

2020

**Northern Highlands
Regional High School
Curriculum Guide**

2021



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January 2020

Dear Highlander:

This Curriculum Guide has been designed to assist you in planning your high school education and to make informed decisions that will influence your future. The guide includes descriptions of all courses and programs offered, and represents a starting point for you and your parents in formulating an appropriate sequence of studies.

You will see that our curriculum is extensive and diverse, and will meet the needs of our dynamic student population. As you begin planning, please take time to speak with your teachers and department supervisors to learn more about our course offerings.

Discuss your immediate and long-range plans and goals with your parents and guidance counselor so that an individualized program of study can be designed to meet your personal and educational goals.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph Occhino". The signature is fluid and cursive, with a large initial "J" and "O".

Joseph Occhino
Principal

Table of Contents

Requirements for Graduation	1
Financial Literacy Requirement	1
Dual Enrollment Courses	2
Early Graduation	2
ELS (English Language Services)	2
Minimum Credits Per Year	2
NCAA Eligibility	2
Pupil Records	2
Senior Request for Special Schedule	2
State Testing Requirements	2
Advanced Placement Courses	3
Guidelines for Grade Level Assignment and Graduation	3
Grading System	3
Grade Point Average (GPA) and Weighting Procedures	4
Weighting for Freshmen & Transfer Credit	4
Scheduling Events	5
Course Selection Notes	5
Schedule Change Guidelines	6
Curriculum Offerings:	
Applied Technology	7
Art	9
Business Education	12
Career and Academic Pathways	15
English	17
Family & Consumer Sciences	22
Health and Wellness, Driver Education	23
Mathematics	25
Media Studies	32
Multidisciplinary	34
Music	35
Science	37
Social Studies	44
World Languages	50
4-Year Course Requirement Worksheet	58

Requirements for the Northern Highlands Regional High School Diploma

All students must complete 125 credits for graduation

English

4 years of core English courses—20 credits

World History/Cultures

1 year—5 credits

U.S. History

2 years—10 credits

Mathematics

3 years—15 credits

Science

3 years—15 credits

Required Course Sequence:

Physics (grade 9); Chemistry (grade 10); Biology (grade 11)

World Languages

2 years—10 credits

Wellness Education/Health/Driver Education

1 year for each year of enrollment—5 credits per year

Visual & Performing Arts

A minimum 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

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, and Family & Consumer Science courses.

Freshman Seminar (a required multidisciplinary course for all ninth graders)

(Formerly Foundations of Literacy and Technology)

One full year —5 credits

Financial Literacy

All graduates must meet the 2.5 financial literacy course requirement.

The financial literacy requirement can be met by enrolling in the following courses:

1. Introduction to Business (grades 9-12)
2. Personal Finance and Investment (grades 9-12)
3. Financial Management (grades 9-12)
4. An approved on-line summer course (see Career and Academic Pathways section)

Other Information

Dual Enrollment Courses—Northern Highlands has partnered with several colleges/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/university are responsible for tuition as required by each university, if applicable. Northern Highlands' teachers have been approved by the respective college/university to teach dual enrollment courses.

Early Graduation—Students who are considering early graduation should discuss the matter with their counselor as early as possible, preferably no later than the end of sophomore year. To initiate this process, students must write a letter to the principal, addressing the reasons for this decision.

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 English Language Learners (ELL) that includes English content, instruction, and English language development. Northern Highlands utilizes the WIDA ACCESS Placement Test (W-APT) 9-12 to determine eligibility.

Minimum Credits per Year—All students must take a minimum of six courses per semester, including wellness 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. For more information, please visit the Eligibility Center web site: <https://web3.ncaa.org/ecwr3/>, as well as the NCAA section of the School Counseling web page.

Pupil Records—Parents/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 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 Guidance for approval. This does not include students participating in the Career & Academic Pathways Program.

State Testing Requirements—All students are required to take the New Jersey Student Learning Assessment (NJSLA). More detailed testing requirements can be found on the school web site under School Counseling. All students must take NJSLA—ELA and NJSLA—Math. All 11th grade students must take the NJSLA-S, also known as the comprehensive science exam.

Advanced Placement Courses

If students are planning to register for one or more Advanced Placement courses, 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. Some students who have been accustomed to A's in CP and Honors courses may become discouraged to receive B's and even C's in AP courses; students should be prepared for the possibility of receiving a C in an AP course.

Tenth grade students who fulfill course prerequisites are permitted to take **one** AP course. However, sophomores who were enrolled and passed Honors Math Analysis in their middle school and are required to take an AP level course as part of their mathematics sequence may take one elective AP course. The elective AP course will receive AP weighting; however, the weighting will not be used when determining our valedictorian or salutatorian at the conclusion of seven semesters.

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 I. (Note: The AP Physics I class is the only AP class that Honors Math Analysis students can take.) Freshmen enrolled in the AP Physics I class will receive AP weighting and are also eligible to sit for the AP examination in May; however, the weighting of the AP Physics I class will not be used when determining our valedictorian or salutatorian at the conclusion of seven semesters.

Guidelines for Grade Level Determination and Graduation

To enter Grade 10

Students will have earned a minimum of 30 credits by the end of ninth grade year.

To enter Grade 11

Students will have earned a minimum of 60 credits by the end of tenth grade year.

To enter Grade 12

Students will have earned a minimum of 90 credits by the end of 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.

- To determine the average for year-long classes, both semesters will receive a 42.5% weighting; the final examination will receive a 15% weighting.
- To determine the average for semester classes, the semester will receive an 85% weighting and the final examination or final project will receive 15% weighting, if applicable.

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 final examination.

GPA and Weighting Procedures

To determine GPA, the final letter grades from all courses, except those designated Pass/Fail, are used. 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 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 page 3 for additional information).
- AP courses taken during ninth grade in another public or private high school will not be assigned AP 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

January and February 2020 —Scheduling:

Every current ninth, tenth and eleventh grader will have an individual subject selection meeting with his/her school counselor; eighth grade scheduling will occur with the sending districts. All high school scheduling will be completed by mid-February.

March 2020—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 changes will be made after March 31, 2020.**

January—March 2020—Academic Level Appeals:

Appeal forms will be available in the school counseling office during the scheduling meetings for any student who wishes to appeal his/her level placement. (i.e: A student who was recommended for a CP level but would like to appeal for placement to the honors level). **The forms are due to the department supervisors no later than March 31, 2020.** Decisions will be made on an ongoing basis through July 2020. Students will be notified via email regarding the decision.

A final list of course requests will also be sent home in late June. No changes will be considered at that time pending any previous appeals.

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### 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.
- All students must register for a minimum of six (6) courses per semester, including wellness education. Therefore, students should have reviewed the entire Curriculum Guide and completed the Subject Selection 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.

## 2019-2020 Schedule Change Guidelines

All students will have been scheduled by mid-February. Students and parents are urged to review course requests and final schedules with great care and consideration. Once families receive final course requests in June, no changes will be considered. 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 his/her elective choice. Changes may be made only if there is space in the course he/she is requesting to enter. The deadline for changing a **full year or a semester course** (both fall and spring) will only be allowed until **September 23, 2020**.
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 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 discipline 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 for consideration is **October 30, 2020**. (Example—Honors Biology to Biology). This does not apply to courses that are electives (see above). Please note—some AP courses are considered electives (i.e. Statistics, Economics, Art History).
3. **Dropping a Course for a Study Hall**—A student may do so 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 a semester course** (both fall and spring) for a study is **October 30, 2020**.

### 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 23, 2020 , he/she 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 withdrawn/failure and receive no credit.**

# Applied Technology

## Computer-Aided Drafting and Design I (Bergen Community College)

Grades 9-12

This introductory drafting course helps students to visualize three dimensions and to strengthen technical imagination. Topics covered include care and use of drafting instruments, lettering, orthographic and pictorial drawings, sketching and dimensioning; all skills essential to aspiring architects and engineers. Students will also apply their skills through three dimensional applications and printing three dimensional projects.

Prerequisite: Minimum a grade of "C+" or better in Algebra (8th grade) and be enrolled (9th grade) or have taken and earned a grade of "C+" or better in CP or Honors Physics.

Note: Students are permitted to take this course for high school credit only. If students would like to receive Bergen Community College credit, they are responsible for the tuition as required. For this Bergen Community College course the cost of tuition is \$160.00 for the course and registration fee. Tuition is subject to change.

## Interior Architectural Design Exploration

Grades 9-12

In this course, students will design interior architecture projects throughout the year, which can 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 sell their ideas. Presentation and documentation of their designs will be created in computer programs such as AutoCAD and REVIT. Students will also be introduced to hand drawing principles before engaging in the elements of CAD. Functional and technical knowledge is introduced through such topics as construction detailing, sustainability, material, furniture, lighting, acoustics, MEP, and building codes. Much like the real world, students will also work collaboratively to further explore design and apply their understanding of the interior architectural design process.

Prerequisite: Minimum a grade of "C+" or better in Algebra (8th grade) and be enrolled (9th grade) or have taken and earned a grade of "C+" or better in CP or Honors Physics.

## Real World Engineering

Grades 9-12

This course integrates Science, Technology, Engineering and Math (STEM) by way of hands-on, real-world activities. Using the case-study approach, students work in design/build teams to solve engineering problems. Teams use computers to research, design, test, organize information, and receive feedback for design solutions. Students will study four major engineering case studies including structures, transportation, auto safety, and flight. In each case study students will utilize Computer-Aided Drafting (CAD) to create and build projects. This course applies the Technology Education Problem-Solving format to solve real life, practical problems.

Prerequisite: Minimum a grade of "C+" or better in Algebra (8th grade) and be enrolled (9th grade) or have taken and earned a grade of "C+" or better in CP or Honors Physics.

## Computer-Aided Drafting and Design II (New Jersey Institute of Technology)

Grades 10-12

The drawings produced are related to manufacturing processes, mechanical devices, automotive aerodynamics of dragsters, and ergonomic engineering. 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 the 3D printers.

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

Note: Students are permitted to take this course for high school credit only. If students in grades 11 and 12 would like to receive New Jersey Institute of Technology credit, they are responsible for the tuition as required. For this New Jersey Institute of Technology course the cost of tuition is \$160.00 for the course and registration fee. Tuition is subject

## Honors Architectural Design

Grades 11-12

Students produce a professional style house portfolio using Computer-Aided Drafting (CAD). 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 research paper is also required.

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

## Honors Engineering Design

Grades 11-12

This course 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. Computer-Aided Drafting (CAD) is used extensively in this course. A research paper is required.

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

## Woodworking

Grades 9-12

This course is an introduction to woodworking. Students learn how to safely and appropriately use woodworking machinery through demonstrations and handouts. All students must pass safety quizzes in order to use machinery and mandatorily practice wood lab safety daily to remain in the course. Basic to intermediate jointing techniques will be used to design and construct four different assigned smaller projects. After completion of assigned work and safety training, students can make an independent project.

## Project Woodworking

Grades 10-12

Project Woodworking is for more serious and advanced students who plan and construct entire projects. Emphasis is on total involvement. Professional techniques are employed in construction, emphasizing a student's pride in the finished product. Projects include making a corner cabinet, a curio, or a dry sink. Students may repeat this course since each student works independently, further enhancing his/her ability to produce a finished product of quality.

Prerequisite: Woodworking.

## Furniture Design

Grades 11-12

Students apply the skills learned in Project Woodworking and apply them to more challenging and complex projects. Emphasis is given to quality and craftsmanship. Projects might include tables, lamps, and lathe work.

Prerequisite: Project Woodworking.

## Robotics

Grades 10-12

This course will introduce students to the field of robotics and engineering by learning the fundamentals, which include mechanisms, programming, 3D AutoCAD, and documentation. The mechanisms unit will teach students how to design types of motions along with more complicated tasks, such as lifting or grasping objects. Students will learn to program their robot in order for it to accomplish various tasks. Design of various parts for their robots will be created in 3D AutoCAD enabling students to visually create unique parts that will ultimately 3D printed and integrated onto their robot. Students will document their design and engineering process using an engineering notebook as is done in the real world of robotics and engineering. Students will apply these fundamentals to problem solve, design, and program a robot that will conduct various challenges during their projects. Much like the real world, students will work collaboratively in order to successfully accomplish the challenge for each project.

Prerequisites: Minimum grade of "C+" or better in Algebra I and have taken and earned a minimum grade of "C+" or better in Physics or H Physics.

# Art

## 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 will be offered opportunities to create works using numerous 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

Students explore clay as a medium for creating both functional and non-functional pottery pieces. Students are exposed to the visual history of ceramics, as well as the basic hand building techniques of ceramic construction and wheel throwing. As students progress through the year, they will have the opportunity to expand upon their skills and develop a proficiency in the use of clay.

## Ceramics II

Grades 10-12

Students will continue to explore ceramics as a medium for creating a series of functional and non-functional pottery projects culminating in a portfolio of their best work. Students will learn about different types of clay properties and firing processes including low fire, high fire and raku firings. Students will also learn to create work in a themed series and how to include verbal interpretation of their work and the work of others through critique. In addition, students will learn advanced hand-building construction, wheel-throwing techniques, and glazing techniques while working on developing their own personal style. Students will have the opportunity to expand upon their skills and develop a proficiency in the use of clay.

*Prerequisites: Successful completion of Ceramics with a grade of B– or better.*

## Photography I

Grades 9-12

While learning the fundamentals of photography, students will photograph assignments both in and out of class. Students will spend much of the course learning about the traditional methods of fine art photography but will also be introduced to digital photography and Photoshop basics. Application of composition using the elements and principles of design will be emphasized in each project. Students will use photography as a means of visual communication and self-expression. Throughout the year, students will apply photographic methods to create a cumulative portfolio of their best work. A manual 35mm camera is required.

## 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, including, 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.

## Digital Arts

Grades 9-12

Digital Arts focuses on digital photography and graphic design through the use of Adobe Photoshop and Illustrator programs. Students will learn the basic foundations of composition through the elements and principles of design. We will cover Adobe Photoshop techniques such as how to edit, crop, enhance, layer multiple images, distort images, and create digital photo collages. We will also focus on graphic design, typography, and vector illustration. Students will create posters, logos, products and packaging by learning how to master the pen tool in Illustrator, along with advanced techniques such as masking and creating repeating patterns. This class will explore graphic design and visual communication as they relate to various career fields, and how they influence our daily lives now more than ever before. The culmination of this course will be a final portfolio that showcases a student's personal brand and body of work. (A digital camera or smart phone is required for this class.)

## Graphic Design

Grades 10-12

Graphic design is a creative process that combines art and technology to visually communicate ideas. This class allows students to improve their abilities in composition, typography, layout and design as well as reinforce and expand upon the techniques learned in Digital Arts. Two-dimensional designs will come off the screen and into the hands through the creation of physical mock-up prototypes. Students will print, cut, glue and physically manipulate their work as well as photograph the final result. Projects will center on real-world application of skills in order to creatively solve visual problems that exist in the design industry today. Each project will be directly tied to a current design career including editorial design, advertising, corporate identity and branding, fashion design, and packaging design.

Prerequisite: *Digital Arts.*

## Honors Drawing and Painting

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 Studio Art. Students will also be exposed to a greater depth of art history and artistic movements that relate back to the course projects.

Prerequisites: *Art Experiences, portfolio review, and teacher recommendation.*

## Honors Studio Photography

Grades 10-12

This is an intensive course for students with one year of previous coursework in photography. The use of photography as an expressive tool is approached by study and application of advanced methods. Students also experiment with specialized photochemistry and alternative processes as well as digital photography and Photoshop. While creating both teacher-assigned and self-generated independent projects, students create a cumulative portfolio of their best work. All projects must show growth in photographic technique and exploration of one's area of interest. Emphasis is given to conceptual and technical development throughout the year.

Prerequisites: *Photography I and teacher recommendation.*

## AP Studio Art: 2D Design (Photography)

Grades 11-12

AP Studio Art Photography is intended for the serious, committed photography student who wishes to pursue visual art at a college level. This course provides students with the opportunity to explore a wide range of photographic techniques and darkroom 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 the medium of photography 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: *Two years of art classes, 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 the equivalent of a two-semester introduction college or university art history survey course. Students enrolled in this course are preparing for and are expected to take the AP examination in Art History in May.

Prerequisites for sophomores\*: Minimum grade of “A-” or better in World History and English 9.

Prerequisites for juniors and seniors. Minimum grade of “B” or better in Honors U.S. History and H English.

*A summer assignment may be required.*

## **AP Studio Art: Drawing and Painting**

Grades 11-12

This course is intended for serious and committed art students who wish to begin creating artwork at the college level. AP Studio Art in Drawing and Painting focuses on advanced media processes and addresses drawing and painting issues. 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 understandings 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.

Prerequisite: Two years of art classes, portfolio submission and departmental review.

*A summer assignment may be required.*

## **Dance**

### **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

## Introduction to Business

Grades 9-12

This course is a combination of business and personal finance. The following units are covered: the economy and globalization; budgeting and savings; investing in the stock market, real estate and bonds; and credit, identity theft and risk management including insurance. The final unit covers students starting their own business and understanding the different business functions including marketing, finance and entrepreneurship. This course fulfills the financial literacy graduation requirement. This course is not open to students who have taken or are currently enrolled in Financial Management or Personal Finance and Investment.

Recommended Prerequisite for Freshmen: Successful completion of Algebra I.

## Personal Finance and Investment

Grades 9-12

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. This course is not open to students who have taken or are currently enrolled in Financial Management or Introduction to Business.

Recommended Prerequisite for Freshmen: Successful completion of Algebra I.

## 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.

## Marketing I: Promotion and Selling

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 failure. Students will create and present an original promotional campaign. Students interested in marketing courses are strongly encouraged to take Digital Arts.

## Entrepreneurship

Grades 11-12

Do you have what it takes to start your own business? This course focuses on starting a business, research and planning, marketing, management, financing, and growth. If students are not afraid to take risks, seek more independence, and have a high desire for achievement, then students will want to take this course to understand why entrepreneurs are willing to take the risk of starting new businesses. Students will participate in a real world business ownership simulation and create a realistic business plan.

Prerequisite: Successful completion of any business education course.



## **Honors Advertising and Branding (Fairleigh Dickinson University)**

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, writing an advertising proposal as well as creating the ads and promotions using Adobe Photoshop and presenting 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 "A-" or better in Marketing: Promotion and Selling and teacher recommendation.*

Note: This is a Dual Enrollment course and is affiliated with a college/university. Students who enroll in this course are responsible for the tuition as required by each college/university, if applicable. Northern Highlands' teachers have been approved by the respective college/university to teach dual enrollment courses. For this Fairleigh Dickinson University course the cost of tuition is \$237.00 for the course. Tuition is subject to change.

## **Honors Business Seminar**

Grade 12

This project-based business course will allow students to more deeply integrate concepts learned in core business classes. Because students will have had varied business course sequences prior to this class, this seminar course will enable them to broaden their individual knowledge of all business disciplines, such as operations, finance, marketing, human resources, and management. Students will develop their leadership and communication skills through a range of business opportunities including case studies, professional business speakers and lectures. Working in teams, students will develop a summative project that incorporates all facets of business learned throughout the program. In addition, each student will have the opportunity to work with an outside business mentor to gain insight on their projects, provide innovative solutions for the business and even have an opportunity to present their summative project upon completion.

*Prerequisites: Business teacher recommendation and minimum grade of "B" or better in one of the following courses: FDU: Honors Advertising and Branding; Honors Management; Entrepreneurship; AP Economics; and Accounting.*

## **Honors Management**

Grades 11-12

This course is designed for students interested in studying business management in a global economy. Topics include: principles of management, business ethics, diversity, international business, leadership skills, and human resource management. Project-based discussions develop around actual business case studies that emphasize the use of analytical and decision-making skills.

*Prerequisite: Minimum grade of a "B" or better in any business education course.*

## **AP Economics**

Grades 10-12

AP Economics is an introductory college level course that will address real world micro and macro topics in the economy. Students will gain a thorough understanding of economic decision making by individuals and firms, the determination of quantities and prices of goods in different kinds of markets, the determination of wages, and the theoretical basis for international trade. In addition, the course will focus on the economic system as a whole 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 examination in Economics in May.

*Prerequisite for sophomores\*: Minimum grade of “A-” or better in Honors Geometry or “B-” or better in Honors Math Analysis (final grade will be checked in June).*

*Prerequisite for juniors and seniors: A minimum of “A-” or better in CP Algebra II/Trigonometry or “B” 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 2).*

## **Business Education Semester Course**

### **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. This course is not open to students who have taken or are currently enrolled in Personal Finance and Investment or Introduction to Business.

*Recommended Prerequisite for Freshmen: Successful completion of Algebra I.*

# CAREER AND ACADEMIC PATHWAYS

## 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. Community Service may be performed at any time during the students' high school career, but cannot be performed during school hours. Students must perform 28 hours for 1.25 credits per year (must be completed between July 1st and June 30th of a given school year). Students could earn a maximum of 5 credits over 4 years and may be used as elective credits. Students will not receive credit for community service hours until the request has been approved by the Career and Academic Pathways Coordinator. Community service experiences are graded as Pass/Fail and are not included in the GPA.

## Senior Internship

Grade 12

The Senior Internship provides eligible rising seniors with an opportunity to engage in experiential learning outside of the traditional classroom environment. Through this in-depth internship, students will gain real world experiences that are meaningful and relevant. 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, 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, semester one, semester two, full year or after school.

## 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. The 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 and Academic Pathways Coordinator. At the conclusion of the Independent Study, the student will make a final presentation.

*Prerequisites: Approval of faculty mentor and the Career and Academic Pathways Coordinator.*

## College Courses (Online and Seated)

Grades 10-12

College 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 a college course, a student must submit an application to the Career and Academic Pathways Coordinator for approval. Each student enrolled in a college course will have a faculty mentor. All college courses must include ongoing communications between the instructor and student, as well as regular interaction for purposes of teaching, evaluating, and providing assistance. At the conclusion of the college course, the student is required to take the final exam under the supervision of the Career and Academic Pathways Coordinator or designee. A letter grade will be awarded and credits may count toward graduation requirements. A numerical grade will be awarded and included in the GPA. All AP classes designated as College Board approved will be weighted accordingly. Any other online or seated college class will be weighted as Honors level.

*Prerequisite: Prior administrative approval by the Career and Academic Pathways Coordinator, Department Supervisor, Supervisor of School Counseling, and Principal must be obtained before enrolling in any online course to ensure the program requested covers the same objectives of the NJ State Standards.*

## **Enrichment and Advancement (Online and Seated)**

Grades 10-12

Enrichment and Advancement 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 enrichment or advancement course, a student must submit an application to the Career and Academic Pathways Coordinator for approval. Each student enrolled in a enrichment or advancement course will have a faculty mentor. All enrichment and advancement courses must include ongoing communications between the instructor and student, as well as regular interaction for purposes of teaching, evaluating, and providing assistance. At the conclusion of the enrichment or advancement course, the student is required to take the final exam under the supervision of the Career and Academic Pathways Coordinator or designee. A letter grade will be awarded and credits may count toward graduation requirements. If the course results in an assessed letter grade, a numerical grade will be awarded and included in the GPA. Otherwise, the course will be graded Pass/Fail.

*Prerequisite: Prior administrative approval by the Career and Academic Pathways Coordinator, Department Supervisor, Supervisor of School Counseling, and Principal must be obtained before enrolling in any online course to ensure the program requested covers the same objectives of the NJ State Standards.*

## **Physical Education Option**

Grades 9-12

Prior approval by the Career and Academic Pathways Coordinator, Department Supervisor, Director of Guidance, and the Principal must be obtained before enrolling in the Physical Education Option to ensure the program demonstrates it provides the level of activity and development equivalent to Northern Highlands' Physical Education program and meets all New Jersey Student Learning Standard in Physical Education. Any costs incurred as a result of the program will be the responsibility of the parent/guardian. A student must be involved in an individualized (not a team) rigorous training program that prepares him/her for competition in a sport on an elite or national level and must included intensive personal training session of at least 15 hours per week with a certified professional. The student must submit a weekly competition/practice schedule to the Career and Academic Pathways Coordinator. Random site visits may also take place. The Physical Education Option will be graded as Pass/Fail and will not be included in the GPA.

# ENGLISH

## Learning Lab

Grade 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.

## English 9

Grade 9

This course of study exposes the student to the various forms of literature—the novel, short story, the essay, drama, and poetry—that deal with universal issues of human nature. All works are taught with attention to understanding main idea, supporting details, author's purpose, and literary techniques. Students will be expected to master various forms of communication, both oral and written, and develop knowledge of essay coherence, sentence skills and organization, and skills of descriptive writing. Students will also have direct instruction on the Modern Language Association format for writing. Works studied may include: *Romeo and Juliet*, *Funny in Farsi*, *Speak*, *Of Mice and Men*, *The House on Mango Street*, *My Antonia*, *The Little Prince*, *Zeitoun*, and *The Curious Incident of the Dog in the Night-time*.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## American Literature

Grade 10

This course continues the development of critical reading, writing and thinking skills. Students will be introduced to important skills of argumentation and literary analysis through close readings of short stories, plays, poems and novels written by American authors, as well as engagement with current events relevant to American identity and culture. Works read may include: *The Great Gatsby*, *Death of a Salesman*, *A Streetcar Named Desire*, *Everything I Never Told You*, and *The Things They Carried*. 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 2).*

## 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. Works read may include: *The Great Gatsby*, *The Grapes of Wrath*, *The Scarlet Letter*, *The Adventures of Huckleberry Finn*, *Death of a Salesman*, selected transcendentalist essays, and poems by Emily Dickinson and Walt Whitman, among others. By the time the school year ends, all sophomores will have had two full years working with fundamental and essential English literacy skills.

Prerequisite: *Minimum grade of "A-" or better in English 9.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## 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: the "anti-hero," existentialism, black humor, and feminism, among others. When possible, students make historical and intertextual connections, tracing the effects of life upon art and art upon life. Works studied may include: *The Road*, *One Flew Over the Cuckoo's Nest*, *The Stranger*, *No Exit*, *Slaughterhouse-Five*, and *Into the Wild*.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Literature and the Individual

Grades 11-12

Students in Literature and the Individual study a variety of literature about individuals and their attempts to find places for themselves in the world, focusing on the factors that help shape them through this process. Students choose from among a variety of classic and contemporary texts in each unit of study to examine the access individuals have to opportunities and the ability individuals have to participate in society within the context of race, gender, socioeconomics, and personal tragedy.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Literature About Society

Grades 11-12

Since media are constantly bombarding our society with advertisements and product placement it has become more important than ever to be active thinkers and analyze the messages, both clearly stated and implied, that we are receiving. Literature about Society encourages students to question and analyze the world around them. The class uses a variety of texts to help students see the ways in which media and society are constantly manipulating the way people think and behave. Students will also write in a variety of formats that encourage them to contribute to the dialogue between text and societal issues. Works studied may include: *Fahrenheit 451*, *Night*, *Maus*, *The Kite Runner*, *Lord of the Flies*, and *Julius Caesar*.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Science Fiction / Fantasy

Grades 11-12

When we think science-fiction and fantasy, what do we imagine? Androids? Elves? A boy with a scar and immense magical power? These are all important narrative elements of the genres, but more deeply, sci-fi and fantasy engage the fundamental questions of human existence: morality, ethics, and the purpose and meaning of life. This course will present these ideas through units such as Fairytales, The Journey, Artificial Intelligence, Time Travel, and Superheroes. Students will engage in works of fiction, film, and television, including *Batman: The Long Halloween* (graphic novel), *The Dark Knight*, *Dr. Who*, and *The Lord of the Rings*. Students will also be able to choose from works such as *The Hobbit*; *Watchmen* (graphic novel), *I, Robot*; *Ender's Game*; *Harry Potter and the Sorcerer's Stone*, and *Caroline*.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Honors Modern Fiction and Nonfiction

Grades 11-12

Through fiction and nonfiction readings from 1900 through the present day, students examine trends and themes of modern and contemporary thought, including anxiety and alienation, existentialism, and the effects of war and technology on society and culture. 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. Students also write cogently, establishing precise claims and citing strong and thorough textual evidence to support their theses. Works studied may include: *The Heart is a Lonely Hunter*, *The Handmaid's Tale*, *The Sun Also Rises*, *Their Eyes Were Watching God*, *As I Lay Dying*, *The Stranger*, *No Exit*, *Slaughterhouse-Five*, *Nine Stories* (Salinger), and *American Short Story Masterpieces*.

Prerequisite: Minimum grade of "A-" or better in an English class.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Honors British Literature

Grades 11-12

This course is for students who wish a thorough and demanding study of works composed by British authors. Students will hone their close reading skills through plays, novels, poems and essays, while sharpening their ability to write clearly and informatively. Major works studied may include: *Beowulf*, *The Canterbury Tales*, *Hamlet*, *Jane Eyre*, *Pygmalion*, *Great Expectations*, *Jack Maggs*, and *Rosencrantz and Guildenstern Are Dead*.

Prerequisite: Minimum grade of "A-" or better in an English class.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## 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 alongside the art and philosophy of those periods, as well as related contemporary works and readings. Students explore different human experiences and compare the literary commonalities that unite us across the ages. Readings for this course include, but are not limited to: Patchett’s *Bel Canto*, a selection of myths, Sophocles’ *Oedipus Rex*, a student-selected contemporary tragedy, examples of Greek philosophy and Roman rhetoric, selections from the *Old and New Testaments*, Dante’s *The Inferno*, O’Brien’s *Going After Cacciato* and a Shakespeare play.

Prerequisite: *Minimum grade of “A-” or better in an English class.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## AP English Language and Composition

Grade 11-12

The course provides high-achieving juniors and seniors with opportunities to engage in close readings of texts and to practice analytical and critical writing. Students prepare for the May AP Language and Composition test by reading non-fiction, exploring rhetorical strategies used by writers, and practicing with past Advanced Placement examination questions.

Prerequisites: *Minimum grade of “A-” or better in two Honors English courses and a qualifying test, or the recommendation of two English teachers and a qualifying test.*

*A summer assignment may be required.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## AP English Literature and Composition

Grade 11 -12

The course provides high-achieving juniors and seniors with opportunities to engage in close readings of texts and to practice analytical, critical, and creative writing. Students prepare for the May AP English Literature and Composition test by reading fiction and poetry, exploring meaning, and practicing with past Advanced Placement examination questions.

Prerequisites: *Minimum grade of “A-” or better in two Honors English courses and a qualifying test, or the recommendation of two English teachers and a qualifying test.*

*A summer assignment may be required.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Senior English Seminar

Grade 12

Are you the kind of student who has always wanted to choose what you want to read rather than what your teacher has selected? Do you enjoy creating your own arguments and actually having the time to explore and support them? Senior English Seminar offers students the opportunity to work independently while still benefiting from guided lessons from the teacher. The class will focus on increasing and honing the reading and writing skills needed in college, the professional world, and life.

Prerequisite: *Three years of core English courses.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

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

Grade 12

This course, emphasizes precise writing and literary analysis. For the first half of the year, 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 half of the year, 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.

Prerequisites: Minimum grade of "A-" or better in an Honors English course. A Writing Portfolio may be required.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 2).

Note: This is a Dual Enrollment course and is affiliated with a college/university. Students who enroll in this course are responsible for the tuition as required by each college/university, if applicable. Northern Highlands' teachers have been approved by the respective college/university to teach dual enrollment courses. For this Syracuse University course the cost of tuition is \$690.00 for the course. Tuition is subject to change.

## English Full Year 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.

### Actors' Workshop

Grades 10-12

In this full year elective, students will read, discuss and view various plays as well as create interactive projects and performances based on these works. Our initial study will take us through theater history as we read together a series of texts that represent various periods in theater history. Topics will include the origins of drama in the Greek and Roman Theater; Elizabethan theater/Shakespeare; and the development of modern theater and various movements in theater history. Throughout this process, students will consider various acting techniques as well as the general concept of developing a character through use of the text, the body and voice, and the style of the period they are studying. For each play read in the beginning of the course, students will be provided an opportunity to select a scene to study and perform.

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

### Actors' Workshop II and III

Grades 11-12

This is an advanced acting elective for eleventh and twelfth grade students. There will be the study of plays and stagecraft as well as actual performances. Students must participate in one or two major productions during the year, either on stage or in a significant crew position, such as student director, student producer, or stage manager.

Prerequisites: Minimum grade of "A-" or better in Actors' Workshop and a teacher's recommendation; participation in at least two major school productions before enrolling in the course.



## **Creative Writing I**

Grades 10-12

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 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 2).*

## **Creative Writing II**

Grades 11-12

This course is for students who wish to continue with writing after taking the first year creative writing course. In this advanced class, students may choose to concentrate on a certain genre, such as poetry or short stories, for much of the year. "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 required to share their work with classmates in a college-style 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: Recommendation from Creative Writing I teacher.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **Creative Writing III**

Grade 12

This is an advanced creative writing elective for twelfth graders. Students in the course will work in areas of their special interest, be it poetry, prose or scriptwriting. Creative Writing III students will do more work than Creative Writing II students—extra assignments and extra requirements. They will also lead the Creative Writing II students in workshop. Students are required to submit to the school magazine, and to various college-sponsored magazines and contests.

*Prerequisites: Successful completion of Creative Writing I and II, and a teacher's recommendation.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **Journalism**

Grades 9-12

This elective provides a dynamic, hands-on introduction to journalism. Students will critically analyze and learn the different parts of newspapers ranging from *The Fling* to *The New York Times*. Students will learn how to write different types of articles such as news stories, opinion pieces, and game recaps, and can have their writing featured in the school paper. Besides focusing on writing, students will also discuss the visual layout of a paper and journalism's impact in the real world. This class will not only improve a student's writing but also discuss a wide-range of current events and allow students to pursue topics of their own interest.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **English Semester Electives**

### **Public Speaking**

Grades 9-12

Communication is the bedrock of all human relations. While technology and media can aid communication, each can make it more complicated and demanding. Regardless of a future career, all students will need to speak effectively to an audience of interested people with and without technology. Students will want to make sure the audience receives certain information and makes a connection as a speaker. This semester course is aimed at building confidence, competency, and pride in public speaking. While learning skills and habits, students will have the opportunity to refine their speaking and listening.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Family and Consumer Sciences

### Foods and Nutrition

Grades 9-12

This course is designed for students interested in food preparation and nutrition. Students learn basic food preparation skills through practical applications. Emphasis is given to the evaluation of students' diets and the ability to choose and prepare foods that promote lifetime health.

### International Foods

Grades 10-12

International Foods explores the culture and cuisine of the following countries: Italy, Greece, France, Spain, Germany, and China. Students use food preparation skills learned in Foods and Nutrition. Advanced culinary techniques are emphasized throughout this course. Students are required to select a country not previously explored and create a presentation, menu selection, and lab.

Prerequisites: Successful completion of Foods and Nutrition.

### Culinary Arts

Grades 10-12

Students will perfect skills acquired in Foods and Nutrition with a year long course in baking and studying 30-minute meals. Units include pastry, cake decorating, specialty desserts and a variety of recipes in 30 minutes. Technique and presentation, as well as factors that influence cuisine are demonstrated, prepared, and evaluated.

Prerequisites: Successful completion of Foods and Nutrition.

### Child Development

Grades 11-12

The study of child development will include social, emotional, physical, and intellectual development of children from birth to six years of age. This course is 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 includes the study of the theory of child development, as well as a practical application through participation in the Early Learning Center.

Prerequisite: Approval of the instructor.

### Honors Tomorrow's Teachers (Fairleigh Dickinson University)

Grade 12

This Fairleigh Dickinson University dual enrollment course is designed to meet the needs and interests of students considering a career in the educational professions. 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 Tomorrow's Teachers also features a nine-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.

Note: This is a Dual Enrollment course and is affiliated with a college/university. Students who enroll in this course are responsible for the tuition as required by each college/university, if applicable. Northern Highlands' teachers have been approved by the respective college/university to teach dual enrollment courses. For this Fairleigh Dickinson University course the cost of tuition is \$316.00 for the course. Tuition is subject to change.

# Health and Wellness

## Wellness Education

Grades 9-12

Wellness Education is geared to improving the physical fitness of students and to developing their awareness of lifetime physical activities. The activities used to achieve the former include flexibility exercises, distance running, weight training, aerobic exercise, and team games such as soccer, flag football, speedball, and volleyball. The activities taught to achieve the latter include golf, tennis, pickle ball, and badminton. Students can select non-traditional activities such as archery, dance, or personal fitness. Freshmen and sophomores are assigned activities within their grade. Junior and senior students will electronically select their activities for the year. It should be noted: Students who have a study will have their science lab during their study hall.

## Team Building and High Rope

High Ropes, an eleven-station challenge curriculum including rope elements, is a popular choice in the curriculum. Team Building I, which includes ice breakers and team building skills, is a requirement for all ninth grade students. High Ropes Adventure II, which is a high ropes course, is an option for eleventh and twelfth graders.

## Health

### Freshmen

Grade 9

The ninth grade curriculum covers Family Living, which includes: life skills, character education, conflict resolution, bullying, anatomy, dating violence, suicide prevention, sexually transmitted infections, chemical addiction, and contraception. Freshman health is one marking period in length and students are assigned from their physical education class.

### Sophomores: Driver Education (Safety Education)

Grade 10

Driver Education, which is mandated by the State of New Jersey, is offered for the equivalent of one marking period in sophomore year. The course covers: licensing; registration of vehicles; insurance requirements; rules of the road; driving techniques; and driver attitudes. As a part of the recently passed requirements, organ donation is discussed and how it can be identified on a driver's license. The final examination is the New Jersey Motor Vehicle Commission test. A grade of 80 is necessary to pass the state examination. An 80 average for the course is required to receive credit toward a safe driving insurance discount. In effect, one can pass the class and not the state test. If a passing grade is achieved, the student will receive a receipt which, when presented at a Driver Qualification Center, will exempt him/her from the written portion of the licensing test. Also, upon passing the course, students will receive a card stating that they have successfully completed thirty hours of classroom instruction which is required to earn a premium reduction from most insurance companies. Students will also be involved in the Drug Abuse Resistance Education (D.A.R.E.) Program. Drivers Education health is one marking period in length and students are assigned from their physical education class.

### Juniors

Grade 11

The eleventh grade curriculum will focus on sexuality, issues in dating, college life and decision making, domestic violence, pre-natal care and pregnancy along with raising an infant during the first year of life. Social, educational, financial, and family issues are woven into this curriculum. Junior health is one marking period in length and students are assigned from their physical education class.

### Seniors

Grade 12

The twelfth grade curriculum consists of the American Red Cross CPR and First Aid course. This will include instruction in lifesaving skills including Cardiopulmonary Resuscitation (CPR), obstructed airways, and using an Automated External Defibrillator (AED). Upon successful completion of the requirements, students will be certified in CPR/AED use and can purchase the certification card in the course. In the nutrition portion of the curriculum, students will track daily food intake and identify calories, fat, and carbohydrates, along with portion control. Senior health is one marking period in length and students are assigned from their physical education class.

## Health and Wellness Semester Courses

### Honors Dynamics of Health Care (Rutgers University)

Grades 11-12

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 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: This is a Dual Enrollment course and is affiliated with a college/university. Students who enroll in this course are responsible for the tuition as required by each college/university, if applicable. Northern Highlands' teachers have been approved by the respective college/university to teach dual enrollment courses. For this Rutgers University course, students earning college credit must sit for the online exam. A grade of 70 or higher is required for most Rutgers courses. While there is no charge for tuition, students will be responsible for the costs of any textbook required by the university as well as the exam fee of \$75.00. The exam fee is subject to change.

### Honors Medical Terminology (Rutgers University)

Grades 11-12

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 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 Health Care.*

Note: This is a Dual Enrollment course and is affiliated with a college/university. Students who enroll in this course are responsible for the tuition as required by each college/university, if applicable. Northern Highlands' teachers have been approved by the respective college/university to teach dual enrollment courses. For this Rutgers University course, students earning college credit must sit for the online exam. A grade of 70 or higher is required for most Rutgers courses. While there is no charge for tuition, students will be responsible for the costs of any textbook required by the university as well as the exam fee of \$75.00. The exam fee is subject to change.

# MATHEMATICS

## Typical Sequence for Mathematics

| Grade 9              | Grade 10                                        | Grade 11                                 | Grade 12                                                                  |
|----------------------|-------------------------------------------------|------------------------------------------|---------------------------------------------------------------------------|
| Honors Math Analysis | Honors Pre-Calculus<br>AP Statistics            | AP Calculus BC<br>AP Statistics          | Honors Multivariable Calculus<br>(or)<br>AP Statistics                    |
| Honors Geometry      | Honors Algebra II/Trigonometry<br>AP Statistics | Honors Pre-Calculus<br>AP Statistics     | AP Calculus BC<br>AP Calculus AB<br>AP Statistics<br>Honors Calculus      |
| Geometry             | Algebra II/Trigonometry                         | Pre-Calculus<br>Statistics & Probability | Honors Calculus<br>AP Statistics<br>Statistics & Probability              |
| Algebra I            | Geometry *                                      | Algebra II<br>Algebra II/Trigonometry    | Advanced Algebra/Trigonometry<br>Pre-Calculus<br>Statistics & Probability |

\* In sophomore year, students who have earned an A 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.

Enrolling in a summer school course or college course is also an option for students who wish to accelerate their mathematics sequence. Students must seek prior approval from the supervisor and principal.

## Learning Lab

Grade 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 with 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.

## Algebra I

Grade 9-12

This course covers a rigorous foundation in skills involving the real number system, signed numbers, algebraic expressions, and solving equations, systems, and inequalities. An introduction of functions is developed and deepened through function notation, graphing, evaluating, operations of functions, and compositions of functions. Additional topics include graphing linear equations, polynomials, factoring, and solving quadratic equations. There is an emphasis on applications of these skills and topics infused throughout the course. This course bridges 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 2).*

## Geometry

Grades 9-12

This course expands on first year algebra skills and introduces students to further foundational skills needed for future coursework on Algebra II/Trigonometry and Pre-Calculus. This course includes an in-depth study of Euclidean Geometry with an emphasis on the following: coordinate geometry and constructions which are infused throughout the course, parallel and perpendicular lines, angles, transformations, triangles, reasoning and proof, polygons and quadrilaterals, circles, area of plane figures, lateral and surface area of solids, volume of solids, and geometric probability. 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.

Prerequisites: *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.*

Prerequisites for sophomores who wish to double up in sophomore year, taking both Geometry and Algebra II/Trigonometry: *Minimum grade of "A" or better in Algebra I or teacher recommendation.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## 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, analytic geometry of the conic sections, areas of plane figures, geometric probability, and areas and volumes of solids. Units in coordinate geometry, transformations, and constructions 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.

Prerequisites: *Minimum grade of "A" or better in Algebra I or a 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 2).*

## 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, as well as a unit on conics. 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 2).*

## 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, linear functions, quadratic functions, polynomial functions, and exponential 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.

Prerequisites: *Algebra I and Geometry.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **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 Pre-Calculus and beyond. 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, and exponential functions. Trigonometry of right and non-right triangles are 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: *Algebra I and Geometry.*

Prerequisites for sophomores who wish to double up in sophomore year, taking both Geometry and Algebra II/Trigonometry: *Minimum grade of "A" or better in Algebra I or teacher recommendation.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **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 Pre-Calculus 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.

Prerequisites for juniors who wish to accelerate into Honors Algebra II/Trigonometry during their junior year: *Minimum grade of "A" or better in Algebra I, "A" or better in Geometry or teacher recommendation.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **Advanced Algebra/Trigonometry**

Grade 12

Designed for those students who completed Algebra II as juniors, this course continues the study of functions and includes trigonometry, probability 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 2).*

## **Pre-Calculus**

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 the following: trigonometry of right and non-right triangles, rational functions, logarithmic functions, and conic sections. Students are introduced to sequences and series as well as elementary concepts of calculus, including limits. 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.

Prerequisites: *Algebra II/Trigonometry.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Honors Pre-Calculus

Grades 11-12

This accelerated course is primarily open to juniors who plan to enroll in AP Calculus as seniors. The course is designed around a rigorous study of the properties and applications of polynomial and transcendental functions. Emphasis is placed on efficient and effective problem solving strategies and techniques to derive fundamental properties of functions. Extensive use is made of graphing technology. This course ends with an introduction to calculus using limits.

Prerequisite: *Minimum grade of "B-" or better in Honors Algebra II/Trigonometry.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Honors Calculus

Grades 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 anti-derivatives 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: *Honors Pre-Calculus or minimum grade of "B-" or better in Pre-Calculus.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## 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 Geometry and Algebra II/Trigonometry.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## 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 are expected to take the AP examination in May.

Prerequisite for sophomores: *\*Honors Math Analysis or minimum grade of "A-" or better (as a final grade) in Honors Geometry or teacher recommendation.*

Prerequisites for juniors and seniors: *Honors Algebra II/Trigonometry or minimum grade of "A-" or better in Algebra II/Trigonometry or teacher recommendation.*

*A summer assignment may be required.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*



## **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 are expected to take the AP examination in May.

Prerequisites: *Minimum grade of "B" or better in Honors Pre-Calculus or teacher recommendation.*

*A summer assignment may be required.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **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 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 sub score grade in addition to the Calculus BC grade. Students are expected to take the AP examination in May.

Prerequisites: *Minimum grade of "A-" or better in Honors Pre-Calculus or teacher recommendation.*

*A summer assignment may be required.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **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. 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.

Prerequisites: *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.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

Note: This is a Dual Enrollment course and is affiliated with a college/university. Students who enroll in this course are responsible for the tuition as required by each college/university, if applicable. Northern Highlands' teachers have been approved by the respective college/university to teach dual enrollment courses. For this Seton Hall University course the cost of tuition is \$400.00 for the course. Tuition is subject to change.

## Mathematics Full Year 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.

Prerequisite for sophomores only\*: Minimum grade of “A-” or better in Honors Geometry or “B-” or better in Honors Math Analysis (final grade will be checked in June).

Prerequisites for juniors and seniors: Minimum grade of “A-” or better in Algebra II/Trigonometry or a minimum grade of “B-” in Honors Algebra II/Trigonometry.  
for all grades.

Approved for NCAA DI and DII athletic eligibility (please refer to page 2).

### 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.

Prerequisite for sophomores only\*: Minimum grade of “A-” or better in Honors Geometry or “B-” or better in Honors Math Analysis (final grade will be checked in June) and demonstrated proficiency in computer science by passing a proficiency examination.

Prerequisites for juniors and seniors: Minimum grade of “B” or better in Honors Computer Science, including JAVA, and a minimum of Algebra II/Trigonometry or demonstrated 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 2).

## Mathematics Semester Electives

### Introduction to Computer Science (Fall)

Grades 10-12

This is the beginning course for students who would like to explore the history and development of computer science. Programming is introduced using ALICE where students will create movies and video games, controlling the behavior of three dimensional (3D) objects and characters in virtual worlds. Students will then begin creating their own games using *Game Maker*. In addition, students will learn how to create and publish their own original mobile apps using *MIT's App Inventor*. Finally, students will design their websites using *Brackets* and have the opportunity to publish and maintain an active website through a free domain hosting system.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### Honors Computer Science including JAVA (Spring)

Grades 10-12

This is the follow-up course to Introduction to Computer Programming. More advanced computer science topics (including Arrays) are studied using the *Visual Basic* language. Students will create dynamic applications using Python Programming language. Also, students will begin the study of JAVA, a popular object-oriented language used in today's practical applications (and utilized in the AP Computer Science course).

*Prerequisites:* *Introduction to Computer Science.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Media Studies Full Year Courses

### **Broadcast Television** (formally Digital Media)

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 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

This is the second in the two-part training program that further develops students' abilities to create industry-quality, on-air content for Northern Highlands TV (NHTV). 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. Students 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 morning show program. Using prior learning and professional newsroom mechanics from Broadcast TV, broadcast team members will learn higher-level field news reporting techniques in both the editorial (writing & interviewing), on-camera and technical realms. Team members will also increase their understanding of the cutting edge technical capabilities and use of TV studio equipment to enhance the quality and depth of creativity in each show that airs on NHTV.

*Prerequisite: Successful completion of Broadcast Television/Digital Media or 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 takes the basic skills learned in Digital Film Production and continues student progress towards higher-level thinking in story development, production quality and the ability to properly manage production and its staff. This advanced-level course will provide students the means to further develop ideas into longer-form productions with higher production values through exposure to professional equipment, techniques and guest professionals in the field of film making. The course will cover budgeting, time management, advanced cinematography and editing techniques, in-depth script development and how to lead talent as a director through their performances.

*Prerequisite: Successful completion of Digital Film Production or teacher recommendation*

## **Media Studies Semester Courses**

### **Video Editing**

Grades 9-12

This introductory semester course will explore video editing for broadcast, film or any other visual medium. There is no experience needed for this class and is designed to advance the video editing skills of students who have a wide range of skills in editing from cell phones to editing studios. By the conclusion of this semester course, students will become highly proficient with Adobe Premiere Pro software and with specific techniques used in editing a wide variety of video 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 Film Production, Broadcast TV, and other on-campus programs and events. As with other media classes, material produced from this class has the potential to be viewed by the school audience and the area community on public broadcasts.

### **Film Studies**

Grades 9-12

This semester course has the dual function of offering students an introduction to the Northern Highlands Film School Program or as an isolated elective choice. This does not function as a prerequisite to Digital Film Production but it is advisable for students to begin film studies here. 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.

# Multi-Disciplinary Courses

## Freshman Seminar

Grade 9

Freshman Seminar is a required multidisciplinary course for all ninth grade students. This course is designed to launch students' high school education by introducing numerous literacies in a dynamic, complex, and interconnected world. Students will develop their reading and writing skills through comprehensive engagement with language conventions, vocabulary, and expressive techniques to communicate a message to a particular audience. Connected to writing and expression, students will apply understanding of technological applications to interpret, analyze, evaluate, and create information in different subjects using multiple media. This course will cultivate 21st century skills, such as inquiry, research, collaboration, problem solving, and citizenship through an interdisciplinary lens.

## Learning Lab

Grade 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.

## Public Speaking

Grades 9-12

Communication is the bedrock of all human relations. While technology and media can aid communication, each can make it more complicated and demanding. Regardless of a future career, all students will need to speak effectively to an audience of interested people with and without technology. Students will want to make sure the audience receives certain information and makes a connection as a speaker. This semester course is aimed at building confidence, competency, and pride in public speaking. While learning skills and habits, students will have the opportunity to refine their speaking and listening.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Music

### Chorus

Grades 9-12

Chorus 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 training ensemble, where students learn the skills necessary to improve as individual vocalists and chorus members. Students have the opportunity to apply these skills in both choral rehearsal and performance, further contributing to the success of the group. Students are encouraged to participate in local, regional, state and national select choirs.

### Honors Concert Choir

Grades 10-12

This is a select vocal ensemble committed to a high standard of performance. The concert choir will study, analyze and perform a more advanced level (level 5 & 6) of repertory than that addressed by the mixed chorus. This group performs in both the winter and spring concerts and other local and community events. The concert choir 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.

Prerequisites: *Audition and director approval.*

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

### Symphonic Band

Grades 9-12

This training ensemble bridges the skill level gap between the middle school and advanced high school level. Students gain valuable musical skills and experiences as they acclimate to high school expectations. Skills, behavior patterns, and attitudes learned in this class benefit every performance ensemble at the high school. 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 a must.*

### 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 of these opportunities.

Prerequisites: *Audition and director approval.*

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

### Chorus/Symphonic Band

Grades 9-12

Students receive equal time in vocal and instrumental music each week.

### Honors Concert Choir/Wind Symphony

Grades 10-12

Students receive equal time in vocal and instrumental music each week.

## **Recording/Audio Technology**

Grades 10-12

This class introduces the student to Industry standard software and hardware: ProTools, Garage Band, Melodyne, as well as the Macintosh operating system, used in the audio studio that utilize computers for Audio and Digital Audio Workstations. 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 pre-existing audio. 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.

## **Honors Music Theory**

Grades 10-12

This course introduces elements of music through sign reading, ear training, rhythmic and melodic dictation, writing four-part harmony, harmonic analysis, elementary counterpoint, and basic composition techniques.

**Note:** *Pianists and string players may also take Honors Music Theory. Students who have doubts about their note reading skills may take a test; those who do not pass the test will be given summer preparatory note reading materials. Students should address all concerns with their teacher.*

## **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 is a detailed presentation of the elements of music in preparation for the AP Music Theory examination, which students are expected to take in May.

*A summer assignment may be required.*



# SCIENCE

## Typical Sequence for Science

| Grade 9                        | Grade 10                          | Grade 11                                                                                                                                                             | Grade 12                                                                                                                                                                                                                                                            |
|--------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Honors Physics<br>AP Physics I | Honors Chemistry<br>AP Physics I  | Honors Biology<br>Biology<br>AP Chemistry<br>AP Physics I<br><br><u>Electives</u><br>Forensics*<br>Oceanography (s)*<br>Astronomy (s)*<br>Environmental Science (s)* | AP Biology<br>AP Chemistry<br>AP Physics I<br>AP Physics C<br>SUPA Honors Forensics*<br>Honors Anatomy/Physiology I & II<br>Oceanography (s)*<br>Astronomy (s)*<br>Environmental Science (s)*<br>AP Environmental Science<br>Sports Medicine/Anatomy*<br>Forensics* |
| Geophysics/Lab                 | Chemistry/Lab<br>Honors Chemistry | Biology/Lab<br>Honors Biology<br><br><u>Electives</u><br>Forensics*<br>Oceanography (s)*<br>Astronomy (s)*<br>Environmental Science (s)*                             | AP Biology<br>AP Chemistry<br>AP Physics I<br>AP Physics C<br>SUPA Honor Forensics*<br>Honors Anatomy/Physiology I & II<br>Oceanography (s)*<br>Astronomy (s)*<br>Environmental Science (s)*<br>AP Environmental Science<br>Sports Medicine/Anatomy*<br>Forensics*  |
| Geophysics*                    | Chemistry*<br>Chemistry/Lab       | Biology*<br>Biology/Lab<br><br><u>Electives</u><br>Forensics*<br>Oceanography (s)*<br>Astronomy (s)*<br>Environmental Science (s)*                                   | Oceanography (s)*<br>Astronomy (s)*<br>Environmental Science (s)*<br>Sports Medicine/Anatomy*<br>Forensics*                                                                                                                                                         |

\* no additional lab time required

(s) semester course

### Departmental Notes

1. Physics, Chemistry, and Biology courses must be taken in sequential order.
2. Classes assigned a lab will have that period removed from wellness education; however, if a student has a study hall, 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 as sophomores or AP Biology as juniors may do so with **prior approval** of a summer course, or college level course.
5. Based on NJDOE requirements, students must take the NJSLA-S at the conclusion of grade 11.

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

## Geophysics

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, thermodynamics, electricity and magnetism, and waves. Geophysics will apply these core ideas to the study of the earth and space phenomena. Such phenomena include the earth's magnetic field, ocean tides, global climate change, and asteroid impact. This course will employ a multi-activity/laboratory-based approach including computer and hands on investigations that will place emphasis on conceptual understanding of physics.

## Geophysics/Lab

Grade 9

The 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, thermodynamics, electricity and magnetism, and waves. Geophysics will apply these core ideas to the study of the earth and space phenomena. Such phenomena include the earth's magnetic field, ocean tides, global climate change, and asteroid impact. This course will employ a multi-activity/laboratory-based approach including computer and hands on investigations as well as interactive simulations to make mathematical connections. This course will provide students with an opportunity for scientific inquiry as students engage in all of the eight science and engineering practices.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## 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, thermo 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.*

*Co-requisite: Honors Geometry.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## AP Physics I

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.

*Prerequisite for incoming freshmen: Only freshmen enrolled in Honors Math Analysis will be eligible to take AP Physics I. (Please refer to page 3 for additional information).*

*Prerequisite for sophomores, juniors, and seniors: Teacher recommendation and minimum grade of a "B" or better in Honors Physics, or "A" in Physics/Lab, and a minimum grade of "B" 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 2).*

## AP Physics C/Lab

Grade 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.

*Prerequisite:* This is a senior course and requires science teacher recommendation and a strong performance in three previous years of honors science.

*AP Calculus is a co-requisite. Concurrent placement in AP level Calculus course (AP Calculus BC) is required.*

*A summer assignment may be required.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Chemistry

Grade 10

This chemistry course is designed for students to explore chemistry concepts using real world phenomena. Topics of study include interactions of matter, chemical reactions, quantitative relationships, energy, solutions, and equilibrium. 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 2).*

## 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.

*Prerequisites:* Successful completion of physics/lab and math or a minimum grade of "A-" or better in physics or teacher recommendation.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## 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.

*Prerequisites:* Minimum grade of "C-" or better in Honors Physics and Honors Geometry or teacher recommendation or a minimum grade of "A-" or better in Physics/Lab and minimum grade of "A-" in Geometry or teacher recommendation.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **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. Student are expected to take the AP Chemistry examination in May.

Prerequisites: *Minimum grade of "B" or better in Honors Chemistry, minimum grade of "B" or better in either Honors Algebra II/ Trigonometry or Honors Pre-Calculus or teacher recommendation.*

Suggested co-requisite (if not taken previously): *Honors Pre-Calculus and Honors Biology.*

*A summer assignment is assigned at teacher discretion.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **Biology**

Grade 11

This introductory course spans a range of topics focusing on how living organisms work individually and how they interact together. Through hands-on lab investigations, use of internet resources, and discussion and collaboration, students will explore the similarities and differences in structure and processes across the biodiversity of all living things. Topics of study include basic biochemistry, cellular respiration, photosynthesis, reproduction, genetics, ecology, natural selection, and human impact. Analytical thinking and problem solving skills will be emphasized.

Prerequisite: *Successful completion of Chemistry or teacher recommendation.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **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. They will show how cell structure relates to function and how cell division and gene mutation can result in evolutionary change. They will examine interactions between living things and the environment. Concepts will be reinforced by related laboratory experiences.

Prerequisites: *Successful completion of Chemistry and Math, or an "A-" or better in Chemistry or teacher recommendation.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **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 "C" or better in Honors Chemistry and teacher recommendation or a strong background in chemistry indicated by a minimum grade of 'A" or better in Chemistry/Lab and teacher recommendation.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## 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: the process of evolution drives diversity and unity of life; 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; 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 I and Chemistry* background. Students are expected to take the AP Biology examination in May.

*Prerequisites:* AP Biology is offered to any student who has successfully completed Honors Chemistry and Honors Biology with a minimum grade of a “B” 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 2).

## Science Full Year 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 study of the human skeleton. The course will also use computer simulated dissection.

*Prerequisites:* Minimum grade of “A-” or better in Biology/lab or “B” or better in Honors Biology.

Approved for NCAA DI and DII athletic eligibility (please refer to page 2).

Note: This is a Dual Enrollment course and is affiliated with a college/university. Students who enroll in this course are responsible for the tuition as required by each college/university, if applicable. Northern Highlands’ teachers have been approved by the respective college/university to teach dual enrollment courses. For this Rutgers University School of Health Related Professions course, students earning college credit must sit for the online exam. A grade of 70 or higher is required for most Rutgers courses. While there is no charge for tuition, students will be responsible for the costs of any textbook required by the university as well as the exam fee of \$75.00. Exam fee subject to change.

### Honors Forensic Science (Syracuse University Project Advance)

Grade 12

Introduction to Forensics 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 in the 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 Curricula: Physics, Chemistry, and Biology.

*Prerequisites:* Completion of Physics, Chemistry, and Biology, with a minimum grade of “B-” in most recent Honors-level science course, or a minimum grade of “B” in most recent Lab-level science course.

Approved for NCAA DI and DII athletic eligibility (please refer to page 11).

Note: This is a Dual Enrollment course and is affiliated with a college/university. Students who enroll in this course are responsible for the tuition as required by each college/university, if applicable. Northern Highlands’ teachers have been approved by the respective college/university to teach dual enrollment courses. For this Syracuse University course the cost of tuition is \$460.00 for the course. Tuition is subject to change.

## AP Environmental Science

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.

*Prerequisites: Minimum grade of “B” or better in Honors Chemistry and Honors Biology and a minimum grade of “A-” 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 2).*

## 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, 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.

*Prerequisites: Successful completion of any level core science course.*

## Forensics

Grades 11-12

This course studies the science behind how forensic scientists are used to solve crimes. Topics include 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. Disclaimer: Some of the course content may be graphic.

*Prerequisites: Successful completion of the physics, chemistry, and biology sequence.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

**Note:** Juniors who would like to enroll in this course must take biology concurrently.

## Science Semester Electives

### Oceanography

Grades 11-12

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.

*Prerequisites: Successful completion of any level Physics and Chemistry course.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **Astronomy**

Grades 11-12

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.

*Prerequisites: Successful completion of any level Physics and Chemistry course.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **Environmental Science**

Grades 11-12

Some of the most pressing issues of our time revolve around the environment and more importantly climate change and working towards a sustainable future. The 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 a 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.

*Prerequisites: Successful completion of any level Physics and Chemistry course.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

# SOCIAL STUDIES

## World History

Grade 9

This survey of world history places an emphasis on Post-World War II history. The course consists of units on China, the Middle East, the Indian Sub-Continent, Africa and a concluding unit chosen by the instructor from a slate composed of Russia since 1991, Mexico, and Enlightenment era Europe. Students will become familiarized with each region's geography, recent history, dominant culture and place in global affairs today.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## United States History I

Grade 10

The course is organized thematically so students can investigate the meaning of U.S. history through the study of significant events, individuals, historical developments, and processes from early American history through the Early-Modern period. 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. Students in this course will examine six major units of study in order to 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 2).*

## Honors United States History I

Grade 10

The course is organized thematically so students can investigate the meaning of U.S. history through the study of significant events, individuals, historical developments, and processes from early American history through the Early-Modern period. 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. Students in this course will examine six major units of study in order to 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 intensive 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.

*Prerequisites: Minimum grade of "A-" or better in World History or recommendation of current history teacher.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## United States History II (Bergen Community College)

Grade 11

The course is organized thematically so students can investigate the meaning of U.S. history through the study of significant events, individuals, historical developments and processes from Modern and contemporary United States history. Students will develop historical thinking skills, such as chronological and comparative reasoning, historical argumentation, and methods for analyzing historical events via primary and secondary sources. Students in this course will examine five major units of study: The Potential and Perils of Becoming a Global Power, Postwar American Culture: Consensus and Contention, The Potential and Perils of Being a Superpower, Culture Wars, America in a Globalized World. 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.

*Prerequisite: U. S. History I.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

Note: Students are permitted to take this course for high school credit only. If students would like to receive Bergen Community College credit, they are responsible for the tuition as required. For this Bergen Community College (BCC) course the cost of tuition is \$232.00 for the course and registration fee. Tuition subject to change.



## Honors United States History II (Bergen Community College)

Grade 11

This course is a more intensive study of U.S. History II with an emphasis on historical reading and writing by responding to document-based questions. The course is organized thematically so students can investigate the meaning of U.S. history through the study of significant events, individuals, historical developments and processes from Modern and contemporary United States history. Students will develop historical thinking skills, such as chronological and comparative reasoning, historical argumentation, and methods for analyzing historical events via primary and secondary sources. Students in this course will examine five major units of study: The Potential and Perils of Becoming a Global Power, Postwar American Culture: Consensus and Contention, The Potential and Perils of Being a Superpower, Culture Wars, America in a Globalized World. 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.

*Prerequisites: Minimum grade of "C-" or better in Honors U.S. History I or teacher recommendation. A minimum grade of "A-" in U. S. History I or recommendation of current history teacher.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

Note: Students are permitted to take this course for high school credit only. If students would like to receive Bergen Community College credit, they are responsible for the tuition as required. For this Bergen Community College course the cost of tuition is \$232.00 for the course and registration fee. Tuition subject to change.

## 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 and sit for the AP examination in May.

*Prerequisites 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 "A-" or better in U.S. History I or a "B-" or better in Honors U.S. History I, or 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 2).*

## Social Studies Full Year Electives

### 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 are expected to take the AP examination in May.

Prerequisites: Successful completion of any AP course offered in Social Studies, or a minimum grade of “B” in Honors U.S. History, or a minimum grade of “A-” 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 2).*

### 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 are expected to take the AP examination in May.

Prerequisites: Successful completion of any AP course offered in Social Studies, or a minimum grade of “B” or better in Honors U.S. History, or a minimum grade of “A-” 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 2).*

### 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 Six Themes addressed in this course are Humans and the Environment; Cultural Development and Interactions; Governance; Economic Systems; Social Interactions and Organizations; and Technology Innovation.

Prerequisites for sophomores: Minimum grade of “A-” or better in World History and teacher recommendation.

Prerequisites: Successful completion of any AP course offered in Social Studies, or a minimum grade of “B” or better in Honors U.S. History, or a minimum grade of “A-” 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 2).*

## **Honors Global Citizenship and Service**

Grades 11-12

The 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.

*Prerequisites: Successful completion of an Honors U.S. History course or a minimum grade of “A-” or better in a U.S. History course.*

## **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 study of general concepts used to interpret U.S. politics through analysis of specific case studies. Students are expected to have strong writing skills. Completion of the course prepares students to take the AP examination in May.

*Prerequisites for sophomores: Minimum grade of “A-” or better in World History (as a final grade) and teacher recommendation.*

*Prerequisites: Successful complete of any AP course offered in Social Studies, or a minimum grade of “B” or better in Honors U.S. History, or a minimum grade of “A-” 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 2).*

## **AP Human Geography**

Grades 10-12

The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012).

*Prerequisites for sophomores: Minimum grade of “A-” or better in World History and teacher recommendation.*

*Prerequisites: Successful complete of any AP course offered in Social Studies, or a minimum grade of “B” or better in Honors U.S. History, or a minimum grade of “A-” 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 2).*

## **Honors Sociology (Syracuse University Project Advanced)**

Grade 11-12

This is an analytic, skill based introduction to sociology class that encourages students to see and think about the social world, themselves, and the relations between themselves and the social world in new ways. As this writing intensive course progresses, students should develop increasing skill in analytical reading and writing, sociological reasoning, empirical research and investigation, and the ability to make empirical and conceptual generalization about self and societal 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.

*Prerequisites: Minimum grade of "B" or better in Honors US I or Honors US II, or a minimum grade of "A-" or better in US I and US II.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

Note: This is a Dual Enrollment course and is affiliated with a college/university. Students who enroll in this course are responsible for the tuition as required by each college/university, if applicable. Northern Highlands' teachers have been approved by the respective college/university to teach dual enrollment courses. For this Syracuse University course the cost of tuition is \$460.00 for the course. Tuition subject to change.

## **Social Studies Semester Electives**

### **Sociology**

Grades 10-12

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 11).*

### **Criminal Law**

Grades 10-12

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 2).*

## **Psychology: Positive Psychology and 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 2).*

## **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 2).*

## **Philosophy: An Introduction to the History of Ideas**

Grades 11-12

The course helps students navigate the essential ideas in the history of philosophy that still resonate today. Philosophy addresses: Epistemological questions concerning the nature of knowledge and truth, ethical questions concerning morality and living a good life, and metaphysical questions on the meaning of self and the nature of reality. The course begins with an examination of logic to strengthen student understanding of argumentation, a necessary skill set in the 21st century. Philosophy is largely discussion-based and thus relies on students to guide the course as they work through the topics of the course. The class emphasizes the careful reading of philosophical texts, critical thinking, and clear verbal and written expression of ideas.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

# 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 PARCC ELA assessment and can voluntarily opt to demonstrate proficiency on a foreign language assessment approved by the NJDOE.
- ASL 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

This introductory course in American Sign Language (ASL) introduces students to the fourth most used language in the United States. Deaf culture and history are integrated into the instruction of the basics of ASL grammar and syntax, vocabulary, fingerspelling, numbers, and visual-manual communication. Projects, presentations, skill-building activities and games as well as interactive communication will be used to enhance and enrich developing expressive and receptive skills in the target language.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### American Sign Language II

Grades 10-12

This course will continue to develop student knowledge and use of American Sign Language through a linguistic and cultural approach. Additional fingerspelling, grammar, vocabulary and deaf culture will be covered to build upon the core knowledge of the language. Students will use both presentational and interpretive skills through practicing real world dialogue and storytelling.

*Prerequisite: Completion of American Sign Language I.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Chinese

### Chinese I

Grades 9-12

This course introduces students to Mandarin, the most widely spoken dialect in China. Students study the Pinyin system of Romanization of Mandarin. The students will learn to communicate about topics such as getting to know each other, families, feelings, hobbies, the date, time expressions, location, daily routines, and weather. Chinese culture and history are also woven into the language lessons to lend a sense of vitality to the course.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### Honors Chinese II

Grades 9-12

Students continue to develop the basic level skills in speaking, listening, reading and writing. There is a transition from traditional and simplified characters in addition to continued practice with the Pinyin system. This course emphasizes vocabulary building and greater fluency in utilizing communication skills in familiar, everyday situations. Students begin to learn different strategies and methods of expressing similar ideas, feelings and concepts, thereby gaining a greater flexibility of expression. Chinese culture and history continue to be woven into the language lessons, continuing a sense of authenticity.

Prerequisite: Recommendation of Chinese I teacher.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### Honors Chinese III

Grades 10-12

Students will continue to develop their language ability to express themselves in many practical, everyday scenarios in greater depth. More complicated grammatical concepts and vocabulary from daily life will be introduced. Chinese culture and history continue to be woven into the language lessons. Classes are conducted mostly in Chinese while students develop interpretive, interpersonal, and presentational modes of communication. The course will also emphasize the critical transition from thinking in English and translating into Chinese to “thinking on your feet” in Chinese.

Prerequisite: Recommendation of Honors Chinese II teacher.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### Honors Chinese IV

Grade 10-12

The Chinese IV Honors class provides students with ongoing and varied opportunities to further develop their proficiencies in Chinese language skills (listening, speaking, reading and writing), and Chinese culture. The class will apply integrated performance-based instruction. Students will learn further about various aspects of contemporary Chinese society, population, ethnicity, cultural celebrations, beliefs and attitudes, and social issues and current affairs. They will also have music literature, movie and poetry appreciation. The class prepares students to demonstrate their level of Chinese at the intermediate-low level.

Prerequisite: Recommendation of Honors Chinese III teacher.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## French

### French I

Grades 9-12

This beginning course emphasizes communication (speaking, listening, reading, writing), and culture. Students express themselves in interpretive, interpersonal, and presentational modes through readings, conversations, dialogues and projects that also include individual and paired computer activities. Students will be prepared to continue their study of French in French II.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### French II

Grades 9-12

Students who began French in middle school review previously learned materials with an eye to increasing communicational skills (speaking, listening, reading, writing), and knowledge of the culture under study. Students express themselves in interpretive, interpersonal, and presentational modes.

Prerequisite: *Minimum of two years of French in middle school or French I.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### Honors French II

Grades 9-12

Students who began French in middle school receive a minimal review of previously learned material. New subject matter is presented at a rapid pace in this enriched French sequence, and reinforced through oral and written communication in interpretive, interpersonal, and presentational modes. Classes are conducted mostly in French.

Prerequisite: *French I teacher recommendation.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### French III

Grades 10-12

Basic linguistic skills and cultural awareness are further developed to increase the student's proficiency and cultural understanding. Students will become comfortable in their ability to express themselves in interpretive, interpersonal, and presentational modes of communications.

Prerequisite: *Recommendation of French II teacher.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### Honors French III

Grades 10-12

Students profit from more advanced reading selections and from listening practice. Students in this advanced course proceed more rapidly with language structure exercises. Classes are conducted mostly in French. Students continue to advance in interpretive, interpersonal, and presentational modes.

Prerequisite: *Recommendation of Honors French II or French II teacher.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### French IV

Grades 10-12

A more in-depth study of French takes place so that students have an adequate command of language patterns of French. Over the year, oral proficiency increases and cultural awareness continues to develop. Students advance in interpretive, interpersonal, and presentational modes while deepening their understanding of cultures of the French-speaking world.

Prerequisite: *Recommendation of French III teacher.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*



## **Honors French IV**

Grade 10-12

Students advance to reading selections of increasing length and difficulty and diverse literary forms. Reading selections are chosen for this cultural significance. Students bring their interpretive, interpersonal, and presentational modes of communication to a more sophisticated level, while studying literature of the French-speaking world. Classes are conducted in French.

*Prerequisite: Recommendation of Honors French III or French III teacher.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## **French V**

Grade 10-12

This course is a continuation of the main elements of French IV. The degree of difficulty in reading material and the overall tempo of the course is greater. Emphasis is given to improvisational conversation as well as higher-order oral work. Students continue to express themselves in interpretive, interpersonal, and presentational modes, developing in complexity and performance.

*Prerequisite: Recommendation of French IV teacher.*

*Approved for NCAA DI and II athletic eligibility (please refer to page 2).*

## **AP French Language**

Grade 10-12

This level requires a high degree of proficiency. 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.

*Prerequisite: Recommendation of Honors French IV teacher.*

*A summer assignment may be required.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Italian

### Italian I

Grades 9-12

This beginning course emphasizes communication (speaking, listening, reading, writing), and culture. Students express themselves in interpretive, interpersonal and presentational modes through readings, conversations, dialogues and projects that also include individual and paired computer activities.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### Italian II

Grades 9-12

The second level of Italian continues to be communicative, focusing on practical situations using language structures. The course further increases students' proficiency in the language and enhances and enriches understanding of Italian culture and heritage. Students become more comfortable expressing themselves in interpretive, interpersonal and presentational modes.

Prerequisite: *Italian I.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### Honors Italian II

Grades 9-10

This course is intended for students who began Italian in middle school and desire an enriched language experience. Minimal review is given to foundational skills and vocabulary learned in grades seven and eight. New material is presented at an accelerated pace, reinforced through oral and written communication in interpretive, interpersonal, and presentational modes. Classes are conducted mostly in Italian.

Prerequisite: *Teacher recommendation for ninth graders or a minimum grade of "A" or better in Italian I along with teacher recommendation.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### Italian III

Grades 10-12

This course is a continuation of speaking in practical situations, requiring knowledge of language structure and culture learned in Italian II. As students develop greater proficiency of spoken and written Italian, they study the characteristics of the different regions of Italy. Reading selections are chosen essentially for their cultural significance and student interest.

Prerequisite: *Recommendation of Italian II teacher.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

### Honors Italian III

Grades 10-12

This course is a more in-depth study of Italian language and culture. Students learn to express themselves using more advanced grammatical structures, and continuing the study of Italian arts and music. Students are required to express themselves in written and spoken Italian. Reading and writing selections are chosen for cultural significance and student interest.

Prerequisite: *Recommendation of Honors Italian II or Italian II teacher.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Italian IV

Grades 10-12

This course is a continuation of the main elements of Italian III; however, a more in-depth study of Italian grammar takes place so that students have an adequate command of language patterns. Over the year, students will express themselves in reading, writing and speaking in the target language. Listening skills will steadily advance throughout the year as students acquire new vocabulary and have more opportunities to practice what they have learned. Interpersonal, presentational and interpretive modes will be used in every unit to increase student proficiency in Italian.

Prerequisites: Recommendation of Italian III teacher.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Honors Italian IV

Grade 10-12

This course is a continuation of the main elements of Honors Italian III; however, the degree of difficulty, reading material, grammar, and overall course tempo are greater. Students engage in extensive improvisational conversation, as well as higher-order oral work, reading, writing, and testing. While studying Italian literature, students continue to express themselves in more complex interpretive, interpersonal, and presentational modes.

Prerequisite: Recommendation of Honors Italian III or Italian III teacher.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Honors Italian V (Syracuse University Project Advance)

Grade 10-12

This course, entitled Italian 201 Intermediate 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 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: Three years of Honors Italian and teacher recommendation.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

Note: This is a Dual Enrollment course and is affiliated with a college/university. Students who enroll in this course are responsible for the tuition as required by each college/university, if applicable. Northern Highlands' teachers have been approved by the respective college/university to teach dual enrollment courses. For this Syracuse University course the cost of tuition is \$460.00 for the course. Tuition is subject to change.

# Spanish

## Spanish I

Grades 9-12

Designed for students new to the study of world languages, this course emphasizes communication (speaking, listening, reading, and writing) and culture of the Spanish-speaking world. Students express themselves in interpretive, interpersonal, and presentational modes through authentic reading and listening selections, conversations, dialogues and projects that incorporate current technologies. Students will be prepared to continue their study of Spanish in Spanish II.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Spanish II

Grades 9-12

Students who began Spanish in middle school or who have completed Spanish I review previously learned material and then move on to new material with an eye to gaining increased proficiency and cultural awareness. Students express themselves in interpretive, interpersonal, and presentational modes of communication.

Prerequisite: *Minimum of two years of Spanish in middle school.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Honors Spanish II

Grade 9-10

This course is intended for students who began Spanish in middle school and desire an enriched Spanish language experience. Minimal review is given to materials learned in grades seven and eight, and new material is presented at an accelerated pace, reinforced through oral and written communication in interpretive, interpersonal, and presentational modes. Classes are conducted in Spanish.

Prerequisite: *Spanish I teacher recommendation.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Spanish III

Grades 10-12

Skills and cultural awareness are further developed to increase students' proficiency and understanding. Students become comfortable expressing themselves in interpretive, interpersonal, and presentational modes of communication.

Prerequisite: *Recommendation of Spanish II teacher.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Honors Spanish III

Grade 10-12

Students develop their ability to express themselves accurately in many scenarios. Students profit from more advanced reading selections and listening practice, and are able to proceed faster with structured exercises. Classes are conducted in Spanish while students continue to advance their interpretive, interpersonal, and presentational modes of communication.

Prerequisite: *Recommendation of Honors Spanish II or Spanish II teacher.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 2).*

## Spanish IV

Grades 10-12

As a more in-depth study of Spanish takes place, students develop adequate command of language patterns. Over the year, oral proficiency and cultural awareness continue to develop. Students advance in interpretive, interpersonal, and presentational skills, while deepening their understanding of cultures of the Spanish-speaking world.

Prerequisite: Recommendation of Spanish III teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 2).

## Honors Spanish IV

Grade 10-12

Students study Spanish culture, make connections and comparisons, and advance to reading selections in increasing length and difficulty and of diverse literary genres. Classes are conducted in Spanish. Students continue mastery of oral and written expression. Students bring their interpretive, interpersonal, and presentational modes of communication to a more sophisticated level while studying literature of the Spanish-speaking world.

Prerequisite: Recommendation of Honors Spanish III or Spanish III teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 2).

## Spanish V

Grade 10-12

This course is a continuation of the main elements covered in CP Spanish IV; however, the degree of reading difficulty and the general tempo of the course are more challenging. Students continue to express themselves in more complex interpretive, interpersonal, and presentational modes, further developing in complexity and performance.

Prerequisite: Recommendation of Spanish IV teacher.

## Honors Spanish V (Syracuse University Project Advance)

Grade 10-12

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.

Prerequisites: Three years of Honors Spanish or a minimum "A-" average or better in Spanish IV, and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 2).

Note: This is a Dual Enrollment course and is affiliated with a college/university. Students who enroll in this course are responsible for the tuition as required by each college/university, if applicable. Northern Highlands' teachers have been approved by the respective college/university to teach dual enrollment courses. For this Syracuse University course the cost of tuition is \$460.00 for the course. Tuition is subject to change.

## AP Spanish Language

Grade 10-12

Because a high degree of proficiency is expected at this level, 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.

Prerequisite: Recommendation of Honors Spanish IV teachers.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 2).

Name: \_\_\_\_\_

Class of: \_\_\_\_\_

### 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             |         |
| Physics              |         | Chemistry                 |         | Biology              |         | Elective             |         |
| World History        |         | US History I              |         | US History II        |         | Elective             |         |
| World Language       |         | World Language            |         | Elective             |         | Elective             |         |
| Freshman Seminar     |         | Elective                  |         | Elective             |         | Elective             |         |
| Elective             |         | Elective                  |         | Elective             |         | Elective             |         |
| Wellness/Health 9    |         | Wellness/Driver Education |         | Wellness/Health 11   |         | Wellness/Health 12   |         |
| <b>Total Credits</b> |         | <b>Total Credits</b>      |         | <b>Total Credits</b> |         | <b>Total Credits</b> |         |

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