2025-2026

Curriculum Guide

Administration

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Joseph Occhino, Principal
Michael Novak, District Director of Curriculum, Instruction, Assessment
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Kimberly Hayes: Career & Academic Pathways
Amy Pierett: Art, Business, Family & Consumer Sciences, ELS, Media Studies, Music, World Languages
Kristen Schumacher: English, Library, Social Studies
Jessica Verdicchio, Ed.D: Wellness & Equity, Nurses, Health, Phys. Ed., Driver Ed.

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Robin Burton, Speech-Language Specialist
Allison Faasse, Learning Disabilities Teacher/Consultant
Gina Fuschetto, School Social Worker
Rachel Maietta, School Psychologist
Melissa Montegari, School Psychologist

Table of Contents

January 2025

Dear Highlanders:

This Curriculum Guide serves as a comprehensive resource detailing the current curriculum, course offerings, and requirements at Northern Highlands Regional High School. It provides descriptions of all available courses and programs, acting as a starting point for you and your parents to develop an appropriate sequence of studies. Designed to aid in the planning of your high school education, this guide helps you make informed decisions about courses and programs that will shape your future.

You will discover that our curriculum is broad and varied, catering to the diverse needs of our vibrant student body. When selecting courses, it is important to carefully consider your educational and career aspirations. Due to the numerous factors influencing your choices, we encourage you to consult with your parents, teachers, and school counselors before finalizing your selections.

Our mission is to uphold academic standards, enrich our curriculum, and guide our students toward achieving the highest levels of academic success. This will be accomplished through thoughtful planning, preparation, and open communication. We strive to foster a positive and collaborative learning environment that enhances academic performance while promoting values such as respect, resilience, kindness, and integrity. We believe in empowering our students to take responsibility for their success and to craft their unique paths.

The dedication of our staff to our students distinguishes our school and creates growth opportunities that extend well beyond the confines of Northern Highlands. To further support your course selections, we encourage your participation in our Elective Exploration program each December. With the guidance of both home and school, you will be able to identify a program that aligns best with your interests and goals.

I wish you a most successful and rewarding experience at Northern Highlands.

Sincerely,

Joseph J. Occhino, Principal

Principal

Requirements for the Northern Highlands Regional High School Diploma

All students must complete 125 credits for graduation
All students must sit for the NJGPA and successfully pass the ELA and Mathematics section or a subsequent Pathway
All students must complete the FAFSA or FAFSA/NJAFAA Waiver Form

English
4 years of core English courses—20 credits

Mathematics
3 years—15 credits
Including:
Algebra I or content equivalent
Geometry or content equivalent
Third year that builds upon the concepts and skills of Algebra I and Geometry and prepares students for college and 21st century careers

Science
3 years—15 credits
Required Course Sequence: Physics (grade 9); Chemistry (grade 10); Biology (grade 11)

World History/Cultures
1 year—5 credits

U.S. History
2 years—10 credits

World Languages
2 years—10 credits

Physical Education/Health/Driver Education
1 year for each year of enrollment—5 credits per year

Visual & Performing Arts
A minimum of 5 credits are required. This requirement includes all Art and Music classes.
The following English electives (5 credits each) also apply: Introduction to Theater & Acting, Actors' Workshop, Actors' Workshop II, III, and Technical Theater: Design, Stagecraft, Production and Management

Career Education & Consumer, Family, and Life Skills
A minimum of 5 credits are required. This requirement includes all Business Education, Applied Technology, Teacher Education, Media Studies, Computer Science, and Family & Consumer Science courses.

Financial Literacy
All graduates must earn at least 2.5 credits in a financial literacy course.

The financial literacy requirement can be met by by taking one of following courses:
1. Introduction to Business (grades 9-12)
2. Financial Management (grades 9-12)
3. Personal Finance and Investment (grades 10-12)
4. Financial Management (grades 10-12) offered through the Northern Highlands Summer Academy

Other Information

Dual Enrollment Courses—Northern Highlands has partnered with several colleges and universities to provide an opportunity for students to earn college credit by taking college-level classes in high school. Students who enroll in these courses that are affiliated with a college or university are responsible for tuition as required by each university, if applicable. Northern Highlands' teachers have been approved by the respective college or university to teach dual enrollment courses. Please see page 6 for more information about our dual enrollment offerings.

Early Graduation—Students who are considering early graduation should discuss the matter with their school counselor as early as possible, preferably no later than the end of sophomore year. To initiate this process, students must schedule a meeting with their school counselor and complete the early graduation application. Upon completion of the early graduation application, students must schedule a meeting with the principal. All early graduation applications will be reviewed and approved by the principal. Official requests for Early Graduation from Northern Highlands Regional High School can be made after the conclusion of the student's sophomore year.

Minimum Credits per Year—Students in grades 9-11 must register for a minimum of seven (7) courses per year, including Health and Physical Education. Students in grade 12 must register for a minimum of six (6) courses, including Health and Physical Education. Students may not take more than one study hall with the exception of seniors who may take up to two study halls.

NCAA Eligibility—The NCAA Eligibility Center certifies the academic credentials of all students who want to play sports at an NCAA Division I or II institution. In order to practice, play and receive an athletic scholarship, students need to meet certain academic benchmarks. These academic benchmarks are defined as core courses. A core course must be an academic course that receives high school graduation credit in a combination of these areas: English, mathematics, natural/physical science, social science, foreign language, comparative religion or philosophy. A core course must also be taught at the college preparatory level or higher. Students must communicate their desire to play at the collegiate level with their school counselor as early as possible to ensure that all academic criteria is met. For more information, please visit the Eligibility Center website, as well as the NCAA section of the School Counseling web page.

Pupil Records—Parents and guardians have the right to review their child's official school records; adult pupils (18 years of age and older) have the right to review their own official records. Persons interested in examining individual records should write a letter addressed to the School Counseling Department requesting an appointment to see a counselor to review those records. After graduation, Northern Highlands will only retain academic and medical records. Under New Jersey Administrative Code regarding pupil records, educational, occupational, and military recruiters shall have access to school facilities and student information directories. A parent or adult pupil may make a request in writing to the principal, stating that the student's name does not appear in student information directories.

Senior Request for Special Schedule—Seniors who have compelling reasons that require them to have an abbreviated schedule must submit a letter from their parents and any other relevant documentation to the Director of School Counseling for approval. This does not include students participating in the Career & Academic Pathways Program.

Special Programs:

ELS—The English Language Service program is designed to teach students who speak languages other than English how to understand, speak, read, and write in English while learning about American culture. The program provides services to Multilingual Learners (ML) that includes English content, instruction, and English language development. Northern Highlands utilizes the WIDA ACCESS Placement Test (W-APT) 9-12 to determine eligibility.

Special Education— Northern Highlands offers a variety of programs for students with special needs, including skills support classes, in-class support classes, and replacement classes. Program decisions are based upon specific needs of students as determined at Individualized Education Program (IEP) meetings.

State Testing Requirements:

New Jersey Student Learning Assessment (NJSLA)—All ninth grade students in English Language Arts and mathematics (Algebra I, Geometry, or Algebra II) are required to take the (NJSLA) and students in grade 11 will also take the NJSLA in science. If students are not enrolled in Algebra I, during their ninth grade year, students will take the NJSLA when they are enrolled in Algebra I.

New Jersey Graduation Proficiency Assessment (NJGPA)—All eleventh grade students are required to take the NJGPA in English Language Arts and mathematics. More information on state testing requirements can be found on the New Jersey Department of Education Assessment website found here.

FAFSA Completion- For the classes of 2025 through 2027, each graduating high school senior is required by law, as part of New Jersey's new graduation requirement P.L. 2023, c.295, to complete the Free Application for Federal Student Aid (FAFSA) or the NJ Alternative Financial Aid Application (NJAFAA) in order to receive a diploma. If a student does not qualify for the FAFSA/NJAFAA or wishes to request they be waived from this graduation requirement, parents/guardians should complete the FAFSA/NJAFAA Waiver Form. The form will be available via the Genesis Parent Portal in January of senior year.

Summer Academy—The Northern Highlands Summer Academy offers robust and challenging courses for advancement, as well as mini-sessions for our students. The Summer Academy application generally opens in December of each school year. Students pursuing classes for advancement will continue to be scheduled based on teacher recommendations and course progression for the next school year. Final adjustments to schedules will be made once students successfully complete their summer academy course. More information about the Northern Highlands Summer Academy can be found here.

Advanced Placement Courses

If students are planning to register for one or more Advanced Placement (AP) course(s), the following should be kept in mind: AP courses are equivalent to college courses; they are extremely rigorous. All students are expected to take the AP examination in May. Due to the rigor of the AP level work, students will be challenged to achieve A's in coursework if they are coming from honors or CP level courses.

Tenth grade students who fulfill course prerequisites are permitted to take two (2) AP courses. Ninth grade students are not permitted to take AP courses, with one exception. Freshmen enrolled in Honors Math Analysis have the option to take either Honors Physics or AP Physics 1. (Note: The AP Physics I class is the only AP class that Honors Math Analysis students can take). Freshmen enrolled in the AP Physics 1 class will receive AP weighting and are also eligible to sit for the AP examination in May; however, the weighting of the AP Physics 1 class will not be used when determining our valedictorian or salutatorian at the conclusion of seven semesters.

Northern Highlands students are only eligible to register for and take an AP Exam in the course(s) they are enrolled in.

Dual Enrollment Course Offerings

Northern Highlands has partnered with several colleges and universities to provide dual enrollment opportunities. Students who enroll in these courses and choose to pursue dual enrollment credit are responsible for tuition as required by each university. Northern Highlands' teachers have been approved by the respective university/college to teach dual enrollment courses. Tuition and exam fees are subject to change annually.

Course Name	Grade	College/University Affiliation	College Credits	NH Credits	Tuition	Notes
Honors Success 101	11-12	Bergen Community	3	2.5	$236.16	This is a one semester course taught in the Fall. There is a one time registration fee of $16.30.
Honors United States History II	11	Bergen Community	3	5	$236.16	There is a one time registration fee of $16.30.
Honors Entrepreneurship Experience	10-12	Delaware	3	5	$500.00	
Honors Computer-Aided Drafting and Design II	10-12	New Jersey Institute of Technology	2	5	$300.00	Juniors and Seniors only are eligible to take the course for college credit.
Honors Global Citizenship	11-12	Fairleigh Dickinson	3	5	$306.00	
Honors British Literature	11-12	Ramapo	4	5	$556.32	
Critical Reading and Writing 101	12	Ramapo	4	5	$556.32	
Honors Data Structures & Advanced Coding	11-12	Ramapo	4	5	$556.32	
Honors Drawing and Painting	10-12	Ramapo	4	5	$556.32	
Honors Financial Accounting	10-12	Ramapo	4	5	$556.32	
Honors Future Educators & Leaders	11-12	Ramapo	4	5	$556.32	This course requires field experience.
Honors Literature & Creative Composition	11-12	Ramapo	4	5	$556.32	
Honors Marketing II	11-12	Ramapo	4	5	$556.32	
Honors Photography II	10-12	Ramapo	4	5	$556.32	
Honors Anatomy & Physiology I&II	11-12	Rutgers	4 (A&P I) 4 (A&P II)	5	$80.00 exam fee	This two semester college course is treated and organized as a full-year course.
Honors Dynamics of Healthcare	10-12	Rutgers	3	2.5	$80.00 exam fee	
Honors Medical Terminology	10-12	Rutgers	3	2.5	$80.00 exam fee	
Honors Scientific Principles of Nutrition	11-12	Rutgers	3	2.5	$80.00 exam fee	

Multivariable Calculus	12	Seton Hall University	4	5	$440.00	
Honors Forensic Science	12	Syracuse	4	5	$460.00	
Honors Sociology	11-12	Syracuse	3	5	$345.00	
Honors Spanish V	11-12	Syracuse	4	5	$460.00	
Honors Writing Studio/Gender & Literary Texts	12	Syracuse	6	5	$690.00	This two semester college course is treated and organized as a full-year course.

Students should consult with the universities they plan to attend to determine the applicability of specific courses to their program(s) of study. Additionally, upon graduation, students must request their official transcript to be sent from the college or university from which they earned the college credit to the college or university they plan to attend.

Guidelines for Grade Level Determination and Graduation

To enter Grade 10
Students will have earned a minimum of 30 credits by the end of their ninth grade year.

To enter Grade 11
Students will have earned a minimum of 60 credits by the end of their tenth grade year.

To enter Grade 12
Students will have earned a minimum of 90 credits by the end of their eleventh grade year.

To graduate
Students will have earned 125 credits.

Grading System

To determine grades for student work within a semester, for the semester grade itself, and for the end of year final grade, numerical grades from 0-100 are used and are converted to letter grades.

- Cumulative assessments will be in place at the end of Semester 1 and Semester 2 in the following core subjects: English, social studies, mathematics, world languages, and science. All other content areas will continue to assess students utilizing performance-based or project-based assessments that will be part of the teachers' usual unit assessment schedule. More information regarding cumulative assessments can be found on page 33 of our Student Handbook.

- To determine the average for year-long classes administering cumulative assessments, both of the semester grades will be averaged and will receive a 45% weighting; the semester 1 cumulative exam will be weighted at 5% and the semester 2 cumulative exam or performance/project based assessment will receive 5% weighting.

Note: For the first semester, no grade lower than a 50 will be recorded. However, for the second semester, teachers will record the actual numerical grade earned on all assignments and the cumulative assessments.

Grade Point Average and Weighting Procedures

To determine Grade Point Average (GPA), the final letter grades from all courses, except those designated Pass/Fail, are used. The GPA is cumulative and is computed at the end of the second, fourth, sixth, seventh, and eighth semesters.

The weighting system assigns quality points based upon the level of the course taken. Courses labeled Honors receive an additional one half quality point, and those labeled Advanced Placement receive one additional point.

GPA Quality Points

GRADES		COURSE LEVEL			
			Regular	Honors	AP
97-100	A+	=	4.3	4.8	5.3
93-96	A	=	4.0	4.5	5.0
90-92	A-	=	3.7	4.2	4.7
87-89	B+	=	3.3	3.8	4.3
83-86	B	=	3.0	3.5	4.0
80-82	B-	=	2.7	3.2	3.7
77-79	C+	=	2.3	2.8	3.3
73-76	C	=	2.0	2.5	3.0
70-72	C-	=	1.7	2.2	2.7
67-69	D+	=	1.3	1.8	2.3
63-66	D	=	1.0	1.5	2.0
60-62	D-	=	0.7	1.2	1.7
59 or below	F	=	0	0	0

Weighting for Freshman Courses and Transfer Students

- AP courses are not offered to ninth grade students at Northern Highlands with the exception of those students who passed or are currently enrolled in Honors Math Analysis who may take AP Physics I concurrently. It should be noted that ninth graders enrolled in AP Physics I will receive AP weighting. (Please refer to the “Advanced Placement Courses” section for additional information).
- AP courses taken during ninth grade in another public or private high school will not be assigned AP weighting; however, students will receive Honors weighting.
- Northern Highlands does not offer ninth grade honors credit in English or social studies. Consequently, honors weighting for transfer students is not assigned to courses in these areas. Ninth grade transfer students may only transfer honors weighting from honors math, honors science, or honors world language.

Scheduling Events In Preparation for the School Year

February and March—Scheduling:
Every current ninth, tenth and eleventh grader will have an individual scheduling meeting with their school counselor; eighth grade scheduling will occur with the sending districts and via the Genesis Parent Portal. All high school scheduling meetings will be completed by the end of March.

March—Academic Level Appeals:
Appeal forms will be available as an electronic form for any student who wishes to appeal their level placement (i.e. A student who was recommended for a CP level but would like to appeal for placement to the Honors (H) level). Students are only permitted two appeals per year. Additionally, Sophomores are only permitted to appeal one AP level course. Appeal forms are shared with students during their scheduling meeting when applicable. Appeal forms must be submitted no later than the deadlines specified during scheduling:

Appeal Deadline for Rising Seniors: Early March (Date TBD)
Appeal Deadline for Rising Juniors: Mid March (Date TBD)
Appeal Deadline for Rising Sophomores: End of March (Date TBD)

Appeal decisions will be made on an ongoing basis through July. Students will be notified via email regarding the decision.

April—Course Request Check and Confirmation:
Student course request sheets will be sent home through Genesis. At this time, any course changes should be made by contacting the school counselor. **No elective course request changes will be made after the following dates:**

Course Request Acknowledgement* for Rising Seniors: Early March (Date TBD)
Course Request Acknowledgement* for Rising Juniors: Mid March (Date TBD)
Course Request Acknowledgement* for Rising Sophomores: End of March (Date TBD)

(*)Please note that appeal results will not be reflected in course selections at this time

Important Notes Concerning Course Selection

- When selecting courses, students should think in terms of a four year high school program of courses, the rigor of the courses and how the program will prepare them for their goals after high school.
- Students in grades 9-11 must register for a minimum of seven (7) courses per year, including Health and Physical Education. Students in grade 12 must register for a minimum of six (6) courses, including Health and Physical Education. Therefore, students should have reviewed the entire Curriculum Guide and completed the 4-Year Worksheet at the end of this guide before meeting with their school counselor.
- All course offerings are subject to adequate student enrollment. The necessary enrollment will vary depending upon the nature of the course. Consequently, all students will select two alternative electives should their first choice not be possible.

2025-2026 Schedule Change Guidelines

All students will meet with their school counselor no later than the end of March each school year for their respective scheduling meeting. Students and parents are urged to review course requests and schedules with great care and consideration. Once families receive final course requests in March, no changes will be considered due to the complexity of scheduling. Once the school year begins, schedule changes will be considered only for the following reasons:

1. **Elective Changes**—A student may have had a change of heart in terms of their elective choice. Changes may be made only if there is space available in the course they are requesting to enter. The deadline for changing a **full year or a fall semester course** will be allowed until **September 12, 2025.** The deadline for changing a **second semester (spring) course** will be allowed until **October 31, 2025**.

2. **Academic Misplacement of the Same Course**—As the school year progresses, some students may find themselves in a class that is too challenging. If the school counselor, teacher and subject supervisor agree that a student is misplaced, a change will be considered, **provided space is available and the proper procedures have been followed**. **Grades within a course will follow the student.** Students will be required to make up the work missed in their new class. Misplacement most often is identified in the first four weeks of school; however, the deadline to change a course due to misplacement is **October 17, 2025** (i.e.Honors Biology to Biology). This does not apply to courses that are electives (see above). Please note—most AP courses are considered electives.

3. **Dropping a Course for a Study Hall**—A student may drop a course for a study hall with written parental permission. Students may not take more than one study hall in a school year with the exception of seniors who may take up to two study halls. The deadline for dropping a **full year or first semester (fall) course** for a study is **October 17, 2025**. The deadline for dropping a **second semester (spring) course** for a study is **October 31, 2025**.

Additional Guidelines

- Parent permission is required for all changes.

- The following are **not valid** reasons for a schedule change:
  - Teacher preference.
  - Changing a course from one period to another.

- If a student decides to drop an elective course after September 12, 2025, they will not have the option to add a new elective and will be placed into a study hall.

- A year-long or semester course will not be recorded on the permanent record, provided the course is dropped by the deadlines noted above. **Post-deadline drops will be entered on the permanent record as a withdrawal/failure and receive no credit.**

Applied Technology

Computer-Aided Drafting and Design I Grades 9-12

This introductory drafting course helps students to visualize three dimensional objects and to strengthen technical imagination. Topics covered include care and use of drafting instruments, lettering, orthographic and pictorial drawings, sketching and dimensioning. Students will also apply their hand drafting skills to learn how to use Computer-Aided Drafting (CAD) and three dimensional applications and printing three dimensional projects. This CAD knowledge will allow for the efficiency, accuracy, and technically quality drawings (orthographic and pictorials).

Prerequisite: Be enrolled in or successfully completed Algebra I.

Interior Architectural Design Exploration Grades 9-12

In this introductory course, students will learn the Principles of Design and Architecture by completing interior architecture projects throughout the year. Projects include residential, hospitality, education, and retail spaces. Such projects will introduce them to the problem-solving design loop and the creative process. Students will be asked to accommodate client's needs for various projects, while also developing unique and enticing design solutions to successfully market or communicate their ideas. Presentation and documentation of their designs will be created in computer programs such as AutoCAD and REVIT. Functional and technical knowledge is introduced through such topics as construction detailing, sustainability, material, furniture, lighting, acoustics, mechanical, electrical, plumbing, and building codes. Much like the real world, students will also work collaboratively to further explore design and apply their understanding of interior architectural design processes.

Prerequisite: Enrolled in or successfully completed Algebra I.

Real World Engineering Grades 9-12

In this introductory course, students will learn about the fundamentals of several different types of engineering and technology that are a part of our everyday world. Students will use the Engineering Design Process to complete four problem based case studies. The four types of engineering learned are architectural/structural engineering, civil engineering, industrial design (with an emphasis on train design), and aerospace engineering. Students research, design, and use math and science to guide and make design decisions. Physical models and prototypes are constructed using hand tools and machinery. Students document design progress by constructing portfolios and record testing results using scientific observation.

Prerequisite: Enrolled in or successfully completed Algebra I.

Honors Computer-Aided Drafting and Design II (New Jersey Institute of Technology) Grades 10-12

Students learn Computer-Aided Drafting (CAD) extensively and the Technology Education Problem-Solving Design Loop on projects. They will also learn how to produce three dimensional objects utilizing our 3D printers. The drawings produced are related to manufacturing processes, mechanical devices, automotive aerodynamics of dragsters, and ergonomic engineering.

Prerequisite: Must have achieved a grade of "80" or better in Computer-Aided Drafting and Design I, Interior Architectural Design Exploration or Real World Engineering or teacher recommendation.

Note: Students wishing to pursue dual enrollment for this course must be in grades 11 or 12. There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Honors Architectural Design Grades 11-12

This course, offered in alternating years, will apply the design thinking practices and strategies learned from Honors Computer-Aided Drafting (CAD II) to design and build a professional style house portfolio. Included are client's requirements for floor, foundation, electrical, plumbing, cross-section, plot/landscape, and elevation plans. Ultimately, students produce a three-dimensional scale model of their house designs. A researched report is also required.

Prerequisite: Minimum grade of "85" or better in Honors Computer-Aided Drafting and Design II, have attained a grade of "80" or better in Algebra II/Trigonometry, Honors Geometry, and teacher recommendation.

Honors Engineering Design Grades 11-12

This course, offered in alternating years, integrates science, technology, engineering and math (STEM) and applies the Technology Education Problem-Solving format to solve real life, practical problems. Trigonometric and calculus-based functions are utilized in the development of structural design. Topics include: developments, intersections, structural design, nuclear generating facilities, green energies, and nautical engineering. Projects and competitions are presented in each area of study as well as a capstone project at the end of the course.

Prerequisite: Minimum grade of "85" or better in Honors Computer-Aided Drafting and Design II, have attained a grade of "80" or better in Algebra II/Trigonometry, Honors Physics/Geophysics, and teacher recommendation.

Woodworking Grades 9-12

This course is an introduction to the fine art of woodworking. Students learn how to safely and appropriately use woodworking tools and machinery through demonstrations and monitored practice. Basic to intermediate jointing techniques will be used to design and construct four different assigned projects. All students must pass safety quizzes in order to use machinery and mandatorily practice wood lab safety, while in the wood lab. Students who wish to continue with woodworking, will move onto Project Woodworking and then to Furniture Design. If a fourth year of a woodworking course is desired, that student can enter into an Independent Woodworking class.

Project Woodworking Grades 10-12

Project Woodworking is for advanced students who choose and plan their projects to be constructed. Advanced techniques are employed in the design and construction of each project. Students will further develop their fine and gross motor skills, along with hand-eye coordination. In addition to encouraging pride in their craftsmanship, this course will also teach students a respect for materials, tools, and safety. Projects vary each year focusing on quality and useful indoor furniture.

Prerequisite: Woodworking.

Furniture Design Grades 11-12

Furniture Design is for advanced students who wish to challenge themselves to plan and construct complex woodworking projects with an emphasis on craftsmanship. Students are encouraged to work independently in the shop and make educated decisions about their designs, materials to be used and the processes for constructing their projects. Students will further develop their fine and gross motor skills, along with hand-eye coordination. Projects will be chosen by the student and approved by the instructor.

Prerequisite: Project Woodworking.

Robotics and Design Thinking Grades 10-12

The world is becoming increasingly automated. Every industry from cars to household appliances use a combination of microprocessors, mechanisms, and structural elements to accomplish and assist humans with tasks. In this course, students will use the Design Thinking and CAD software to plan and build automated machines. Students will code and program lego mindstorm robots, learn about types of mechanisms and the four basic types of motions to accomplish tasks such as moving objects along the x, y, z axis. Finally, students will consider forces and structural needs for robots which involve designing chassis for mechanical and

electrical components. Students will work in teams to design and build robots and evaluate outcomes using User Centered Design to measure the effectiveness of their designs.

Prerequisite: Minimum grade of "80" or better in Algebra I and have taken and earned a minimum grade of "80" or better in Physics/Geophysics

Art

Art Department Pathways * indicates a prerequisite (S) Semester Course		
Grade 9 INTRODUCTORY COURSES	**Grade 10-12 SECOND LEVEL**	**Grade 10-12 ADVANCED LEVEL**
PHOTO COURSES Photography I	**PHOTO COURSES** Honors Photography II* (Dual Enrollment: Ramapo)	**PHOTO COURSES** AP 2-D Art and Design*
GRAPHIC DESIGN COURSES Introduction to Graphic Design	**GRAPHIC DESIGN COURSES** Honors Graphic Design*	**GRAPHIC DESIGN COURSES** AP 2-D Art and Design*
Animation: From Concept to Creation (S)	Motion Graphics: Create Your Own Visual Vibes (S)	
FINE ART COURSES Art Experience Do-It-Yourself Design	**FINE ART COURSES** Honors Drawing and Painting* (Dual Enrollment: Ramapo)	**FINE ART COURSES** AP Drawing*
CERAMICS COURSES Ceramics Introduction to Sculpture	**CERAMICS COURSES** Ceramics II*	
	AP Art History*	

Art Experiences Grades 9-12

Art Experiences introduces students of all levels to the world of art and design. Since this is an introductory level class, students are offered opportunities to create works using a range of materials and techniques. The course explores basic media including drawing, painting, printmaking, design, and sculpture. Student artists will begin to develop a vocabulary in composition and various media while exploring personal solutions for problems in the arts. This course provides a backdrop to other classes in the visual arts program and allows students the chance to create a cumulative portfolio of their best works.

Ceramics Grades 9-12

In this introductory ceramics course, students dive into the versatile world of clay, creating both functional and artistic pottery pieces. Through hands-on exploration, students learn foundational techniques in hand-building and wheel-throwing, while also uncovering the rich visual history of ceramics. As the year progresses, students will have opportunities to expand their skills, experiment with various methods, and develop their unique artistic voice with clay.

Ceramics II Grades 10-12

Building upon their introductory experience, Ceramics II students create a cohesive portfolio of functional and decorative pottery, developing a deeper understanding of the art form. They explore diverse clay types and firing processes, from low-fire and high-fire techniques to the dynamic process of raku firing. Students are encouraged to work in themed series, refining their personal style, and engaging in meaningful critiques of their own and others' work. With advanced instruction in hand-building, wheel-throwing, and glazing, students will further elevate their skills and proficiency with clay.

Prerequisite: Successful completion of Ceramics with a grade of "85" or better and teacher recommendation.

Do-It-Yourself Design Grades 9-12

The Do-It-Yourself Design course provides students with the unique opportunity to learn how to design functional and aesthetic works of art. 21st century problem-solving skills will be utilized to create projects that are both utilitarian and decorative. Work produced in this course can be used in real-life applications. Encompassing a wide range of media and techniques, this course will allow students to create "Pinterest-style" home decor such as jewelry designs, crafts, textiles, and sculptural designs. Students will explore a wide range of media incorporating, but not limited to, wood, wax, glass, paper, tile, photographs, yarn, recycled objects and more. Some of the varied artistic processes that are addressed include photographic image transfers, knitting, beading, weaving, and ceramic hand building.

Introduction to Graphic Design Grades 9-12

This course will introduce students to the concepts of Graphic Design, its history, typography, vector illustration, design principles and production processes using current industry standard technologies. It will be project-based and center on real-world application of skills in order to creatively solve problems that exist in the design industry today across various career fields including; editorial, advertising, logo identity and branding, fashion, promotional, product and packaging design. Students will learn the basics of Adobe Illustrator and some aspects of Adobe Photoshop in order to produce original designs that integrate imagery with type. Students will employ a visual language relating to composition and aesthetics through the process of critique. Students will engage in discussions regarding how graphic design and visual communication influences their daily lives now more than ever before. This class is a perfect complement for those students interested in business, marketing, or entrepreneurship, as well as those interested in creative design professions.

Honors Graphic Design Grades 10-12

This course covers the advanced study of graphic design, visual communication and production processes. Students will further their understanding of graphic design and improve their abilities in composition, typography, layout and design as well as expand upon the foundations learned in Introduction to Graphic Design. Projects will center around real world applications and creatively solving design industry challenges. Students will work independently and in teams to explore and create editorial designs, advertising campaigns, corporate identity and branding, fashion design, promotional items, and packaging design. Where possible, students will expand their designs into workable prototypes, moving from 2D layouts on their screen into physical 3D mock-ups. Students will engage in class critiques after each project to reflect upon the design process and share constructive feedback for future improvement. Throughout this course students will create comprehensive projects that can be used in a design portfolio, showcasing a student's best work and preparing them with a solid foundation for a future major or career in design.

Prerequisite: Successful completion of Intro to Graphic Design with a grade of "90" or better and teacher recommendation.

Introduction to Sculpture Grades 9-12

In this course, students will be able to expand their repertoire of artistic expression from 2-D to working in 3-D in order to build sculptures. Students will be introduced to a wide range of sculpting techniques, including carving, modeling, assemblage, and finishing. They will learn how to manipulate various materials, such as clay, wood, metal, and found objects, to bring their artistic vision to life, while acquiring hands-on experience in a creative studio environment. They will also learn how to think critically and conceptually about their work and other people's artwork. By the end of the course, students will have a portfolio of their best work.

Photography I Grades 9-12

This course introduces students to the foundations of both traditional film and digital photography, using each medium to cultivate creative skills and technical proficiency. In the first semester, students will learn the fundamentals of using a 35mm film camera and darkroom techniques to develop and process film. The second semester shifts to digital photography, where students will learn to use digital cameras and explore Photoshop tools for cropping, enhancing, and editing images. Throughout the course, emphasis is placed on composition and the elements and principles of design, enabling students to effectively use photography for visual communication and self-expression. By the end of the course, students will have a cumulative portfolio showcasing their growth and work.

Honors Photography II (Ramapo College) Grades 10-12

Designed for students who have completed one year of photography study, this honors-level course allows students to deepen their skills and develop photography as an expressive art form. Through the study and application of advanced techniques and conceptual subject matter, students will explore both film and digital formats in greater depth. Coursework includes hands-on darkroom work, expanded digital photography skills, and advanced Photoshop editing. Students will complete a mix of teacher-assigned and self-directed projects, enabling them to pursue personal interests and develop a unique photographic style.

Prerequisite: Successful completion of Photography I with a grade of "90" or better and teacher recommendation.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

AP 2-D Art and Design Grades 11-12

AP 2-D Art and Design is intended for the serious, committed design student who wishes to pursue visual art at a college level. This course provides students with the opportunity to explore a wide range of design techniques and methods and prepares them for a college major in Studio Art. Students will work both inside and outside of class to create a portfolio to be submitted to the College Board. Students will work on projects that use various methods and topics that explore various 2D design media and work on their own topics where they explore a particular design idea or concern. Students' commitment to the course is essential to the success of their portfolio.

*Prerequisite: S*uccessful completion of two (2) of the following: Honors Graphic Design, Photography I, or Honors Photography II with a grade of 90 or better*, portfolio submission, and departmental review.*

A summer assignment may be required.

Honors Drawing and Painting (Ramapo College) Grades 10-12

Students will produce both teacher-assigned and self-generated independent projects using a wide range of artistic media. The focus of this course is on two-dimensional drawing and painting techniques with the overall goal of creating a cohesive portfolio of their best work. Students may generate several pieces that they can take with them to the more advanced follow up course, AP Drawing. Students will also be exposed to a greater depth of art history and artistic movements that relate back to the course projects.

Prerequisite: Successful completion of Art Experiences with a grade of "90" or better and teacher recommendation.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

AP Drawing Grades 11-12

This course is intended for committed art students who wish to begin creating artwork at the college level. AP Drawing focuses on advanced media processes and is inquiry based. Students create and assemble artwork both inside and outside of class in preparation for the AP Studio Art digital submission. During the first semester, students work on teacher-assigned topics which are designed to broaden understanding of various visual media. During the second semester, students develop a series of visually cohesive artworks. The expectation of this course is that students work, independently and rigorously, to complete and assemble a

portfolio. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisites: Successful completion of Art Experience or Do-It-Yourself Design and Honors Drawing and Painting with a grade of 90 or better, portfolio submission and departmental review.

A summer assignment may be required.

AP Art History Grades 10-12

This course explores such topics as the nature of art, its uses, its meanings, the process of art making and responses to art. Through investigation of diverse artistic traditions of cultures from prehistory to present from both western and nonwestern cultures, the course fosters in-depth understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual, and comparative analysis to engage with a variety of art forms, constructing understanding of individual works and interconnections of art-making processes and products throughout history. The course is designed to be equivalent to a two-semester introduction course in art history at a college or university. Students enrolled in this course are expected to take the AP Art History exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite for sophomores: Minimum grade of "90" or better in World History.*

Prerequisite for juniors and seniors. Minimum grade of "85" or better in current Honors History course or "90" or better in U.S. History I or U.S. History II.

**This only applies to students taking the course as sophomores.*

A summer assignment may be required.

Art Semester Courses

Animation: From Concept to Creation Grades 9-12

Step into the captivating world of animation, where your ideas spring into action! In this hands-on course, students will master industry-leading tools like Adobe After Effects and Blender to transform still images into vibrant animated scenes. Experiment with storytelling, character motion, and visual effects that will bring your imagination to life. Collaborate on creative projects, refine your technique, and build a portfolio of animations that reflect your distinct vision and style. Whether it is dreaming up a short film or eye-catching web content, this course will help you animate your ideas from start to finish.

Motion Graphics: Create Your Own Visual Vibes Grades 10-12

Ready to make visuals that pop? This immersive course dives into the art of motion graphics using Adobe After Effects and Blender, blending animation with design. Learn to turn static designs into dynamic visuals, from moving typography to slick social media graphics that grab attention. With a focus on rhythm, style, and visual storytelling, students will develop a skill set that translates ideas into compelling motion graphics. Perfect for students looking to elevate their portfolios with fresh, eye-catching projects. Get ready to set your creativity in motion and create your own visual vibes!

Prerequisites: Successful completion of Introduction to Graphic Design with a grade of "87" or better and teacher recommendation.

Dance Grades 9-12

This elective course is intended to introduce students to various aspects of dance. The course will include the following units of study: Elements of Dance and Kinesthetic Movement, History of the Arts and Culture, Influence of Dance, and Choreography and Performance. All students will choreograph, perform, and critique solo and collaborative pieces. Students will learn the importance of dance in various cultures, its impact across history, and its integration with visual and performing arts. This is an introductory-level course for those with little or no experience.

Business Education

Business Department Pathways * indicates a prerequisite ^ satisfies Financial Literacy graduation requirement + satisfies requirement for DECA participation (S) Semester Course			
Grade 9	**Grade 10**	**Grade 11**	**Grade 12**
INTRODUCTORY BUSINESS COURSES Introduction to Business^+ Financial Management^(S) The Business of Fashion (S) Succeeding in a Global Economy (S) The Business of Sports (S) Business Technology (S)	**INTRODUCTORY BUSINESS COURSES** Introduction to Business^+ Financial Management^(S) The Business of Fashion (S) Succeeding in a Global Economy (S) The Business of Sports (S) Business Technology (S)	**INTRODUCTORY BUSINESS COURSES** Introduction to Business^+ Financial Management^(S) The Business of Fashion (S) Succeeding in a Global Economy (S) The Business of Sports (S) Business Technology (S)	**INTRODUCTORY BUSINESS COURSES** Introduction to Business^+ Financial Management^(S) The Business of Fashion (S) Succeeding in a Global Economy (S) The Business of Sports (S) Business Technology (S)
FINANCE & ECONOMICS COURSES Principles of Accounting +	**FINANCE & ECONOMICS COURSES** Principles of Accounting *+ Honors Financial Accounting* + (Dual Enrollment- Ramapo) Personal Finance and Investment*^ AP Economics* +	**FINANCE & ECONOMICS COURSES** Principles of Accounting *+ Honors Financial Accounting* + (Dual Enrollment- Ramapo) Personal Finance and Investment*^ AP Economics* +	**FINANCE & ECONOMICS COURSES** Principles of Accounting *+ Honors Financial Accounting* + (Dual Enrollment- Ramapo) Personal Finance and Investment*^ AP Economics* + Honors Business Seminar *+
	MARKETING COURSES Marketing I +	**MARKETING COURSES** Marketing I + Honors Marketing II (Dual Enrollment- Ramapo)* +	**MARKETING COURSES** Marketing I + Honors Marketing II (Dual Enrollment- Ramapo)* + Honors Business Seminar *+
	MANAGEMENT COURSES Honors Entrepreneurship Experience (Dual Enrollment- Univ. of Delaware)*	**MANAGEMENT COURSES** Honors Entrepreneurship Experience (Dual Enrollment- Univ. of Delaware)*+ Honors Management*+	**MANAGEMENT COURSES** Honors Entrepreneurship Experience (Dual Enrollment- Univ. of Delaware)* + Honors Management*+ Honors Business Seminar *+

Introduction to Business Grades 9-12

This course provides students with an introduction to the world of business and to varied career paths. Students will explore a range of business concepts and develop a general understanding of the global economy. They will experience entrepreneurial activities by testing the viability of a start-up concept, learn to manage business finances through accounting practices, and launch a product into the real world through advertising and marketing. Students will develop an understanding of budgeting and banking, investing and credit, and the importance of insurance. Completion of this course will satisfy the graduation requirement for financial literacy.

<u>Prerequisite</u>: Successful completion of Algebra I.

Principles of Accounting Grades 9-12

This course is designed to develop the techniques of acquiring, organizing, maintaining, interpreting, communicating, and using modern-day technology to process financial information. This course is a must for those students who are interested in careers in the business world. Accounting is the language of business. Students learn how companies manage money for success. Some topics include the importance of maintaining a journal, credits and debits, payroll accounting, and financial statements analysis. Real-world applications are incorporated and software is used.

Honors Financial Accounting (Ramapo College) Grades 10-12

This course introduces the student to fundamental accounting terminology and theory, including the accounting cycle, analysis, recording of transactions, and reporting financial information in accordance with Generally Accepted Accounting Principles (GAAP). Students are required to complete a comprehensive project that demonstrates their ability to analyze the financial statements of publicly traded companies and make an informed investment decision based on the analysis.

Prerequisite: Minimum grade of "90" or better in any business education course. This does not include the Financial Management class taken during Summer Academy.

Note: There is a financial obligation for students who wish to earn college credit for this course; *please see page 6 for additional information.*

Personal Finance and Investment Grades 10-12

Do you want to learn about the stock market and about how to manage money? This course will enable students to learn about the critical aspects of personal financial decision-making. Students will participate in a stock market game that simulates real-world investing. This course explores a broad range of today's asset/investment alternatives, including stocks, bonds, mutual funds, exchange-traded funds, savings instruments, real estate and collectibles. Students also learn about important financial topics such as purchasing/owning a car, saving for college, responsible credit card usage, and avoiding identity theft. This course fulfills the financial literacy graduation requirements.

Note: This course fulfills the financial literacy graduation requirements.

Prerequisite: Successful completion of Algebra I.

Marketing I Grades 10-12

This course provides a detailed introduction to marketing and its impact on how consumers decide to spend their money. Students who take this course will apply marketing concepts to current trends and understand how marketing plays a vital role in business. Students learn how the "Four P's of Marketing" affect consumer decisions; how product promotion affects buying habits; and how pricing affects buying decisions. Instruction includes hands-on experiences by analyzing "real world" case studies of marketing successes and failures. Students will create and present an original promotional campaign.

Honors Marketing II (Ramapo College) Grades 11-12

This second level marketing course will allow students to combine their creative and analytical skills to explore all aspects of advertising, branding and market research. Throughout the duration of the course, students will learn all facets necessary to launch successful advertising campaigns including market segmentation, various forms of advertising media, budgeting and media costs. Students will write an advertising proposal as well as create ads and promotions using Adobe Photoshop and present their ideas. In addition, students will learn to develop actual products from beginning to end, including branding, product positioning, packaging and label design. Students will also have the unique opportunity to work collaboratively with other departments in the building to create public service announcements that will be launched in the school.

Prerequisite: Minimum grade of "90" or better in Marketing I and teacher recommendation.

Note: There is a financial obligation for students who wish to earn college credit for this course; *please see page 6 for additional information.*

Honors Entrepreneurship Experience (University of Delaware) Grades 10-12

The mission of The University of Delaware's partner program at Northern Highlands is to convert classrooms into real-world entrepreneurship labs and deliver transformative learning experiences to students. EntreX curriculum builds from a broad conception of entrepreneurship by pursuing the creation, delivery and capture of value from new ideas. This concept highlights the relevance and usefulness of entrepreneurial thinking and action in any organizational context, including startups, existing companies, social ventures and nonprofit organizations. The EntreX curriculum emphasizes learning by doing and its impact - unleashing students' full creative potential and empowering them to make a world they design. UDEL EntreX curriculum is a dual enrollment course offering 3 college credits to any student achieving a "C" or better.

Prerequisite: Minimum grade of an "90" or better in any business education course. This does not include the Financial Management class taken during Summer Academy.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Honors Business Seminar Grade 12

Honors Business Seminar is a collaborative, project-based course that builds upon core business concepts and equips students with the skills necessary for success in a variety of professional careers. Students will explore project management and learn to initiate, plan, execute, monitor, and close projects that address real-world problems. Through case studies, stakeholder engagement, and the development of project deliverables, students will gain practical experience. The course also includes career exploration, helping students identify interests, create professional resumes and cover letters, networking, and refining interview techniques. Each student will have the opportunity for real-world application provided through a work-based learning experience, enabling students to intern or shadow professionals in their chosen fields. By completing a portfolio documenting their experiences and achievements, students demonstrate readiness for future career endeavors. Students must possess a valid driver's license and access to transportation.

Prerequisite: Business teacher recommendation and a minimum grade of "90" or better in one of the following courses: Honors Marketing II (Ramapo), Honors Management, or AP Economics.

Honors Management Grades 11-12

This advanced-level business course provides students the opportunity to explore and apply management principles including planning, organizing, leading, and controlling. Through project work, case studies, and current events, students will assess the effects successful management practices and leadership styles have on the motivation of employees and the resultant productivity of an organization. Students will review and discuss current business trends as a means of developing their understanding of managerial practices and effective leadership. Class discussions will explore the potential for application of managerial practices to their own lives.

Prerequisite: Minimum grade of "90" or better in any business education course. This does not include the Financial Management class taken during Summer Academy.

AP Economics Grades 10-12

AP Economics is an introductory college level course that will address real world macro topics in the economy. Students will gain a thorough understanding of economic decision making with particular emphasis on analyzing and interpreting economic data, measuring economic growth through various economic indicators, and research and utilizing the methods used to correct disruptions in the business cycle such as Monetary and Fiscal Policy. Students will learn to use graphs, charts and data to analyze, describe, and explain economic concepts, while being prepared to properly research, interpret and discuss current events in our economic system. Students enrolled in this course are preparing for and are expected to take the AP Macroeconomics exam in May. Students who wish to take the AP Microeconomics exam will be required to do additional teacher-guided coursework outside of class. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite for sophomores: Minimum grade of "90" or better in Honors Geometry or "80" or better in Honors Math Analysis (final grade will be checked in June).*

Prerequisite for juniors and seniors: minimum grade of "90" or better in CP Algebra II/Trigonometry or "85" or better in Honors Algebra II/Trigonometry.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Business Education Semester Courses

The Business of Fashion Grades 9-12

This course provides students with a broad introduction to the global fashion industry. Nike, Louis Vuitton, H&M, and Zara are industry leaders with a world-wide presence. While design and production are global, selling is local. In this course, students will explore the fundamentals of retail, inventory management, fashion promotion, and visual merchandising. Students will develop their knowledge of the fashion industry through case-studies, guided research, project-based learning, and guest speakers. They will acquire transferable knowledge and skills for careers in fashion merchandising, retail management, and marketing.

The Business of Sports Grades 9-12

This semester course offers a comprehensive exploration of the business side of sports and its influence on athletes, teams, and the broader community. Students will explore key aspects such as sports marketing, management, media, and the financial operations of sports organizations. Students will analyze real-world case studies to understand successful business strategies and common challenges faced by sports organizations. This course is ideal for those interested in pursuing careers in sports management, marketing, communication, or entrepreneurship within the sports industry.

Business Technology Grades 9-12

This course equips students with critical technology and digital communication skills that are essential for college and career readiness. Through hands-on projects, students will build proficiency in widely-used software such as Microsoft Office, Google Suite, and Canva, gaining practical skills in public speaking, data analysis, and data visualization with Microsoft Excel. Additionally, students will develop professional communication abilities by creating resumes, advertisements, and compelling business presentations, all designed to enhance confidence and prepare them for real-world scenarios. Ideal for students aiming to gain a competitive edge in college and the workplace, this course provides a solid foundation for future academic and professional success.

Financial Management Grades 9-12

This one semester course promotes personal responsibility for financial planning, saving, credit, investing, and risk management. Financial literacy is essential in the 21st century as people exercise a wider range of choices in the interconnected, global economy. Students in this course will learn how to establish goals and budgets, analyze personal financial decisions, evaluate investment and savings alternatives, use credit responsibly, and manage financial risks. The course exposes students to "real world" scenarios and experiences such as case studies and a stock market game. This course fulfills the financial literacy graduation requirement.

Note: The course is not open to students who have taken or are currently enrolled in Introduction to Business or Personal Finance and Investment.

Succeeding in a Global Economy Grades 9-12

The world is interconnected and the job market is competitive. How do corporations successfully grow their brands outside the US? What if you were offered an opportunity to work and live in another country? How would *you* prepare for an exciting and rewarding career in the global market? In this project-based course, you will: 1) Develop awareness of the challenges and opportunities of

operating a multinational company; 2) Develop the soft skills and knowledge to compete and thrive in a global job market. Main topics include: Global trade and currency values; role of culture, religion, and language in cross-country marketing; career exploration in a global marketplace. The role of technology, e-commerce, and remote working in an international environment is explored.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Advancement and/or Enrichment (Online and/or Seated) Grades 10-12

Advancement and/or enrichment courses are available to students who wish to study a content area or level beyond the scope of the Northern Highlands curriculum. To enroll in an advancement and/or enrichment course, a student must submit a course request application to the Career & Academic Pathways Supervisor for approval (see page 28, *Application Process*, for a link to the application). Each student enrolled will work with the Career & Academic Pathways Supervisor and/or a faculty mentor to oversee course progress, and courses must include ongoing communications between the instructor and student, as well as regular interaction for purposes of teaching, evaluating, and providing assistance. If the course results in an assessed letter grade, a numerical grade will be awarded and included in the GPA if credits count toward graduation requirements. Students may not exceed eight courses in a school year for GPA calculation purposes. If applicable, all AP courses designated as College Board approved will be weighted accordingly. Any other online and/or seated college class will be weighted as Honors level.

Prerequisite: Prior administrative approval by the Career & Academic Pathways Supervisor, Department Supervisor, Director of School Counseling and Principal must be obtained before enrolling in any online and/or seated course.

Bergen Community College High School Partnership Programs Grades 10 -12

Through a partnership with Bergen Community College, Northern Highlands will allow qualified students to enroll in courses that not only will satisfy Northern Highlands graduation requirements, but also will allow students to earn college credit or certifications. The Early College Program is for high-performing juniors and seniors who can earn an Associate's Degree (60 credits) while still in high school. It is the responsibility of the Northern Highlands student to review the final schedule with an appropriate counselor and with Bergen Community College to make sure all courses taken meet both high school and Associate Degree requirements. The Bergen Experience is also for high-performing sophomores, juniors, and seniors who can take courses on the BCC campus while still attending high school during the school year and/or summer. The Early Career program is designed for students who have not decided if they want to go straight to work after high school or attend college. Students can take coursework to become a Certified Logistics Associate/Certified Logistics Technician; Childhood Development Associate; and Medical Office Assistant.

There are two applications associated with these programs: a Bergen Community College application and the Northern Highlands Advancement/Enrichment course request application. Students applying to the Early College program who meet the program's criteria should first complete the Northern Highlands Early College Application, followed by the appropriate Bergen Community College application. Once the appropriate course(s) are determined, students then should complete the NH Advancement/Enrichment application (see page 28, *Application Process*, for a link to the applications).

Prerequisite: Prior administrative approval by the Career & Academic Pathways Supervisor, Department Supervisor, Director of School Counseling, and Principal must be obtained before enrolling in any online and/or seated course.

Community Service and Volunteering Grades 9-12

Community Service activities are those that students perform to benefit at least one other unrelated person and for which they receive no compensation. Additionally, students may not earn community service credit through activities associated with an existing Northern Highlands club unless specifically approved by the Career & Academic Pathways Supervisor. Students may apply earned hours toward their National Honor Society applications, but once a student is inducted, hours required by National Honor Society, thereafter, may not count toward the annual community service hours and credit. Community Service may be completed at any time during the students' high school career, but it cannot be performed during school hours. Students must complete 28 hours in order to earn 1.25 credits per year and the work must be completed between July 1 and June 15 of a given school year. Students could earn a maximum of 5 credits over 4 years, and this may be used as an elective credit. Community Service experiences are graded as Pass/Fail and are not included in the GPA. (See page 28, *Application Process*, for a link to the application).

Electrical Apprenticeship Program/Interim Credentials (Electrical Training Alliance) Grades 11-12

Through a unique program called Interim Credentials, students can take five courses completely online, which would fulfill the first year of an electrical apprenticeship after graduation. In a gamified learning environment, students learn about DC Theory, blueprints, codes and safety, and job opportunities. In addition to Northern Highlands, ten other schools nationally are partnering with Electrical Training Alliance/NECA/IBEW to offer students this opportunity to learn a skilled trade in a safe environment.

To enroll in this program, a student must submit an Advancement/Enrichment course request application to the Career & Academic Pathways Supervisor for approval (see page 28, *Application Process*, for a link to the application).

Prerequisite: Prior administrative approval by the Career & Academic Pathways Supervisor, Department Supervisor, Director of School Counseling, and Principal must be obtained before enrolling in this program. Students should be enrolled in Algebra II or Algebra II/Trigonometry or completed the course.

Independent Study Grade 12

Independent Study is available to a student who wishes to study a content area or level beyond the scope of the Northern Highlands curriculum. To enroll in this course, a student must submit an Independent Study course request application to the Career & Academic Pathways Supervisor for approval (see page 28, *Application Process*, for a link to the application). The Independent Study experience is truly "independent" in that there is a high level of autonomy and each pathway requires dedication, responsibility, and accountability on the part of the student. Each student enrolled in an Independent Study will have a faculty mentor and possibly a career-based mentor (if available and/or applicable). All Independent Study students are responsible for developing a learning plan in collaboration with the faculty mentor and the Career & Academic Pathways Supervisor. At the conclusion of the Independent Study, the student will make a final presentation to show evidence of learning. Students will receive a grade of Pass/Fail for Independent Study.

Prerequisite: Prior administrative approval by the Career & Academic Pathways Supervisor, Department Supervisor, Director of School Counseling, and Principal must be obtained before enrolling in Independent Study.

Option II Physical Education Grades 9-12

Option II Physical Education students have the opportunity to receive graduation credit through an alternative activity that meets or exceeds the District's PE requirement. A student must be involved in an *individualized* (not a NH team) rigorous training program that prepares the student for competition in a sport on an elite or national level and must include intensive personal training sessions of at least 150 minutes per week with a certified professional. To enroll in Option II PE, a student must submit a Wellness PE course request application to the Career & Academic Pathways Supervisor for approval (see page 28, *Application Process*, for a link to the application). Any costs incurred as a result of the program will be the responsibility of the parent/guardian. The student must submit a weekly competition/practice schedule, daily log of activities, and verification of hours from a coach to the Career & Academic Pathways Supervisor. Random site visits may also take place. The Wellness Physical Education program will be graded as Pass/Fail and will not be included in the GPA. Students must sit for the Health portion of the PE course but will be assigned a study hall for the rest of the school year.

Prerequisite: Prior administrative approval by the Career & Academic Pathways Supervisor, Department Supervisor, Director of School Counseling, and Principal must be obtained before enrolling in the Wellness Education program.

Ramapo College Rise Program Grades 12

Through a partnership with Ramapo College of New Jersey, Northern Highlands will allow qualified students to enroll in courses during their senior year at Ramapo College that will not only satisfy Northern Highlands graduation requirements, but also will allow students to earn college credit. It is the responsibility of the Northern Highlands student to review the final schedule with the appropriate counselors at both Northern Highlands and Ramapo College of New Jersey to make sure all courses taken meet high school requirements. The following criteria must be met in order to be eligible to attend Ramapo College of New Jersey: 1) A cumulative GPA of 3.3 or better after junior year at Northern Highlands; 2) Pass all portions of the assessment(s) required by the State of New Jersey for high school graduation; and finally, 3) Achieve qualifying test scores on the SAT, ACT, or Accuplacer prior to June of junior year. Any online and/or seated college class will be weighted as an Honors course. This program offers up to four (4) college credits at a reduced Northern Highlands tuition rate.

There are two applications associated with this program: a Ramapo College Rise application and the Northern Highlands Advancement/Enrichment course request application (see page 28, *Application Process*, for a link to the application).

Prerequisite: Prior administrative approval by the Career & Academic Pathways Supervisor, Department Supervisor, Director of School Counseling, and Principal must be obtained before enrolling in any online and/or seated course.

Senior Internship Grade 12

The Senior Internship provides eligible rising seniors and current seniors with an opportunity to engage in experiential learning outside of the traditional classroom environment. Through this individualized learning opportunity, students will gain valuable interpersonal and intrapersonal skills that are critical components for college and career readiness. Students who complete the internship requirements will obtain credit for participating in a full-year, half-year, after-school, or summer internship. The internship program will be capped at 30 students per semester. Senior internship experiences will be graded as Pass/Fail and are not included in the GPA. Internship duration can include: summer (3 credits), fall semester half-day (7.5 credits), spring semester half-day (7.5 credits), full-year (15 credits), or after-school (credits determined by hours worked).

To enroll in this program, students must be in good academic standing and have no discipline infractions on file. A student must submit a Senior Internship course request application (see page 28, *Application Process*, for a link to the application), provide a current resume, and interview for the opportunity.

Prerequisite: Prior administrative approval by the Career & Academic Pathways Supervisor, Director of School Counseling, and Principal must be obtained before participating in the Senior Internship program.

Honors Success 101 (Bergen Community College) Grade 11-12

Honors Success 101 is a one-semester, dual enrollment course through Bergen Community College, which is designed to help students achieve success in college and beyond. The course will focus on the strategies, habits, and values necessary for students to take charge of their own academic and personal growth. Emphasis will be placed on the college application process, self-assessment, goal setting, written and oral communication skills, critical thinking, self-management, and study strategies. This course will be weighted as an Honors course. Students can earn up to 3 college credits after completing the BCC registration.

Prerequisite: Students need to be recommended for this college-level course by their School Counselor and a minimum grade of "90" or better in an English class.

Summer Study Abroad (CIEE) Grades 9-12

Through a partnership between The Council on International Educational Exchange (CIEE), a study abroad program, and Northern Highlands, students (grades 9-12) will have an opportunity to study abroad during the summer, earn college credit, and/or receive 50 community service hours.

CIEE is the longest running study abroad program in the US and has broad applications across the Northern Highlands curriculum. CIEE, a nonprofit study abroad and intercultural exchange organization, provides students an opportunity to focus on either world language (French, Spanish, Italian, Arabic, German, Italian, Mandarin, Japanese, Korean or Portuguese) or various thematic programs (STEM, Arts, Business, Sustainability, or Social Change). Students who participate in one of the language immersion programs can elect to receive four (4) college credits from Tulane University ($150 transcript fee). Programs are 3 to 4 weeks long and are held at CIEE Study Centers. Seniors are eligible to apply for merit scholarships, while freshmen, sophomores, and juniors are eligible for both merit as well as financial need scholarships (10%-100% of tuition). CIEE also offers STAMP testing and issues Global Seals of Biliteracy for students who qualify. Students who participate in the thematic programs may earn up to 50 community service credits for their experiences.

Students should contact the Career & Academic Pathways Supervisor to review study abroad options.

Work-Based Learning Grade 12

Only seniors are eligible to participate in a paid work experience during the school day and receive an abbreviated schedule. Students must work a minimum of 15 hours/week, spread over a four-day period excluding weekends. The student must attach a letter from the employer indicating promise of employment, days per week, hours per week, employer's contact information including phone number and email. Northern Highlands reserves the right to contact the employer at any time, and may also request a student's pay stub to verify hours of employment. Students will be required to submit a monthly timesheet to the Career & Academic Pathways Supervisor. Students are not eligible to take a study hall while participating in this program.

Please be advised that due to the fact that our Work-Based Learning Program is non-credit bearing, students will not be eligible to participate in a spring sport, as students will not have earned the required number of credits.

To enroll in this program, a student must submit a Work-Based Learning application (see page 28, Application Process, for a link to the application).

Prerequisite: Prior administrative approval by the Career & Academic Pathways Supervisor, Director of School Counseling, and Principal must be obtained before enrolling in the Work-Based Learning program.

Career & Academic Pathways: Applications

Programs (Click on the links below for detailed information)	Application Process (Click on the links below to access info on how to apply)
Advancement and/or Enrichment	Course Request for Advancement and/or Enrichment (must be completed for each individual course taken outside of NH)
Bergen Community College Partnerships • Early College Program • Bergen Experience Program • Early Career Program	Internal Early College Program Application The appropriate Bergen Community College Applications will be shared with students once approved. Course Request for Advancement and/or Enrichment (must be completed for each individual course taken at BCC)
Community Service and Volunteering	Community Service and Volunteering Application
Electrical Apprenticeship Program	Course Request for Advancement and/or Enrichment (must be completed for each individual course taken through Apprenticeship program)
Independent Study	Course Request for Independent Study
Option II Physical Education	Option II Physical Education Application
Ramapo Rise Program	Ramapo College Dual Enrollment Form Course Request for Advancement and/or Enrichment (must be completed for each individual course taken at Ramapo)
Senior Internship	Senior Internship Application
Honors Success 101	No Application Required
Summer Travel Abroad	Applications can be found on the CIEE website
Work Based-Learning	Work-Based Learning Application

English

9th and 10th Grade English Courses

English 9 — Grade 9

English 9 provides students with a fundamental understanding and appreciation of fiction and nonfiction, while improving their oral and written communication skills and developing effective reading, research, analytical, listening, and study skills through the study of thematic units. Students will develop analytical and critical thinking skills while examining various literary forms including poetry, novels, essays, and short stories. Writing instruction includes creative writing, library and online research skills, and structured, formal writing, encompassing basic grammar skills and use of Modern Language Association (MLA) format. Emphasis is placed on cultivating appropriate classroom behaviors, organizational and study skills, and transitioning from middle school to high school.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

American Literature — Grade 10

This course is an examination of literary texts that identify significant American ideas and experiences. Students will be introduced to the skills of argumentation and literary analysis through close readings of essays, plays, short stories, poems and novels written by American authors through the following units: American Narratives, Identifying American Identities, Everything's an Argument, and Literature as Argument. By the time the school year ends, all sophomores will have had two full years working with fundamental and essential English literacy skills.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors American Literature — Grade 10

This course is a demanding and rigorous examination of literary texts that shed light on significant American ideas and experiences. Students will be introduced to important skills of argumentation and literary analysis through close readings of essays, plays, short stories, poems and novels written by American authors. Students will also be challenged to grow in their skills of digital literacy and civic engagement by exploring current issues in American culture and society. By the time the school year ends, all sophomores will have had two full years working with fundamental and essential English literacy skills. At the Honors level, students will be expected to display these skills both in class and independently.

Prerequisite: Minimum grade of "90" or better in English 9 and teacher recommendation

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors American Studies/English — Grade 10

This course is a combined cohort that blends the themes of Honors American Literature and Honors United States History I. The Honors American Literature course will engage students in close reading of great works of American literature to illuminate and investigate some of the core themes of American identity, while providing instruction in the skills of analytical, narrative and argumentative writing as well as digital literacy and critical reading strategies. The Honors United States History I course will attend to similar themes of American identity while instructing students in historical thinking skills such as chronological and comparative reasoning, historical argumentation, and methods for analyzing historical events via primary and secondary sources. This course is 10 credits and will meet the needs of both Honors American Literature and Honors United States History I.

Prerequisite: Minimum grade of "90" or better in English 9 and World History and recommendation from both English 9 and World History teachers.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

11th and 12th Grade English Courses

Literature and Creative Composition Grades 11-12

This course is for students who wish to study the art and craft of writing creatively. Students will read the work of contemporary writers in several genres as well as engage with the work of individual writers in greater detail in order to analyze writing as both an art form and a professional craft. Students in this course will have opportunities to develop their own original creative work in the genres of fiction, poetry, drama, and creative nonfiction.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Literature About Society Grades 11-12

Literature About Society is a course that seeks to utilize literature as a vehicle by which students can explore the way in which present and historical societies shape, inhibit, and influence their citizens in positive and negative ways. Through a diversity of media, including novels, film, short stories, poetry, digital advertisements, and music, students will interrogate the invisible power structures that serve as underpinnings to our society, trace the individual's struggle to maintain individuality or innate goodness in spite of societal conventions, and critique the line between the individual and the societal. Students will examine the inherent structures of society (the political, the hierarchical, the social) and interrogate what said structures reveal about human nature through the study of the following units: Societal Structures and Power; Violence and Bias; Dystopian Realities; and Storytelling as Resistance.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Modern Fiction and Nonfiction Grades 11-12

Examining novels, plays, stories, and nonfiction from 1900 through the present day, students explore trends and themes of modern and contemporary thought. The course examines ethical and social topics such as finding meaning in one's life, our responsibility to others, and the impact of technology and/or war on society. Students will study modern stylistic techniques and themes, drawing examples from art, history, and psychology, in order to identify and analyze examples across literature, nonfiction, film and television.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Science Fiction and Fantasy Grades 11-12

This course will focus on science fiction and fantasy as genres that engage the fundamental questions of human existence: morality, ethics, the nature of reality, and the purpose and meaning of life. We will critically examine works within the genres, considering representative themes and tropes, as well as the rhetorical and literary methods that authors use to relate their visions. Students will also examine the social, scientific, and philosophical underpinnings of some major works of fiction, film, and television in both genres. Works considered may include a variety of short stories and fairy tales, *Shrek, The Hobbit, Harry Potter and the Sorcerer's Stone, The Hitchhiker's Guide to the Galaxy, Batman: The Long Halloween,* and *The Matrix*.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Critical Reading and Writing 101 (Ramapo College) Grade 12

Critical Reading and Writing 101 is a dual-enrollment course with Ramapo College designed to prepare high school seniors for the reading and writing demands of college, regardless of their chosen field of study. In this course, students will develop critical reading and research skills to engage with a variety of complex texts, analyzing and interpreting information effectively. They will also practice essential writing techniques, focusing on clarity, organization, and argumentation to communicate their ideas with precision and impact. Students will have a wide range of choice of topics and texts, and will work with increasing independence to complete student-directed projects. By the end of the course, students will be equipped with the skills to approach college-level reading and writing assignments with confidence.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

11th and 12th Grade English Honors Courses

Honors British Literature (Ramapo College) Grades 11-12

Honors British Literature is an dual-enrollment course with Ramapo College that examines the phenomena of myth and memory in literature of the British Isles. Through pairings of classic British literature and contemporary retellings, students hone critical thinking, analytical reading, and synthesis writing skills. Materials used in the course include plays, novels, poems, essays and artwork through the study of the following units: Heroism, Monstrosity, and Cultural Identity; Individual, Generational, and National Trauma; The Bard and the Yard: Ecology and Apocalypse in Shakespeare; and Cultural Memory.

Prerequisite: Minimum grade of "90" in an English class and teacher recommendation.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Humanities Grades 11-12

Honors Humanities emphasizes a central question: "What does it mean to be human?" This survey course seeks to respond to the question by studying the literature of various periods and cultures in Western Civilization, as well as related contemporary works and readings. This course also emphasizes the skills needed to be an active reader and a strong writer. Students read and analyze both fiction and nonfiction texts, looking closely at authors' choices for diction, style, syntax, and structure in an effort to understand how form follows function and reflects societal concerns. Students will explore different human experiences and compare the literary commonalities that unite everyone across the ages through the following units of study: What Does It Mean To Be Human? Mythology and Storytelling; Ancient and Modern Tragedy; Storytelling; Making Sense of the Senseless; and Rhetoric.

Prerequisite: Minimum grade of "90" in an English class and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Literature and Creative Composition (Ramapo College) Grades 11-12

This dual-enrollment course with Ramapo College examines the art and craft of writing creatively through a variety of literary approaches. Students will study the work of contemporary writers in several genres and engage with the work of individual writers in greater depth in order to analyze writing as both an art form and a professional craft. Students will examine their own writing with purpose and intention in order to develop original creative work with distinctive style and voice in the genres of fiction, poetry, drama, creative nonfiction, and digital writing.

Prerequisite: Minimum grade of "90" in an English class and teacher recommendation.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Modern Fiction and Nonfiction Grades 11-12

Experiencing novels, plays, stories, and nonfiction from 1900 through the present day, students examine trends and themes of modern and contemporary thought. Students read and analyze an author's choices for diction, style, syntax, and structure in fictional and informational texts in an effort to understand how form follows function and reflects societal concerns through the study of the following units: A Bridge to the Modern Era; Finding Meaning in the Modern World; Elevating the Genre and Diverse Voices. Students also write cogently, establishing precise claims and citing strong and thorough textual evidence to support their theses. When possible, students make historical and intertextual connections, tracing the effects of life upon art and art upon life.

Prerequisite: Minimum grade of "90" in an English class and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Speculative Fiction Grades 11-12

This course examines the various genres of speculative fiction, including science fiction, climate fiction, horror, and fantasy, applying a variety of critical approaches. Students will interpret themes, symbols, and literary techniques in complex texts; understand how historical, cultural, and philosophical contexts influence literature; and analyze how authors use rhetorical strategies to persuade or inform their audience. Students will be encouraged to compare and contrast themes, characters, and stylistic elements across multiple texts or genres and contemplate how major works in these genres raise fundamental questions of human existence by examining their social, scientific, and philosophical underpinnings and debating a variety of related ethical and moral questions.

Prerequisite: Minimum grade of "90" in an English class and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Writing Studio/Gender & Literary Texts (Syracuse University Project Advanced) Grade 12

This class is Syracuse's Freshman English course, emphasizing precise writing and literary analysis. For the first semester, the emphasis will be on an introduction to academic writing that focuses on the practices of analysis and argument, practices that carry across disciplinary lines and into professional writing. Students will be asked to annotate readings, experiment with different styles and organizational choices, and engage in a variety of drafting and revision activities. In the second semester, students will explore the construction and representation of gender, especially as it affects the production and reception of literary and other cultural texts. Students will analyze what gender comes to mean, how gender is constructed within particular historical and cultural formations, and examine its importance for literary studies. This is a writing-intensive course intended to familiarize students with the thought process, structures, and styles associated with writing in the liberal arts. In addition to promoting critical writing skills, this course fosters practices of close reading with a range of literary texts and informational texts.

Prerequisite: Minimum grade of "90" in an Honors English course.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

11th and 12th Grade English Advanced Placement Courses

AP English Language and Composition Grades 11-12

AP Language and Composition is designed both to enhance the students' understanding of civics and citizenship as well as to comply with the needs of the AP English Language and Composition Exam. The approach of the course is thematic, which is reflected in the syllabus, and includes the following units: Introduction to Argumentation, Advanced Rhetoric, Basic Citizenry, Justice, and Media Literacy. Within each of the units, students will study and analyze rhetorical approaches and implement them in their own argumentative writing, while understanding and practicing the advanced reading, writing, and thinking skills necessary for the AP exam. Students enrolled in this course are expected to take the AP English Language and Composition exam in May. Please see page 5 for additional information regarding advanced placement courses and exams..

Prerequisite: Minimum grade of "90" in an Honors English course and the recommendation of an English teacher.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP English Literature and Composition Grades 11 -12

The course provides high-achieving juniors and seniors with opportunities to engage in close readings of texts-including short fiction, poetry, full-length novels and plays-and to practice analytical, critical, and creative writing. Students study the structures of fictional works, examining the author's use of literary elements-including characterization, narration, structure, and figurative language-as they master their literary analysis skills. Students enrolled in this course are expected to take the AP English Literature and Composition exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: Minimum grade of "90" in an Honors English course and the recommendation of an English teacher.

A summer assignment is required

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

English Full Year Course Electives

Introduction to Theater and Acting Grades 9-12

This elective course is intended to introduce students to various aspects of the collaborative nature of theater. The course will include theater history, activities in technical theater crafts such as set design and decoration, costume design, and general elements of production. Some introductory activities will also be included, activities that will provide students with a framework for future acting courses. All students will perform some short pieces, either as a solo or within a group. This is an appropriate hands-on approach to theater for those with little or no background or experience.

Technical Theater: Design, Stagecraft, Production, and Management Grades 9-12

This elective course provides an opportunity for students interested in theater to explore the non-performance aspects of theater within a collaborative setting. Semester 1 focuses on beginning stagecraft techniques that are the foundation for technical theater. The beginning technicians will learn to interpret, develop and execute various designs for a scripted text. Through projects and work on mainstage productions, students gain the confidence and technique needed to become a skilled technician. The focus for semester 1 is design (scenic, costume, properties, hair and make-up, light, and sound) and the required technical skills. Semester 2 exposes students to both the art and business of theater, preparing them for leadership roles in theater administration, producing, and management. The curriculum not only provides students with an appreciation and understanding of theater as an art form, but

also explores the best practices of the marketplace through management and marketing coursework. Students will master the art of technical theater both in the classroom and through working on mainstage productions.

Actors' Workshop Grades 10-12

This full-year elective course will expand on the talents of student actors who have already had significant theater experiences. Building on previous activities, students will develop their acting portfolio through performances and exercises, studying theater history and various theater movements, as well as engaging with different acting techniques. In addition to extensive script reading, many assignments will have significant writing, rehearsing and experimental components requiring students to challenge themselves with both classical and contemporary characters, scenes, monologues, and plays.

Prerequisite: Introduction to Theater and Acting and a teacher recommendation.

Actors' Workshop II and III Grades 11-12

This elective is designed for those students who continue to pursue their theater interests, in addition to the activities listed above, and with a yearly change in the material being used, theater practice can be further developed, through more challenging and expansive options, including directing, designing, leading and modeling for their classmates.

Prerequisite: Minimum grade of "90" in Actors' Workshop and a teacher's recommendation; participation in at least two major school productions before enrolling in the course.

21st Century Journalism Grades 9-12

This elective provides a dynamic, hands-on introduction to journalism today. Topics covered include writing for multiple modes of media, the technical skills related to layout and design, media literacy, the importance of journalism in our democracy, ethical and legal issues related to the field, and the role of new technology, especially in social media and plays. This class will improve students' writing, while also allowing them to explore and discuss a wide-range of current events and pursue topics of their own interest, helping them to be responsible contributing members of the world today. Students may have their work published in the school's newspaper–*The Highland Fling*.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

English Semester Courses

Creative Writing I Grades 9-12

Creative Writing I introduces students to poetry, short stories, dramatic writing (monologues, scenes and one-act plays), and memoirs. Wordplay encourages the joy of writing, and class sessions consist of the writing of first drafts, readings and discussions of professional contemporary writers and students' own work, revision sessions, and one-on-one discussions of the students' work. Students are encouraged to submit their writing to the school literary magazine.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Creative Writing II Grades 9-12

This course is for students who wish to continue with writing after taking the first semester creative writing course. In this advanced class, students may choose to concentrate on a certain genre, such as poetry or short stories. "Prompts" designed to inspire creativity and help the students avoid writer's block are given for in-class, first-draft writing, but students may work on longer pieces over time, and will have frequent conferences with the teacher. Students will be asked to share their work with classmates in a workshop atmosphere, and to submit work to the school magazine, as well as entering various college-sponsored, outside contests. Whenever possible, the course will end with a public reading of student work.

Prerequisite: Successful completion of Creative Writing I.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Family and Consumer Sciences

Child Development Grades 10-12

The study of child development will include the social, emotional, physical, and intellectual development of children from birth to six years of age. This course prepares students for a variety of careers and future endeavors involving children in various capacities. Classes are designed to meet the needs of students planning to enter a career involving children, fostering better parenting skills, and developing a better understanding of themselves and others. This course encourages collaboration, creativity, and problem-solving as students work together to address real-world challenges in early childhood education. The course includes the study of the theory of child development, as well as a practical application through participation in the Early Learning Center.

Prerequisite: Family and Consumer Science teacher approval.

Foods and Nutrition Grades 9-12

This course is ideal for students interested in food preparation and nutrition. Through hands-on activities, students learn basic food preparation skills. Emphasis is placed on evaluating personal diets and developing the skills to select and prepare foods that support lifelong health.

From The Kitchen To The Table Grades 10-12

In this year-long course, students build on skills acquired in *Foods and Nutrition*, focusing on advanced baking and food preparation techniques. Units include specialized methods in pastry, cake, and specialty dessert preparation. Students will also explore international cuisine and quick meal preparation suitable for a college lifestyle.

Prerequisites: Successful completion of Foods and Nutrition.

Honors Future Educators & Leaders (Ramapo College) Grades 11-12

This Ramapo University dual enrollment course is designed to meet the needs and interests of students considering a career in the educational professions or any leadership position or career involving training, development or working with children. The course fosters personal, academic, and professional understanding in education theory, educational trends in American society, and human relations in the school and community. Honors Future Educators & Leaders also features a ten-week field experience that includes classroom observation and assistance as well as practice teaching. Participants compose and compile a portfolio that constitutes the majority of the second-semester grade. Semester one is designed for instructional purposes; semester two will include a field experience at one of the Allendale, Upper Saddle River, or Ho-Ho-Kus school districts. Students must possess a valid driver's license by the second semester.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Health and Physical Education

Grade 9 Physical Education

The 9th Grade Physical Education course is geared toward improving the physical fitness of students and developing their awareness of lifetime and cooperative activities. Students will be introduced to skills and strategies that will help them create and engage in a community atmosphere and build and maintain a healthy lifestyle. Activities include ice breakers, small group and large group cooperative challenges, and outdoor and indoor fitness activities. This course will give students a chance to further develop and improve their relationships, communication skills and self-esteem while working on their all around wellness.

Grade 10 Physical Education

The 10th Grade Physical Education course will provide students with the opportunity to explore, develop and practice skills in activities designed for lifetime fitness. Through discussions, exercises, and engagement, students will gain a better understanding of the various benefits of having cardiovascular, strength, and conditioning routines in their daily lives. Through a variety of instructional methods, students will practice skills that demonstrate competency in both fitness concepts and movement skills. Students will also demonstrate competency in game strategies by participating in small group and team activities. This will also provide students an opportunity to build and develop self-esteem, relationships, communication, and collaboration skills.

Grade 11 and 12 Physical Education

The 11th and 12th Grade Physical Education courses are focused on imparting knowledge and skills related to overall physical fitness and an appreciation for the importance of life-long physical activity as a means of enhancing physical, mental, emotional, and social health. Students will take part in varied activities which involve both competitive games and non-competitive games. These activities provide an opportunity to develop specific skills, collaborate with peers, and build a vocabulary pertaining to fitness. Additionally, classes will devote time each week to fitness activities which may include, but are not limited to, body-weight exercises, dynamic stretching, kettlebells, free-weights and resistance bands. Furthermore, students will build, maintain, and/or develop leadership skills, problem-solving skills, interpersonal and communication skills, resilience, empathy, and more.

Grade 11 and 12 High Ropes

High Ropes is an elective course available to 11th and 12th grade Physical Education students. Built in the adjacent woods to the east of Northern Highlands campus, the High Ropes course offers 11 climbing elements varying in height and challenge for a single or partner climbing adventure. Students are taught the safety protocols and techniques for belaying their peers, playing a key role in the success of all climbs by fostering problem-solving skills, offering motivation, and promoting teamwork.

Health and Driver's Education

Grade 9 Health

This course is designed to assist students in obtaining accurate information, developing lifelong positive attitudes and behaviors, and making wise decisions related to their personal health. Study will include personal and community health; mental, emotional, and social health; decision making, relationships, and communication; social media and its impact, stressors and stress management, health products and medicines; commonly abused drugs, treatment, and support. Central themes are the acceptance of personal responsibility for lifelong health, respect for and promotion of the health of others, and informed use of health-related information, products, and services.

Grade 10 Health: Driver Education (Safety Education)

Driver Education, mandated by the State of New Jersey, is offered for the equivalent of one marking period in sophomore year. The final exam is the N.J. Division of Motor Vehicles test. A grade of 80% is necessary to pass the state exam. If a passing grade is achieved, the student will receive a receipt which, when presented at a Driver Qualification Center, will exempt them from the written portion of the licensing test. Upon successful completion of 30 hours in the driver education course, students will receive a letter in Genesis indicating that they may be eligible for a safe-driving insurance discount with most insurance companies. Students

who take a make-up test (permitted one time only) which results in them receiving another score below 80% on the Driver Education state exam will be required to contact New Jersey Motor Vehicles and take the test on their own. In effect, one can pass the class and not the state test. Similarly, one can pass the state test and not qualify for the letter of successful completion of the course.

Grade 11 Health

This course is designed to assist students in obtaining accurate information on relationships, dating violence, LGBTQ education, sexuality, male/female reproductive systems, contraception, sexually transmitted infections and prenatal care. Using an inclusive lens, students will engage in discussions around each of these topics by utilizing the following teaching methods; in-class cooperative learning, evidence based research and group projects through interactive technology. Students will be educated on the New Jersey mandates such as cancer screening, Safe Haven law, LGBTQ education, access to internal Northern Highlands Wellness Department resources as well as counseling and Planned Parenthood.

Grade 12 Health

This course provides students with an overview of responding to emergencies and the importance of nutrition. Topics include: how to respond to a choking victim/obstructed airways, wounds that are bleeding profusely, how to recognize and treat a person who is going into shock, care for an individual who has experienced a seizure, and how to immobilize and provide initial treatment for spinal or head injuries. CPR/AED procedures will be explained and practiced. Further, students will learn about the grief process including the physical, emotional, and behavioral symptoms of grief; coping mechanisms and techniques for handling grief and loss; and resources available to students. In addition, students will develop an understanding of the role nutrition plays in personal health outcomes such as obesity, diabetes, high blood pressure, and cardiovascular disease. Topics include: macronutrients (carbohydrates, fats, and proteins), micronutrients (vitamins and minerals), and exploring popular eating regimens such as keto, paleo, vegan, vegetarian, and Mediterranean diets.

Mathematics

Typical Sequence for Mathematics

<table>
<tr><th>Grade 9</th><th>Grade 10</th><th>Grade 11</th><th>Grade 12</th></tr>
<tr><td>Honors Math Analysis</td><td>AP Precalculus
AP Statistics</td><td>AP Calculus BC
AP Statistics</td><td>Honors Multivariable Calculus
AP Statistics</td></tr>
<tr><td>Honors Geometry</td><td>Honors Algebra II/Trigonometry
AP Statistics</td><td>AP Precalculus
AP Statistics</td><td>AP Calculus BC
AP Calculus AB
AP Statistics
Honors Calculus</td></tr>
<tr><td>Geometry</td><td>Algebra II/Trigonometry</td><td>Precalculus
Statistics & Probability</td><td>Honors Calculus
AP Statistics
Statistics & Probability</td></tr>
<tr><td rowspan="2">Algebra I</td><td rowspan="2">Geometry *</td><td>Algebra II</td><td>Advanced Algebra/Trigonometry
Statistics & Probability</td></tr>
<tr><td>Algebra II/Trigonometry</td><td>Precalculus
Statistics & Probability</td></tr>
</table>

* In sophomore year, students who have earned an assessment average of 95 or better in Algebra I and a teacher recommendation may double up in Geometry and Algebra II/Trigonometry so that they may take a Calculus course in senior year.

Algebra I Grades 9-12

In this course, students build deep conceptual understanding around the topics of equivalence, solving equations, systems, and inequalities, and exploring the connections and differences between linear, quadratic, and exponential functions. Students begin the year by generalizing patterns, studying both arithmetic and geometric sequences. This sets the foundation for exploring linear relationships, and later on, both linear and nonlinear functions. Throughout each unit, there is an emphasis on real-world applications of skills and topics infused throughout the course, which serves to bridge the gap between concrete ideas of arithmetic and abstract ideas for higher mathematics.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Geometry Grades 9-12

This course expands on first year algebra skills and introduces students to further foundational skills needed for future coursework in Algebra II/Trigonometry and Pre-Calculus. This course includes an in-depth study of Euclidean Geometry with an emphasis on the following: coordinate geometry, parallel and perpendicular lines, angles, transformations, triangles, reasoning and proof, polygons and quadrilaterals, circles, area of plane figures, lateral and surface area of solids, and the volume of solids. This course is designed to allow students to use mathematics as a tool for problem-solving and make further preparations for solving real world applications.

Prerequisite: Successful completion of Algebra I.

Prerequisite for incoming freshmen: Multiple criteria will be used as determined and reviewed by the student's middle school principal.

Prerequisite for sophomores who wish to double up in sophomore year, taking both Geometry and Algebra II/ Trigonometry: Minimum assessment average of "95" or better in Algebra I and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Geometry Grades 9-10

The subject of this course is the development of Euclidean Geometry with an emphasis on logical structure using inductive and deductive reasoning. Topics include parallel lines, congruent triangles, quadrilaterals, inequalities, similar polygons, right triangles, circles, areas of plane figures, geometric probability, and areas and volumes of solids. Units in coordinate geometry and transformations will be introduced and infused throughout the curriculum, as well. Although direct and indirect proofs will be written, logical reasoning and applications in real world situations will also be emphasized.

Prerequisite: Minimum assessment average of "95" or better in Algebra I and teacher recommendation.

Prerequisite for incoming freshmen: Multiple criteria will be used as determined and reviewed by the student's middle school principal.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Math Analysis Grade 9

This accelerated course presents topics covered in Honors Geometry and Honors Algebra II/Trigonometry. Students will study logic, deductive reasoning, parallel lines, congruent triangles, quadrilaterals, inequalities, similar polygons, right triangles, circles, constructions, coordinate geometry, area and volume. In addition, students will have an in-depth study of functions: general, linear, quadratic, piecewise, polynomial, and rational. Proofs and derivatives of formulas will be incorporated when appropriate.

Prerequisite for incoming freshmen: Multiple criteria will be used as determined and reviewed by the math supervisor.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Algebra II Grades 11-12

This course reviews first year algebra skills and introduces students to further foundational skills needed for future coursework. This course includes an in-depth algebraic and graphical approach to general functions and transformations, linear functions, quadratic functions, and polynomial functions. The course is designed to allow students to use mathematics as a tool for problem-solving and make further preparations for solving real world applications.

Prerequisite: Successful completion of Algebra I and Geometry.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Algebra II/Trigonometry Grades 10-11

This course expands on first year algebra skills and introduces students to further foundational skills needed for future coursework in Precalculus and beyond. This course includes an in-depth study of the following: complex numbers, as well as the algebraic and graphical approach to linear functions, quadratic functions, and polynomial functions; trigonometry of right and non-right triangles is also explored. This course is designed to allow students to use mathematics as a tool for problem-solving and make further preparations for solving real world applications.

Prerequisite: Minimum average of "80" in both Algebra I and Geometry and teacher recommendation.

Prerequisite for sophomores who wish to double up in sophomore year, taking both Geometry and Algebra II/ Trigonometry: Minimum assessment average of "95" or better in Algebra I and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Algebra II/Trigonometry Grades 10-11

This course expands on first year algebra skills and introduces students to further foundational skills needed for future coursework in Precalculus and Calculus. This course includes an in-depth study of the following: statistics, probability, and complex numbers, as well as algebraic and graphical approach to linear functions, quadratic functions, polynomial functions, rational functions, exponential functions, and logarithmic functions. A comprehensive study of trigonometry and circular trigonometry is explored. The course is designed to allow students to use mathematics as a tool for problem-solving and make further preparations for solving real world applications.

Prerequisite for rising juniors who wish to accelerate into Honors Algebra II/Trigonometry: Minimum assessment average of "95" or better in Algebra I and minimum assessment average of "95" or better in Geometry and teacher recommendation.

Prerequisite for rising sophomores: Minimum assessment average of "80" or better in Honors Geometry and teacher recommendation. Minimum assessment average of "95" or better in Geometry and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Advanced Algebra/Trigonometry Grade 12

Designed for those students who completed Algebra II as juniors, this course continues the study of functions, which includes trigonometry, basic rational, exponential and logarithmic functions, and college algebra. A scientific calculator (required) is used extensively in this course. This course is not open to students who completed CP Algebra II/Trigonometry.

Prerequisite: Algebra II.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Precalculus Grades 11-12

This course expands on first year and second year algebra skills and introduces students to further foundational skills needed for future coursework in Calculus. This course includes an in-depth study of: trigonometry of right triangles and the coordinate plane, trigonometric functions and identities, rational functions, and logarithmic functions. Students are introduced to sequences and series as well as elementary concepts of calculus, including limits. There will be an emphasis on efficient and effective problem-solving strategies that will be necessary in future calculus courses. This course is designed to allow students to use mathematics as a tool for problem-solving and make further preparations for solving real world applications. For juniors, the course is designed to prepare students for Honors Calculus. For seniors, the course is designed to prepare students for college coursework and essential mathematical skills.

Prerequisite for rising juniors and rising seniors: Minimum average of "80" or better in Algebra II/Trigonometry.
Not open to students who took Algebra II.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Precalculus Grades 10-12

This course includes an in depth study of trigonometric functions and identities, rational functions, logs and exponentials, their connection with previous Algebra II and Geometric properties and their applications to real world scenarios. Students will be introduced to conics, series, sequences, and polar and parametric equations as well as an analytical study of limits. This course provides an excellent foundation for calculus but also serves as an appropriate capstone mathematics course that will open pathways to success in STEM fields. It is expected that the students in this course will seek college credit, college placement, or both, as a result of successful performance on the advanced placement examination. Students enrolled in this course are expected to take the AP Precalculus exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: Minimum assessment average of "80" or better in Honors Algebra II/Trigonometry.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Calculus Grade 12

This course is designed for students who opt not to take the AP Calculus course in their senior year. The course will prepare students with the fundamentals of calculus in preparation for college calculus. The course will introduce the concept of limits, techniques of differentiation and integration and its applications. Derivatives and antiderivatives of trigonometric functions, derivatives of exponential and logarithmic functions, and trigonometric functions will be explored. Techniques of integration using real world examples will be studied. Problem solving and applications are emphasized.

Prerequisite: Successful completion of AP Precalculus or minimum average of "80" or better in Precalculus.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Statistics and Probability Grades 11-12

This course introduces major concepts and tools for collecting and analyzing data, and drawing conclusions. The main themes are: exploring data, describing statistics, sampling and experimentation, statistical inference and hypothesis testing. Basic concepts of probability and normal distributions are studied. Case studies in confidence intervals, correlation, and regression are also examined. Verbal communication, problem solving, and the use of technology are emphasized throughout the year. This is a practical and helpful course for many careers, including the social sciences, business, and engineering.

Prerequisite: Successful completion of Algebra II/Trig or minimum average of "90" or better in Algebra II and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Statistics Grades 10-12

This course introduces students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Problem solving and effective verbal communication is strongly emphasized and is necessary for success in the course. There is an abundance of interpretive reading that requires students to use inference skills. Students are exposed to four broad conceptual themes: exploring data; sampling and experimentation; anticipating patterns; and statistical inference. Topics in probability include geometric and binomial theorems, and the normal curve. Those students interested in social sciences, engineering, science and math are encouraged to enroll. Students enrolled in this course are expected to take the AP Statistics exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

*Prerequisite for sophomores: *Honors Math Analysis or minimum assessment average of "90" or better (as a final grade) in Honors Geometry and teacher recommendation.*

Prerequisite for juniors and seniors: Honors Algebra II/Trigonometry or minimum assessment average of "93" or better in Algebra II/ Trigonometry and teacher recommendation.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Calculus (AB) Grades 11-12

Calculus AB covers differential and integral calculus topics that are typically covered in a Calculus I course in college. The course emphasizes theory as well as the applications of differentiation and integration. Concepts and problems are examined from a verbal, geometric, numeric, and analytical perspective. This is a rigorous, challenging, and demanding course that requires an intuitive knowledge of mathematics. It is expected that the students in this course will seek college credit, college placement, or both, as a result of successful performance on the advanced placement examination. Students enrolled in this course are expected to take the AP Calculus AB exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: Minimum assessment average of "80" or better in AP Pre-Calculus and teacher recommendation.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Calculus (BC) Grades 11-12

The Calculus BC course covers Calculus AB topics, as well as additional topics in differential and integral calculus and infinite series. This course is rigorous, challenging, and demanding, and is recommended only for those who appreciate and understand the theoretical aspects of mathematics. Additional topics are the L'Hopital's Rule, logistic growth, Euler's Method, improper integrals, series convergence, and Maclaurin and Taylor Series. Students who perform well may receive up to two semesters of college credit. Students who take the Calculus BC examination will receive a Calculus AB subscore grade in addition to the Calculus BC grade. Students are expected to take the AP examination in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: Minimum assessment average of "90" or better in AP Pre-Calculus and teacher recommendation.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Multivariable Calculus (Seton Hall University) Grade 12

This course is run through Seton Hall University's Project Acceleration and is designed for students who have successfully completed Advanced Placement Calculus BC and is weighted accordingly. It is intended for advanced students who have demonstrated thorough knowledge of Calculus I and Calculus II. The course expands upon single variable calculus while covering topics in more than one variable including vectors and matrices, parametric curves, partial derivatives, double and triple integrals, and vector calculus in two and three dimensional space. All topics are presented using multiple representations with the use of a graphing calculator. Topics are represented graphically, numerically, algebraically and verbally.

Prerequisite: Successful completion of AP Calculus BC, teacher recommendation and a 3 or higher on the AP Calculus BC exam. This will be confirmed over the summer.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Mathematics Full Year Course Electives

AP Computer Science Principles Grades 10-12

AP Computer Science Principles introduces students to the foundations of computer science with a focus on how computing powers the world. Along with the fundamentals of computing, students will learn to analyze data, create technology that has a practical impact, and gain a broader understanding of how computer science impacts people and society. Students are expected to take the AP examination in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite for rising sophomores only: Minimum grade of "90" or better in Honors Geometry or "80" or better in Honors Math Analysis (final grade will be checked in June).*

Prerequisite for rising juniors and seniors: Minimum grade of "90" or better in Algebra II/Trigonometry or a minimum grade of "80" in Honors Algebra II/Trigonometry.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Computer Science A Grades 10-12

This course is designed for students who seek a challenge beyond Introduction to Computer Science and Honors Computer Science. The course focuses on comprehensive program development and implementation, using the JAVA programming language. Case studies and activities are used to analyze the logic behind effective data structure development using object-oriented programming. Debugging and efficient coding techniques are emphasized throughout the course, further incorporating in-depth analysis of real world applications and complex data structures. Students explore problem-solving in mathematics, business, and other disciplines. They also have the opportunity to construct a functional portfolio of programs to use when applying for admission to college level computer-science programs. Students are expected to take the AP examination in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite for rising sophomores only: Minimum grade of "90" or better in Honors Geometry or "80" or better in Honors Math Analysis (final grade will be checked in June) and demonstrated proficiency in computer science by passing a proficiency examination.*

Prerequisite for rising juniors and seniors: Minimum grade of "85" or better in Honors Computer Science, including JAVA or AP Computer Science Principles, and a minimum of Algebra II/Trigonometry. If this is your first Computer Science course you must demonstrate proficiency in computer science by passing a proficiency examination.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Data Structures and Advanced Coding Concepts (Ramapo College) Grades 11-12

This dual enrollment course offers a study of the basic data structures and related algorithms and is meant to function as the capstone course for students who are committed to computer science as an academic pathway. Stacks, queues, deques, arrays, linked lists, trees, graphs, strings, sorting, searching, and file structures are among the topics presented in this course. In addition, the topics of computer graphics, web development, computer security, and software development will be discussed throughout the course.

Prerequisite: Successful completion of AP Computer Science A with a 4 or 5 on the AP exam.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Artificial Intelligence (The Coding School) Grades 10-12

Artificial Intelligence (AI) will change the world as we know it, shaping how business is done, how people connect, and how society functions. It will affect every industry and sector, making it critical that all members of the future workforce have an understanding of AI and its implications. So whether students plan on pursuing careers in politics, business, or healthcare, they all need to learn about AI. This course is a continuation of the partnership with The Coding School. Introduction to Artificial Intelligence (AI) is designed for high school students to gain cutting-edge knowledge and skills in AI with a focus on Machine Learning (ML). This course is offered virtually with live instruction by a Harvard researcher. Throughout the course, students will work on real-world AI projects, culminating in a capstone project; hear from leading experts in AI from industry and academia; and join a national cohort of future AI leaders. While students are scheduled for this class during an instructional period, this course is predominantly self-paced and virtual with a faculty member as a facilitator.

Prerequisite: Successful completion of Geometry.

Note: Students interested in taking Honors Artificial Intelligence should let their counselor know during scheduling and also complete the Advancement and/or Enrichment application on the Career & Academic Pathways website.

Honors Quantum Computing (The Coding School in partnership with Qubit and IBM) Grades 10-12

Qubit by Qubit's Introduction to Quantum Computing with Google AI is a cutting-edge course designed to introduce high school students to the exciting world of quantum computing. Quantum is the next frontier of computing technology and will revolutionize fields such as healthcare, finance, and cybersecurity. If students are interested in math, computer science, electrical engineering, or physics, you will find that quantum computing lies right at the intersection of all these fields. It also has important applications in biology, chemistry, and economics, which will also be explored in this class. Students do not need an extensive background in quantum computing or computer science to take this course. Topics covered include basic linear algebra, probability, and Python coding basics. Students will also spend time exploring the "weird" properties of quantum mechanics that make quantum computers so powerful. By the end of this course, students will be able to code quantum gates and circuits, understand quantum algorithms and even run code on a real quantum computer. While students are scheduled for this class during an instructional period, this course is predominantly self-paced and virtual with a faculty member as a facilitator.

Prerequisite: Successful completion of Geometry.

Note: Students interested in taking Honors Quantum Computing should let their counselor know during scheduling and also complete the Advancement and/or Enrichment application on the Career & Academic Pathways website.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Mathematics Semester Course Electives

Introduction to Computer Science (Fall) Grades 9-12

This is the beginning course for students who would like to explore the study of computer science. The programming concepts are taught using various block-based programming languages, which helps students learn coding concepts without having to memorize syntax for a given language. Students will first learn about fundamental coding concepts using one of many available block-based programming languages. Students will then further develop their understanding of user input and computer output in programs by creating mobile applications using a drag and drop mobile application development environment. Students will then explore game development using a block-based game development environment. In addition, students will visit topics of ethics in computer science throughout the course.

Grade 9 Prerequisite: Student must be enrolled in or completed Geometry

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Computer Science (Spring) Grades 9-12

This is the next course in the sequence following Introduction to Computer Science. Students will learn programming concepts using a variety of text-based programming languages. In addition, more advanced computer science topics (including Arrays, Methods/Functions, Classes, Modules, etc.) are studied throughout the course. Students will also learn about object-oriented programming concepts and how to implement them. Students will learn how to develop an interactive web page. Students will create a variety of dynamic applications using one of the many integrated development environments available. Throughout the course, students will learn about and discuss computer security concerns and issues.

Prerequisite: Introduction to Computer Science.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Media Studies Courses

Broadcast Television Grades 9-12

The first in a two-part instructional training program that gives students the tools and techniques to develop and produce on-air programming for Northern Highlands TV (NHTV). The program will develop and improve both storytelling skills and technical ability to ultimately curate news-packages. Techniques associated with entertainment and other genres will also be explored. Students will be given step-by-step instructions on how to use field and studio video equipment, ranging from cameras to voiceover techniques, audio capture, and basic video editing. Students will be able to improve their on-camera delivery through lessons that encourage on-air participation and develop presentation skills through both field and studio activities. In the studio component, students will get hands-on experience with equipment in the live TV studio and design full programs for airing on NHTV and for the morning news show. This is a program that caters to both the technical-minded student who would prefer to work behind the scenes as well as those who wish to have air-time.

Advanced Broadcast Television Grades 10-12

Advanced Broadcast Television is the second in the two-part training program. This class further develops students' ability to create industry quality, on-air content for Northern Highlands TV. In this second level course, students will be responsible for the full development and production of The NHTV Morning Show from writing, to the live (or live on tape) studio broadcast. They will be given roles that mirror a working television station and be asked to implement organizational skills to complete tasks related to the development of the NHTV morning program. Using prior learning and professional newsroom mechanics, broadcast team members will learn higher level field news reporting techniques in both the editorial writing, as well as in on-camera and technical realms. Students will also increase their understanding of the technical capabilities and use of advanced TV studio equipment to enhance the quality and depth of creativity in each show that airs on NHTV and to provide career ready experience. Students will be given a chance in this stage to weigh in on what role they wish to perform in the production process, whether it's an on-air job or a behind the scenes position.

Prerequisites: Successful completion of Broadcast Television and teacher recommendation.

Digital Film Production Grades 9-12

Digital Film Production is a course for students who wish to start the development of skills in the use of video cameras and digital editing software. Students create short films that are designed to entertain, show understanding of the art of filmmaking, and express personal visions and understanding of their world and of people. Techniques include idea forming, storyboarding, scripting, lighting, cinematography, microphone treatment and application, and sound recording. Students will analyze and discuss the techniques used by Hollywood film-makers and apply the techniques to their work in the course. Students will participate in the production of a substantial narrative video piece that will be presented in an appropriate school venue. Additionally, the work produced by students will be broadcast for public viewing in the school, on local public access channels, as well as be submitted to local, national and international film festivals.

Advanced Digital Film Production Grades 10-12

This course continues the development of Digital Film Production and is a course for students who wish to learn and expand their skills in film making and general production. As in the pre-requisite course, students will create films that express personal visions and understanding of their world and of people. A mastery in techniques including brainstorming, storyboarding, scripting, lighting, camera management, microphone treatment and application, and sound recording will all be developed. Students will analyze and discuss the techniques used by Hollywood film-makers and apply the techniques to their work. In addition students will learn about Independent film development including; budgeting, staff management, auditioning, working with actors, feeding and working with crews and pitching a script. It is the goal of this class that the students will participate in the production of a substantial narrative/abstract film which will be presented in a final film showcase for the public on campus. Additionally, the work produced by students will be broadcast on NHTV Studios Youtube Channel and submitted to multiple local, national and international film festivals.

Prerequisites: Successful completion of Digital Film Production and teacher recommendation.

Sports and Media Broadcasting Grades 9-12

Sports and Media Broadcasting is a full year course which trains students in the art of live sports play by play, color commentary, and sideline reporting. Topics of study include how to research teams, rosters and storylines for games including game day and event preparation. Students will learn the rules and gameplay for a variety of sports in terms of how they are played and how they should be covered. The course will also detail best practices, standard guidelines for professionalism, electronic journalistic integrity, development of style and sports desk news anchoring technique. As part of the class students will call live games as part of NHTV's Northern Highlands Game of the Week broadcasts. For each season they will learn anchoring skills including writing, reading, video editing and delivery of game highlights and sports news.

Media Studies Semester Courses

Film Studies Grades 9-12

This semester course provides an introduction to film studies. Students in this course will first learn what it takes to make a film before providing a critical analysis of some of the best films ever made. Students will learn and execute basic screenwriting skills, cinematography, editing, and lighting as well as gain an understanding of who works on films and what their roles are. Following that, students will begin critical analysis of silent movies and trace film techniques through history, leading to contemporary works in each of the main film genres: comedy, science fiction, horror, action, and drama.

Video Editing Grades 9-12

Video Editing is a semester course for all those who enjoy post-production video editing. There is no experience needed for this class. It is designed to advance the video editing skills of students who have a range of skill in editing, from cell phones, to editing studios, to none at all. Students will become highly proficient with Adobe Premiere Pro, Audition and After Effects software, as well as with specific techniques used in editing a wide variety of video projects. These range from films, to news shows, special school segments such as pep rallies and year end videos, video entertainment and selective audio projects. Students will utilize green screen technology, motion graphics, and other animation to build high level, sophisticated videos. The class is designed to interface well with other media courses like Digital Film, Advanced Film, Broadcast TV, and other on campus visual design courses. As with other media classes, material produced from the class has the potential to be viewed by the school audience and general audiences abroad.

Multi-Disciplinary Courses

Learning Lab Grades 9-12

Students receive individual and small group assistance in their current math and/or English course through direct instruction and with the use of technology. Learning Lab teachers are in contact with the students' teachers to help support daily lessons and assessment preparation. Students learn note taking skills, study skills, and techniques to improve their foundational skills in math, reading and writing. One additional goal is to prepare students for state mandated assessments and graduation requirements. Students receive five credits per year and a grade of a pass or fail.

AP Seminar Grades 11-12

This course is part of a two-year AP Capstone program which engages students in inquiry-based research and in the analysis and creation of strong arguments. Students should be committed to mastering the synthesis of research, writing, collaboration, and oral presentations, and must be independent in their studies and capable of self-paced work. Students will analyze articles, research studies, and a variety of other written and visual texts. They will develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. This course prepares qualified juniors for AP Research, but seniors are also welcome to take it. Students enrolled in this course are expected to take the AP Seminar exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: A grade of "90" or better in an Honors English course and Honors English teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Research Grade 12

In the second year of the two-year program, students deeply explore an academic topic, problem, issue, or idea of individual interest. Students will be able to draw on the mastery skills acquired in AP Seminar and design, plan, and implement a year-long study of their own research questions. Students will also build on the research skills developed in AP Seminar while furthering their study of methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students will reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. In accordance with the College Board, 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. The AP Capstone Diploma is granted to students who earn scores of 3 or higher in AP Seminar and AP Research and on 4 additional AP Exams of their choosing. The AP Seminar and Research Certificate is granted to students who earn scores of 3 or higher in both AP Seminar and AP Research.

Prerequisite: AP Seminar teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Multi-Disciplinary Semester Courses

Public Speaking Grades 9-12

Effective communication is the cornerstone of all human relationships and professional success. In today's world, being able to speak confidently and persuasively to an audience is a critical skill that extends beyond any specific career. This performance-based, one-semester course, is designed to build students' confidence, competence, and pride in public speaking. Students will learn practical techniques for overcoming speaker anxiety, using body language effectively, engaging an audience, and using visual aids to support and enhance presentations.

The course covers a variety of public speaking contexts, including persuasive, informative, and impromptu speaking, equipping students with skills for diverse real-world scenarios. Students will have opportunities to present both individually and in groups,

receiving constructive feedback to improve delivery and style. As they progress, they'll develop an understanding of audience analysis, organization of ideas, and the importance of tone, clarity, and pacing in their delivery. By the end of the course, students will have a toolkit for effective communication that they can apply in academic, professional, and personal settings.

Approved for NCAA DI and DII athletic eligibility (please refer to page 5).

Music

A Cappella & Choir Grades 9-12

This course is primarily a performance ensemble, which performs in winter and spring concerts, and in other settings of the director's choosing. It is also a vocal technique class, where students learn the basics of traditional and contemporary pop a cappella and the skills necessary to improve as individual vocalists and chorus members. Students have the opportunity to apply these skills in both rehearsal and performance, further contributing to the success of the group. This course may be repeated for additional credits.

Honors A Cappella & Choir Grades 10-12

The honors level class will include lessons in music reading, theory, and performing practices. Participation in all performances is required. This is a select vocal ensemble committed to a high standard of performance. The entire spectrum of repertoire is covered at an advanced level from traditional choral music to contemporary pop a cappella. This group performs in both the winter and spring concerts and other local and community events. The ensemble also represents Northern Highlands at selected festivals and competitions. Students are encouraged to participate in other select choirs at the local, regional, state, and national levels. This course may be repeated for additional credits.

Prerequisite: Teacher Recommendation.

Criteria: Ability to sing in tune with an advanced level of tone production; ability to sight read and evidence of tonal memory; ability to follow vocal score.

AP Music Theory Grades 11-12

This course corresponds to two semesters of a typical introductory college music theory course that covers topics such as musicianship, theory, musical materials, and procedures. Musicianship skills including dictation and other listening skills, sight-singing, and keyboard harmony are considered an important part of the course. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of music that are heard or presented in a score. Development of aural skills is a primary objective. Performance is also part of the learning process. Students understand basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials are emphasized. This course provides a detailed presentation of the elements of music in preparation for the AP Music Theory examination, which students are expected to take in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: Teacher recommendation.

A summer assignment may be required.

Recording/Audio Technology Grades 10-12

This class introduces the student to Digital Audio Workstation (DAW) software and hardware: Mixcraft, effects plug-ins, Melodyne, as well as the Microsoft operating system used in the audio studio that utilizes computers for audio and video. Related equipment, including microphones, outboard processors and basic musical concepts and terms are covered. Students will learn how to create background soundtracks for film using the Mixcraft Loop Library. Skills will be developed in recording technique, including acoustics, microphone setup and placement, mixing, sampling, and understanding the history of recording and audio production. Practical applications will include recording projects and providing live sound and audio recording.

String Ensemble Grades 9-12

String Ensemble is a full year course designed to provide students with a continuation of musical skills developed in middle school. This course is a developmental performance-based group. Students are expected to reach a proficiency level on their instruments conducive to playing level IV-V music. They will have knowledge of the technical skills applicable to their respective instruments. String Ensemble is an elective, performance class open to all orchestral string players who have completed the middle school string program or its equivalent outside of the system. This ensemble has concerts in the winter and spring, as well as performances at

various local and community functions, festivals, and competitions. Students are prepared for participation in ensembles at the college level and beyond, and are encouraged to participate in more select bands at the local, regional, state, and national levels.

Honors String Ensemble Grades 10-12

The Honors String Ensemble is an advanced performance group designed for students who have a solid foundation in string performance. Building upon the skills acquired in String Ensemble or through private study, this ensemble offers students the chance to engage with a more challenging and diverse repertoire, focusing on pieces at levels 5 and 6. Students will showcase their musical development through a series of concerts held during the winter and spring, and will be expected to research and provide program notes for their repertoire. In addition to these formal performances, the ensemble will participate in various local and community events, enhancing the students' experience by allowing them to perform in different settings. Opportunities to audition for and participate in select ensembles on the local, regional, and state levels are very actively sought, and students are expected to partake in at least one audition.

Prerequisite: Audition and teacher approval.

Symphonic Band Grades 9-12

The Symphonic Band is a full year course designed to provide students with a continuation of musical skills developed in middle school and beyond. Skills, behavior patterns, and attitudes learned in this class benefit every performance ensemble at the high school. This ensemble has concerts in the winter and spring, as well as performances at various local and community functions, festivals, and competitions. Individual and group improvements are vital to the continued success of the high school instrumental program; students are prepared for participation in ensembles at the college level and beyond. Students are encouraged to participate in more select bands at the local, regional, state, and national levels.

Prerequisite: Prior instrumental experience and performance is required.

Honors Wind Symphony Grades 10-12

This performance ensemble builds upon Symphonic Band preparation and has concerts in the winter and spring, as well as performances at various local and community functions, festivals, and competitions. Students develop valuable musical skills and experience, utilizing an increasingly difficult and varied repertoire (levels 5 & 6). The skills, behavior patterns, and attitudes first learned in Symphonic Band will continue to benefit every performance ensemble at the high school. Opportunities to audition for and participate in select ensembles on the local, regional, and state levels are very actively sought, and students are strongly urged to partake in these opportunities.

Prerequisite: Teacher Recommendation.

Criteria: Ability to play with an advanced level of instrumental technique and tone production; ability to sight read.

***Note**: A Capella & Choir//Symphonic Band Grades 9-12: Students receive equal time in vocal and instrumental music each week.*

***Note**: Honors A Capella & Choir/Wind Symphony Grades 10-12: Students receive equal time in vocal and instrumental music each week.*

Music Semester Courses

Guitar Academy Grades 9-12

This semester course provides the student an opportunity to learn basic guitar skills and techniques through the study of various styles of music for the guitar. Guitar Academy is designed to develop the basic skills necessary to be a successful performer and overall musician or build on their current level of proficiency and knowledge of the guitar through the study of music theory, vocabulary, historical references, performance opportunities, recording, and creative composition. Guitars and methods books will be provided in school but students are encouraged to purchase/rent a guitar for home practice. No prior guitar playing experience is required.

Music in the Movies Grades 9-12

This semester course will examine the development of music in film from its origins in 19th century musical traditions to the modern day. The class emphasizes analysis and the relationship between music and narrative films. Students will study the overall history and trends in the development of film music and explore the role of music in storytelling and its ability to enhance the emotion felt by an audience. The study of film often centers on the visual aspects of the medium with little attention given to the important role that music plays. The purpose of this course will be to obtain an increased awareness of the many functions of film music and learn about its prominent role in the cinema.

Music Theory I Grades 9-12

Music Theory I is a half year course designed to cover the basic fundamentals of music theory. Students will learn about the rudiments of music, including pitch, duration, scales, keys, intervals, meter, rhythm and other related areas. No musical experience is required, as this course covers music theory (written & aural) from the “ground-up”. This course is intended for students interested in learning about the inner workings of music theory, and provides the fundamentals needed for students who may be interested in taking AP Music Theory in a subsequent year.

Rocking Through the Ages Grades 9-12

In this semester course, students will recognize the development of music from a historical and cultural perspective. Students will understand the fundamentals of music and discover basic music terminology, and instrument families. These elements will then be used throughout the course as a foundation for discussion of music throughout history. Eras covered will include the fifties through today. Students will gain an understanding of the context in which music was created by recognizing and aurally identifying style characteristics, genres, and representative masterworks from various periods and how that ties into the culture of the period. The course utilizes listening examples of influential artists alongside historical context to gain greater understanding of the growth and development of music. Students will explore artistic ideals and issues related to the worldview reflected in music.

Songwriter’s Studio Grades 9-12

This course focuses on songwriting styles and techniques. Over the course of the semester, different songwriting methods will be presented and students will be shown easy to understand methods to develop the necessary skills to compose well-crafted lyrics and music. Focusing on melody writing, chord progressions, and lyric structure, students will develop their own personal musical identity as well as critical listening skills. This class welcomes budding musicians and poets and students will function as independent songwriters and collaborative songwriting teams.

Science

Typical Sequence for Science

Grade 9	Grade 10	Grade 11	Grade 12
Honors Physics/Lab AP Physics 1/Lab	Honors Chemistry/Lab AP Physics 2/Lab	Honors Biology/Lab AP Chemistry/Lab AP Physics C/Lab AP Physics 2/Lab Additional Science Electives	AP Biology/Lab AP Chemistry/Lab AP Physics C/Lab AP Physics 2/Lab AP Environmental Additional Science Electives
Geophysics/Lab	Chemistry/Lab Honors Chemistry/Lab	AP Physics 1/Lab Biology/Lab Honors Biology/Lab Additional Science Electives	AP Biology/Lab AP Chemistry/Lab AP Physics 1/Lab AP Physics 2/Lab Additional Science Electives

Departmental Notes

1. Geophysics/Lab, Chemistry/Lab, and Biology/Lab courses must be taken in sequential order.
2. Classes assigned to a lab will have that period removed from Health and Physical Education; however, if a student has a study hall, the lab will come out of study rather than physical education class.
3. Students wishing to double up in a lab science must take a study hall to accommodate labs.
4. Students who wish to enroll in AP Chemistry/Lab as sophomores or AP Biology/Lab as juniors may do so upon completion of an approved NH Summer Academy course.

Students may choose to opt-out of dissection in the following life science courses: Honors Anatomy & Physiology/Lab, Sports Medicine/Anatomy. Consult the Student/Parent Handbook and/or the instructor's Canvas page for details concerning the opt-out process.

Physics Courses

Geophysics/Lab

Grade 9

Geophysics is an engaging, foundational course that introduces key concepts in physics—such as motion and its underlying causes, electricity, and wave dynamics—and applies them to explore Earth's climate and the universe's history, from the Big Bang to Earth's formation and the mechanics of plate tectonics. Throughout this course, we will investigate the principles behind modern electronic technologies and alternative energy solutions, emphasizing real-world applications. Students will engage with diverse learning strategies, including video analysis, electronic probes, hands-on data collection and analysis, computer simulations, and interactive tutorials. The course places a strong emphasis on building a solid foundation in science and engineering practices, computational thinking, and preparing for future science coursework. Additionally, students will develop the scientific literacy needed to critically interpret scientific information, analyze data, and evaluate claims, empowering them to make informed, evidence-based decisions.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Physics/Lab Grade 9

The physics course is designed to develop student understanding of the four core ideas in the physical sciences. These ideas include forces and motion, interactions between objects and systems, thermal energy, electricity and magnetism, and waves. The intention is to provide students with fundamental concepts to allow for expansion and connections in subsequent high school science courses with a strong emphasis on math concepts and skills. Students enrolled in physics will develop a genuine understanding of the physical laws basic to all sciences and interrelationships and their effect on the development of society. The course will employ a multi-activity/laboratory-based approach, including video demonstrations, computer and non-computer-assisted laboratories, as well as interactive computer simulations. Students are also expected to demonstrate understanding of several engineering practices, including design and evaluation.

Prerequisite for incoming freshmen: Multiple criteria will be used to determine placement.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Physics 1/Lab Grades 9-12

The course is a rigorous math-based physics course. It is designed to be equivalent to the first semester of an introductory college level algebra based physics course. A high level of achievement in algebra and geometry is mandatory. Students choosing to take this class will find it challenging, with extended study time requirements outside of class. Students are required to apply the principles learned in class to problem solving in homework, test, and laboratory settings. The major topics of study include: kinematics, Newtonian Mechanics, energy, harmonic motion, waves, sound, electrostatics and simple electric circuits. Students enrolled in this course are expected to take the AP Physics 1 exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite for incoming freshmen: Only freshmen enrolled in Honors Math Analysis will be eligible to take AP Physics 1. (Please refer to page 5 for additional information).

Prerequisite for sophomores, juniors, and seniors: Teacher recommendation and minimum grade of "85" or better in Honors Physics, or "95" in Geophysics/Lab, and a minimum grade of "85" or better in Algebra II/Trigonometry or concurrently enrolled in Algebra II/ Trigonometry.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Physics 2/Lab Grades 10-12

AP Physics 2 is designed to be equivalent to the second semester of an introductory college level algebra-based physics course. Whereas AP Physics 1 covers all the topics relevant to motion, AP Physics 2 covers topics relevant for today's modern technologies and engineering needs: electric fields and circuits, magnetism and electromagnetism, optics, waves, sound, and modern physics. It is an exciting course where you will learn how all the important technologies around us work and is based on a laboratory filled with electronic probes, video and electronic analysis, computer simulations, video lessons, interactive learning tutorials, and hands on experience with light, sound, electricity, optical phenomena, and magnetism. Students enrolled in this course are expected to take the AP Physics 2 exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite for sophomores, juniors, and seniors: Teacher recommendation and a minimum grade of "85" or better in AP Physics 1 or a minimum grade of "90" or better in Honors Physics.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Physics C/Lab Grade 11- 12

AP Physics C is designed to prepare the qualified physics student to take the Advanced Placement Physics C test in Mechanics and/or Electricity/Magnetism. This course requires the use of Calculus in the solution of problems. This includes: mechanics with motion in two dimensions, work, energy, momentum, rotation, oscillatory motion, universal gravitation and electricity/magnetism with electric forces and fields, capacitance, steady state and non-steady state circuits, magnetic fields and forces, and induction. Successful completion of this course and the AP Physics Examination in Mechanics and Electricity/Magnetism will provide an experience similar to that of two semesters of physics in engineering, physical science, mathematics or pre-med program at a university. This course requires a high degree of commitment to academic work and extremely strong mathematical analysis and problem solving abilities. Students enrolled in this course are expected to take the AP Physics C exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: This is an upper level course that requires a science teacher recommendation and a strong performance in three previous years of honors science.

AP Calculus is a co-requisite. Completion of or concurrent placement in a Calculus BC course.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Chemistry Courses

Chemistry/Lab Grade 10

This chemistry course is designed for students to explore chemistry concepts using real world phenomena. Students will learn the chemical principles necessary for an introductory college chemistry course as well as entering a science related career. Topics of study include interactions of matter, chemical reactions, quantitative relationships, energy, solutions, and equilibrium. Students will blend these core ideas with scientific and engineering practices to explain chemistry core concepts. Scientific practices include developing and using models, planning and conducting investigations, analyzing and interpreting data, and using mathematical and computational thinking. The engineering practices put a realistic twist on the scientific method to give students the opportunity to experience how real scientists investigate problems.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Chemistry/Lab Grade 10

This chemistry course is designed for students who are considering a science related career and who have shown superior aptitude and interest in science and mathematics. Students will explore chemistry concepts using real world phenomena to explore interactions of matter, chemical reactions, quantitative relationships, energy, solutions, and equilibrium. Students will blend these core ideas with scientific and engineering practices to explain chemistry core concepts. Scientific practices include developing and using models, planning and conducting investigations, analyzing and interpreting data, and using mathematical and computational thinking. The engineering practices put a realistic twist on the scientific method to give students the opportunity to experience how real scientists investigate problems.

Prerequisite: Minimum grade of "70" or better in Honors Physics and current math course or teacher recommendation or a minimum grade of "95" or better in Geophysics/Lab and minimum grade of "95" in current math course with teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Chemistry/Lab Grades 11-12

Advanced Placement Chemistry is a high mathematical, introductory college level course that builds upon the knowledge base gained in a first year chemistry course. This course emphasizes inquiry and reasoning skills as methods to develop the College Board's six Big Ideas and their corresponding enduring understandings. The areas of study include, but are not limited to: the structure of matter, the properties of matter, chemical reactions, rates of chemical reactions, thermodynamics, and equilibrium. Students will be required to do independent research and reading, write formal lab reports, and think analytically about problems they may never have encountered before. Students will be engaged in hands-on laboratory work, integrated throughout the course, which accounts for a minimum of 25 percent of the course time. Students enrolled in this course are expected to take the AP Chemistry exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: Minimum grade of "85" or better in Honors Chemistry and a minimum grade of "85" or better in either Honors Algebra II/ Trigonometry or AP Precalculus or teacher recommendation.

Suggested co-requisite (if not taken previously): AP Precalculus and Honors Biology.

A summer assignment is assigned at teacher discretion.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Biology Courses

Biology/Lab Grade 11

This course focuses on the nature of life at all levels of structural organization. It emphasizes the similarities of basic life functions within the vast diversity of life forms. Students will describe the molecules that make up living things and explain how cells use energy to stay alive. The course will show how cell structure relates to function and how cell division and gene mutation can result in evolutionary change. Students will examine interactions between living things and the environment. Concepts will be reinforced by related laboratory experiences.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Biology/Lab Grade 11

In this course, students explore the core concepts on which modern biology is based. Students will see how all forms of life are unified by the similarities in their organization and life functions. They will describe biologic molecules and explain the energy transformations that sustain life. They will show the relationship between cell structure and function, and between cell division and genetic variation, and describe how evolution is possible through sexual reproduction and gene mutation. Critical thinking and scientific inquiry skills are fostered through laboratory work, group activities, internet sources, and independent work.

Prerequisite: Minimum grade of "75" or better in Honors Chemistry or minimum assessment average of "95" or better in Chemistry/Lab with teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Biology/Lab Grades 11-12

The AP Biology course is designed to be the equivalent of a college level introductory biology course. The intent of this course is to expose students to higher level biological principles, concepts, and skills and allow them the opportunity to apply their knowledge to real life applications. The core concepts of AP Biology are organized around biological principles called Big Ideas that permeate the entire course and focus on the following topics: Big Idea 1: the process of evolution drives diversity and unity of life; Big Idea 2: biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis; Big Idea 3: living systems store, retrieve, transmit and respond to information essential to life processes; Big Idea 4: biological

systems interact, and these systems and their interactions possess complex properties. In class, students are given opportunities to learn and apply their knowledge through the process of inquiry rather than learning solely from lectures and/or prescribed lab protocols. AP Biology is a challenging course that requires a strong Biology (summer Bio classes are not encouraged unless it is through the Highlands Summer Academy) and a Chemistry background. Students enrolled in this course are expected to take the AP Biology exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: AP Biology is offered to any student who has successfully completed Honors Chemistry and Honors Biology with a minimum grade of "85" or better in both courses. Teacher recommendation is required.

A summer assignment may be assigned.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Full Year Science Electives

Honors Anatomy & Physiology I & II/Lab (Rutgers University) Grades 11-12

This course follows a sequential development of the major body systems in an organized and structured curriculum. The course is designed to give the students a selective overview of human anatomical structure and an analysis of human physiological principles. Labs will include slide work, dissection of various animals and the study of the human skeleton. The course will also use computer simulated dissection.

Prerequisite: Minimum grade of "90" or better in Biology/lab or "80" or better in Honors Biology.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Forensic Science (Syracuse University Project Advance) Grade 12

Introduction to Forensic Science at Syracuse University explores the application of scientific methods and techniques to matters of law. Case details are evaluated with scientific logic, and principles and practices of physics, chemistry, and biology are used to analyze different items of physical evidence to support or disprove an interpretation of a scene. Historical cases, new technologies, and ethical considerations are also discussed. Topics include blood analysis, DNA comparison, drug chemistry and toxicology, fingerprints, autopsy and pathology, arson, firearms, and trace evidence analysis. Please note that portions of this course include mature content and graphic images. Students must follow the Physics First Curriculum: Physics, Chemistry, and Biology.

Prerequisites: Completion of Physics, Chemistry, and Biology, with a minimum grade of "80" in the most recent Honors level science course, or a minimum grade of "90" in the most recent Lab-level science course.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Environmental Science/Lab Grades 11-12

The goal of the AP Environmental Science course is to provide students with scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. The AP Environmental Science course is a demanding course designed to be the equivalent of a one semester, introductory college course in Environmental Science. Environmental Science is interdisciplinary; it embraces a wide variety of topics from different areas which include concepts of geology, biology, chemistry, and geography. Students enrolled in this course

are expected to take the AP Environmental exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: Minimum grade of "85" or better in Honors Chemistry and Honors Biology or a minimum grade of "90" or better in Chemistry/Lab and Biology/Lab, or written recommendation from two science teachers.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Forensics Grades 11-12

This course studies the science behind how forensic scientists are used to solve crimes. Topics include the history of forensic science, the crime scene, physical and biological evidence collection and analysis, microscopic investigations, hair and fiber analysis, determination of the time of death, and insect study. DNA evidence is also covered along with computer, document, and voice recognition as evidence. Please note that portions of this course include mature content and graphic images.

Prerequisite: Successful completion of Physics and Chemistry, and successful completion or currently enrolled in Biology.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Sports Medicine Grades 11-12

Sports Medicine is designed for the student who is interested in the study of anatomy and physiology and how sports affect these systems. Areas of emphasis include the study of anatomy, exercise physiology, nutrition, personal health and fitness, supplementation, physical therapy, kinesiology, athletic injury evaluation, and the rehabilitation of athletic injuries. Lab experiences are an essential learning tool and include blood pressures and heart rates, reflexes, joint assessments, ankle and various taping techniques, splinting and wrappings, and dissections.

Prerequisite: Successful completion of any level core science course.

Science Semester Electives

Astronomy Grades 9-12

Students are introduced to astronomy and the makeup and dynamics of the universe. Using powerful telescopes, the school planetarium, and the internet, students learn how to identify Earth's place in the universe. Students also study the moon, planets, major stars and constellations, galaxies, nebulae, and other objects like black holes.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Crime Scene Forensics Grade 9

In this engaging half-year course, students will explore key topics, including the evolution of forensic science, the intricate components of a crime scene, and the meticulous processes involved in the collection and analysis of physical and biological evidence. Students will gain hands-on experience with essential forensic techniques, such as lifting fingerprints, analyzing handwriting from crime scene notes, and conducting glass-shattering analysis. This course emphasizes practical learning through a variety of hands-on experiments, making the exploration of forensic topics both educational and enjoyable. By the end of the course, students will have a solid understanding of forensic methodologies and their application in real-world scenarios.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Environmental Science Grades 9-12

Some of the most pressing issues of our time revolve around the environment and more importantly climate change and working towards a sustainable future. This Environmental Science course provides students with scientific principles, concepts, and methodologies required to consider these issues and analyze climatic concerns both natural and human made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. The Environmental Science course is designed to be the equivalent to an introductory college course in Environmental Science. The course draws from diverse subjects, including concepts of geology, biology, chemistry, geography, politics, history, economics, and current events.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Food Science Grades 11-12

Are artificial flavors and colors really that bad for you? How do you make the fluffiest muffin? How do you get the best flavor in your food? These are the kinds of questions we will explore over the course of the semester to clarify misconceptions that have developed between scientists and consumers regarding food and to optimize our recipes. Students will have the opportunity to perform experiments with food and food materials, learn how to be an informed consumer, and become more aware of the chemistry of food. Students will use chemical concepts to explain how food molecules react to changes during cooking. Students should be able to view food through a new lens as they focus on the science behind it.

Prerequisites: Successful completion of any level Chemistry course.

Oceanography Grades 9-12

Students will be introduced to marine biology and oceanography through both the physical dynamics of the ocean and the interdependencies that exist within the various marine ecosystems. Students will learn about the physical structure of chemistry of the ocean, the diversity of ocean life, marine ecology, and the scope and impact of human interactions with the oceans. Laboratory experiences are embedded in the curriculum and will take place during the regularly scheduled class periods.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Dynamics of HealthCare (Rutgers University) Grades 10-12

This Rutgers School of Health Related Professions course provides an orientation to health care services and their delivery. Students who successfully complete the course will earn three college credits from Rutgers and 2.5 credits on their Northern Highlands transcript. This course is a prerequisite for all Rutgers courses at Northern Highlands. The class presents an interdisciplinary perspective focusing on process skills such as critical thinking, ethical reasoning, effective communication, and the ways to continue independent learning throughout life. The course shows how all health care providers acquire professional competency in dealing with the issues and problems they face as well as the role they play as informed consumers.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Honors Medical Terminology (Rutgers University) Grades 10-12

Medical Terminology is the study of words that pertain to body systems, anatomy, physiology, medical processes and procedures and a variety of diseases. It provides specialized language for the health care team, enabling health care workers to communicate in an accurate, articulate and concise manner. This course is designed to give the students a comprehensive knowledge of word construction, definition and use of terms related to all areas of medical science. The course includes, but is not limited to terms related to the anatomy of the human body, functions of health and disease, and the use of language in processing medical/dental records and claim forms.

Prerequisite: Honors Dynamics of Healthcare.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Honors Scientific Principles of Nutrition (Rutgers University) Grades 11-12

This dual enrollment course outlines the relationship of diet, lifestyle, and the prevention of disease for healthy living. An overview of the digestion, absorption, and metabolism of protein, carbohydrates, fat, vitamins, and five minerals is provided. Nutrition needs at various stages of the lifespan are stressed. Applying the science of nutrition to life including needs for fitness and physical activity, evaluating nutrition claims, food labeling, and other consumer concerns are emphasized.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Social Studies

World History Grade 9

This survey of World History places an emphasis on 20th century history up to contemporary times. The course consists of units on China, the Middle East, the Indian Subcontinent, Africa with a specific emphasis on Congo, Rwanda, South Africa and a concluding unit on Latin America. Students will become well versed in not only the histories and peoples of specific places but the interconnectedness between them; students will analyze the unifying themes of these regions, such as imperialism and resistance, throughout the units. The aim of this course is to provide students with diverse perspectives in World History and the ability to contextualize the world around them.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

United States History I Grade 10

This course focuses on American history from the country's founding through the first and second Reconstruction periods. Students will investigate the meaning of U.S. history through the study of significant events, individuals, historical developments, and consistent themes and processes from both a historical and contemporary lens. Students will develop historical thinking skills, such as chronological reasoning, comparative reasoning, historical argumentation, and methods for analyzing historical events via primary and secondary sources, and also examine and make connections among a variety of historical periods, events, and developments. The aim of this course is the promotion of civic aptitude via the study of a wide variety of social studies fields including geography, humanities, sociology, economics and politics.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors United States History I Grade 10

This course focuses on American history from the country's founding through the first and second Reconstruction periods. Students will investigate the meaning of U.S. history through the study of significant events, individuals, historical developments, and consistent themes and processes from both a historical and contemporary lens. Students will develop historical thinking skills, such as chronological reasoning, comparative reasoning, historical argumentation, and methods for analyzing historical events via primary and secondary sources, and also examine and make connections among a variety of historical periods, events, and developments. The aim of this course is the promotion of civic aptitude via the study of a wide variety of social studies fields including geography, humanities, sociology, economics and politics. This course is a more rigorous study of U.S. History I. Students with a grade of "B-" or better who exhibit strong writing skills will be eligible for AP U.S. History in their junior year.

Prerequisite: Minimum grade of "90" or better in World History and recommendation of current history teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors American Studies/Social Studies Grade 10

This course is a combined cohort that blends the themes of Honors American Literature and Honors United States History I. The Honors American Literature course will infuse the great works of American literature to illuminate and investigate some of the core themes of American identity, while providing instruction in the skills of analytical, narrative and argumentative writing as well as digital literacy and critical reading strategies. The Honors United States History I course would attend to similar themes of American identity while instructing students in historical thinking skills such as chronological and comparative reasoning, historical argumentation, and methods for analyzing historical events via primary and secondary sources. This course is 10 credits and will meet the needs of both Honors American Literature and Honors United States History I.

Prerequisite: Minimum grade of "90" or better in English 9 and World History and recommendation from both English 9 and World History teachers.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

United States History II Grade 11

This course is a study of U.S. History with an emphasis on historical reading, analysis, and writing. Students will investigate U.S. history through the study of significant events, individuals, and historical developments and processes from Modern and contemporary United States history. Students will further develop historical thinking skills, such as chronological and comparative reasoning, historical argumentation, and methods for analyzing historical events via primary and secondary sources. Students will be challenged to make connections among a variety of historical developments, periods, and events. The aim of this course is the promotion of civic aptitude and engagement through the study of social studies fields such as geography, humanities, sociology, economics and politics. The course seeks to prepare students to be critical thinkers and active participants, aware of their roles in contemporary life, culture and the increasingly interdependent global society.

Prerequisite: U.S. History I.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors United States History II (Bergen Community College) Grade 11

This dual-enrollment course is a more intensive study of U.S. History with an emphasis on historical reading, analysis, and writing. Students will investigate U.S. history through the study of significant events, individuals, and historical developments and processes from Modern and contemporary United States history. Students will further develop historical thinking skills, such as chronological and comparative reasoning, historical argumentation, and methods for analyzing historical events via primary and secondary sources. Students will be challenged to make connections among a variety of historical developments, periods, and events. The aim of this course is the promotion of civic aptitude and engagement through the study of social studies fields such as geography, humanities, sociology, economics and politics . The course seeks to prepare students to be critical thinkers and active participants, aware of their roles in contemporary life, culture and the increasingly interdependent global society.

Prerequisite: Minimum grade of "70" or better in Honors U.S. History I and teacher recommendation. A minimum grade of "90" in U.S. History I and recommendation of the current history teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

AP United States History Grades 11-12

This course is a full survey of U.S. History from the colonial period to the present, focusing on content, strategies, techniques and skills needed in preparation for the AP examination. Students are expected to have strong writing skills. Students enrolled in this course are expected to take the AP United States History exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite for juniors wishing to take AP U.S. History in lieu of either Honors U.S. History II or U.S. History II: Minimum grade of "90" or better in U.S. History I or "83" or better in Honors U.S. History I, and teacher recommendation based on a student's writing ability, which is a distinguishable element of performance for AP U.S. History.

Prerequisite for seniors wishing to take AP U.S. History as an elective: Teacher recommendation.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Full Year Social Studies Electives

AP European History Grades 11-12

This college level course focuses on the social, economic, and political developments in European history from 1450 onward. In preparation for the AP test, emphasis is on historical writing, including free response and document-based essay questions. Students are expected to have strong writing skills. Students enrolled in this course are expected to take the AP European exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: Successful completion of any AP course offered in Social Studies, or a minimum grade of "85" or better in Honors U.S. History, or a minimum grade of "90" or better in U.S. History. Candidates who do not meet these requirements must have a teacher recommendation.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Human Geography Grades 10-12

AP Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socio economic organization and its environmental consequences. The course consists of seven units: Thinking Geographically, Population and Migration, Cultural Patterns and Processes, Political Patterns and Processes, Agriculture and Rural Land-Use, Cities and Urban Land-Use, and Industrial and Economic Development. The course is equivalent to an introductory college-level course in human geography and prepares students for the AP exam. Students enrolled in this course are expected to take the AP Human Geography exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite for sophomores: Minimum grade of "90" or better in World History and teacher recommendation.

Prerequisite: Successful completion of any AP course offered in Social Studies, or a minimum grade of "85" or better in Honors U.S. History, or a minimum grade of "90" or better in U.S. History. Candidates who do not meet these requirements must have a teacher recommendation.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Psychology Grades 11-12

This college level course is designed to provide students with an experience similar to a college level introductory psychology class. Students develop an understanding of major core concepts and theories in psychology, learn basic skills of psychological research and experimental design, understand the ethical standards governing the work of psychologists, and apply psychological concepts to their own lives. All students will be held to skill standards designed to prepare them for success on the Advanced Placement Examination in May. Students enrolled in this course are expected to take the AP Psychology exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: Successful completion of any AP course offered in Social Studies, or a minimum grade of "85" in Honors U.S. History, or a minimum grade of "90" or better in U.S. History. Candidates who do not meet these requirements must have a teacher recommendation.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP U.S. Government & Politics Grades 10-12

This college level course provides an analytical perspective of government and politics in the United States. The course involves the study of general concepts used to interpret U.S. politics through the analysis of specific case studies. Students are expected to have strong writing skills. Students enrolled in this course are expected to take the AP U.S. Government & Politics exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite for sophomores: Minimum grade of "90" or better in World History (as a final grade) and teacher recommendation.

Prerequisite: Successful completion of any AP course offered in Social Studies, or a minimum grade of "85" or better in Honors U.S. History, or a minimum grade of "90" or better in U.S. History. Candidates who do not meet these requirements must have a teacher recommendation.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP World History: Modern Grades 10-12

This college level course will explore topics from approximately 1200 C.E. to the present. Students will develop a greater understanding of the dynamics of continuity and change across historical periods throughout this course. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. The themes addressed in this course are Humans and the Environment; Cultural Development and Interactions; Governance; Economic Systems; Social Interactions and Organizations; and Technology Innovation. Students enrolled in this course are expected to take the AP World History: Modern exam in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite for sophomores: Minimum grade of "90" or better in World History and teacher recommendation.

Prerequisite: Successful completion of any AP course offered in Social Studies, or a minimum grade of "85" or better in Honors U.S. History, or a minimum grade of "90" or better in U.S. History. Candidates who do not meet these requirements must have a teacher recommendation.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Global Citizenship and Service (Fairleigh Dickinson University) Grades 11-12

The dual enrollment course examines international issues confronting the world today. Emphasis is placed on the historical roots of upheaval and strife. Students will develop a detailed knowledge of regional crises and an appreciation of the obstacles the international community must navigate to restore stability. These crises include economic collapse, epidemics or pandemics, the persecution of minorities, the denial of human rights, political strife and military conflict. Students will demonstrate mastery of these issues through various forms of assessment. Much of the second semester is devoted to student teams completing a global service project as a culminating activity.

Prerequisite: Successful completion of an Honors U.S. History course or a minimum grade of "90" or better in a U.S. History course.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Sociology (Syracuse University Project Advanced) Grades 11-12

Honors Sociology is designed as an analytic, skills-based introduction to sociology. This course emphasizes analytic reading and conceptual analysis. Readings include empirical research studies and review articles of research in an area of sociological investigation. Honors Sociology introduces C. Wright Mills' classic notion of "the sociological imagination," encouraging students to see and think about the social world, themselves, and the relations between themselves and the social world in novel ways. As the course progresses, students should obtain increasing skill in analytic reading and writing, sociological reasoning, empirical investigation, and in the ability to make empirical and conceptual generalizations about self and society in an increasingly global world. Major topics include: culture, groups, and social structure; the power and influence of the media; self and identity; social inequalities based on race, class, gender and sexuality; and social change. This is a college course offered through Syracuse University, and students must pay for the Syracuse University credits to receive a Syracuse University transcript.

Prerequisite: Minimum grade of "85" or better in Honors U.S. I or Honors U.S. II, or a minimum grade of "90" or better in U.S. I and U.S. II.
Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Social Studies Semester Electives

Criminal Law Grades 9-12

This introduction to criminal law will involve the study of the agencies and processes involved in the criminal justice system, including the legislature, the courts, and the police. An analysis of the 4th, 5th, & 6th Amendment considerations during police investigations, arrest, and while moving through the judicial system will be emphasized. The course will also consider the roles and problems of the criminal justice system in a democratic society.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Psychology: Adolescent and Adult Health Grades 10-12

This course is a basic introduction to psychology with a general survey of psychological principles and research methods, as well as a more specific look at the socio-cultural factors that contribute to a person's overall psychological, emotional, and physical health. Topics will include the role of relationships, interpersonal conflicts, social norms, and risk factors on adolescent and adult health to inform both future personal and public health decisions.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Psychology: Positive Psychology and the Science of Happiness Grades 10-12

This course will provide students with a general introduction to psychological principles and to delve into the subtopic of positive psychology. The focus of positive psychology is on the studying and fostering of factors and behaviors that create an environment in which individuals flourish. Students will examine what individuals can do to improve their happiness, health, empathy, leadership, goal setting, humor, achievement, and relationships. Students will then apply this knowledge in this project-based course.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Sociology Grades 9-12

Sociology is the study of social life, social change, and the social causes and consequences of human behavior. Life is social whenever we interact with others and over time these patterns of interaction become embedded into the fabric of our society. This course introduces students to the manner in which sociologists study society. Some of the topics that students may examine are the

sociological perspective, research methods, culture, socialization: becoming human, social organization, social inequalities, deviance and conformity, social institutions, social change, folklore, and urban life.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

World Languages

- There is a two year World Languages graduation requirement, preferably in the same language.
- Northern Highlands participates in the NJ Department of Education (NJDOE) State Seal of Bi-literacy Program, which recognizes students who attained proficiency in English and in another language or languages (either studied in school and/or spoken at home) by the time they graduate from high school. Eligible juniors and seniors can demonstrate English proficiency by meeting or exceeding expectations on the NJSLA ELA assessment and can voluntarily opt to demonstrate proficiency on a foreign language assessment approved by the NJDOE.
- American Sign Language has been recognized by the state as fulfilling the world language requirement for high school graduation.

Exploring Languages and Cultures Grades 9-12

This survey course is designed for students beginning their first year of study of languages and cultures, who may not plan to continue their study of language beyond two years. Students are introduced to Spanish, French, and Italian languages and cultures, as well as less frequently studied languages and cultures from Europe, Asia, Africa, and the Americas. The multi-cultural focus addresses different peoples and practices, and makes comparisons and connections with students' own heritage.

Prerequisite: Teacher recommendation.

American Sign Language

American Sign Language I Grades 9-12

The Level I American Sign Language (ASL) curriculum includes units such as Self-Image, Our Families, School & Education, and Life Experiences. Through these units, students explore themes of personal identity, relationships, cultural traditions, and everyday life. In this introductory course, students begin developing self and cultural awareness through activities including conversations, dialogues, and projects, with both individual and paired participation. Emphasis on full immersion in the language across listening, signing, reading, and writing supports students' foundational communication skills in ASL.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

American Sign Language II Grades 10-12

The American Sign Language II curriculum expands on the foundational skills from Level I and includes units on topics such as Our Role Within Our Families, Healthy Living & Nutrition, Teens & Technology, and Leisure & Recreation. This course strengthens vocabulary, fingerspelling fluency, number incorporation, grammatical parameters, and classifiers, with an increased focus on expressive and receptive signing skills. Continued exposure to Deaf culture and the history of ASL through cultural materials and readings enhances students' understanding and appreciation of ASL. Engaging in immersive signing, reading, and writing activities, students in Level II advance their communicative abilities and build readiness for further ASL study.

Prerequisite: Completion of American Sign Language I.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

American Sign Language III Grades 11-12

In American Sign Language III, students study units such as Telling My Story, Milestones & Traditions, Contemporary Life, and Health & Wellness. This level emphasizes further development of expressive and receptive language skills, complex vocabulary, and cultural insights. Students explore historical and cultural aspects of ASL and Deaf culture through authentic materials, while gaining deeper linguistic and cultural understanding. Level III students work on advanced dialogues, participate in class

discussions, and undertake projects that challenge their proficiency in nuanced ASL communication. By the end of the course, students compile a portfolio showcasing their growth and achievements in ASL.

Prerequisite: Completion of American Sign Language II.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

French, Italian, and Spanish

French I Grades 9-12
Italian I
Spanish I

In Level I, students begin exploring self-expression and cultural understanding through thematic readings, dialogues, conversations, and projects, which include both individual and paired activities. This course includes a variety of immersive activities in listening, speaking, reading, and writing in the target language to help build foundational communicative skills. By the end of this level, students are prepared to participate in basic conversations and comprehend simple texts, using vocabulary and grammar structures learned throughout the year.

All approved for NCAAA DI and DII athletic eligibility (please refer to page 4).

French II Grades 9-12
Italian II
Spanish II

At Level II, students engage with a broader range of thematic units. The focus remains on practical communication as students build on prior skills to communicate more effectively. Students develop confidence in expressing themselves across interpretive, interpersonal, and presentational modes, allowing them to engage in more complex interactions and comprehend increasingly detailed texts.

Prerequisite: Minimum of two years of language in middle school or Level I.

All approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors French II Grades 9-12
Honors Italian II
Honors Spanish II

Level II Honors courses are designed for high-achieving students, offering a rigorous approach to language learning that emphasizes real-world communication. Instruction introduces new topics rapidly, with a focus on applying language structures in various contexts. Students complete in-depth projects, produce original reports, and interact with authentic texts. Classes are conducted primarily in the target language, and students are expected to engage critically with new materials and demonstrate strong interpretive and expressive skills.

Prerequisite: Recommendation of Level I teacher and/or placement test.

All approved for NCAA DI and DII athletic eligibility (please refer to page 4).

French III Grades 10-12
Italian III
Spanish III

While mastering more complex vocabulary and grammar structures. The curriculum emphasizes the cultural context, encouraging students to apply language skills in real-life situations. Through interpretive, interpersonal, and presentational activities, students engage in nuanced discussions and produce more structured written pieces, preparing them to handle diverse communicative tasks with greater fluency and accuracy.

Prerequisite: Recommendation of Level II teacher.

All approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors French III Grades 10-12
Honors Italian III
Honors Spanish III

Level III Honors is tailored for motivated students with a strong interest in language and culture. The course includes advanced readings, challenging listening activities, and sophisticated language exercises. Instruction is conducted almost entirely in the target language, and students work at an accelerated pace, mastering more intricate language structures. This level promotes fluency through consistent practice in interpretive, interpersonal, and presentational communication, preparing students for nuanced, culturally relevant discourse.

Prerequisite: Recommendation of Honors Level II or Level II teacher and/or placement test.

All approved for NCAA DI and DII athletic eligibility (please refer to page 4).

French IV Grades 11-12
Italian IV
Spanish IV

In Level IV, students engage with advanced thematic units that encourage deeper exploration and application of language skills in diverse contexts. They focus on expressing themselves with sophistication and precision, using advanced grammar structures and vocabulary. Through projects, discussions, and presentations, students analyze contemporary and global topics, gaining deeper cultural insights. This level prepares students to use language confidently in diverse, real-world contexts.

Prerequisite: Recommendation of a Level III teacher.

All approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors French IV Grades 11-12
Honors Italian IV
Honors Spanish IV

Level IV Honors is designed for students who have demonstrated exceptional proficiency and dedication in language learning. This accelerated course emphasizes advanced speaking, reading, writing, and listening skills, with a strong focus on cultural understanding. Students engage in challenging interpretive, interpersonal, and presentational tasks and gain proficiency in analyzing and discussing complex topics. Instruction is conducted entirely in the target language, promoting fluency and precision.

Prerequisite: Recommendation of Honors Level III or Level III teacher and/or placement test.

All approved for NCAA DI and DII athletic eligibility (please refer to page 4).

French V Grades 11-12
Spanish V

At this level, students learn about historical and cultural influences, geography and its effect on the economy, and daily life when living abroad. By the end of level five, students are expected to communicate effectively; giving and getting information; surviving predictable and complicated situations; narrating and describing in present, past, and future time; supporting opinions, and hypothesizing comfortably in French or Spanish.

Prerequisite: Recommendation of Level IV teacher.

All approved for NCAA DI and II athletic eligibility (please refer to page 4).

Honors Italian V Grades 11-12

This course is a proficiency-based course that reviews understanding of the formal structures of language, refines previously acquired linguistic skills, and builds awareness of Italian culture. Authentic oral and literary texts are introduced. By the end of the course, students are expected to communicate effectively; giving and getting information; surviving predictable and complicated situations; narrating and describing in present, past, and future time; supporting opinions, and hypothesizing comfortably in Italian.

Prerequisite: Recommendation of Honors or CP Italian IV teacher and/or placement test.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Honors Spanish V (Syracuse University Project Advance) Grades 11-12

This course, entitled Spanish 201 Intermediate Spanish at Syracuse University, is a proficiency-based course that reviews understanding of the formal structures of language, refines previously acquired linguistic skills, and builds awareness of Spanish culture. Authentic oral and literary texts are introduced. By the end of the course, students are expected to communicate effectively: giving and getting information; surviving predictable and complicated situations; narrating and describing in present, past, and future time; supporting opinions and hypothesizing comfortably in Spanish.

Prerequisite: Three years of Honors Spanish or a minimum "90" average or better in Spanish IV, and teacher recommendation and/or placement test.

Note: There is a financial obligation for students who wish to earn college credit for this course; please see page 6 for additional information.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP French Language Grades 11-12

This course is an advanced level course, which meets the needs of students that have achieved greater fluency and listening comprehension and wish to refine these skills. Listening and speaking skills are continuously analyzed and evaluated. Reading continues with a variety of original selections discussed in French, and writing skills are expanded to include analytical and creative papers/projects. Students enrolled in this course are preparing for and are expected to take the AP examination in French Language in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: Recommendation of Honors French IV teacher and/or placement test.

A summer assignment may be required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

AP Spanish Language Grades 11-12

This course is an advanced level course, which meets the needs of students that have achieved greater fluency and listening comprehension and wish to refine these skills. Listening and speaking skills are continuously analyzed and evaluated. Reading continues with a variety of authentic selections discussed in Spanish; writing skills are expanded to include analytical and creative formats. Students enrolled in this course are preparing for and are expected to take the AP examination in Spanish Language in May. Please see page 5 for additional information regarding advanced placement courses and exams.

Prerequisite: Recommendation of Honors Spanish IV teachers and/or placement test.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Full Year World Language Electives

Spanish Language and Culture through Cinema Grades 10-12

This course is designed to improve speaking abilities while learning about Spanish culture and cinema in context. Through a variety of films, the students will learn to recognize and interpret cultural and ideological messages and discuss ways that Spanish culture differs from and is similar to their own. Additionally, there will be several writing exercises throughout the course that will help students improve their writing abilities. By the end of the course, students will have a better command of all linguistic skills, especially listening comprehension, fluency and accuracy in their speech.

Prerequisite: Completion of at least Spanish 3 or Honors Spanish 2 or teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 4).

Northern Highlands Regional High School — 4 Year Worksheet

Freshman Year	Credits	Sophomore Year	Credits	Junior Year	Credits	Senior Year	Credits
English 9		American Literature		English		English	
Mathematics		Mathematics		Mathematics		Elective	
Geophysics/Lab		Chemistry/Lab		Biology/Lab		Elective	
World History		US History I		US History II		Elective	
World Language		World Language		Elective		Elective	
Elective		Elective		Elective		Elective	
Elective		Elective		Elective		Elective	
Physical Education/Health 9		Physical Education/Driver Education		Physical Education/Health 11		Physical Education/Health 12	

Years Required	NHRHS Graduation Requirements 125 Credits	Minimum Years for College Entrance	Recommended Years for College Entrance
4	English	4	4
3	Social Science (World History, US I, US II)	3	4
3	Mathematics	3	4
3	Science (Geophysics/Lab, Chemistry/Lab, Biology/Lab)	3 Lab	3-4
2	World Language	2	3-4
1	Visual Performing Arts	-	-
1	Career, Consumer, Family, Life Skills	-	-
0.5	Financial Literacy	-	-
4	Physical Education & Health/Driver Education	-	-
-	Electives	-	-