEBPAGE DESIGN/ANIMATION II 2.5 cr., 18 wks

Prerequisite: Webpage Design/Animation I

This course is a continuation of Webpage Design/Animation. It is an area of instruction that addresses the technology, knowledge and skills required for college bound students and for the workplace. The course explores presentations and Web pages utilizing text, graphics, sound, video, and 2D and 3D animations. This course simultaneously examines both the theory and the practice of new media.

495 ROBOTICS AND AUTOMATION Gr. 9-12 2.5 cr., 18 wks

This course provides an introduction to automatic control and computerized systems. Students will analyze and construct remote and computer controlled electronic systems, program a robot, operate computer controlled manufacturing equipment and learn about the power systems that make robotics possible. Each student will design, build, and test a robot or automated system. Additionally, they will explore the principles and issues related to the use of automation in contemporary society.

069 POWER TECHNOLOGY I (N) Gr. 9-12 2.5 cr., 18 wks

In this Technology Education course, students become familiar with multiple power systems, as well as its components and features. This familiarization is the basis for all engineering and operating activities in power systems. Students will become familiar with various instruments and tools to enhance a piece of equipment. Students are introduced to the fundamentals of today's technologies in generating transmission and power system management. They will assemble and test internal combustion engines, and learn about other power technologies, such as rocket and solar powered vehicles. Each student in this course will inspect, repair, and maintain an engine. An understanding of the basic principles in operating engines and the proper use of tools will be emphasized in this course.

070 POWER TECHNOLOGY II (N) Gr. 9-12 2.5 cr., 18 wks

Prerequisite: Small Engines I or Power Technology I

This course will build upon the basic principles that students learned in Small Engines I or Power Technology I. Prior to taking this course, students should have a strong understanding of various instruments and tools used to enhance pieces of equipment. Students will take an advanced look into the cooling, lubrication, carburation and ignition systems of both four and two stroke engines. Internal combustion engines, other time/labor saving engines, and motors will be explored. These devices include diesel engines, rocket and jet engines, electric motors, hydraulics, hybrid vehicles, and the use of CAD. Students will also utilize rapid prototyping techniques, which include 3D printers and laser engravers for projects.

072 LANDSCAPE DESIGN Gr. 9-12 2.5 cr., 18 wks

Landscape Design is a course that will direct the student in developing an appropriate landscape plan. The student will also become able to estimate the cost of various landscapes, from planning to completion.

PROJECT LEAD THE WAY

The Project Lead the Way (PLTW) program is a nationally recognized pre-engineering program, consisting of a series of courses designed to give students a sound foundation in engineering. As a nationally certified PLTW school, students who pass the end of year PLTW national test and earn a passing grade of an A or B are eligible for a variety of opportunities from the colleges. The Project Lead the Way course sequence is as follows: Introduction to Engineering Design (IED) is the required introductory course, Principles of Engineering (PE), Digital Electronics (DE), and Engineering Design and Development (EDD) (Required 4th Course)**.**

This program will benefit the students through providing students exposure to the field of STEM at a variety of levels from technical to academic. Each PLTW Engineering course engages students in interdisciplinary activities like working with a client to design a home, programming electronic devices or robotic arms. These activities not only build knowledge and skills in engineering, but also empower students to develop essential skills such as problem solving, critical and creative thinking, communication, collaboration, and perseverance.

470 Introduction to Engineering Design Grade: 9-12 5 cr., 36 wks.
Co-requisite(s): Geometry, **Algebra I (Advanced)**

Learn how to solve complex problems and develop problem-solving skills using the Engineering Design Cycle. Study the design concepts of form and function, and use Autodesk Inventor to translate your conceptual design into 3D computer models. Students develop sketches, design computer models, understand how to use mass property calculations (such as volume and density) to evaluate their model, and learn the concepts of cost analysis, quality control and marketing for production. During the course, students develop a portfolio to display their designs with peers, instructors, and professionals.

471 Principles of Engineering Honors Grade: 10-12 5 cr., 36 wks.
Prerequisite(s): Introduction to Engineering Design Co-requisite: Algebra II

In this dynamic hands-on course, students explore the field of engineering and engineering technology. Working in teams, students solve open-ended, real world challenges using all available resources. Exploring various technology systems and manufacturing processes, students learn how engineers and technicians use math, science, and technology in an engineering problem-solving process to benefit people. Students consider the social and political consequences of technological change. Each project concludes with individual written documentation and a formal team presentation.

472 Digital Electronics Honors 11-12, 5 cr., 36 wks.
Prerequisite(s): IED, PED Math Co/Prerequisite(s): Pre-Calculus/Algebra II
The study of electronic circuits that are used to process and control digital signals. In contrast to analog electronics, where information is represented by a continuously varying voltage, digital signals are represented by two discrete voltages or logic levels. This distinction allows for greater signal speed and storage capabilities and has revolutionized the world of electronics. The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation. Utilizing the activity-project-problem-based (APB) teaching and learning pedagogy, students will analyze, design, and build digital electronic circuits. While implementing these designs, students will continually hone their professional skills, creative abilities, and understanding of the circuit design process. Digital Electronics (DE) is a high school level course that is appropriate for 10th or 11th grade students interested in exploring electronics. Other than their concurrent enrollment in college preparatory mathematics and science courses, this course assumes no previous knowledge

473 Engineering Design and Development Honors Grade 12, 5 cr., 36 wks.
Pre-requisites IED, PED and DE
(EDD) is the capstone course in the PLTW high school engineering program. It is an open-ended engineering research course in which students work in teams to design and develop an original solution to a well-defined and justified open-ended problem by applying an engineering design process. Students will perform research to select, define, and justify a problem. After carefully defining the design requirements and creating multiple solution approaches, teams of students select an approach, create, and test their solution prototype. Student teams will present and defend their original solution to an outside panel. While progressing through the engineering design process, students will work closely with experts and will continually hone their organizational, communication and interpersonal skills, their creative and problem solving abilities, and their understanding of the design process.

WORLD LANGUAGE

TABLE OF CONTENTS

The North Hunterdon/Voorhees High School District offers sequential study in French, German, Latin and Spanish. A student may begin a sequence of study in any grade and each level is a prerequisite for the next level. Students begin by developing basic skills in listening, speaking, reading and writing. As students advance through the levels, their proficiency in each of three modes of communication will increase through level appropriate language functions. Through the study of language, students acquire critical thinking skills applicable to other academic studies. Students are encouraged to study more than one world language. Juniors and seniors are encouraged to begin a second or third world language. Modern language classes are conducted in the target language, and stress the acquisition of communicative competency. In Latin, emphasis is placed on interpretive reading and on understanding the influence Latin has on the English language. The advantages and benefits of studying a world language include the broadening of the student's knowledge of the world, improving grammar skills in both English and the second language, enhanced career opportunities in business, the military, medicine, law,

the arts, history, science, social work and many other fields. Students who continue to study through the fourth and fifth years and who achieve a proficiency level of Intermediate Mid are eligible to earn the nationally and state recognized Seal of Biliteracy.

340 SPANISH CP 5 cr., 36 wks

College Prep courses are designed for the student with little to no background in world language study or for the student who finds language learning challenging. Students are introduced to the basics of language study. They learn the foundational material- vocabulary and structures- necessary for success in the Advanced language courses that follow. Upon successful completion of Spanish CP, the student will be encouraged to continue the study of that language the next year by taking Spanish I Advanced.

LEVEL I

302 FRENCH I ADVANCED 5 cr., 36 wks
311 GERMAN I ADVANCED 5 cr., 36 wks
342 SPANISH I ADVANCED 5 cr., 36 wks

This course is designed to give the beginning language student functional language ability through a variety of communicative activities. As the year progresses, the students' ability to comprehend and express themselves in the target language is strengthened. Activities integrate the culture and heritage of the language studied.

321 LATIN I ADVANCED 5 cr., 36 wks

The first year Latin course guides students to mastery of the fundamentals of Latin vocabulary and use and an understanding of the essential linguistic connection between Latin and English. From the study of Latin I, students gain a new awareness of their native tongue, and understanding of classical civilization and the best possible foundation for learning modern languages.

LEVEL II

303 FRENCH II ADVANCED 5 cr., 36 wks
312 GERMAN II ADVANCED 5 cr., 36 wks
343 SPANISH II ADVANCED 5 cr., 36 wks

As in Level I courses, the Level II courses increase the student's functional ability in speaking, listening, reading and writing. As the year progresses, students improve their ability to understand and communicate meaningful information in spontaneous interactions, as well as to present new information in both written and spoken situations. Activities integrate the culture and heritage of the language studied.

322 LATIN II ADVANCED 5 cr., 36 wks

This course continues to guide students to increased skills in Latin vocabulary and word building, and in English derivation study. The course emphasizes the essentials of Latin syntax and also develops the student's understanding of the Republican period of Roman history.

LEVEL III

344 SPANISH III ADVANCED 5 cr., 36 wks.

Level III courses increase the student's functional ability in speaking, listening, reading and writing. As the year progresses, students are exposed to more and more advanced structures and vocabulary relating to a wide range of topics. Activities integrate the culture and heritage of the language studied.

304 FRENCH III (H/WT)
313 GERMAN III (H/WT)
349 SPANISH III (H/WT) 5 cr., 36 wks

The subject matter is similar to the Advanced Spanish III course listed above. However, this course is offered to students of above average ability and performance who want to pursue excellence and sophistication in listening, speaking, reading, and writing Spanish. To enroll in Honors Spanish III, students must obtain the approval of their Spanish Level II teacher and have a final average of B or better. Honors Spanish III provides continued enhancement of language skills, vocabulary and grammatical constructions in oral and written communication. There will be continued development to understand the spoken and written language and to speak it accurately and fluently. This class will be conducted primarily in Spanish. Students wishing to take AP Spanish as their final course should choose Spanish III Honors.

323 LATIN III (H/WT) 5 cr., 36 wks

The readings of original Latin authors like Cicero strengthen translation skills and broaden the student's knowledge of Latin. Syntax and vocabulary are mastered so that the reading of original texts may lead to an appreciation of the classical expression of thought and the history and culture that are associated with the text.

LEVEL IV

305 FRENCH IV (H/WT) 5 cr., 36 wks
314 GERMAN IV (H/WT) (V) 5 cr., 36 wks
345 SPANISH IV (H/WT) 5 cr., 36 wks

The goal of the fourth year classes is to attain fluency of written and oral expression as well as extensive comprehension of the language. Classes are conducted in the target language. The language is used in a variety of situations. Critical thinking skills as well as fluency of expression are developed through thematic units, activities and oral and written expressions. Many aspects of culture are studied. The French IV Honors and Spanish IV Honors courses are a prerequisite for AP French and AP Spanish, respectively.

348 SPANISH IV ADVANCED (North Hunterdon only) 5 cr., 36 wks

This course is designed for the student who successfully completed Spanish III Advanced or Honors and wishes to continue study of Spanish but does not wish to take AP Spinternshipanish in his/her final year of study. Students will continue to make gains in proficiency in all four skills- speaking, listening, reading and writing. Material is presented through thematic units. Many aspects of culture are studied.

324 LEVEL IV AP LATIN 5 cr., 36 wks

This course consolidates the vocabulary, syntax and derivational skills covered in Latin I, II, and III. Students will be reading Vergil's Aeneid and Caesar's De Bello Gallico to coincide

with the Advanced Placement syllabus so that the students may take the exam in May. The emphasis is on translation and literary analysis.

LEVEL V

347 SPANISH V (H/WT) 5 cr., 36 wks

Level V offers the opportunity to discuss, and read different types of texts. Through reading of selected materials students will improve their functional communicative competence. Classroom activities will include discussions, conversations, role playing and oral reports. Written assignments will include grammar review, and creative writing. Culture units will be utilized through a variety of audio-visual materials, special activities, and projects.

307 AP FRENCH LANGUAGE (North Hunterdon only)

315 GERMAN V (H/WT)

346 AP SPANISH LANGUAGE 5 cr., 36 wks

The Advanced Placement course is intended for those students who plan on taking the Advanced Placement Examination in May. This course is designated by the Advanced Placement program as a preparation for the Advanced Placement Examination. It is comparable to a college-level course. Great emphasis is placed on the mastery of listening, speaking, reading, and writing skills. A review of grammar, development of vocabulary, and communicative abilities in both oral and written forms are mastered. Critical thinking in fluent oral expression and written composition is necessary. Students interested in enrolling in Advanced Placement World Language courses must obtain the approval of the Level IV instructor.

POLYTECH

TABLE OF CONTENTS

Polytech courses consist of one or two-year programs of study in which students learn the skills that will prepare them for post-secondary educational opportunities or immediate entry into the workforce. Our students work with state-of-the-art equipment and receive hands-on training in a variety of fields. Many of our programs also offer articulation agreements with various post-secondary schools enabling students to earn college credits while still in high school. All of our shared time programs give students the opportunity to enroll in a Polytech program and also attend their home high school. Programs are scheduled by the student's home school guidance counselor and transportation is also provided by the home high school. For additional information, please call the Main Office at 908-284-1444. Applications for admission are found at www.hcpolytech.org or through the home school guidance office.

EQUAL OPPORTUNITY /AFFIRMATIVE ACTION

It is the policy of the Hunterdon County Polytech School District not to discriminate on the basis of race, color, creed, religion, sex, ancestry, national origin, social or economic status, or disability in its educational programs or activities and employment policies as is required by Title IX of the Educational Amendments of 1972 and N.J.A.C. 6:4-1.1 et. seq. Inquiries regarding compliance may be directed to our Affirmative Action and 504 Compliance Officer Susan Joyce at 908-788-1119, Ext. 2003.

For up to date information about the Polytech course offerings, visit their website:

http://www.hcpolytech.org/

Internship/ Early College Opportunities:

If rising senior students are interested in completing an internship experience or taking college courses, they should speak with their school counselor. Hunterdon County Polytech has a few options to consider: Customized/Work-Based Learning

HCVSD Academy Programs

Additional Information Available: www.hcvsd.org

Name	General Information
Computer Science and Applied Engineering Academy	• All eighth grade students in Hunterdon County are eligible to apply. Out-of-county students will be considered based on availability of seats. • Individuals interested in CSAEA are highly encouraged to apply, no prior computer science experience necessary. • Acceptance into the program will be based on placement test scores, attendance, discipline records, 7th & 8th grade transcripts, and an interview. • Students will be bused from their home to Voorhees High School (VHS), where the program is held. Students should coordinate transportation services through their school. • The Academy program is designed for students to attend VHS the entire day and for all four years of high school. • Each CSAEA class is equivalent to one 55 minute class within a rolling block schedule • There are no fees for this program. The start up costs have been covered by grant funds and tuition is charged to the home school. • After completing all the courses and academics necessary for graduation, students will graduate from the Computer Science and Applied Engineering Academy. • CSAEA is not a substitute for the NJ State math and science graduation requirements. • Students will be eligible to earn AP credit, as well as college credits. Colleges may require a discounted tuition fee.

Biomedical Sciences Academy

- All eighth grade students in Hunterdon County are eligible to apply. Out-of-county students will be considered based on availability of seats.
- Acceptance into the program will be based on placement test scores, attendance, discipline records, 7th & 8th grade transcripts, and an interview.
- Students will be bused from their home to North Hunterdon High School (NHHS), where the program is held. Students should coordinate transportation services through their school.
- The Academy program is designed for students to attend NHHS the entire day and for all four years of high school.
- Each BSA class is equivalent to one 55 minute class within a rolling block schedule.
- There are no fees for this program. The start up costs have been covered by grant funds and tuition is charged to the home school.
- After completing all the courses and academics necessary for graduation, students will graduate from the Biomedical Sciences Academy.
- BSA is not a substitute for the NJ State math and science graduation requirements.
- Students will be eligible to earn college credits from at least one or more NJ colleges. Colleges may require a discounted tuition fee.

Environmental Sustainability and Engineering Academy

- All eighth grade students in Hunterdon County are eligible to apply. Out-of-county students will be considered based on availability of seats.
- Acceptance into the program will be based on placement test scores, attendance, discipline records, 7th & 8th grade transcripts, and an interview.
- Students will be bused from their home to Voorhees High School(VHS) where the program is held. Students should coordinate transportation services through their school.
- The Academy program is designed for students to attend VHS the entire day and for all four years of high school.
- Each ESEA class is equivalent to one 55 minute class within a rolling block schedule.
- There are no fees for this program. The start up costs have been covered by grant funds and tuition is charged to the home school.
- After completing all the courses and academics necessary for graduation, students will graduate from the Academy.
- Students will be eligible to earn college credits from at least one or more NJ colleges. Colleges may require a discounted tuition fee.

SCHEDULE PLANNING SHEET

TABLE OF CONTENTS

Name: _____ Home Telephone: _____

Email: _____

	COURSE #	COURSE NAME	RECOMMENDED		CREDITS
			YES	NO	
ENGLISH					5
MATH					
SCIENCE					
SOC. STUDIES					
WORLD LANGUAGE					
HEALTH/PHYS. ED.		(Pre-scheduled)			5
LUNCH	990/991	(Pre-scheduled)			0
.					

*** 5, 7.5 or 10 credits possible, depending upon level.**

ELECTIVES: Fine & Performing Arts - Music and Art
Practical Arts - AgriScience, Business, Family and Consumer Science, Industrial Tech., and Polytech

1						
2						
3						
4						

ALTERNATE COURSE SELECTION: (Will be scheduled only to resolve conflicts.) Choose at least two half-year courses.

1						
2						
3						

1. **All students must carry a minimum of 35 credits. Total Credits_____**
2. **Level placements are determined by performance in the current classes. In order to maintain a level, the student should be earning a grade of "C" or better.**
3. **Students who are earning grades of "D" or "F" in current classes need additional coursework in the basics and should be scheduled accordingly.**
4. Students desiring honors level placement must have an "A" in current course in content level.

5. All course level placement requests will be reviewed with teachers' recommendations at the end of the 3rd marking period.
6. Rising seniors: Competitive colleges and universities look carefully at your senior course selections!