School Counseling Department  
*Kelly Peterfriend, Supervisor*

**Counselors**  
Jennifer Ferentz, Counselor  
Stephen Jochum, Counselor  
Jennifer Kuo, Counselor  
Jennifer Saxton, Counselor  
Michael Stone, Counselor

Special Service Department  
*Thomas Buono, Supervisor*

**Child Study Team**  
Lyle Becourtney, Psy.D., School Psychologist  
Cathy Berberian, School Social Worker  
Robin Burton, Speech-Language Specialist  
Deanna Friedland, School Social Worker  
Tracy LaRocca, Learning Disabilities Teacher/Consultant  
Jessica Verdicchio, School Social Worker

**Department Supervisors**  
*Thomas Buono—Music*  
*Tiffany Cohen—Science, Applied Technology*  
*Bruce Emra—English, Art, TVP, ELS, Library*  
*Rosemarie Malloy—Mathematics, Business*  
*Robert Petrosino—Social Studies, World Languages*  
*Steven Simonetti—Health & Wellness, Driver Education, Family & Consumer Sciences*

"Child Find"

For Pupils Ages 14-21  
Special programs for young adults, ages 14 through 21, are conducted at Northern Highlands Regional High School for those who have an identified disabling condition and/or a measurable developmental delay in physical, social, communicational, and/or emotional areas, and who may require and would benefit from special education and related services. Eligibility for these services is determined by a Child Study Team evaluation of the child. Any resident who has a child, ages 14 through 21 years, who may require special services, should contact the Office of Special Services of the Northern Highlands Regional High School at 201-327-8700, Ext. 220. Project "Child Find" serves special needs children from birth to 21 years of age.
January 2015

Dear Student:

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.

Joseph Occhino
Principal
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REQUIREMENTS FOR THE NORTHERN HIGHLANDS REGIONAL HIGH SCHOOL DIPLOMA

All students must complete 125 credits for graduation

I. English
   4 credit years of core English courses—20 credits

II. World History/Cultures
    1 credit year—5 credits

III. U.S. History
     2 credit years—10 credits

IV. Mathematics
    3 credit years—15 credits

V. Science
    3 credit years—15 credits

   Required Course Sequence:
   Physics (grade 9); Chemistry (grade 10); Biology (grade 11)

VI. World Languages
    2 credit years—10 credits

VII. Physical Education/Health/Driver Education
     1 credit year for each year of enrollment—5 credits per year
VIII. **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 Acting and Theater
- Actors' Workshop
- Actors' Workshop II, III

IX. **Career Education & Consumer, Family, and Life Skills**

A minimum of 5 credits are required. This requirement includes all Business Education, Applied Technology, Teacher Education, and Family & Consumer Sciences courses. The following electives (5 credits each) also apply:

- TV Production
- Broadcast Television
- Video Storytelling
- Advanced Film Production
- Journalism
- Creative Writing I, II, and III
- Film Studies

X. **Contemporary Business Technology and Freshman Rhetoric** courses (required of all ninth graders)

One semester each—2.5 credits each—total of 5 credits

XI. **Financial Literacy**

All graduates must meet the 2.5 financial literacy course requirement.

Please refer to page 3 for detailed information on meeting the financial literacy requirement.
FINANCIAL LITERACY REQUIREMENT

New Jersey State requires that all students meet at least 2.5 credits in financial, economic, business, and entrepreneurial literacy. Students must demonstrate understanding about how the economy works and their own role in the economy, and also develop the necessary skills to effectively manage personal finances by the time they graduate.

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

1. Introduction to Business (grades 9-12)
2. Personal Finance and Investment (grades 9-12)

Students can also meet the financial literacy requirement by taking a semester course in Financial Management; students enrolled in this course can take one of the following semester courses to balance the semester offering of Financial Management (grades 10-12):

1. Dynamics of Health Care (grades 10-12)
2. Emergency and Clinical Care (grades 11-12)
3. Medical Terminology (grades 11-12)
4. Jewelry Design (grades 10-12)
5. Evolution of Popular Music (grades 10-12)
6. Study Hall (grades 10-12)

Any student can meet his/her financial literacy requirement by enrolling in a pre-approved college, summer, or virtual course. Written approval from the business department supervisor and principal is required before enrolling. Tuition and fees would be the responsibility of each family. The grade from these outside courses will be incorporated in the GPA and credit calculations.
Minimum Credits per Year
All students must take a minimum of six courses per semester, including physical education. Students may not take more than two study halls.

State Testing Requirements
Beginning with the Class of 2016, all students will be required to take the Partnership for Assessment of Readiness for College and Careers (PARCC). High school students will take the PARCC assessment in Algebra I, Algebra II/Trig., Geometry, English 9, English 10 (American Literature). Students enrolled in Biology must take the New Jersey Biology Competency Test (NJBCT).

Special Education Students
To receive a state-endorsed, high school diploma, Special Education students must meet all state and local high school graduation requirements, unless exempted in their Individualized Education Program.

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 principal for approval.

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. Regarding English, a student must take either two English courses in junior year, enroll in an approved high school summer English course for new credit, or take two semesters of college English to fulfill their requirement.

Graduation Participation
Only those students who have earned a Northern Highlands diploma are permitted to participate in the graduation ceremony.

Honor Graduates
Those graduating seniors who are members in good standing of the Northern Highlands Chapter of the National Honor Society are designated “Honor Graduates” in the graduation program, and wear a gold sash with their cap and gown.

Attendance
The Northern Highlands Student/Parent Handbook explains all attendance and tardiness policies and procedures. Students and parents are responsible for familiarizing themselves with this material.

Student Obligations When Tardy or Absent
Tardiness does not excuse a student from assignments or tests that are due on a given day. Students are responsible for submitting assigned work, and for taking tests and quizzes as scheduled by the teacher. All assignments are posted on our website: www.northernhighlands.org under faculty/homework.

Incomplete Grades
Students who receive an INCOMPLETE for a semester grade must complete all assignments within a two week period (10 school days). Students who do not fulfill this obligation will receive a failure (F) for each incomplete with the grade recalculated accordingly.
Progress Reports
Parents/Guardians will receive progress reports electronically and have 24/7 online access to their child’s grades beginning after the posting of progress reports in October.

Report Cards
Parents/Guardians will receive report cards electronically and have online access during each semester. It should be noted that final report cards are mailed home.

Honor Roll and High Honor Roll
The Honor Roll is published at the end of the year (based on the student’s final average) and at the end of the first semester (based on the student’s first semester grades). To be on the Honor Roll, a student must have all A’s and B’s. To be on the high Honor Roll, a student must have all A’s, and no more than one B grade.

Valedictorian and Salutatorian
Following the completion of the first semester in senior year, a valedictorian is selected, based upon a seventh-semester Grade Point Average (GPA). The student with the highest GPA is designated the valedictorian; the student with the second highest GPA, salutatorian. If a tie occurs for valedictorian—two or more students having the same GPA up to and including the third decimal point—those students are designated co-valedictorians; in this case, no salutatorian is selected.

Bergen County Central Technical Education Center (BCCTEC) & Rockland BOCES
BCCTEC and BOCES provide students with either a shared-time or full day of vocational and technical shop training coordinated with the student’s high school schedule. The shared-time student will take most of his/her academic class and co-curricular activities at Northern Highlands. A variety of programs is offered. Those who are interested should contact their school counselor.

* To be accepted into the full time program at BCCTEC, students must apply in the eighth grade and begin in their freshman year. There is a financial obligation for the BOCES program.

Parents of eighth graders: If interested, please contact your child’s middle school principal.

Courses Available at Other Sites
Qualified seniors may elect to take courses at Ramapo College, Bergen Community College, and other area colleges. Similarly, virtual classes may be used to earn credits outside of Northern Highlands. Students are responsible to register for off-campus classes and must provide their own transportation and pay for course(s). High school credit is not given for college courses, unless pre-approved by the principal.

Student Activities/Athletics
Northern Highlands offers many sports and co-curricular activities, which are described in our Student Activities Guide. This information is also posted on our website. Go to www.northernhighlands.org —then click on Clubs/Athletics tab. From the drop down menu, select Activities Guide.

Summer Assignments
Summer assignments are required in AP courses, Syracuse University Project Advance (SUPA) courses, and other dual enrollment courses. In addition, English 9, American Literature, Honors American Literature, World History, US History I (CP/H) and US History II (CP/H) require a summer assignment. A detailed list of summer assignments is posted on our school website in June.
School Counseling Services
At the beginning of freshman year, each student is assigned a school counselor who will remain with the student over four years. The counselor's responsibility is to assist students and parents with: academic, college, career planning, social and personal concerns. A Student Services Bulletin is available online each month to keep students and parents informed of yearly scheduling, standardized testing, post-high school planning, college application procedures and important dates. A career program begins freshman year and continues throughout high school as a means to help students to seriously consider a college major and/or career.

Home Instruction Requests
Home instruction may be provided for students who are absent from school for more than two consecutive weeks (10 school days). Parents should submit a doctor’s request for home instruction to the student’s counselor who will bring it to the Intervention and Referral Services team. Parents are required to be at home during the time that an instructor visits.

Homework Assignments
Northern Highlands’ teachers use our website to post a myriad of information including, but not limited to homework assignments. If a student is absent, log onto www.northernhighlands.org and click on “Faculty/Homework.” To the best of their ability, students should be aware of assignments when not in school. Students that miss class for a school related activity are responsible for all assignments posted on teacher web pages. If a student is absent, we encourage them to reach out directly to their teachers via email if they cannot find an assignment on the website.

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, and, where appropriate, to request an amendment. Authorized persons interested in examining such individual records should write a letter addressed to the School Counseling Department requesting an appointment to see a counselor to review and interpret 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.

Basic Skills Program
Inclusion in the program is by recommendation based upon student performance on New Jersey standardized tests and Northern Highlands’ school-wide assessments. The program’s goal is to prepare students for the mandated New Jersey assessments, which are required by the state for graduation. Students in the program also receive individual and/or small group assistance in note taking; study skills; math skills; techniques to improve reading and writing across the curriculum. Students will receive five credits per year and a grade.

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 include supported; English content, instruction and English language development. Students who require this service should see their school counselor. Northern Highlands utilizes the WIDA ACCESS Placement Test (W-APT) 9-12 to determine eligibility.
Special Services

The Special Services Department provides consultation, counseling, and academic support programs for the Northern Highlands school community. The department consists of one psychologist, three social workers, a learning consultant and a speech-language specialist. Special Services offers students, parents, and staff the opportunity to solve problems that require the guidance of a professional.

Special Education Program

Northern Highlands offers a variety of programs for students with special needs, including skills support classes, in-class support classes, and replacement classes. Program decisions are based upon specific needs of students as indicated in their Individualized Education Program (IEP). A skills support class is offered to students whose IEP states the need for such instruction. Topics taught over a four year period include: organizational skills, note taking, time management, technology use, problem solving, learning strategies, critical reading and transition skills. The exception is that students will be able to apply newly acquired skills to become more effective learners. Students will receive five credits per year.

Other offerings include:

In-Class Support Program: These classes provide special needs students the opportunity to be in general education classes with both a content area teacher and a special education teacher.

Pull-Out Replacement Classes: In lieu of the regular academic program, replacement classes provide special needs students with an individualized curriculum, detailed in a student’s IEP.

Life, Education, Academic Skills Program (LEAP): This program is designed to provide students with Special Education needs additional support for their mainstream program. It is a small program with individualized intensive support for students to navigate between the academic, social, and/or physical aspects of a mainstream environment so students can actively participate in the least restrictive environment.

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. NCAA legislation guides the NCAA Eligibility Center staff in its review of 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 and must be taught by a qualified instructor. For more information, please visit the Eligibility Center web site: http://web1.ncaa.org.
DUAL ENROLLMENT COURSES
Northern Highlands has partnered with Syracuse University (SUPA), Rutgers School of Health Related Professions (formally UMDNJ), Fairleigh Dickinson University (FDU), Bergen Community College (BCC), and Seton Hall University (SHU). **While there is no charge for tuition at Rutgers at this time, students will be responsible for the costs of any textbook required by the university.** Students who enroll in courses that are affiliated with the aforementioned universities/colleges are responsible for tuition as required by each university, if applicable. Northern Highlands' teachers have been approved by the respective university/college to teach dual enrollment courses. Tuition is subject to change (rates indicated below are for the 2015-2016 school year). Additional information regarding dual enrollment classes will be distributed to parents once their child is enrolled in the class.

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Grade</th>
<th>Affiliation</th>
<th>Credits</th>
<th>Tuition</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NH</td>
<td>College</td>
<td></td>
</tr>
<tr>
<td>Honors Writing/Reading</td>
<td>12</td>
<td>SUPA</td>
<td>5</td>
<td>6</td>
<td>$112/credit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tuition subject to change.</td>
</tr>
<tr>
<td>Honors Forensics</td>
<td>12</td>
<td>SUPA</td>
<td>5</td>
<td>4</td>
<td>$112/credit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tuition subject to change.</td>
</tr>
<tr>
<td>Honors Spanish V</td>
<td>12</td>
<td>SUPA</td>
<td>5</td>
<td>4</td>
<td>$112/credit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tuition subject to change.</td>
</tr>
<tr>
<td>Honors Italian V</td>
<td>12</td>
<td>SUPA</td>
<td>5</td>
<td>4</td>
<td>$112/credit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tuition subject to change.</td>
</tr>
<tr>
<td>Honors Dynamics of Healthcare</td>
<td>10-12</td>
<td>Rutgers</td>
<td>2.5</td>
<td>3</td>
<td>$40 exam fee</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This course is a prerequisite for all Rutgers courses. Ten hours of clinical shadowing is required.</td>
</tr>
<tr>
<td>Honors Anatomy &amp; Physiology I &amp; II</td>
<td>12</td>
<td>Rutgers</td>
<td>5</td>
<td>8</td>
<td>$40 exam fee</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This two semester college course is treated and organized as a full-year course.</td>
</tr>
<tr>
<td>Honors Medical Terminology</td>
<td>11-12</td>
<td>Rutgers</td>
<td>2.5</td>
<td>3</td>
<td>$40 exam fee</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This course is for juniors and seniors only after they have completed Dynamics of Health Care.</td>
</tr>
<tr>
<td>Honors Emergency &amp; Clinical Care</td>
<td>11-12</td>
<td>Rutgers</td>
<td>2.5</td>
<td>3</td>
<td>$27 exam fee</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This course is for juniors and seniors only after they have completed Dynamics of Health Care.</td>
</tr>
<tr>
<td>Honors Tomorrow's Teacher</td>
<td>12</td>
<td>FDU</td>
<td>5</td>
<td>4</td>
<td>$274 for the course</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tuition subject to change.</td>
</tr>
<tr>
<td>Honors Advertising &amp; Branding</td>
<td>11-12</td>
<td>FDU</td>
<td>5</td>
<td>3</td>
<td>$225 for the course</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tuition subject to change.</td>
</tr>
<tr>
<td>Computer-Aided Drawing I</td>
<td>9-12</td>
<td>BCC</td>
<td>5</td>
<td>2</td>
<td>$146 for the course</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This fee includes registration. Tuition subject to change.</td>
</tr>
<tr>
<td>United States History II (CP &amp; Honors)</td>
<td>11</td>
<td>BCC</td>
<td>5</td>
<td>3</td>
<td>$211 for the course</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This fee includes registration. Tuition subject to change.</td>
</tr>
</tbody>
</table>

**NOTES ON DUAL ENROLLMENT**

<table>
<thead>
<tr>
<th>SUPA</th>
<th>Rutgers</th>
<th>FDU</th>
<th>BCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students may be required to pay for some of their books.</td>
<td>Students must earn a final grade of 75 or better in order to receive Rutgers credit. Students must sit for the Rutgers final at Rutgers. Northern Highlands will provide transportation.</td>
<td>Semester 1 is designed for instructional purposes; semester 2 will include a field experience at one of our Allendale, Upper Saddle River, or Ho-Ho-Kus schools. Students must possess a valid driver's license.</td>
<td>Students are permitted to take these classes for high school credit only. If students would like to receive college credit, they would have to pay tuition for the class.</td>
</tr>
</tbody>
</table>
ADVANCED PLACEMENT COURSES

If students are planning to register for one or more AP courses, the following should be kept in mind:

All students are expected to take the AP examination in May.

_Usually, there is at least one hour of homework per night—including weekends and vacations—for an AP course._ Students should bear this in mind as they contemplate courses, including other possible AP courses. Be prepared to make a commitment.

AP courses are equivalent to college courses. They are extremely rigorous.

If students play a sport, participate in a time consuming co-curricular activity, or have a job, will they have time to do all the work that is required?

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.

Sophomores who fulfill course prerequisites are permitted to take one AP course.

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 ASSIGNMENT AND GRADUATION

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

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

To enter Grade 12
Students will have earned a minimum of 90 credits by the end of junior 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 as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>97-100</td>
<td>C+</td>
<td>77-79</td>
</tr>
<tr>
<td>A</td>
<td>93-96</td>
<td>C</td>
<td>73-76</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
<td>C-</td>
<td>70-72</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
<td>D+</td>
<td>67-69</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
<td>D</td>
<td>63-66</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
<td>D-</td>
<td>60-62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>59 or below</td>
</tr>
</tbody>
</table>

- 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.

Our 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

<table>
<thead>
<tr>
<th>GRADES</th>
<th>COURSE LEVEL</th>
<th>Regular</th>
<th>Honors</th>
<th>AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>97-100</td>
<td>A+</td>
<td>=</td>
<td>4.3</td>
<td>4.8</td>
</tr>
<tr>
<td>93-96</td>
<td>A</td>
<td>=</td>
<td>4.0</td>
<td>4.5</td>
</tr>
<tr>
<td>90-92</td>
<td>A-</td>
<td>=</td>
<td>3.7</td>
<td>4.2</td>
</tr>
<tr>
<td>87-89</td>
<td>B+</td>
<td>=</td>
<td>3.3</td>
<td>3.8</td>
</tr>
<tr>
<td>83-86</td>
<td>B</td>
<td>=</td>
<td>3.0</td>
<td>3.5</td>
</tr>
<tr>
<td>80-82</td>
<td>B-</td>
<td>=</td>
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WEIGHTING FOR FRESHMAN COURSES AND TRANSFERRING CREDITS

- Freshman AP courses are not offered at Northern Highlands with the exception of those students enrolled in Honors Math Analysis who are taking AP Physics I concurrently. It should be noted that freshmen enrolled in AP Physics I will receive AP weighting. (Please refer to page 9 for additional information).
- AP courses taken during freshman year in another public or private high school will not be assigned AP weighting.
- Northern Highlands does not offer freshman Honors credit in English, Social Studies, or World Languages. Consequently, Honors weighting for transfer students is not assigned to courses in these areas. Freshman transfer students may transfer Honors weighting from Honors Geometry, Honors Physics or Honors Biology only, whichever is applicable.
- For transfer students, only one AP course will be awarded weighting in the GPA.

CREDIT FOR COURSE WORK OUTSIDE OF NORTHERN HIGHLANDS

- Any courses taken outside of Northern Highlands must be preapproved by the Department Supervisor and principal.
- Incoming Freshmen may not take summer school classes for new credit.
- If a course is taken for remediation in summer school, the original F is included in the GPA and remains on the transcript along with notation of the summer school grade.
- Virtual high school courses must be preapproved by the Department Supervisor and Principal.
- Students who take high school level courses in grade eight will not receive high school credit, but courses will be considered for academic placement.
SCHEDULING EVENTS—2015
The following scheduling events will occur January through June of 2015:

JANUARY/ FEBRUARY/ MARCH/ APRIL 2015—Scheduling:
Every current freshman, sophomore or junior will have an individual subject selection meeting with his/her school counselor; eighth grade scheduling will occur at sending districts. All high school scheduling will be completed by mid-April.

FEBRUARY 5, 2015—Academic Overview:
Eighth grade through junior year parents are invited to attend.

APRIL 2015—Course Request Check and Confirmation:
Student Course Request sheets will be sent home. At this time, any course changes should be made by contacting your child’s school counselor. No elective course changes will be made after May 1, 2015.

JUNE 2015—Academic Level Appeals:
Appeal forms will be available in the school counseling office June 1, 2015 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 June 12, 2015.

A final list of course requests will 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
1. 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.

2. All students must register for a minimum of six courses per semester, including physical 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.

3. Parents of eighth grade and junior students will be scheduled for subject selection meetings with their child and his/her school counselor.

4. 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.
2015-2016 SCHEDULE CHANGE GUIDELINES

All students will have been scheduled by April. 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 if there is space in the course he/she is requesting to enter. These changes will only be allowed until September 11, 2015.

2. **Academic Misplacement**—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. Grades within a discipline will follow the student moving either up or down a level. 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 expires five days after the first progress reports are posted.

3. **Dropping a Course for a Study Hall**—A student may do so with written parental permission. Students may not take more than two study halls in a school year. The deadline for dropping a full year or a semester course (both fall and spring) for a study expires five days after the first progress reports are posted.

**NOTES:**

a) Parent permission is required for all changes.

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

c) If a student decides to drop an elective course, he/she will not have the option to add a new elective unless it helps build the enrollment in a particular course.

d) 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.**

e) Dual enrollment courses follow different procedures dictated by the university/college. Students should consult page 8 of the Curriculum Guide and/or their counselor for more information.

f) Appeals may be made to the department supervisor, and then to the principal.
ENGLISH

Only core English courses—including the Syracuse University Project Advance course—may be used to meet the twenty credit diploma requirement of English.

All English courses focus on reading, writing, listening, speaking, and viewing, and follow the Modern Language Association format for writing.

Core English Courses

English 9

This course explores various genres of literature—the novel, short story, the essay, drama, and poetry—and includes instruction in the Modern Language Association format for writing. Works studies may include: Romeo and Juliet, A Tale of Two Cities, Of Mice and Men, The House on Mango Street, Great Expectations, My Antonia, The Little Prince, Zeitoun, All Quiet on the Western Front and The Curious Incident of the Dog in the Night-time.

A summer reading assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Freshman Rhetoric

In this required semester course for freshmen, students learn the essentials of correct and clear writing. The course focuses on word choice (diction), syntax, imagery and tone. Students refine their writing skills and learn the Modern Language Association format for writing. There is instruction in correct grammar and usage. Student writing includes narrative, expository, and persuasive writing. Emphasis is given to writing coherently for both school and the workplace. Organization and study skills are also addressed. At times, students will present their writing orally in small groups or to the class at large.

American Literature

This course continues work begun in English 9 developing students' reading, writing and thinking skills. American authors will be studied throughout the year; writers such as Arthur Miller, F. Scott Fitzgerald, and Tim O'Brien. 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 7).
Honors American Literature

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 two full years working with fundamental and essential English literacy skills.

**Prerequisite:** An “A-” average in CP English 9.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Modern Fiction and Nonfiction

Grades 11-12

Course readings include novels, plays, poems, short stories, and nonfiction of the late 19th and 20th centuries. Students are encouraged to appreciate literature through a variety of themes such as existentialism, institutions, and the common man as a tragic hero. Works may include: *Dracula, One Flew Over the Cuckoo’s Nest, One Day in the Life of Ivan Denisovich, The Alchemist, Slaughterhouse-Five, The Road, In Cold Blood,* and *Into the Wild.*

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Literature and the Individual

Grades 11-12

Classic and contemporary readings address the development of the individual within the context of race, gender, socio-economics, spirituality, adolescence, and personal tragedy. Works read may include: *Ordinary People, Annie John, Life of Pi, The Bell Jar, The Catcher in the Rye, Macbeth, Stitches, and Black Boy.*

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Literature About Society

Grades 11-12

Literature About Society employs novels, plays, poetry, essays, film, and music to explore key social issues that impact society, such as race, ethnicity, and gender; wealth and poverty; war and genocide; oppression and rebellion; the media and technology; science and medicine. Works read may include: *1984, The Kite Runner, Maus I, Maus II, Night, Animal Farm, Lord of the Flies, Julius Caesar, Brave New World, Fahrenheit 451,* and *Fences.*

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
**Honors Modern Fiction and Nonfiction**

Grades 11-12

Experiencing novels, plays, stories, and nonfiction from 1900 through the present day, students examine trends and themes of modern and contemporary thought: 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 Awakening*, *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:** An “A-” average in a CP English class.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

*Not open to students who have taken CP Modern Fiction and Nonfiction.*

**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*, *Jude the Obscure*, *Pygmalion*, *Look Back in Anger*, and *Rosencrantz and Guildenstern Are Dead*.

**Prerequisite:** An “A-” average in a CP English class.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

**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. We 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:** An “A-” average in a CP English class.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

**Senior English Seminar**

Grade 12

Effective writing is a skill that requires ongoing and extensive practice in both reading AND writing. This course proposes two interactive components: 1) guided, intensive narrative, expository, and persuasive writing with a focus on synthesis and the application of rhetorical strategies, and 2) focused reading based upon student choice. Reading will be required but the texts will vary depending on the interests of the students. The course will provide practice and instruction in the evaluation of texts, as well as the types of writing students will use both in college and the professional world.

**Prerequisite:** Three years of core English courses.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
**SUPA: Honors Writing Studio/Gender & Literary Texts**

This class is Syracuse’s Freshman English course, emphasizing 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 revisions 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 tests. 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:** An “A–” 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 7).

There is a financial obligation (please refer to page 8).

**AP English**

The course provides the high achieving senior with opportunities to do close reading of texts and to practice analytical, critical and creative writing. Students prepare for the spring AP Language and Composition test and the AP English Literature and Composition test by practicing with past Advanced Placement examination questions. Works read may include: *The Language of Composition*, *Teaching a Stone to Talk*, *A Moveable Feast*, *Jude the Obscure*, *King Lear*, and *Revolutionary Road*. Students are expected to take at least one, if not both, of the AP examinations in May.

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

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
English Electives

The following elective courses do not count toward the required 20 English credits for graduation, but may be applied to the Visual & Performing Arts requirements:

**Introduction to Theater and Acting**

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**

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; the development of modern theater and various movements in theater history. Throughout this process, we 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 we are studying. For each play we 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**

This is an advanced acting elective for juniors and seniors. 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:* A minimum grade of “A-” in Actors’ Workshop and a teachers recommendation; participation in at least two major school productions before enrolling in the course.

**Creative Writing I**

Creative Writing I introduces students to poetry, short stories, dramatic writing (monologues, scenes and one-act plays), and memoir. 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 7).*
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 asked to share their work with classmates in a workshop atmosphere, and to submit work to the school magazine. 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 7).

Creative Writing III  

Grade 12

This is an advanced creative writing elective for seniors. Students in the course will work in areas of their special interest, be it poetry, prose or scriptwriting. The offering of this class is contingent on sufficient enrollment.

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 7).

Journalism  

Grades 9-12

This elective provides a dynamic, hands-on introduction to all aspects of journalism. Students will learn the basic reporting skills of interviewing, researching, and writing on deadline, and will also be introduced to the design principles used in modern newspaper layouts. Students also learn about the history of journalism in the United States, as well as the legal and ethical issues involved in reporting the news. Finally, students in this course will become more aware of current events, and more skilled at evaluating the ways in which stories are developed and presented in print, broadcast, and electronic media.
SOCIAL STUDIES

World History

This survey of world history begins with the experience of China from pre-modern times to the present day. Subsequent units emphasize the modern history of the Middle East, India and Sub-Saharan Africa. The course concludes with a wide-ranging survey of European history including the Enlightenment and the French Revolution of 1789. Students evaluate the changing face of European society as industrialization and national rivalries shape the continent and the wider world through the age of imperialism.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

United States History I

Students begin the course with an assessment of the continental status quo in the decade prior to the start of the American Revolution. Emphasis is placed on a chronological approach detailing the development of the institutions of government, states’ rights, the concept of Manifest Destiny and the morality of slavery. The Civil War and Reconstruction units will be followed with a thematic strand tracing the struggle of African Americans to realize the promise of the 13th, 14th, and 15th Amendments through 1964 and passage of the Voting Rights Act. Students with a minimum grade of “A-” will qualify to sit for the AP Entrance examination in February.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Honors United States History I

This course is a more intensive study of U.S. History I. Students with a grade of “B-” or better will have the opportunity to sit for the AP entrance examination if they wish to take AP U.S. History in their junior year.

Prerequisites: Minimum grade of “A–” in World History or recommendation of current history teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

United States History II

The social movements of Populism and Progressivism serve as the starting points of this course. America’s development of an overseas empire, its post-World War I insularity and the collapse of the global economy frame the first half of the course. Substantial time is devoted to World War II and the new internationalist character of the American response to global challenges during the Cold War. The course concludes with the twin national traumas of Vietnam and Watergate and a summation of the 1970’s.

Prerequisite: U. S. History I.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Note: Students enrolled in this class will have the opportunity to earn college credit through Bergen Community College while simultaneously fulfilling their high school graduation requirements.

There is a financial obligation for those students who would like to earn college credit (please refer to page 8).
Honors United States History II

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.

Prerequisites: Minimum grade of “C-” in Honors U.S. History I and/or teacher recommendation. A minimum grade of “A-” in CP U.S. History I or recommendation of current history teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Note: Students enrolled in this class will have the opportunity to earn college credit through Bergen Community College while simultaneously fulfilling their high school graduation requirements.

There is a financial obligation for those students who would like to earn college credit (please refer to page 8).

AP United States History

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-” in CP U.S. History I or a “B-” in Honors U.S. History I, and teacher recommendation based on a student’s writing ability, which is a distinguishable element of performance for AP U.S. History.

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

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
Social Studies Electives

**Sociology**  
Grades 10-12

This course introduces students to the manner in which sociologists study society. Changing economic patterns, the advent of new technologies and the formation of defined social classes influence human behavior, and alter the interaction of social groups. Topics include marriage, education, deviant behavior, immigration, the teenage environment, urban life, crime, population trends, as well as career and personal choices.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 7).*

**Psychology**  
Grades 11-12

This course introduces students to the systematic and scientific study of behavior and mental processes. Students will increase their understanding of psychology, its methods, theory, and research. Primarily, the course explores the psychological facts, principles and phenomena associated with each of the major sub-fields of psychology (consciousness, learning, personality, cognition, etc.). Course work is centered on case readings, film analysis and application of concepts to current events.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 7).*

**AP Psychology**  
Grades 11-12

This 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-” in U.S. History. Candidates who do not meet these requirements must have a teacher recommendation.

A summer assignment is required.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 7).*

**AP European History**  
Grades 11-12

This 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” in Honors U.S. History, or a minimum grade of “A-” in U.S. History. Candidates who do not meet these requirements must have a teacher recommendation.

A summer assignment is required.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 7).*
Honors Model United Nations  Grades 11-12

The course examines international issues that have emerged in the past and/or are currently confronting the United Nations. Emphasis is given to study and mastery of international issues that have led to crisis and conflict in the world. Students demonstrate mastery of this material through competent presentation of issues by underlying model simulations of international diplomacy. Students are responsible for leading the Model Simulations program. This course develops students’ public speaking and problem-solving skills in both classroom and competitive settings. It is an excellent complement to student participation in the Model United Nations Club.

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

Note: If interested in attending, there are costs associated with several overnight field trips.

Honors American Studies  Grade 12

This comprehensive, inter-disciplinary course explores what it means to be an American. Students study the history and the literature of the United States, synthesizing both in order to determine what defines American culture. Teachers from the Social Studies and English departments address major themes, providing unique perspectives and valuable insights. Special emphasis is given to the literature, art, music and popular culture of the 20th century. America’s remarkable diversity, relationship to the rest of the world, and its role in globalization are also included in this study.

Prerequisites: During junior year, students should have a minimum grade of “B” in both Honors U.S. History II and an Honors English course or a minimum grade of “A-” in U.S. History II and an English course.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

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-” 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” in Honors U.S. History, or a minimum grade of “A-” in U.S. History. Candidates who do not meet these requirements must have a teacher recommendation.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

*Reminder: Sophomores are permitted only one AP level class.
AP World History

Students will develop a greater understanding of dynamics of continuity and change across historical periods included in the course. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. Five specific themes are addressed: interactions between humans and the environment; development and interaction of cultures; state-building, expansion and conflict; creation, interaction and expansion of economic systems; and the development and transformation of social structures. Emphasis is placed on preparing students to successfully take the AP examination in May.

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

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-” in U.S. History. Candidates who do not meet these requirements must have a teacher recommendation.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

*Reminder: Sophomores are permitted only one AP level class.
MATHMATICS

All Northern Highlands mathematics courses emphasize an analytical and comprehensive approach to learning. Students will use mathematical processes of problem solving, communications, connections, reasoning, representations and technology to solve problems and communicate mathematical ideas. All sequences provide rigorous and challenging studies in preparation for college entry. Incoming freshmen that are new registrants will be notified of a future date to take an Algebra Proficiency Examination to be considered for the Honors program or to assist with proper placement.

Typical Sequences

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<th>Grade 11</th>
<th>Grade 12</th>
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Departmental Notes

In sophomore year, students who have earned an A– or better in CP Algebra I and a teacher recommendation may double up in CP Geometry and CP or Honors Algebra II/Trigonometry so that they may take a Calculus course in junior 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.

Concepts of Algebra and Mathematical Patterns

This course is designed for students who need additional reinforcement in number sense, arithmetic skills, basic algebra, and patterns. Analytical thinking coupled with a thematic approach to problem solving is the main instructional strategy. The major focus is upon every day, real world applications and skills.

Concepts of Geometric and Mathematical Reasoning

This is the second year course that follows Concepts of Algebra I and Mathematical Patterns. The course focuses on basic geometric concepts, spatial sense, measurement and definitions, with a concentration on arithmetic and algebraic skills. Real world applications are the main instructional strategies and problem solving techniques.
Applied Mathematics  

Grades 11-12

This course, which is open only to students who need to fulfill their third year graduation requirement in mathematics, focuses on practical problem solving that is found in social, consumer and career aspects of daily living. Emphasis is given to arithmetic skills, geometry and basic algebra. College entry exam preparation is also incorporated.

Algebra I  

Grade 9,12

This course covers basic foundation skills in signed numbers, simplifying algebraic equations, solving equations, verbal problems, graphing linear equations, polynomials, factoring and simplifying rational algebraic expressions. A unit on statistics is also incorporated. It is designed for those students who need additional time to master the concepts and skills of algebra and basic arithmetic.

CP Algebra I  

Grade 9

This course covers a rigorous foundation in skills involving the real number system, signed numbers, simplifying algebraic equations, solving equations, verbal problems, graphing linear equations, polynomials, factoring, simplifying rational algebraic expressions and quadratic equations. This course bridges the gap between concrete ideas of arithmetic and abstract ideas for higher mathematics. A unit on probability and statistics is also incorporated.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Geometry  

Grade 10

The subject of this course is the development of Euclidean Geometry with an emphasis on reasoning skills. Topics include parallel lines, congruent triangles, quadrilaterals, inequalities, similar polygons, right triangles, circles, areas of plane figures and volumes of solids. Coordinate geometry, transformations, and constructions will be introduced.

Prerequisite: Algebra I or CP Algebra I.

CP Geometry  

Grades 9-10

The subject of this course is the development of Euclidean Geometry with an emphasis on 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. Coordinate geometry, transformations, and constructions will be introduced and infused throughout the curriculum, as well.

Prerequisites: CP Algebra I or 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 CP Geometry and CP or Honors Algebra II/Trigonometry: Minimum grade of “A-” or better in CP Algebra I and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
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-” in CP Algebra I and 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 7).

Algebra II  
Grades 11-12

This course covers the basic elements of a second year algebra course. Topics include: equations, graphs, functions, inequalities, systems, rational expressions, and an introduction to complex numbers.

**Prerequisites:** Algebra I and Geometry.

CP Algebra II/Trigonometry  
Grades 10-11

This course includes an in-depth study of real numbers, an introduction to functions, polynomial functions, parabolas, rational expressions, irrational and complex numbers, and probability and statistics. Trigonometry of the right and non-right triangle is studied.

**Prerequisite:** CP Algebra I and CP Geometry.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Honors Algebra II/Trigonometry  
Grades 10-11

The topics are similar to those in CP Algebra II/Trigonometry, but follow a more in-depth approach. Additional topics are trigonometric functions, analytical trigonometry, exponential and logarithmic functions. Proofs and derivations of formulas will be incorporated when warranted. Students who intend to take AP Calculus should enroll in this course.

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

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

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Advanced Algebra/Trigonometry  
Grade 12

Designed for those students who completed Algebra II as juniors, this course continues the study of functions and covers trigonometry and probability, college algebra, and pre-college mathematics topics.

**Prerequisite:** Algebra II.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Not open to students who completed CP Algebra II/Trigonometry.
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: linear, quadratic, polynomial, rational, exponential, logarithmic and trigonometric. Conics will also be explored.

**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 7).

Pre-Calculus  
Grades 11-12

This course includes an in-depth study of functions, logarithms, analytical geometry, conic sections, polar graphing, rational functions and graphical limits. Students are introduced to the elementary concepts of calculus.

**Prerequisites:** CP Algebra II/Trigonometry and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Honors Pre-Calculus  
Grades 10-12

This accelerated course is primarily open to juniors who plan to enroll in AP Calculus as seniors. Emphasis is on problem solving strategies and techniques of proof, as well as enriching algebraic skills. In addition to the rigorous study of functions and conic sections, students will investigate polar graphing, sequences and series, probability and statistics, inverse trigonometric functions, exponential and logarithmic functions, and trigonometric identity proofs.

**Prerequisite:** Minimum grade of “B-” in Honors Algebra II/Trigonometry.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Not open to students who have taken Pre-Calculus.

Honors Calculus  
Grades 11-12

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-” in Pre-Calculus.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

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, anticipating patterns, 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 and problem solving are emphasized throughout the year. This is a practical and helpful course for many careers.

**Prerequisite:** Successful completion of CP Geometry and CP Algebra II/Trigonometry.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
AP Statistics

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” (as a final grade) in Honors Geometry and teacher recommendation.

Prerequisites for juniors and seniors: Honors Algebra II/Trigonometry or minimum grade of “A-” in CP Algebra II/Trigonometry and teacher recommendation.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

*Reminder: Sophomores are permitted only one AP level class.

AP Calculus (AB)

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 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” in Honors Pre-Calculus and teacher recommendation.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

AP Calculus (BC)

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-” in Honors Pre-Calculus and teacher recommendation.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
Multivariable Calculus

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:** Teacher recommendation and a 3 or higher on the AP Calculus BC exam. This will be confirmed over the summer.

**Note:** Students taking this course can earn college credit (please refer to page 8). There is a financial obligation to earn college credits.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
## SCIENCE

### Typical Physics First Sequences

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* no additional lab time required.

**Departmental Notes**

1. Physics, Chemistry, and Biology courses must be taken in sequential order.
2. Students may transfer to a higher level provided grades are appropriate and a teacher recommendation is provided.
3. No electives may be substituted for core requirements unless approved by the principal.
4. Classes assigned a lab will have that period removed from physical education; however, if a student has a study hall, lab will come out of study rather than physical education class.
5. Students wishing to double up in a lab science must take a study hall to accommodate labs.
6. 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.

Students may choose to opt-out of dissection on the following life science courses: Biology, CP Biology, Honors Biology, Honors Anatomy & Physiology, AP Biology, Sports Medicine and Anatomy. Consult the Student/Parent Handbook and/or the instructor’s Schoolwires homepage for details concerning the opt-out process.
Physics/Lab  
Grade 9

The course introduces students to the study of basic physics and the conceptual understanding of physical interactions. The major topics include kinematics, mechanics, impulse, momentum, energy, thermodynamics, waves, light, optics, sound electricity, magnetism, and astronomy.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

No additional scheduled lab time required.

CP Physics/Lab  
Grade 9

The course introduces students to the study of physics conceptually by studying physical phenomena, and by requiring them to describe those phenomena computationally and graphically, both in the classroom and the laboratory. The major topics include kinematics, mechanics, impulse, momentum, energy, thermodynamics, waves, light, optics, sound, electricity, and magnetism.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Honors Physics/Lab  
Grade 9

The course introduces students to the study of physics conceptually by studying physical phenomena, and by requiring them to describe rigorously those phenomena computationally and graphically, both in the classroom and the laboratory. The major topics include kinematics, mechanics, impulse, momentum, energy, thermodynamics, waves, light optics, sound, electricity and magnetism.

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

Co-requisite: Honors Geometry.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

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. On average, the student is expected to spend one hour on homework problems each night, with additional time spent reviewing the chapter in the book and examining homework solutions from the previous night’s work. 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 9 for additional information).

Prerequisite for sophomores, juniors, and seniors: Teacher recommendation, successful completion of science courses, and a minimum grade of “B” in Algebra II/Trigonometry or concurrently enrolled in Algebra II/Trigonometry.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
AP Physics-C/Lab

AP Physics-C is designed to prepare the qualified physics student to take the Advanced Placement Physics-C test in Mechanics and Electricity/Magnetism. This course requires the use of Calculus in the solution of problems in the following areas: motion in two dimensions, work, energy, momentum, rotation, oscillatory motion, universal gravitation, 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 AB; AP Calculus BC) is required.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Chemistry/Lab

The context provides for a real world foundation of chemistry concepts. Students are engaged in activities that explore matter, how atoms combine to form new materials, and why different types of matter behave in certain ways. Critical thinking and problem solving skills are developed in classroom and lab activities. Students use technology for data collections and analysis, to develop presentations that accurately express their ideas, and for modeling.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

No additional scheduled lab time required.

CP Chemistry/Lab

Students in this course will learn the thinking skills and chemical principles that are necessary for success in an introductory college general chemistry course. Topics of study include atomic structure, chemical bonding, chemical reactions, gas laws, acids and bases, and stoichiometry. Strong analytical and algebra skills are necessary for success at this level. Students will leave this course with the ability to solve problems using factor-label method, significant figures, and algebraic manipulation of symbolic equations. The course combines lecture, self-study, traditional laboratory exercises, and experimental design to enhance understanding of the big ideas in chemistry.

Prerequisites: Successful completion of CP physics and CP Math or a minimum grade of “A-“ in Physics with teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Honors Chemistry/Lab

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. The emphasis is on quantitative, analytical, and problem solving skills. Topics include modern atomic theory, periodic properties and laws, bonding and molecular dynamics, stoichiometric relationships, gas laws, thermodynamics, acid-base reactions, kinetics, electrochemistry, nuclear chemistry, and equilibrium.

Prerequisites: Minimum grade of “C-“ in Honors Physics and Honors Geometry and teacher recommendation or a minimum grade of “A-“ in CP Physics and minimum grade of “A-“ in CP Geometry and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
AP Chemistry/Lab

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” in Honors Chemistry, minimum grade of “B” in either Honors Algebra II/Trigonometry or Honors Pre-Calculus and teacher recommendation.

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

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Biology/Lab

In this introductory course, students will utilize the scientific method of investigation, observation, and inquiry to gain knowledge about all living parts of earth. Particular emphasis will be placed on cellular structure, life processes (including respiration and photosynthesis), cellular transport (diffusion and osmosis) and cell reproduction. Special topics in the study of DNA and genetics will also be covered. Laboratory investigations and the use of Internet resources are an integral part of this hands-on course, helping students to further develop their critical thinking and scientific inquiry skills. Students will demonstrate appropriate proficiency in the biological sciences to successfully complete the End of Course State Biology Examination. Based on New Jersey Department of Education requirements, students must take the New Jersey Biology Competency Test (NJBCT) at the conclusion of this course.

Prerequisite: Successful completion of Chemistry and/or teacher recommendation.

No additional scheduled lab time required.

CP Biology/Lab

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. Students will develop appropriate proficiency to pass the New Jersey Biology Competency Test (NJBCT), which is required by the New Jersey Department of Education.

Prerequisites: Successful completion of CP Chemistry and CP Math, or an “A-” in Chemistry with teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
Honors Biology/Lab

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. Students will develop appropriate proficiency to pass the New Jersey Biology Competency Test (NJBCT), which is required by the New Jersey Department of Education.

Prerequisite: Minimum grade of “C-” in Honors Chemistry and teacher recommendation or a strong background in chemistry indicated by a minimum grade of ‘A-” in CP Chemistry and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

AP Biology/Lab

The AP biology course is designed to be the equivalent of a college level introductory biology course. The intent of this course is to expose students to higher level biological principles, concepts, and skills and allow them the opportunity to apply their knowledge to real life applications. The core concepts of AP Biology are organized around biological principles called big ideas that permeate the entire course and focus on the following topics: Big Idea 1: The process of evolution drives diversity and unity of life. Big Idea 2: Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis. Big Idea 3: Living systems store, retrieve, transmit and respond to information essential to life processes. Big idea 4: Biological systems interact, and these systems and their interactions possess complex properties. In class, students are given opportunities to learn and apply their knowledge through the process of inquiry rather than learning solely from lectures and/or prescribed lab protocols. AP Biology is a challenging course that requires a strong Biology I and Chemistry background, as well as a considerable daily time commitment in order to be successful. 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” in both courses. Teacher recommendation is required.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
Science Electives

**Rutgers School of Health Related Professions:**

**Honors Anatomy & Physiology I & II/Lab**

This Rutgers course is the study of the structure and function of the human body. Students who successfully complete the course will earn eight college credits from Rutgers and five credits on Northern Highlands’ transcript. Taking this course for college credit is optional and not a requirement to enroll. Rutgers does not charge tuition. 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-” in CP Biology or “B” in Honors Biology. In order to receive credit through Rutgers for this course, completion of Dynamics of Health Care is necessary.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

**Note:** Students taking this course can earn college credit (please refer to page 8).

**Syracuse University Project Advance (SUPA):**

**SUPA: Honors Forensic Science**

This SUPA course provides the synthesis of all required courses in the Physics First Curriculum. Chemistry 113/Forensics Science at Syracuse University is intended to provide an introduction to understanding the science behind crime detection. Scientific method, specifically relevant to crime detection and analysis, will be presented with emphasis on techniques used to evaluate physical evidence. Topics include blood analysis, organic and inorganic evidence analysis, microscopic investigations, hair analysis, DNA, drug chemistry and toxicology, fiber comparisons, paints, glass compositions and fragmentation, fingerprints, soil comparisons, and arson investigations, among others. Laboratory exercises will include techniques commonly employed in forensic investigations. Students must first follow the Physics First Curriculum: Physics, Chemistry, and Biology.

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

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

**No additional scheduled lab time required.**

**Note:** There is a financial obligation (please refer to page 8).

**Sports Medicine**

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, kinesiology, athletic injury evaluation, rehabilitation of athletic injuries, and pharmacology. The human skeletal, muscular, and nervous systems are covered in great detail. 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:** Minimum grade of “C” in CP Chemistry and CP Biology, or a minimum grade of “B” in Chemistry and Biology, and teacher recommendation.

**No additional schedule lab time required.**
Environmental Science  

Every day our environment changes. What is our role in this change? What can we do to effect positive change? This course takes an interdisciplinary approach to introducing students to the science that runs our planet. Students will learn how to identify and analyze environmental problems, evaluate risks associated with these issues, and examine alternative solutions. Students complete field investigations about the ecosystem that is our school campus and how the school fits into the greater environment.

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

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

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

AP Environmental Science  

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” in Honors Chemistry and Honors Biology and a minimum grade of “A-” in CP Chemistry and CP Biology, or written recommendation from two science teachers.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Forensics  

This course studies the science behind how forensic scientists are used to solve crimes. Unlike the SUPA Forensics course, it does not carry college credits. 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 unpleasant.

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

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

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

Ocean and Space  

This year long course will be separated into two semesters. Astronomy will investigate the history of modern astronomy, discussing astronomy related technologies of ancient civilizations and progressing to modern astronomical observatories and telescopes. The basic scientific principles and theories behind the following topics will be discussed: astronomical instrumentation; fundamental theories of cosmology; the lifecycle of stars; constellations; and lunar and planetary sciences. This course is open to all students interested in further exploring astronomy. Marine Biology and Oceanography will introduce students to both the physical dynamics of the ocean ecosystem and the interdependencies between the ecosystem and the biota that exists within its confines. 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.

No additional schedule lab time required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
WORLD LANGUAGES

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*Syracuse University Project Advance (SUPA)

Departmental Notes

- There is a two year World Languages graduation requirement, preferably in the same language.
- Students must have three or four years of a CP or Honors level language in order to be adequately prepared for the SAT Subject Test.
- See page 8 for specific information on Syracuse University reduced tuition for the four credit SUPA classes.
- Northern Highlands is committed to providing four years of language study for our students. However, please bear in mind that in the eventuality of low enrollment at upper levels of language study, this commitment may be met via virtual high school classes.

Exploring Languages and Cultures

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.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
Latin

Latin I

Grades 9-12
Students are given the opportunity to develop a firm foundation for language study in general (including English). Emphasis is placed on the study of derivatives to increase English vocabulary and study skills. Selected readings are on Roman culture and customs, including mythological and historical figures.

Prerequisite: Students who have studied another world language should have earned a minimum grade of “C.”

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Honors Latin II

Grades 10-12
Introducing more complex grammatical structures, this course is a continuation of basic Latin grammar. The study of Roman customs and religion focuses on Roman family, daily life, forms of entertainment, and history. Additional emphasis is placed on the study of derivatives, Latin prefixes, and Latin words used in English in an effort to increase the student’s ability to decipher unfamiliar English vocabulary words.

Prerequisite: Recommendation of Latin I teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Honors Latin III

Grades 11-12
This course is a continuation of Latin grammar, concentrating on more complex grammatical structures and an introduction to rhetorical figures of speech in preparation for reading selected works of several prose authors of the Golden and Silver Ages of Latin Literature. Students will focus on the works of Roman historians while reading, translating and comparing the writing styles of authors such as Caesar, Cicero, Pliny the Younger, and Livy.

Prerequisite: Recommendation of Latin II teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Honors Latin IV

Grade 12
This course provides a general grammar review focusing on subjunctive mood, infinitives and participles as used by specific authors. Study includes: literary styles and figures of speech common to Latin oratory; history; letter writing; and works of Caesar, Cicero, Pliny, and Livy. Students are also introduced to poetry and versification with particular attention to the works of Ovid.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
French

French I

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 CP French II.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

CP French II

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 7).

French II Enriched

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 in French.

Prerequisite: Teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

CP French III

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 CP French II teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Honors French III

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 French II E teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
CP French IV  
Grades 11-12

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 CP French III teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Honors French IV  Grade 11

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 teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

CP French V  Grade 12

This course is a continuation of the main elements of CP 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 CP French IV teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Syracuse University Project Advance (SUPA):

SUPA: Honors French V  Grade 12

This course, entitled French 201 Intermediate French at Syracuse University, focuses on systematic development of advanced level skills. Activities involve the use of film and video to develop note-taking skills; oral skills are honed in extended discourse, paragraph length accounts, role playing and interviews. Activities focus on understanding the facts and details of narration and description. Production of texts such as letters, journals, summaries and reports will be systematically developed.

Prerequisite: Three years of Honors French or an “A-” average in CP French IV, plus teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Note: There is a financial obligation (please refer to page 8).
AP French Language

Grade 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.

Prerequisite: Recommendation of Honors French IV teacher.

A summer assignment is required.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

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 CP Spanish II.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

CP 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 7).

Spanish II Enriched

Grade 9

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: Teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

CP 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 CP Spanish II teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).
Honors Spanish III

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 Spanish IIE teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

CP Spanish IV

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 CP Spanish III teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Honors Spanish IV

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 teacher.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

CP Spanish V

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 CP Spanish IV teacher.

Syracuse University Project Advance (SUPA):

SUPA: Honors Spanish V

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 an “A-” average in CP Spanish IV, and teacher recommendation.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

Note: There is a financial obligation (please refer to page 8).
**AP Spanish Language**

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.

*Prerequisite:* Recommendation of Honors Spanish IV teachers.

*A summer assignment is required.*

*Approved for NCAA DI and DII athletic eligibility (please refer to page 7).*

**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 7).*

**CP 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 7).*

**CP Italian II Enriched**

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 in Italian.

*Prerequisite:* Teacher recommendation for ninth graders or a course grade of “A” in Italian I along with teacher recommendation.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 7).*

**CP Italian III**

Grades 11-12

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 CP Italian II teacher.

*Approved for NCAA DI and DII athletic eligibility (please refer to page 7).*
**Honors Italian III**

Grades 11-12

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 CP Italian II teacher.

*Note:* In case of low enrollment, this Honors Italian III class may not be offered. Those students wishing to continue their four year sequence of Italian will continue in CP Italian III or Honors Italian IV.

**Honors Italian IV**

Grade 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 CP Italian III or Honors Italian III teacher.

**Syracuse University Project Advance (SUPA):**

**SUPA: Honors Italian V**

Grade 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.

**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 7).*
Honors Chinese II

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 7).

Honors Chinese III

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 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 7).

Honors Chinese IV

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 7).
Business Education

Introduction to Business Grades 9-12

This course examines business concepts including diverse economic systems, today's market, the government's role in business, and decision-making skills. Other topics include the stock market, entrepreneurship, planning a budget, making investments, and planning a career in today's global economy. This course fulfills the financial literacy requirement.

*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 you to learn about the critical aspects of personal financial decision-making. You 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.

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

*Not open to students who have taken Financial Management.*

Marketing: 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 become consumers as a result of better understanding of 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.

FDU: Honors Advertising and Branding Grades 11-12

This second level marketing course will allow students to combine their creative and analytical skills to explore all aspects of advertising and branding. 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*: Teacher recommendation and a minimum grade of “B” in Marketing: Promotion and Selling.
Honors Business Seminar

This collaborative 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: Minimum grade of “B” in one of the following courses: Marketing II: Advertising and Branding, Honors Management, Entrepreneurship, AP Economics or Teacher Recommendation.

Honors Management

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” in any business education course.

Entrepreneurship

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 you are not afraid to take risks, seek more independence, and have a high desire for achievement, then you will want to take this course to understand why entrepreneurs are willing to take the risk of starting new businesses.

Prerequisite: Successful completion of any business education course.

AP Computer Programming

This course is designed for students who seek a challenge beyond Computer Science and Programming. The course focuses on comprehensive program development and implementation, using JAVA programming language. Case studies and activities are used to analyze the logic behind effective data structure development using object-oriented techniques. Debugging techniques 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.

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

Prerequisites for juniors and seniors: Minimum grade of “B” in Honors Computer Programming, including JAVA, and Honors Algebra II/Trigonometry or CP Algebra II/Trigonometry, or demonstrated proficiency in computer science by meeting with the computer science teacher and passing a proficiency examination.

A summer assignment is required for all grades.

*Reminder: Sophomores are permitted one AP level class.
In this university level macroeconomics course, students study the U. S. economy as a system for dealing with the problem of scarcity. Students develop analytical skills and evaluate the relationships among such variables as national output, income, employment, inflation, and the quantity of money. Heavy emphasis is placed on Fiscal and Monetary Policy, the Federal Reserve Bank, interest rates, as well as international economies, and the roles these topics play in our current economic system. Strong analytical skills are highly necessary. Students are expected to take the AP examination in May.

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

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

A summer assignment is required for all grades.

Approved for NCAA DI and DII athletic eligibility (please refer to page 7).

*Reminder: Sophomores are permitted only one AP level class.
Contemporary Business Technology

This course focuses on developing 21st century technology skills. In a global economy driven by information and innovation, students must know both leading/emerging technology tools, as well as workplace readiness skills to excel and compete effectively. The course focuses on all aspects of information literacy, including data sourcing, analysis, collaboration, and presentation. Students will utilize industry standard software programs such as Microsoft Office as well as leading edge emerging technology applications. The course is designed to provide students with the technology readiness skills to succeed in both school and the workplace. All entering freshmen must take this semester course with Freshman Rhetoric.

Financial Management

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.

Recommended Prerequisite for Freshmen: Successful completion of Algebra I.

Not open to students who have taken Personal Finance and Investment.

Accounting

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 want 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 electronic software is used.

Introduction to Computer Programming (Fall)

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.

Honors Computer Programming including JAVA (Spring)

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 Ruby 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 Programming course).

Prerequisites: Introduction to Computer Programming.
Applied Technology

Computer-Aided Drafting and Design I  
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 to learn how to use Computer-Aided Drafting (CAD), and a variety of mechanical devices, including gears and pulleys.

Note: Students enrolled in this class will have the opportunity to earn college credit through Bergen Community College (BCC) while simultaneously fulfilling their high school graduation requirements.

There is a financial obligation for those students who would like to earn college credit (please refer to page 8).

Computer-Aided Drafting and Design II  
Grades 10-12

The drawings produced are related to manufacturing processes, mechanical devices, automotive aerodynamics of dragstes, and ergonomic engineering. Students learn Computer-Aided Drafting (CAD) extensively and the Technology Education Problem-Solving Design Loop on projects. They also study robotics in greater depth with the direct aid of Lego Mindstorms.

Prerequisite: Must attain a grade of “B-” or better in Computer-Aided Drafting and Design I or Real World Engineering and teacher recommendation.

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: Must attain a 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 CP or Honors Geometry, and teacher recommendation.

Honors Engineering Design*  
Grades 11-12

(Not offered in 2015-2016)

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, pneumatics, robotics 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: Must attain a grade of “B” or better in Computer-Aided Drafting and Design II, have attained a grade of “C+” or better in Algebra II/Trigonometry, CP or Honors Physics, and teacher recommendation.

*Honors Architectural Design and Honors Engineering Design are offered in alternate years.
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: Must attain 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.

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. 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. All students must pass safety quizzes in order to use machinery and mandatorily practice wood lab safety daily to remain in the course. Students will not be able to take Woodworking again; they will move onto Project Woodworking or Furniture Design.

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 his/her 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 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 ever growing field of robotics with the ultimate goal of building a mobile robot. Students will learn and apply skills from the following areas: Computer-Aided Design (CAD), programming, and mechanisms. CAD allows students to model their robots, giving them a visual representation and a plan to build them. Programming provides the language that creates a robot’s brain and allows it to interact with its environment. Mechanisms will enable students’ robots to make simple motions, as well as perform more complicated tasks such as grabbing or picking up objects. Students will also apply their knowledge of ninth grade Physics and Geometry as they design, construct and analyze their robot. The culminating project will be based on previous FIRST Robotics competitions. Students are also strongly encouraged to participate in the Robotics Club.

Prerequisites: A grade of “B” or better in CP Math and Science. A grade of “C” or better in Honors Math and Science or Teacher Recommendation.
Television Production Electives

**TV Production**

Grades 9-12

This course provides insight and hands-on experience in the production of in-studio and Electronic Field Production (EFP) for television. Through lectures, demonstrations, and applications, students learn the three elements of TV production: pre-production, production, and post-production, including digital editing with state-of-the-art equipment. The first half of the course is studio-based, while the second half of the course concentrates on remote production and editing.

**Broadcast Television**

Grades 10-12

This in-depth course is for students who enjoyed TV Production and who wish to continue studying this creative medium. Class time is devoted to editing raw footage into "packages" for the Morning News. Additionally, students will write, produce, direct crew, and act as on-air talent for the morning broadcasts. Students will be assigned to shoot various events throughout the year as part of their homework grade. The art of on-camera delivery and also sports play-by-play will be learned.

*Prerequisite:* A minimum grade of “B+” in TV Production and teacher recommendation.

**Video Storytelling**

Grades 10-12

This in-depth course is for students who enjoyed TV Production and who wish to continue studying media arts. This course will explore the student’s ability to tell stories using interactive methods and digital delivery systems. In this production course, students explore recent developments in interactive digital narratives, performances, documentaries, silent movies, short films, and experimental programs. A variety of projects challenge students to think of creative and exploratory ways to use the media of television and webcasting. Some of the students’ productions may air throughout the school on the morning programs.

*Prerequisite:* A minimum grade of “B+” in TV Production and teacher recommendation.

**Film Studies**

Grades 10-12

This class studies film as an art form. Topics include: terminology, film technique, editing, screenwriting, the classic Western, women in film, Hitchcock, film noir, and contemporary movie making, among others. Films are studied as texts to be analyzed and critiqued. At the end of the course, students create their own scenes in different genres.

**Advanced Film Production**

Grade 12

This course gives advanced production students an opportunity to explore a particular aspect of the field in greater depth. Emphasis on visual storytelling, character development and dramatic structure will be explored. Students will develop a treatment, a proposal, storyboards, and a full-script and/or screenplay. Students will host previews of their work throughout the process and receive audience feedback.

*Prerequisite:* A minimum grade of “A-” in Broadcast Television or Video Storytelling and teacher recommendation.
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.

Introduction to Fashion and Textiles Grades 9-12
This is an entry level class exposing students to a wide range of career and creative possibilities in the world of fashion and textiles. Areas of study may include, but are not limited to: fashion psychology, history, textile applications, color theory, illustration, sewing and knitting, styling, current events, wardrobe planning and career exploration. This class is primarily project based with a strong focus on application of industry terms and techniques.

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 PowerPoint 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 foods of Regional America. Units include pastry, cake decorating, specialty desserts and recipes from across the United States. 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 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.
FDU: Honors Tomorrow’s Teachers

This Fairleigh Dickinson University course is designed to meet the needs of students planning to pursue a career as a teacher. Students who successfully complete the course will earn four college credits from Fairleigh Dickinson and five credits on Northern Highlands’ transcript.

This class will address professional and personal development, professional practice, and academic growth in the following areas: human relations in the school and community, education in American society, and organizational process and behavior within the context of the school and community.

There is a financial obligation and the transportation for field experience is the responsibility of the student (please refer to page 8).
VISUAL AND PERFORMING ARTS

Art

Art Experiences Grades 9-12

Art Experiences introduces students of all levels to the world of art and design. As 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, and sculpture. Student artists will begin to develop a vocabulary in composition and various mediums 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 styles. Students will have the opportunity to expand upon their skills and develop a proficiency in the use of clay.

Photography I Grades 9-12

While learning the fundamentals of black and white photography, students will photograph assignments both in class and outside of class. Students will learn the traditional methods of film processing and darkroom techniques to produce museum quality black and white negatives and prints. Application of composition using the elements and principles of design will be emphasized in each project. Students will begin to use photography as a form 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 thirty-five millimeter (35mm) camera is required.
Digital Arts

Digital Arts incorporates both digital photography and graphic design into two unique semesters. During the first semester, students will learn the basic foundations of digital camera use as well as the guidelines for good composition, lighting, and depth. They will also learn advanced Adobe Photoshop techniques such as how to edit, crop, enhance, layer multiple images, distort images, use filters effectively, and create digital photo-collage. Students will employ a visual language relating to composition and aesthetics through the process of critique. The second semester will focus on graphic design — its history, typography, and composition using current industry standards. Students will create designs by integrating their own digital images with type through the use of Adobe Illustrator, along with learning advanced techniques such as masking, drawing paths, creating patterns and repeats, and producing production-ready artwork. This class will explore graphic design and visual communication as it relates to various career fields, and how it influences our daily lives now more than ever before. The culmination of this course will be a cohesive digital portfolio focusing on self-promotion that showcases a student’s best work. (A digital camera is required for class).

Graphic Design

Graphic design is a creative process that combines art and technology to communicate ideas. This class allows students to further their understanding of graphic design and improve their abilities in photography, typography, layout and design as well as reinforce image composition and techniques learned in Digital Arts. This class will further explore the use of digital images, typography and design layout to produce professional graphic designs, with focus on print-driven media. Students will also learn advanced methods of professional digital photography, including studio lighting and product shots, as they photograph actual samples of their mock-up designs. Projects will center on real-world application of skills in order to creatively solve problems that exist in the design industry today, across various career fields. This course covers advanced study in creative visual design, communication and production processes, including editorial design, advertising campaigns, corporate identity and branding, fashion design, promotional items, and packaging design. The culmination of this course will be a cohesive graphic design portfolio that showcases a student’s best work.

Prerequisite: Digital Arts.

Honors Drawing and Painting

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 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

This is an intensive course for students with one year previous coursework in black and white 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. They learn to select print papers, film, and processes that enhance image quality. 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 ones area of interest. Emphasis is given to conceptual and technical development throughout the year. Students will also prepare work for an art show in the spring, an artist’s statement, and final portfolio.

Prerequisites: Photography I, portfolio review, and teacher recommendation.
AP Art History

Students learn about Western Art History and other forms from different cultures. The class chronologically covers topics ranging from ancient cave art to the art of Egypt, Greece, Rome and the 20th century. This course is designed to be a college level art history course where students can do independent research. Students who take this course are expected to take the AP examination in May.


Prerequisite: A minimum grade of “B” in honors level history and English courses.

A summer assignment is required.

*Reminder: Sophomores are permitted only one AP level class.

AP Studio Art: Drawing and Painting

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 24 pieces of 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. During this time, students design twelve original pieces for the concentration section of their required portfolio. 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 is required.

AP Studio Art: 2 D Design (Photography)

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 that consists of 29 pieces of artwork to be submitted to the College Board. During the first half of the year, students work on projects that use various methods and topics that explore the medium of photography. During the second half of the year, students 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 is required.

Art Semester Course

Jewelry Design

Student artists have the unique opportunity to explore their creativity through the art of jewelry design. This course begins with an introduction to the principles of basic jewelry construction. Students transform a variety of traditional and non-traditional art media to create several individual pieces. Students implement expressive media such as metal, wire, stones, and beads while learning to design bracelets, necklaces, anklets, and earrings.

Note: Students who need to meet their financial literacy requirements can enroll in Jewelry Design as part of their semester sequence with Financial Management.
Music

Chorus  Grades 9-12
Serving a dual purpose, 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.

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. 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 a must.

Wind Ensemble  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.

Concert Choir/Wind Ensemble  Grades 10-12
Students receive equal time in vocal and instrumental music each week.

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.

**Prerequisite:** Approval of the instructor.

**Minimum Requirements for Honors Music Theory:** Students must be able to read notes, either the treble or the bass clef. Those who cannot do so will be given preparatory note reading exercises, which may be completed over the summer. It is not necessary that a student play an instrument; one may be a singer (in chorus or not), or an instrumentalist (in band or not).

**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 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.

**Prerequisites:** Honors Music Theory and the approval of the instructor.

Music Semester Course

The Evolution of Popular Music  Grades 10-12
Students will examine the evolution of the principal forms of popular music since the late 19th century, such as jazz, the development of rock and roll, and film music studies, as well as current trends in music. This course addresses concepts and skills that are of great potential benefit to all levels of music students.

**Note:** Students who need to meet their financial literacy requirements can enroll in The Evolution of Popular Music as part of their semester sequence with Financial management.
**HEALTH AND WELLNESS**

**Introduction:**

Physical Education is required each year that a student is enrolled in high school. At Northern Highlands, Health and Driver Education components are included in the Physical Education program. All students will have Health and Physical Education each year. Students who are medically excused from Physical Education are required to complete alternative assignments. (See below for specifics.)

<table>
<thead>
<tr>
<th>Grade 9</th>
<th>Physical Education/Family Living I</th>
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<tbody>
<tr>
<td>Grade 10</td>
<td>Physical Education/Driver Education</td>
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<td>Grade 11</td>
<td>Physical Education/First Aid and Nutrition</td>
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<td>Grade 12</td>
<td>Physical Education/Sexuality and Parenting</td>
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**Physical Education**

Grades 9-12

Physical 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 self-defense, 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. Students are given the Presidential Physical Fitness Test in ninth grade.

**It should be noted:** Students who have a study will have their science lab during their study hall.

**Basis for Grading**

- Preparation 25%
- Participation/cardio 65%
- Knowledge/sportsmanship 10%

As a part of our cardio component, students are required to run a minimum of two days per week for 10-15 minutes at the beginning of class. The cardio component counts toward the student’s overall grade.

**Project Adventure**

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

**Medical Excuses for Physical Education**

Students who are medically excused by a doctor from Physical Education must complete an alternate assignment during their Physical Education period to receive credit for the time that they are out of class to earn graduation credit.

Students will be assigned a series of assignments to complete weekly, for a medical excuse of five weeks or less. Students excused for a period longer than six weeks will be given a long term project for each marking period. Students will be given a topic and due date and be asked to visit Schoolwires/Phys Ed/Medical Absences for specific directions.

We offer a modified Physical Education program for students currently in rehabilitation for an injury. Working with the student’s doctor or our school trainer, we will develop a program that will help the student with rehabilitation, and at the same time allow him/her to meet requirements for passing Physical Education.
Health (Grades 9-12)

Health instruction is offered each school year, except during sophomore year when students are enrolled in Driver Education. Students are automatically reassigned from their physical education classes. To graduate, a student must pass health. The grade for health is separate from the physical education grade.

Freshmen (1.25 credits) 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) (1.25 credits) Grade 10

Driver Education (Safety 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, we will be discussing organ donation 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. Students who take a make-up test (permitted one time only), which results in their receiving yet another score below 80 on the Driver Education state examination, will be required to contact the New Jersey Motor Vehicle Commission to take the test on their own. In effect, one can pass the class and not the state test. Similarly, one can pass the state test and not qualify for the lower insurance premium.

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. This card 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.

Juniors (1.25 credits) Grade 11

The eleventh 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 also track daily food intake and identify calories, fat, and carbohydrates, along with portion control.

Seniors (1.25 credits) Grade 12

The twelfth grade curriculum will focus on sexuality, pregnancy, pre-natal care, and raising an infant during the first year of life. The Baby-Think-It-Over will be used in this course as well as an Empathy Belly to help students develop a better understanding of getting pregnant and raising infants. Social, educational, financial, and family issues are woven into this curriculum.
Health Education Semester Course(s)

**Rutgers School of Health Related Professions:**

**Honors Dynamics of Health Care**

Grades 10-12

This Rutgers School of Health Related Professions course provides an orientation to health care services and their delivery. Students who successfully complete the course will earn three college credits from Rutgers and 2.5 credits on 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:** Students who need to meet their financial literacy requirement can enroll in Dynamics of Health Care as part of their semester sequence with Financial Management. Please refer to page 3 for additional information.

**Rutgers School of Health Related Professions:**

**Honors Emergency and Clinical Care**

Grades 11-12

Emergency and Clinical Care is a course that deals with emergencies before medical help arrives. The course is designed to give the student the knowledge of how to recognize and respond to an emergency. The intent of the course is to help the student feel more confident in his/her ability to act appropriately in the event of an emergency. Students will be prepared to:

1) Obtain a patient medical history.
2) Take and record vital signs relative to medical/dental treatment.
3) Acquire cardiopulmonary resuscitation American Red Cross certification.

**Prerequisite:** Dynamics of Health Care

**Note:** Students who enroll and complete Emergency and Clinical Care will be exempt from Junior Health and remain in Physical Education.

**Rutgers School of Health Related Professions:**

**Honors Medical Terminology**

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:** Successful completion of Dynamics of Health Care. This course may be taken concurrently with any level Biology course in grade 11.

**No additional scheduled lab time required.**
## Northern Highlands Regional High School — 4 Year Worksheet

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<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

### NHRHS Graduation Requirements 125 Credits

<table>
<thead>
<tr>
<th>Years Required</th>
<th>NHRHS Graduation Requirements</th>
<th>Minimum Years for College Entrance</th>
<th>Recommended Years for College Entrance</th>
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</thead>
<tbody>
<tr>
<td>4</td>
<td>English</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Social Science, including World History, US I, US II</td>
<td>3</td>
<td>4</td>
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<tr>
<td>3</td>
<td>Mathematics</td>
<td>3</td>
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<tr>
<td>3</td>
<td>Science with a lab (Physics, Chemistry, Biology)</td>
<td>3 Lab</td>
<td>3-4</td>
</tr>
<tr>
<td>2</td>
<td>World Language</td>
<td>2</td>
<td>3-4</td>
</tr>
<tr>
<td>1</td>
<td>One Semester Each: Freshman Rhetoric/CBT</td>
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</tr>
<tr>
<td>1</td>
<td>Visual Performing Arts</td>
<td>-</td>
<td>-</td>
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<tr>
<td>1</td>
<td>21st Century Life and Career Skills</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>0.5</td>
<td>Financial Literacy</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Physical Education &amp; Health/Driver Education</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>Academic Electives</td>
<td>-</td>
<td>-</td>
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</tbody>
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