

Northern Burlington County Regional High School



Program of Studies 2012 - 2013

March 12, 2012

NORTHERN BURLINGTON COUNTY REGIONAL HIGH SCHOOL

PERSONNEL DIRECTORY

BOARD OF EDUCATION

Paul Tootell, President - Springfield Township
James Nucito, Vice President – Mansfield Township
Lt. Col John Bartlett, Military Liaison- Joint Base McGuire-Dix-Lakehurst
Michael Crawford - North Hanover Township
Marie Goodwin - Springfield Township
Edmund Nowak - North Hanover Township
Debbie Pribell - Mansfield Township
Gerry Spence - Chesterfield Township
Barclay Townsend - North Hanover Township
Kevin Zimmer - North Hanover Township

CENTRAL OFFICE ADMINISTRATORS

James Sarruda, Ed. D. Superintendent
Kathy McCormick, Ed. D. Assistant Superintendent

DISTRICT DIRECTORS

Matthew La Grou..... English Language Arts, Social Studies, Gifted and Talented
Sally Lopez.....Agriscience, Business and Technology, Family and Consumer Science, Media Center, and World Languages
Amy Stella Mathematics and Science
Holly Post Special Services

BUILDING ADMINISTRATORS

Craig Wigley Principal
Maggy Hanna Assistant Principal, Visual and Performing Arts
Matthew Konowicz..... Assistant Principal, Applied Technology
Douglas Newman Assistant Principal, Health and Physical Education

COUNSELING DEPARTMENT

Tara Corcoran, Counselor, ext. 2054, tcorcoran@nburlington.com
Margaret Duke, Counselor, ext. 2073, mduke@nburlington.com
Carol Ferriolo, Counselor, ext. 2049, cferriolo@nburlington.com
Jacquelyn Marshall, Counselor, ext. 2052, jmarshall2@nburlington.com
Kelly Reising, Counselor, ext. 2082, kreising@nburlington.com

Kristen Crow, Secretary, ext. 2050, kcrow@nburlington.com
Vickie Sheppard, Registrar, ext. 2051, vsheppard@nburlington.com
Carol Boccolini, Student Management Data Specialist, ext. 2089, cboccolini@nburlington.com

TABLE OF CONTENTS

INTRODUCTION

| | |
|--|----|
| Graduation Requirements | 1 |
| College & Career Readiness | 1 |
| Sample High School Program | 1 |
| AP & Honors Programs | 2 |
| Gifted & Talented Program | 3 |
| Schedule Change Process/Timelines | 3 |
| Grading/Honor Roll | 4 |
| GPA Calculation | 5 |
| Senior Final Exam Exemption | 6 |
| Grade Level Promotion Requirements.... | 6 |
| Summer Courses | 6 |
| Option II | 7 |
| Early Dismissal | 7 |
| Early Graduation Option | 7 |
| Testing | 7 |
| College Accelerated Program (CAP)..... | 7 |
| Athletic/Activity Eligibility/NCAA | 8 |
| Senior Options | 9 |
| Program Planner/Worksheet | 45 |

COURSE DESCRIPTIONS

| | |
|---|----|
| English | 10 |
| Mathematics | 14 |
| Science | 18 |
| Social Studies | 22 |
| Health and Physical Education | 25 |
| World Language | 26 |
| Career and Technical Education | 30 |
| Agriscience | 30 |
| Applied Technology | 33 |
| Business and Technology | 37 |
| Family and Consumer Science..... | 39 |
| Visual and Performing Arts | 40 |
| Art | 40 |
| Music | 41 |
| Theatre | 43 |

MISSION STATEMENT

The Northern Burlington County Regional School District, established in 1960, proudly serves the communities of Chesterfield, Mansfield, North Hanover, and Springfield. The mission of the district, in partnership with home and community, is to provide a safe environment in which to prepare all students to achieve the core curriculum content standards at all grade levels and become creative, independent, life-long learners, critical thinkers, problem solvers, and responsible citizens in a rapidly changing and diverse global community.



WE BELIEVE...

- All children have the right to an education in a safe and caring environment where learning is valued.
- Our children are our community's most valuable asset and our educators are our most valuable resource.
- All students should be accepted as individuals and guided to meet their potential.
- Life-long learning through professional and personal development creates a culture of enduring greatness.
- A rigorous curriculum is the framework for nurturing an academically challenging, child-centered environment that encourages intellectual exploration.
- We have the obligation to nurture a culture of respect that honors the uniqueness of the individual and fosters responsibility toward the community and the environment.

INTRODUCTION

The **Program of Studies** provides students with a reference guide for long-range course scheduling (page 45). Active involvement of parents, students, and counselors is strongly encouraged in the course selection process. Each year's selections should be evaluated to meet graduation requirements and long-term career aspirations. The following questions should be considered when selecting a course:

- Does this course fulfill graduation requirements?
- Does this selection prepare students for college or post-secondary career choices?
- Does this course meet National Collegiate Athletic Association (NCAA) initial eligibility?

GRADUATION REQUIREMENTS

All students are required to meet minimum state graduation requirements in order to receive a diploma. These requirements include 130 credits as follows:

| | |
|--|-------------------|
| English I, II, III & IV..... | 20 credits |
| Health & Physical Education..... | 16 credits |
| Mathematics | 15 credits |
| Science | 15 credits |
| U.S. History I & II..... | 10 credits |
| World History..... | 5 credits |
| Visual & Performing Arts (VPA)*..... | 5 credits |
| Career & Technical Education (CTE)** | 5 credits |
| World Languages | 5 credits |
| Personal Economics*** | 2.5 credits |
| Electives | Remaining credits |

* Art, Music, Theatre

** Selected Agriscience courses, Applied Technology, Business, Computer Programming, Family and Consumer Science.

*** Personal Economics, Financial Math, or Economics

COLLEGE AND CAREER READINESS

Entrance requirements vary greatly among colleges, universities, and technical schools. Therefore, it is imperative to know the specific requirements for individual schools. The best preparation for college and career is a rigorous high school academic program. Students should seek additional information via [Family Connection](#). Please note: High school graduation requirements may differ from college admission requirements.

Minimum requirements for most four-year institutions include:

- 4 years of English
- 3 years of Social Studies
- 2-3 years of laboratory Science
- 3 years of Mathematics (Algebra I, Geometry, Algebra II)
- 2-3 years of the same World Language
- 2 years of academic electives (English, Mathematics, Science, Social Studies, World Language)

SAMPLE HIGH SCHOOL PROGRAM

| Grade 9 | | | Grade 10 | | | Grade 11 | | | Grade 12 | | |
|----------------|---------------------------------|-----|----------------|---------------------------------------|-----|----------------|--------------------------------|-----|----------------|-----------------------------------|-----|
| 1 | English I | 5 | 1 | English II | 5 | 1 | English III | 5 | 1 | English IV | 5 |
| 2 | Algebra I or Geometry Honors | 5 | 2 | Geometry or Algebra II | 5 | 2 | Algebra II or Pre-Calculus | 5 | 2 | Adv Alg/Trig, Pre-Calc or Calc | 5 |
| 3 | Biology | 5/6 | 3 | Chemistry or Environmental Science | 5/6 | 3 | Physics or Physical Science | 5/6 | 3 | Science Elective | 5/6 |
| 4 | World History | 5 | 4 | US History I | 5 | 4 | US History II | 5 | 4 | Social Studies Elective | 5 |
| 5 | Health/PE | 4/5 | 5 | Health/PE | 4/5 | 5 | Health/PE | 4/5 | 5 | Health/PE | 4/5 |
| 6 | World Language | 5 | 6 | World Language | 5 | 6 | World Language | 5 | 6 | World Language | 5 |
| 7 | CTE or VPA Elective | 5 | 7 | CTE or VPA Elective | 5 | 7 | Personal Economics Elective | 2.5 | 7 | Elective | 5 |
| 8 | Elective or Study Hall | 5 | 8 | Elective or Study Hall | 5 | 8 | Elective or Study Hall | 7.5 | 8 | Elective or Study Hall | 5 |
| Total Credits: | | 40 | Total Credits: | | 40 | Total Credits: | | 40 | Total Credits: | | 40 |

COLLEGE READINESS ASSESSMENTS

Northern Burlington supports and provides all juniors' participation in the PSAT/NMSQT (Preliminary SAT/National Merit Scholarship Qualifying Test), and all sophomores' participation in the PLAN (Preliminary ACT).

The PSAT/NMSQT measures verbal reasoning, critical reading, math problem solving, and writing skills. The PSAT is intended to provide an estimated SAT score. Students may qualify for the National Merit Scholarship Program based on their results on this standardized test. Competition for this scholarship is only available to juniors. Juniors may take the SAT in the spring and may retake the test in the fall of their senior year.

The PLAN is designed for sophomores as a preliminary assessment that measures reading comprehension, grammar, writing skills, math skills, and science knowledge. It provides an estimated ACT score, connects students to colleges, identifies students' academic strengths and areas in need of improvement, and familiarizes students with the standardized test taking process.

COLLEGE ENTRANCE EXAMS

Four-year institutions also require the SAT Reasoning Test or the ACT. Colleges accept either the SAT I or the ACT for admission. It is critical to check each institution's requirements for admission. Students are encouraged to take each test at least once to determine the format which suits them best. Many highly competitive schools require one or more SAT II Subject Tests. Information regarding each test follows:

SAT- The Scholastic Aptitude Test is a 3 hour and 45 minute test administered to juniors in the spring and seniors in the fall. The test is comprised of three sections: Critical Reading, Math, and Writing. Each section is scored from 200 – 800 points, with a maximum score of 2400. Registration is processed online through [The College Board](#).

SAT II (Subject Test) - Subject Tests are designed to measure knowledge and skills in specific subject areas, as well as the ability to apply that knowledge. Students take the Subjects Tests to demonstrate their mastery of specific subjects such as English, History, Mathematics, Science, and World Language. Subject tests are not required by all colleges for admissions. They are administered to juniors in the spring and seniors in the fall. Registration is processed online through [The College Board](#).

ACT- ACT is a 3 hour and 30 minute test administered to juniors in the spring and seniors in the fall. The test is comprised of five sections: English, Mathematics, Reading, Science Reasoning, and Writing. Each section is scored from 1 – 36, and the total score is derived by averaging all sections of the test. The overall maximum score is a 36. Registration is processed online through the [ACT](#) website.

If a student requires testing accommodations, it is the parent/guardians' responsibility to complete and submit the appropriate application to The College Board and/or ACT.

ADVANCED PLACEMENT AND HONORS PROGRAMS

Advanced Placement (AP) and Honors Programs develop the academic potential of students seeking increased rigor through an accelerated curriculum. These courses emphasize preparation for The College Board Advanced Placement examinations. Students who have consistently demonstrated strong achievement, proficient skills, and disciplined study habits should consider these courses. The AP and Honors courses include summer assignments and students are required to attend meetings in the spring to review course expectations.

Advanced Placement (AP) - These college level courses enrich the secondary school experience for students willing to apply themselves to the rigorous expectations. AP courses are equivalent to the first level of college courses. The course curricula correspond to the AP tests offered by the College Board. AP students are encouraged to participate in the AP exam in May, which may result in the awarding of college credit.

Honors - Honors courses demand rigorous and extensive academic commitment. These students have also demonstrated a great interest in the subject with skills commensurate with an independent work ethic.

Honors & AP Enrollment Criteria Guidelines

Students entering Grade 9 must review prerequisite requirements by course. In addition to the final grade, initial course level placement is based on teacher recommendation, demonstrated competency within the discipline, and an independent work ethic.

Students entering Grades 10-12 are expected to obtain a recommendation from their current teacher in that discipline, and maintain specific grade requirements for placement in honors or AP level courses as indicated below:

| Current Level | Desired Level | Grade Required |
|---------------|---------------|----------------|
| College Prep | Honors | A |
| College Prep | AP | A |
| Honors | Honors | B |
| Honors | AP | A |
| AP | AP | B |

Criteria for Appeal

If a student did not receive a teacher recommendation and/or has not performed at the required levels for enrollment in the Honors or AP courses he/she may appeal his/her placement to the appropriate director and building principal. Appeal applications will be available in the Counseling Office and on the website during the month of June. The deadline for filing an appeal is **June 30th**.

GIFTED AND TALENTED PROGRAM

The Gifted and Talented Program complements students' ongoing education with a supplemental program that is both rigorous and challenging. Critical skills in higher-level thinking, communication, and research are developed through courses that require individual initiative. Placement in Gifted & Talented courses is based on multiple performance criteria. Please contact the Office of Academics for additional information.

SCHEDULE CHANGE PROCESS / TIMELINES

The master schedule and staffing are determined by student course selections. Therefore, it is essential that student selections are thoughtfully considered. Students are expected to honor their commitments by completing their selected courses. The administrative team reserves the right to designate student placements.

Requests for course selection changes will not be honored after **June 1st**. Only changes that are educationally beneficial for the student will be considered.

After the start of the school year, requests for schedule changes must be made using the Schedule Change Form. Schedule changes will be considered for the following reasons **only**:

- The correction of a clerical error in the schedule. Examples may include a missing course, a conflict between two or more courses, failure of a prerequisite course, or a serious imbalance in the course load assigned for each semester.
- A recommendation from the Child Study Team.
- A recommendation from a building administrator for disciplinary, attendance, or instructional reasons.
- If a student is repeating a course and is assigned to a teacher with whom he or she previously received a failing grade, provided another teacher is available.

Please note: Schedule changes according to the criteria above may result in a grade of WF (Withdraw Failing), which will negatively impact the student's permanent record. See Impact of Course Withdrawal on Transcript.

Schedule changes **will not** be considered for the following reasons (but are not limited to):

- Course content or expectations
- Course not needed for graduation
- Teacher preference or inability to relate to the current teacher
- To lighten course load, for convenience, preference for another subject, or to be with friends
- Changes that create more than eight (8) study hall periods per week.
- To reduce schedule to fewer than thirty (30) credits.

Withdraw Passing / Withdraw Failing

Withdraw Pass (WP) / Withdraw Fail (WF) will be applied as follows:

- If a course is dropped **during** the first fourteen (14) school days of a semester, no indication of enrollment will be indicated on the report card or transcript.
- If a course is dropped **after** the first fourteen (14) school days of a semester, the current grade at the time of withdraw will be indicated on the report card and transcript as WF or WP.

LEVEL CHANGES

A student requesting a level change must submit the Request for Schedule Change Form to his/her counselor within fourteen (14) school days. Grades transfer with the student for all level changes.

GRADING

The calculation of grades is determined as follows:

The grade scale is as follows:

| | Semester 1 | Semester 2 |
|--------------------|------------|------------|
| Quarter 1 Grade | 40% | |
| Quarter 2 Grade | 40% | |
| Mid-term Exam | 20% | |
| Quarter 3 Grade | | 40% |
| Quarter 4 Grade | | 40% |
| Final Exam | | 20% |
| Final Course Grade | 50% | 50% |

| |
|------------|
| A = 90-100 |
| B = 80-89 |
| C = 70-79 |
| D = 65-69 |
| F = 0-64 |

The final grade in each full year course is determined by averaging the two semester grades.
The final grade for semester courses (half year) is determined by the semester grade only.

HONOR ROLL

Honor Roll is published at the end of each marking period to provide recognition and as an incentive for high scholastic achievement. High Honor Roll designation is awarded to students who have achieved a 90% or better in every subject. Honor Roll designation is awarded to students who have earned an average of 80% for all subjects. Regardless of the academic average, no student who has earned a 77% or lower in any subject will be included in this list. *Weighted value for honors courses is only added to the final grade, but will be applied each quarter for the purpose of determining Honor Roll.

GPA CALCULATION

Weighted GPA is based on final grades. The final grade is multiplied by the course credit. This determines the number of “quality points”. The total quality points are divided by the total number of credits to determine the GPA. For the Classes of 2013 and 2014, if the class is an Honors or AP class, 7 points is added to the final grade.

Example:

| Course | Final Grade | Quality Points Added | Credits | Weighted Grade Calculation |
|-----------------|-------------|----------------------|---------|----------------------------|
| English I | 85 | 0 | 5.0 | $85 \times 5 = 425$ |
| Geometry Honors | 90 | 7 | 5.0 | $97 \times 5 = 485$ |
| AP US I | 91 | 7 | 5.0 | $98 \times 5 = 490$ |
| PE 9 | 83 | 0 | 2.5 | $83 \times 2.5 = 207.5$ |
| Total | | | 17.5 | 1607.5 |

Calculation: Quality Points (1607.5) ÷ Credits (17.5) = GPA (91.86)

Effective with the Class of 2016, quality points will be adjusted as follows: Honors = 7 points, AP = 10 points.
(Pending Board Approval)

Example:

| Course | Final Grade | Quality Points Added | Credits | Weighted Grade Calculation |
|-----------------|-------------|----------------------|---------|----------------------------|
| English I | 85 | 0 | 5.0 | $85 \times 5 = 425$ |
| Geometry Honors | 90 | 7 | 5.0 | $97 \times 5 = 485$ |
| AP US I | 91 | 10 | 5.0 | $101 \times 5 = 505$ |
| PE 9 | 83 | 0 | 2.5 | $83 \times 2.5 = 207.5$ |
| Total | | | 17.5 | 1622.5 |

Calculation: Quality Points (1622.5) ÷ Credits (17.5) = GPA (92.71)

SENIOR FINAL EXAM EXEMPTION

All seniors are eligible for exemption from final exams by meeting the following requirements:

Semester Courses

- 1) Students must have at least a 90% average in both quarters in the semester.
- 2) Student must not have more than six (6) absences for the semester.
- 3) The final grade will be determined by averaging the two quarter grades.
- 4) Students who wish to take the semester exam may do so to improve the grade but must realize that the exam grade will count regardless of the outcome.

Full Year Courses

- 1) Students must have at least a 90% average in each marking period as well as the first semester exam.
- 2) Students must not have more than twelve (12) absences for the year.
- 3) The grade will be determined for the second semester by averaging the third and fourth quarter grades.
- 4) Students who wish to take the semester exam may do so to improve the grade but must realize that the exam grade will count regardless of the outcome.

GRADE LEVEL PROMOTION REQUIREMENTS

Promotion to the next grade is as follows:

| | |
|-------------|---------------|
| To Grade 10 | 30.0 credits |
| To Grade 11 | 60.0 credits |
| To Grade 12 | 90.0 credits |
| To Graduate | 130.0 credits |

SUMMER COURSES

Credit Recovery

A student who receives an “F” in a course taken during the regular school year, will not receive credit for that course. This may affect graduation status. Students are responsible for all summer school arrangements. Applications are available in the Counseling Office and must be pre-approved. Credit may be earned in the summer for a **maximum of two courses**. Extenuating circumstances may enable a third course to be approved by the Director.

The course must meet for a minimum of 60 hours for a five credit recovery. The grade awarded for the course will be recorded along with the previous grade received resulting in adjustment to the student's GPA. The original failing grade will remain on the student's transcript. Upon successful completion of the course work, appropriate credits will be awarded.

Please note: Failure to remediate a failed course may influence eligibility for fall and winter sports.

Original Credit

Students wishing to pursue accelerated course work may receive approval to take courses for original credit in the summer. Students must complete the Option II Application Form for approval by the Option II Committee at least 60 (sixty) days prior to enrollment in external courses. The course must meet for a minimum of 120 hours, must align with the district's curriculum, and must be offered at an accredited institution. A full course description must be attached to the application.

OPTION II

District policy permits students to apply for high school credits for alternative learning experiences in accordance to N.J.A.C. 6A:8-5.1(a)ii. Students seeking credits under this provision must submit the Option II Application Form to the Director of Counseling at least sixty (60) days before the onset of the alternative program. Health classes cannot be completed via Option II. Students requesting a physical education (PE) alternative cannot have more than three (3) study hall periods per week. Examples of alternative learning experiences include community learning projects, internships, independent studies, online courses, Early Graduation Option and college courses. For additional information and the application packet, please contact the Counseling Office.

Middle school courses taken for high school credit do not fulfill high school graduation requirements in those subject areas.

EARLY DISMISSAL

Seniors may apply to pursue a partial day schedule. Students making this request must submit the Option II Application Form to the Counseling Office by **August 15th**. A minimum of thirty (30) credits must be maintained in the student's schedule.

EARLY GRADUATION OPTION

Students may apply to pursue an accelerated program of study that will meet all course requirements prescribed by the State of New Jersey and the Board of Education. For additional information, interested families should schedule a conference with the student's counselor and the administrative program coordinator prior to the start of the sophomore year.

TESTING

All students enrolled in biology are administered the New Jersey Biology Competency Test (NJBCT). Students are required to pass the New Jersey High School Proficiency Assessment (HSPA) prior to graduation. The test is first administered in the junior year. Students who score *Partially Proficient* on a section of the test will be enrolled a HSPA 12 class and will retake the test in October and if necessary March of their senior year. For those students who continue to score *Partially Proficient*, the Alternate High School Assessment (AHSA) process provides the opportunity for students to meet this graduation requirement.

COLLEGE ACCELERATED PROGRAM (CAP)

A partnership with Burlington County College (BCC) offers students an opportunity to earn both high school and college credit for selected courses. Staff members, who are recognized as adjunct faculty at BCC, teach these courses during the regular school day. Students receiving dual credit are required to complete the BCC registration process and pay the BCC tuition in the fall. Classes that are currently part of the CAP are noted at the end of each course description with *CAP.

ATHLETIC AND EXTRA-CURRICULAR ACTIVITY ELIGIBILITY

Eligibility for fall sports or extra-curricular activities is determined by students' academic standing.

- All first time 9th grade students will be automatically eligible to participate in the fall and winter.
- The class of 2012 and 2013 must have earned 27.5 credits in the previous school year to be eligible to participate in the fall and winter
- The class of 2012 and 2013 must have earned 13.75 credits in the first semester to be eligible to participate in the spring.
- Beginning with the class of 2014, the minimum credit requirement (after 9th grade) has increased to 30 earned credits from the previous school year to be eligible to participate in the fall and winter.
- Beginning with the class of 2014, 15 earned credits from the first semester are required, to be eligible to participate in the spring.
- Credits earned in summer school can only be applied to the preceding year.

Beginning with the class of 2014, the NJSIAA has increased the credit threshold to 30 credits per year and 15 credits earned per semester to be eligible for athletics. All first time 9th grade students shall be eligible during the first semester of the school year (September to January).

Once a student begins a winter sport, he/she will be permitted to complete it. Should a student be engaged in a full year activity, he/she can continue until the close of the third marking period. Examples of full year activities are Student Congress and the Journalism club.

National Collegiate Athletic Association (NCAA) Guidelines Preparation for Participation in College Athletics

If a student intends to participate in NCAA Division I or II college athletics as a freshman, the student must be certified by the NCAA Eligibility Center. Certain academic criteria must be achieved in high school in order to be eligible to participate in college. The student's counselor can determine if initial eligibility standards apply. If met, go to the NCAA Eligibility Center and submit the application the summer after the junior year. The application is online at [NCAA Eligibility Center](http://www.ncaa.org/eligibility-center). Meeting the minimum NCAA eligibility requirements does not guarantee admission into the college of choice. **Please note:** Course requirements change periodically and should be confirmed via the NCAA website.

| Division I | Division II | Division II (2013 and beyond) |
|---|--|---|
| <p>16 Core Courses required:</p> <ul style="list-style-type: none"> • 4 years of English • 3 years of mathematics (Algebra I or higher) • 2 years of natural science/physical science (one year of laboratory) • 1 additional year of English, math, or natural/physical science • 2 years of social studies • 4 additional years of core courses (from any area listed above, or from World Language, non-doctrinal religion or philosophy) <p>Earn a sliding scale combination of grades in core courses and standardized test scores. The sliding scale can be found on the NCAA Eligibility Center website.</p> | <p>14 Core Courses required:</p> <ul style="list-style-type: none"> • 3 years of English • 2 years of mathematics (Algebra I or higher) • 2 years of natural science/physical science (one year of laboratory) • 2 additional years of English, math, or science • 2 years of social studies • 3 additional years of core courses (from any area listed above, or from world language, non-doctrinal religion or philosophy) <p>Earn a 2.000 grade-point average or better in core courses and earn a combined SAT score of 820 or higher. There is no sliding scale in Division II.</p> | <p>16 Core Courses required:</p> <ul style="list-style-type: none"> • 3 years of English • 3 years of mathematics (Algebra I or higher) • 2 years of natural science/physical science (one year of laboratory) • 3 additional years of English, math, or natural/physical science • 2 years of social studies • 4 additional years of core courses (from any area listed above, or from World Language, non-doctrinal religion or philosophy) <p>Earn a 2.000 grade-point average or better in core courses and earn a combined SAT score of 820 or higher. There is no sliding scale in Division II.</p> |

SENIOR OPTIONS

Lifetime Information for Everyone (L.I.F.E) (1625)

Prerequisite: By application

Credits: 5

This course is part of the NJ Teen Prevention Education Program (Teen PEP). Students develop the knowledge and skills needed to conduct prevention outreach workshops and character education activities. It fulfills the graduation requirement of Senior Health and Physical Education. Please note: students are required to attend a two day retreat in the summer prior to the course.

Peer Leadership (7008)

Prerequisite: By application

Credits: 7.5

Peer Leadership provides students with an opportunity to develop leadership skills. Peer Leaders facilitate the freshman transition into high school by guiding social-emotional growth and promoting academic achievement. Students participate in Health and Physical Education for 5 credits and Peer Leadership Lab five days per week for 2.5 credits. Please note: students are required to attend a retreat in the summer prior to the course.

Senior Instruction Leadership Corps (SILC) (7020)

Prerequisite: By application

Credits: 2.5

SILC exposes students to the field of education. By working closely with their teacher mentor, SILCs provide assistance and supplemental instruction to the students in the class. As part of the program, students secure a teacher mentor, maintain a weekly journal, read and reflect on educational topics, and attend mandatory monthly meetings after school. Only full year courses are eligible to fulfill the SILC program, and students are scheduled to SILC five days per week.

Course Descriptions

ENGLISH

English provides students with the analytical skills needed to understand the many nuances of language arts. Comprehensive instruction focuses on strategies for the PSAT and HSPA examinations. Four years of English are required for graduation and all required courses have summer reading or writing assignments

| | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|------------------|---|---------------------------------|---|--|
| Required | English I English I Honors | English II English II Honors | English III English III Honors AP English Language & Composition | English IV English IV-Senior Research Seminar English IV Honors AP English Literature & Composition |
| Electives | Creative Writing I, Creative Writing II, Journalism, Public Speaking, Yearbook, Science Fiction and Fantasy | | | |

English I (1401)

Grade Level: 9

Credits: 5

Prerequisite: None

English I introduces students to contemporary and classical literature. Students participate in performance-based activities to develop reading comprehension, speaking, and writing skills. ^Summer assignment

English I Honors (1400)

Grade Level: 9

Credits: 5

Prerequisite: An 85% in Grade 8 English/Language Arts is required for entrance

English I Honors explores the world of contemporary and classical literature. In this course, students develop their critical reading, speaking, and writing skills. The rigors of the course advance students' in-depth analyses of materials at an accelerated pace. ^Summer assignment

English II (1405)

Grade Level: 10

Credits: 5

Prerequisite: English I or English I Honors

English II introduces students to a diverse selection of American authors. Students demonstrate understanding via performance-based activities to enhance their reading comprehension, speaking, and writing skills. ^Summer assignment

English II Honors (1403)

Grade Level: 10

Credits: 5

Prerequisite: English I Honors or English I

English II Honors advances student writing through an in-depth study of classical and contemporary American literature. In this rigorous course, students demonstrate understanding in a variety of challenging papers, projects, and presentations to enhance their critical reading, speaking, and writing skills. This course prepares students for further advanced study in English III Honors or AP Language and Composition. ^Summer assignment

English III (1409)

Grade Level: 11

Credits: 5

Prerequisite: English II or English II Honors

English III instills an understanding of the evolution of the English language around the world. This course strengthens students' reading comprehension, writing, and speaking skills through the exploration of major literary themes. ^Summer assignment

English III Honors (1410) Pending Board Approval

Grade Level: 11

Credits: 5

Prerequisite: English II Honors or English II

English III Honors advances student writing through rigorous study of classical and contemporary British literature. Students demonstrate understanding in a variety of challenging papers, projects, and presentations to enhance their critical reading, speaking, and writing skills. This course prepares students for further advanced study in English IV Honors or AP Literature and Composition ^Summer assignment

Advanced Placement English Language & Composition (1406)

Grade Level: 11

Credits: 5

Prerequisite: English II Honors or English II

AP English Language & Composition advances students' critical reading and writing skills. Taught on par with a college freshman writing course, AP Language and Composition introduces students to numerous texts as they study sophisticated writing techniques. It is highly recommended that students take the AP English Language and Composition exam. *CAP ^Summer assignment

English IV (1417)

Grade Level: 12

Credits: 5

Prerequisite: English III or AP English Language & Composition

English IV enhances students' writing skills through the study of world literature. In addition, students prepare for the SAT, college application process, and future employment. Performance-based activities measure students' understanding of course content. ^Summer assignment

English IV – Senior Research Seminar (1418)

Grade Level: 12

Credits: 5

Prerequisite: By application

English IV-Senior Research Seminar augments students' writing and analytical skills through a two part course. During their first semester, students explore world literature and refine their skills in language arts. During the second semester, they develop an individualized research project that extends well beyond the classroom. In conducting research, students are required to secure a Northern Burlington staff member to serve as a mentor, maintain a weekly journal, and develop their research. As a culminating experience, students present their findings to an evaluative panel. Passing grades for each semester is required for graduation.

English IV Honors (1411) Pending Board Approval

Grade Level: 12

Credits: 5

Prerequisite: English III Honors or English III or AP Language and Composition

English IV Honors advances student writing through a in-depth study of classical and contemporary World literature. In this rigorous course, students demonstrate understanding in a variety of challenging papers, projects, and presentations to enhance their critical reading, speaking, and writing skills. ^Summer assignment

Advanced Placement English Literature & Composition (1414)

Grade Level: 12

Credits: 5

Prerequisite: AP English Language & Composition or English III

AP English Literature & Composition engages students in the process of analyzing literature. As a college level course, it focuses on the students' ability to discern the multiple meanings of a text and to uncover an author's purpose. Students will study challenging fiction, drama, and poetry from a wide range of writers. It is highly recommended that students take the AP English Literature & Composition exam. *CAP ^Summer assignment

ENGLISH ELECTIVES

Creative Writing I (1420)

Grade Level: 9 -12

Credits: 2.5

Prerequisite: None

Creative Writing I explores the various genres associated with the creative writing process. Students analyze the works of professional writers, compile a portfolio, and are encouraged to submit selected pieces to NBC's literary magazine, *Kaleidoscope*.

Creative Writing II (1421)

Grade Level: 10 -12

Credits: 2.5

Prerequisite: Creative Writing I

Creative Writing II inspires students to move beyond the fundamentals of poetry and short prose fiction. Students create poems, short stories, and children's stories and analyze the works of established writers. Students are encouraged to submit selected pieces to NBC's literary magazine, *Kaleidoscope*.

Journalism (1422)

Grade Level: 9 -12

Credits: 2.5

Prerequisite: None

Journalism explores the function of print media in American society. Students learn the basics of related laws and the various types of news stories and articles. As part of this experience, students conduct interviews with members of the school community and compile portfolios demonstrating basic understanding of news writing. Students are expected to submit selected pieces to NBC's school newspaper, *The Blueprint*.

Public Speaking (1426)

Grade Level: 9 -12

Credits: 2.5

Prerequisite: None

Public speaking introduces students to the power of effective communication. It focuses on developing a personal speaking style, crafting and delivering speeches, and applying effective communication strategies. Students study great historical speeches to understand the power of contextual relevance.

Yearbook (7002)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Yearbook focuses on the writing process and development of *Northern Light*, NBC's annual publication. Students develop an understanding of journalistic writing styles and desktop publishing. In addition, students take on the various responsibilities needed to meet deadlines that produce such an extensive book.

Science Fiction & Fantasy (1424)

Grade Level: 9-12

Credits: 2.5

Prerequisite: None

Science Fiction & Fantasy creatively explores the origin and future of a flawed humanity. Through the study of supernatural abilities, time travel, and alternate realities, this course explores popular genres while raising compelling questions about the direction of humanity and the "what ifs" that plague our imagination.

Senior Research Seminar (2330)

Grade Level: 12

Credits: 2.5

Prerequisite: English III and by application

Senior Research Seminar exposes students to an individualized learning experience that extends beyond the classroom. Through this second semester elective course, students learn the skills necessary to pursue a personal interest or passion that focuses on the world beyond high school. To achieve these goals, students conduct research and participate in performance-based learning activities. As part of this innovative program, students secure a Northern Burlington staff member to serve as mentor, maintain a weekly journal, and develop a research paper or project. As a culminating experience, students present their research to an evaluative panel.

GIFTED & TALENTED PROGRAM

Gifted & Talented Seminar I (1429)

Grade Level: 9-12

Credits: 5

Prerequisite: Program Admittance

Gifted & Talented Seminar I is an honors level course that provides a rigorous interdisciplinary program for students who place into the gifted program. This seminar focuses on philosophical, ethical, and scientific issues that impact our existence as human beings and global citizens.

Gifted & Talented Seminar II (1427)

Grade Level: 10-12

Credits: 5

Prerequisite: Program Admittance

Gifted and Talented Seminar II I is an honors level course that provides rigorous instruction to students. By taking an interdisciplinary approach to the exploration of literary, social, historical, and economic issues, students develop their skills for advanced academic inquiry.

LANGUAGE ARTS SUPPORT PROGRAMS

Required placement in supplemental Language Arts services is determined by students' scores on state and/or local assessments. Students who score *Partially Proficient* on state assessments are scheduled for a skills class.

English Language Services (ELS) (5009)

Grade Level: 9-12

Credits: 5

English Language Services supports non-English speaking students in their acquisition of the English language. Students are identified through the WIDA-ACCESS Placement Test.

Language Arts Skills (5311)

Grade Level: 9, 10

Credits: 2.5

Language Arts Support reinforces basic reading and writing skills through focused tutoring. Placement in this course is determined by multiple measures including standardized test scores.

HSPA Language Arts 11 (5350)

Grade Level: 11

Credits: 2.5/ 5

HSPA 11 Language Arts augments the skills necessary to achieve proficiency on the language arts portion of the HSPA. Students requiring supplemental assistance, as identified by multiple measures, are scheduled for this course. With teacher assistance, students work collaboratively to address deficiencies in identified cluster areas.

HSPA Language Arts 12 and/or Alternative High School Assessment (AHSA) (5205)

Grade Level: 12

Credits: 1.25/2.5/5

HSPA Language Arts 12/AHSA provides students who scored Partially Proficient on the language arts portion of the HSPA with supplemental instruction in preparation for the October and possibly March test re-takes. If necessary, students complete Performance Assessment Tasks to fulfill the state graduation requirement via the AHSA (Alternative High School Assessment)

MATHEMATICS

Three years of mathematics are required for graduation including Algebra I, Geometry, and Algebra II.
Four years of mathematics are strongly recommended using the following sequence:

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|--|---------------------------------|-------------------------------------|--|
| Algebra I | Geometry | Algebra II (Applications) | Advanced Algebra & Trig Financial Mathematics & Introduction to Statistics |
| Algebra I | Geometry Geometry Honors | Algebra II Algebra II Honors | Advanced Algebra & Trig Pre-Calculus Pre-Calculus Honors Financial Mathematics & Introduction to Statistics AP Statistics |
| Geometry Geometry Honors | Algebra II Algebra II Honors | Pre-Calculus Pre-Calculus Honors | Calculus AP Calculus AB AP Statistics Financial Mathematics & Introduction to Statistics |
| Geometry Honors & Algebra II Honors | Pre-Calculus Honors | AP Calculus AB AP Statistics | AP Calculus BC AP Statistics |

Algebra I (1930)

Grade Level: 9

Credits: 5

Prerequisite: Mathematics 8 or Algebra I; If Algebra I is taken in Grade 8, students must earn an average of 85% in Algebra I to advance to Geometry in Grade 9.

Algebra I develops the foundation for future math courses. Major topics include data exploration, equations and inequalities, systems of equations, applications, mathematical models, polynomials, and proportions. This course encourages students' understanding through discussion and hands-on investigations.

Geometry (1941)

Grade Level: 9, 10

Credits: 5

Prerequisite: Algebra I; If Algebra I is taken in Grade 8, an average of 85% is required to advance to Geometry. Any student in Grade 11 who re-takes Geometry is required to take HSPA 11 and/or Algebra II concurrently.

Geometry examines logical methods of problem solving, physical relationships, and properties of two and three-dimensional figures. Points of exploration include perpendicular and parallel lines and planes, deductive and inductive reasoning skills, polygon congruence and similarity, coordinate geometry, transformations, and numerous methods of measuring length, area, and volume of geometric figures.

Geometry Honors (1942)

Grade Level: 9, 10

Credits: 5

Prerequisite: Algebra I; If Algebra I is taken in Grade 8, an average of 90% is required to advance to Geometry Honors.

Geometry Honors advances logical methods of problem solving, physical relationships, and properties of two and three-dimensional figures. Understandings include angle relationships, perpendicular and parallel lines, congruent triangles, similar polygons, circles and arcs. Inductive and deductive methods of proof, constructions, loci, coordinate geometry, areas of polygons and circles, surface area, volumes of solids, and the fundamentals of transformations are also included. ^Summer assignment

Algebra II (1931)*Grade Level: 10, 11**Credits: 5**Prerequisite: Geometry; Any student in Grade 11 who re-takes Geometry is required to take HSPA 11 and/or Algebra II concurrently.*

Algebra II expands topics from Algebra I and prepares students for more advanced mathematics. Students develop an understanding of systems of equations, graphing and analyzing functions, factoring, complex numbers, and matrices.

Algebra II Honors (1932)*Grade Level: 10, 11**Credits: 5**Prerequisite: Geometry Honors or Geometry**Corequisite: Geometry Honors*

Algebra II Honors emphasizes and expands topics from Algebra I and prepares students for Honors Pre-Calculus and AP Calculus. Students develop an understanding of systems of equations, graphing and analyzing functions, factoring, complex numbers, matrices, conic sections, and an introduction to trigonometry. ^Summer assignment

Algebra II (Applications) (1947)*Grade Level: 11**Credits: 5**Prerequisite: Geometry; Any student in Grade 11 who re-takes Geometry is required to take HSPA 11 and/or Algebra II concurrently.*

Algebra II (Applications) reviews and extends topics from Algebra I and prepares students for additional mathematics courses. Students develop an understanding of systems of equations, graphing and analyzing functions, factoring, complex numbers, and matrices.

Advanced Algebra and Trigonometry (1946)*Grade Level: 11, 12**Credits: 5**Prerequisite: Algebra II (Applications) or Algebra II*

Advanced Algebra and Trigonometry expands on topics from Algebra II and prepares students for an entry level college mathematics course. Topics include: polynomial function, zeros of polynomial functions, compositions of functions, inverse functions, exponential and logarithmic functions, right triangle trigonometry, inverse trig functions, Law of sine, Law of cosine, vectors, and statistics.

Pre-Calculus (1933)*Grade Level: 11, 12**Credits: 5**Prerequisite: Algebra II or Algebra II Honors; Any student in Grade 12 must score Proficient on the HSPA to take Pre-Calculus.*

Pre-Calculus introduces students to higher levels of mathematics and analytical skills essential to problem solving. Topics include trigonometry, sequences, series, limits, algebraic functions, exponential and logarithmic functions. Vectors, linear transformations, and an introduction to calculus via limits are also explored. *CAP

Pre-Calculus Honors (1934)*Grade Level: 11, 12**Credits: 5**Prerequisite: Algebra II Honors or Algebra II*

Pre-Calculus Honors advances and accelerates students to higher levels of mathematics and analytical skills essential to problem solving. Topics include trigonometry, sequences, series, limits, algebraic functions, exponential and logarithmic functions. Vectors, linear transformations, polar coordinates, mathematical induction and an introduction to Calculus via limits are also explored. *CAP ^Summer assignment

Calculus (1961)*Grade Level: 12**Credits: 5**Prerequisite: Pre-Calculus or Pre-Calculus Honors*

Calculus explores the mathematics of change and motion. Major topics include properties of functions, limits, continuity, differentiation, and integration. Students are exposed to a balance of theory behind the mathematics as well as real life applications. *CAP

Advanced Placement Calculus AB (1958)*Grade Level: 12**Credits: 5**Prerequisite: Pre-Calculus Honors or Pre-Calculus*

AP Calculus AB develops students' understanding of the concepts of calculus, and provides experience with its methods and applications. This college-level course emphasizes a multi-representational and integrated approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. It is highly recommended that students take the AP Calculus AB exam. *CAP ^Summer assignment

MATHEMATICS ELECTIVES**Financial Mathematics (1963)***Grade Level: 11, 12**Credits: 2.5**Prerequisite: Geometry**This semester class fulfills the personal economics graduation requirement**This semester class is paired with Introduction to Statistics.*

Financial Math encourages understanding of consumer situations including budgeting, income tax (state and federal), installment buying, insurance (life, medical, property, automobile, etc.), payroll and payroll deductions, banking, and investments. By addressing practical financial situations, students develop fundamental life and personal management skills.

Introduction to Statistics (1962)*Grade Level: 11, 12**Credits: 2.5**Prerequisite: Geometry**This semester class is paired with Financial Math.*

Statistics manipulates and analyzes data from many diverse fields. Major topics include frequency, distributions of empirical data, calculations of descriptive statistics, probability distributions, confidence intervals, hypothesis testing, and correlation. *CAP

Advanced Placement Calculus BC (1957)*Grade Level: 12**Credits: 5**Prerequisite: AP Calculus AB*

AP Calculus BC is continuation of AP Calculus AB. This course coincides with Calculus AB. Advanced applications of derivatives and integrals will be taught, along with infinite series and other topics normally taught in a second semester college calculus class. The course is intended for students seeking a career in mathematics, physical sciences, or engineering. *CAP ^Summer assignment

Advanced Placement Statistics (1970)

Grade Level: 11, 12

Credits: 5

Prerequisite: Algebra II

AP Statistics, a college-level course, introduces students to the concepts and tools for collecting, analyzing, and drawing conclusions from data. Four broad conceptual themes include exploring data, sampling and experimentation, anticipating patterns, and statistical inference. It is highly recommended that students take the AP Statistics exam. *CAP ^Summer assignment

MATH SUPPORT PROGRAMS

Required placement in supplemental math services is determined by students' scores on state and local assessments. Students who score *Partially Proficient* on state assessments are scheduled for a skills class.

Math Skills 9/10 (5554/5556)

Grade Level: 9/10

Credits: 2.5

Math Skills provides supplemental instruction to develop students' understanding of fundamental mathematical concepts. Students who are identified by multiple measures including math course grades, standardized test scores, diagnostic assessments, and teacher recommendations are scheduled for this course.

HSPA Math 11 (5555)

Grade Level: 11

Credits: 2.5/5

HSPA Math Preparation augments the skills necessary to achieve proficiency on the mathematics portion of the HSPA (High School Proficiency Assessment). Students requiring supplemental assistance, as identified by multiple measures, are scheduled for this course. With teacher assistance, students work collaboratively to address deficiencies in identified cluster areas.

HSPA Math 12 and/or Alternative High School Assessment (AHSA) (5204)

Grade Level: 12

Credits: 1.25/2.5/5

HSPA Math 12/AHSA provides students who scored *Partially Proficient* on the mathematics portion of the HSPA with supplemental instruction in preparation for the October and possibly March test re-takes. Individualized instruction is based on each student's Educational Proficiency Plan (EPP). If necessary, students complete Performance Assessment Tasks to fulfill the state graduation requirement via the AHSA (Alternative High School Assessment).

SCIENCE

Three years of science are required for graduation including Biology and two of the following courses: Chemistry/Environmental Science/Physics/Physical Science/ (EPS offered in 2010-2011). All students enrolled in Biology are administered the New Jersey Biology Competency Test (NJBCT) in the spring.

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|--|--|---|--|
| Biology Biology (Agriscience) | Environmental Science | Physical Science | Advanced Plant Science Advanced Animal Science |
| Biology Biology (Agriscience) Biology Honors | Chemistry Chemistry Honors Environmental Science | Physics Chemistry Environmental Science | Physics Environmental Science Science Elective |
| Biology Honors | Chemistry Honors | AP Physics B Environmental Science | Science Elective |

Biology (Agriscience) (2216)

Grade Level: 9, 10

Credits: 6

Prerequisite: None

Biology (Agriscience) develops students' understanding of the interconnections of biological science and the agriculture industry. Topics include the behavior, growth, and genetics of plants and animals. Students perform hands-on activities in the greenhouses and participate in the maintenance of in this laboratory-based course. Students take the New Jersey Biology Competency Test (NJBCT) in the spring. ^Summer assignment

Biology (2215)

Grade Level: 9, 10

Credits: 6

Prerequisite: None

Biology enhances students' scientific literacy by examining features of life at the molecular and cellular levels, and advances to more complex life systems. The interactions of various life forms with each other and their environments are explored. From their natural interest and general knowledge of organisms, students investigate concepts of life while developing scientific process skills in this laboratory-based course. Students take the New Jersey Biology Competency Test (NJBCT) in the spring. ^Summer assignment

Biology Honors (2209)

Grade Level: 9, 10

Credits: 6

Prerequisite: An 90% in Grade 8 Science is required for entrance

Suggested Corequisite: Geometry Honors or Geometry

Biology Honors advances students' scientific interest by examining features of life at the molecular and cellular levels, and advances to more complex life systems. The interactions of various life forms with each other and their environments are explored. Honors Biology is an intensive and in-depth laboratory-based course. This course is strongly recommended for students who aspire to a career in science, engineering, or the health professions. Independent laboratory and ecosystem observations are an integral part of this course. Students take the New Jersey Biology Competency Test (NJBCT) in the spring. ^Summer assignment

Chemistry (2244)

Grade Level: 10, 11

Credits: 6

Prerequisite: Biology

Suggested Corequisite: Algebra II

Chemistry investigates the structure and behavior of matter by mathematically examining and manipulating information. Major topics include elements and compounds, properties of matter, and applications of this information. This laboratory-based course develops students' problem solving and critical thinking skills by analyzing and manipulating data.

Chemistry Honors (2245)

Grade Level: 10, 11

Credits: 6

Prerequisite: *Biology or Honors Biology*

Suggested Corequisite: *Honors Algebra II or Algebra II*

Chemistry Honors investigates the structure and behavior of matter. By mathematically examining and manipulating data, students explore elements and compounds, properties of matter, and applications of this information. This intensive, in-depth, laboratory-based course is strongly recommended for students who aspire to a career in science, engineering, or health professions. ^Summer assignment

Environmental Science (2218)

Grade Level: 10, 11, 12

Credits: 5

Prerequisite: *Biology*

Environmental Science explores the impact of natural events, human behavior, and the benefits of sustainability on the environment. Changes to global climate, management of natural resources, production and use of energy, waste management systems, agriculture, and threats on various species are explored. By studying the biodiversity of the planet and local environment, students gain an understanding of the structure and dynamics of Earth's systems. In this interdisciplinary, laboratory-based course, students examine these environmental issues and develop alternate solutions.

Physical Science (2225)

Grade Level: 10, 11, 12

Credits: 5

Prerequisite: *Biology*

Physical Science combines the concepts of physics and chemistry as they impact the environment. Topics include: chemical and physical systems such as matter and energy, and motion and forces, the relationship between order and disorder in the universe, the solar system, mountain building, cycles of Earth, and technology. Critical thinking is emphasized in this laboratory-based course.

Physics (2254)

Grade Level: 11, 12

Credits: 6

Prerequisite: *Chemistry or Chemistry Honors*

Suggested Corequisite: *Algebra II*

Physics investigates matter and motion by mathematically examining and manipulating data. Topics include kinematics, dynamics, conservation laws, optics, acoustics, and some advanced topics in mechanics. Students' problem solving, critical thinking, and reasoning skills will expand by analyzing information in this laboratory-based course.

Advanced Placement Physics B (2250)

Grade Level: 11, 12

Credits: 7

Prerequisite: *Chemistry or Chemistry Honors and Algebra II*

Corequisite: *Pre-Calculus*

AP Physics B investigates the movement of matter using a mathematically intensive approach. Topics include kinematics, Newton's laws of motion, work and energy, momentum, circular motion and rotation, conservation laws, electrostatics, electricity, fluid mechanics and thermodynamics, electricity and magnetism, waves and optics, and atomic and nuclear physics. This college-level course is intended for the student planning on studying science or engineering in college. It is highly recommended that students take the AP Physics B exam. AP Physics B differs from AP Physics C, a calculus-based Physics course. *CAP ^Summer assignment

SCIENCE ELECTIVES

These electives cannot substitute for any of the three required science courses.

Advanced Placement Biology (2211)

Grade Level: 11, 12

Credits: 7

Prerequisite: Biology and Chemistry

AP Biology is comparable to a college introductory biology course taken by biology majors during their first year. Topics include biochemistry, cells, energy transformation, molecular genetics, heredity, evolution, taxonomy, botany, zoology and ecology. AP Biology provides students with the conceptual framework, factual knowledge, and analytical skills to critically examine the rapidly changing science of biology. Independent laboratory and field investigations are an integral part of this course. It is highly recommended that students take the AP Biology exam. *CAP ^Summer assignment

Advanced Placement Chemistry (2243)

Grade Level: 11, 12

Credits: 7

Prerequisite: Chemistry Honors or Chemistry, and Algebra II

AP Chemistry is comparable to a college introductory chemistry course taken by science or engineering majors during their first year. Students' understanding of the structure and behavior of matter advances by mathematically examining and manipulating data. Topics include atomic theory and periodicity, chemical bonding, chemical equilibrium and reaction kinetics, stoichiometry, gas laws, intermolecular forces, and acid/base theory. Students will develop laboratory techniques, formal laboratory report writing skills, and laboratory data analysis skills. It is highly recommended that students take the AP Chemistry exam. *CAP ^Summer assignment

Advanced Placement Physics C – Mechanics, Electricity and Magnetism (2255 & 2256)

Grade Level: 12

Credits: 7

Prerequisite: Pre-Calculus, AP Physics B or Lab Physics Corequisite: Calculus

Please note: This course is offered based on sufficient student enrollment

AP Physics C advances students' understanding of the fundamentals of physics. Major topics in this calculus-based course include mechanics, electricity, and magnetism. Other topics include waves, thermodynamics, special relativity, and quantum theory. It is highly recommended that students take the AP Physics C exam.

*CAP ^Summer assignment

Advanced Animal Science (2600)

Grade Level: 10-12

Credits: 5

Prerequisite: Biology of Agriscience or Biology

Advanced Animal Science exposes students to the world of agriculture, animal science, and career options. The Curriculum for Agricultural Science Education (CASE) - Animal Science is an activity-based, project-based, and problem solving-based learning experience. Students will be involved in the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. Animals on site provide opportunities to explore genetics, breeding, feeding and nutrition concepts and practices. This course alternates every other year with Advanced Plant Science. Students are required to assist with the care and feeding of the animals.

Advanced Plant Science (2601)

Grade Level: 10-12

Credits: 5

Prerequisite: Biology of Agriscience or Biology

The Advanced Plant Science/Curriculum for Agricultural Science Education (CASE) - Plant Science course studies plant anatomy, physiology, classification, and the fundamentals of production and harvesting. Students will acquire knowledge and skills required to utilize plants effectively. Greenhouse activities explore the environmental impact on growth, reproduction, development, and plant commerce production. Applications of asexual propagation techniques provide opportunities for plant/crop production. Pesticide safety practices as established by the EPA are implemented. This course alternates every other year with Advanced Animal Science. Students are required to participate in greenhouse production projects such as poinsettia and bedding plant crops.

Human Anatomy & Physiology (2212)

Grade Level: 11, 12

Credits: 6

Prerequisite: Biology and Chemistry

Human Anatomy and Physiology specializes in understanding the human body and its functions. Students study all major body systems, with emphasis on structure, function, mechanics, and maintaining balance. Students will investigate the anatomy of the human body by performing animal dissections, will explore human physiology through laboratory explorations, and will demonstrate learning through laboratory practical exams. *CAP

SOCIAL STUDIES

Social Studies offers a progression of courses designed to develop a broad understanding of world affairs. Three years of social studies are required for graduation including World History and U.S. History I and II. Elective courses cannot substitute for required courses.

| | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|-------------------------------------|--|---------------------------------|-----------------------------------|-----------------------------|
| Required | World History World History Honors | US History I AP US History I | US History II AP US History II | Social Studies Electives |
| Electives (Grades 11-12) | AP Psychology Criminology, Current Issues, Economics, Intro to Psychology, Sociology, Western Civilization | | | |

World History (2326)

Grade Level: 9

Credits: 5

Prerequisite: None

World History enhances students understanding of global events. From the First Global Age to major contemporary events, students explore the implications of social and political evolution in law, religion, commerce, and technology. Students engage in an array of activities that explain the relevance of these new ideas to our modern world. ^Summer assignment

World History Honors (2321)

Grade Level: 9

Credits: 5

Prerequisite: An 85% in Grade 8 American History is required for entrance

World History Honors provides students with an advanced understanding of global events. From the First Global Age to major contemporary events, students explore the implications of social and political evolution in law, religion, commerce, and technology. Students engage in an array of independent projects and writing to explain the relevance of these new ideas to our modern world. ^Summer assignment

US History I (2322)

Grade Level: 10

Credits: 5

Prerequisite: World History

US History I promotes a comprehensive understanding of American history from the early voyages of Columbus through the Reconstruction. Major topics include a intensive study of the Constitution, the contributions of Presidents, the pre and post Revolutionary War periods, and the achievements of prominent Americans.

Advanced Placement US History I (2320)

Grade Level: 10

Credits: 5

Prerequisite: World History

AP US History I cultivates students' historical understanding by analyzing America's social, political, economic, and cultural development. Emphasis is placed on the American Revolution and the founding documents that were essential to the emergence of a mature democracy. The course concludes with The Rise of Sectionalism and the Civil War. AP US History I is equivalent to a college-level course with extensive research and frequent writing. It is highly recommended that students take the AP US History exam upon completion of AP US History II. *CAP ^Summer assignment

US History II (2323)

Grade Level: 11

Credits: 5

Prerequisite: US History I

US History II promotes a comprehensive understanding of American history from the post-Reconstruction to the present. By exploring the major characters and events associated with each period, students understand how the United States emerged as a world power. The ideals of democracy will be examined to develop a deeper appreciation of the American way of life.

Advanced Placement US History II (2325)

Grade Level: 11

Credits: 5

Prerequisite: AP US History I or US History

AP US History II advances historical understanding of the periods between 1865 and the present. Emphasis is placed on the United States' growing role in world affairs, domestic and international consequences of this growth, and the government's intervention in national affairs. AP US History II is a college-level course with extensive research and frequent writing. It is highly recommended that students take the AP US History exam. *CAP. ^Summer assignment

SOCIAL STUDIES ELECTIVES

Advanced Placement Psychology (2346)

Grade Level: 12

Credits 5

Prerequisite: None

AP Psychology challenges students with an intensive study of selected topics in psychology. Students learn about psychological disorders, treatment strategies, stress and its impact on health, human development, and many other psychological issues. AP Psychology is a college level course. It is highly recommended that students take the AP Psychology exam. *CAP ^Summer assignment

Criminology (2390)

Grade Level: 11-12

Credits: 2.5

Prerequisite: None

Criminology advances students' comprehension of crime and juvenile delinquency. Special subjects include causes of crime and society's responses. Emphasis is placed on the understanding that laws are the basis of our criminal justice system. Law cases are studied and individuals involved in law enforcement will be guest speakers.

Current Issues (2394)

Grade Level: 11-12

Credits: 2.5

Prerequisite: None

Current Issues explores changes within the family, community, state, nation, and world. By using various news media, students are empowered to understand how current events affect society. Because of the diversity of the news stories used, students should expect to discuss topics that may be sensitive in nature. Frequent reading and analysis of newspapers and other forms of news media is required.

Economics (2395)

Grade Level: 11-12

Credits: 2.5

Fulfills Personal Economics graduation requirement

Economics introduces students to the world of finances and financial systems. Through this course, students will recognize the relevance of Economics to their daily lives and be expected to research and debate various policies, conduct interviews, and role play economic scenarios. The course stresses the understanding of basic principles of Economics, many of which can be summarized by the concept that states “there is no such thing as a free lunch.” Participation in simulations is required.

Introduction to Psychology (2345)

Grade Level: 11-12

Credits: 2.5

Prerequisite: None

Introduction to Psychology investigates the major principles and complexities of human mental processes. Psychology explores how environment influences behavior and personalities. Students will develop an understanding of the basic foundations of psychology, human development, learning, and the conscious mind.

Introduction to Sociology (2344)

Grade Level: 11-12

Credits: 2.5

Prerequisite: None

Sociology focuses on the scientific study of social relationships. In this course, students assume an active role in analyzing and assessing societal issues. Students will attain further sociological insight through projects and presentations featuring such important concepts as socialization and the institutions of family and education.

Western Civilization (2396)

Grade Level: 11-12

Credit: 2.5

Prerequisite: None

Western Civilization explores the human experience from the early river societies to the Renaissance. Emphasis is placed on the political, economic, social, and religious developments that impacted the formation of the Western world.

HEALTH AND PHYSICAL EDUCATION

HEALTH EDUCATION

Health 9 (1103) *Credits: 2/2.5*
 Health 9 introduces students to the topics of personality development and human emotions. Students develop skills in communication, stress management, resisting drugs, nutrition, and relationships. Sexuality and promiscuity are discussed with a focus on emotional and physical wellness.

Health 11 (1101) *Credits: 1/1.25*
 Health 11 enables students to acquire certification in the American Red Cross techniques as they relate to Cardiopulmonary Resuscitation (CPR) in infants, children, and adults. These skills help students respond correctly to important first aid emergencies.

Health 10 (1105) *Credits: 1/1.25*
 Health 10 provides instruction in driver safety education, with an emphasis on decision making to reduce driving accidents, and common challenges to beginning drivers. Behind the wheel training can be scheduled through NBC's Evening School.

Health 12 (1100) *Credits: 2/2.5*
 Health 12 guides seniors in discussions on mental and physical health and wellness. Topics explored include drug use, contraceptives, relationships, marriage, parenting skills, social issues, and special needs individuals.

PHYSICAL EDUCATION

Physical Education
Grade Level: 9-12 Credits: 2/2.5/3.75
 PE 9-12 assists students in their physical, mental, and social development. By participating in different activities, students discover their own interests while learning the benefits of lifelong fitness. These activities vary according to grade. Presidential Physical Fitness testing occurs in all classes. This battery of athletic challenges establishes a national baseline for physical fitness and annually tracks student progress.

Adapted Physical Education (1617)
Grade Level: 9-12 Credits: 2/2.5/3.75
Prerequisite: By recommendation
 Adapted PE enables students to participate in team and individual activities with support. Students learn skills that promote lifelong fitness through weight training, stretching, health & wellness, nutrition, safety, hygiene, strength and endurance training.

ELECTIVES

Lifetime Information for Everyone (LIFE) (1625)
Grade Level: 12 Credits: 5
Prerequisite: By application
 LIFE provides leadership training for students who desire to serve as peer educators in areas pertaining to teen issues. The LIFE course, which takes the place of Senior Health, is part of the New Jersey Teen Prevention Education Program (NJPEP). These students, who then become part of a statewide network, are given training in a variety of areas such as peer leadership, mentoring, mediation, and life skills. Please note: students are required to attend a two day retreat in the summer prior to the course.

Peer Leadership (7008)
Grade Level: 12 Credits: 7.5
Prerequisite: By application
 Peer Leadership provides students with an opportunity to develop leadership skills. Peer Leaders facilitate the freshman transition into high school by guiding social-emotional growth and promoting academic achievement. Students participate in Health and Physical Education for 5 credits and Peer Leadership Lab five days per week for 2.5 credits. Please note: students are required to attend a retreat in the summer prior to the course.

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|-----------------|-------------------|-------------------|--------------------|
| Fitness | Lacrosse | Fitness | Fitness |
| Soccer | Wall Climbing | Tennis | Strength Training |
| Ultimate Games | Basketball | Volleyball | Volleyball |
| Ropes Course | Indoor Soccer | Pickle Ball | Tennis II |
| Volleyball | Fitness | Team Handball | Archery |
| Basketball | Paddle Tennis | Orienteering | Badminton |
| Aerobics | Flag Football | Strength Training | Table tennis |
| Track and Field | Strength Training | Rhythmic | Ropes Course |
| Speedball | Rhythmic | Basketball | Recreational Games |
| New Games | Softball | Softball | New games |

WORLD LANGUAGE

Students learn to communicate in languages other than English and develop a strong understanding of other cultures. The program builds language proficiency through a sequence of courses. Therefore, students are strongly encouraged to complete multiple years of a language sequence and to study more than one language. Most colleges require a minimum of two consecutive years of a World Language in high school, while competitive colleges prefer three or more years. **All language courses must be studied in successive years.**

Chinese I (1505)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Chinese I introduces students to Mandarin. Emphasis in this course is on the basic skills of listening, speaking, reading and writing Chinese characters. Language learning is presented through the use of thematic units. Culture is an integral part of the curriculum.

Chinese II (1506)

Grade Level: 9-12

Credits: 5

Prerequisite: Chinese I or MS Chinese Grades 7 & 8

If Chinese I is taken in Grade 8, an average of an 85% is required to advance to Chinese II.

Chinese II continues to develop the basic skills of listening, speaking, reading and writing Chinese characters. The Mandarin language is presented through thematic units. Culture is an integral part of the curriculum. *CAP

Chinese III (1507)

Grade Level: 10-12

Credits: 5

Prerequisite: Chinese II

Chinese III advances the students' communicative abilities. Thematic units are used to present the language. Culture continues to be an integral part of the curriculum. *CAP

Chinese IV (1508)

Grade Level: 11, 12

Credits: 5

Prerequisite: Chinese III

Chinese IV refines essential communication skills. Oral proficiency is emphasized. Thematic units are used to present the language. Students read and discuss contemporary articles from authentic target language sources. Culture continues to be an integral part of the curriculum.

French I (1512)

Grade Level: 9-12

Credits: 5

Prerequisite: None

French I introduces students to the basic skills of listening, speaking, reading and writing elementary French. The target language is presented through thematic units. The culture of French-speaking countries is an integral part of the curriculum.

French II (1513)

Grade Level: 9-12

Credits: 5

Prerequisite: French I or MS French Grades 7 & 8

If French I is taken in Grade 8, an average of an 85% is required to advance to French II.

French II continues to develop the basic skills of listening, speaking, reading and writing practical French. The target language is presented through thematic units. The culture of French-speaking countries is an integral part of the curriculum. *CAP

French III (1514)

Grade Level: 10-12

Credits: 5

Prerequisite: French II

French III strengthens students' facility with the language by reinforcing basic communication skills. Thematic units are used to present the language. The culture of French-speaking countries remains an integral part of the curriculum. *CAP

French IV (1515)

Grade Level: 11, 12

Credits: 5

Prerequisite: French III

French IV refines essential communication skills. Oral proficiency is emphasized. Grammar will be studied to facilitate accuracy of self-expression. Thematic units are used to present the language. Students read and discuss contemporary articles from authentic target language sources. The culture of French-speaking countries remains an integral part of the curriculum. *CAP

French V (1516)

Grade Level: 12

Credits: 5

Prerequisite: French IV

French V focuses on the reinforcement of students' abilities to communicate and express their ideas, feelings and opinions, both orally and in writing. Presentations on literary and cultural topics as well as personal experiences are required. Readings include essays, short stories, plays and poetry. *CAP

German IV (1525)

Grade Level: 11, 12

Credits: 5

Prerequisite: German III

German IV refines essential communication skills. Oral proficiency is emphasized. Grammar will be studied to facilitate accuracy of self-expression. Thematic units are used to present the language. Students read and discuss contemporary articles from authentic target language sources. The culture of German-speaking countries remains an integral part of the curriculum.

German V (1526)

Grade Level: 12

Credits: 5

Prerequisite: German IV

German V focuses on the reinforcement of students' abilities to communicate and express their ideas, feelings and opinions, both orally and in writing. Presentations on literary and cultural topics as well as personal experiences are required. Readings include essays, short stories, plays and poetry.

Spanish Culture and Conversation (1557)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Spanish Culture and Conversation offers students an opportunity to meet the World Language graduation requirement. This course does not fulfill a four-year college entrance requirement. Students are exposed to Hispanic culture and acquire an understanding of the interrelationship between language and culture.

Spanish I (1552)*Grade Level: 9-12**Credits: 5**Prerequisite: None*

Spanish I introduces students to the basic skills of listening, speaking, reading and writing elementary Spanish. The target language is presented through thematic units. The culture of Spanish-speaking countries is an integral part of the curriculum.

Spanish II (1553)*Grade Level: 9-12**Credits: 5**Prerequisite: Spanish I or MS Spanish Grades 7 & 8**If Spanish I is taken in Grade 8, an average of an 85% is required to advance to Spanish II.*

Spanish II continues to develop the basic skills of listening, speaking, reading and writing practical Spanish. The target language is presented through thematic units. The culture of Spanish-speaking countries remains an integral part of the curriculum. *CAP

Spanish III (1554)*Grade Level: 10-12**Credits: 5**Prerequisite: Spanish II*

Spanish III strengthens students' facility with the language by reinforcing basic communication skills. Thematic units are used to present the language. The culture of Spanish-speaking countries remains an integral part of the curriculum. *CAP

Spanish IV (1555)*Grade Level: 11, 12**Credits: 5**Prerequisite: Spanish III*

Spanish IV refines essential communication skills. Oral proficiency is emphasized. Grammar is studied to facilitate accuracy of self-expression. Thematic units are used to present the language. Students read and discuss contemporary articles from authentic target language sources. The culture of Spanish-speaking countries remains an integral part of the curriculum. *CAP ^Summer assignment

Advanced Placement Spanish Language (1550)*Grade Level: 11-12**Credits: 5**Prerequisite: Spanish IV or Spanish for Native Speakers II/III*

AP Spanish Language intensively reviews structure, vocabulary building, and pronunciation to improve language facility. Students also explore Spanish magazines, newspapers, and a variety of authentic audio-visual selections. This intensive college-level course is largely determined by the course description published by the College Board. It is highly recommended that students take the AP Spanish Language Exam. *CAP ^Summer assignment

Advanced Placement Spanish Literature (1551)*Grade Level: 11-12**Credits: 5**Prerequisite: AP Spanish Language*

AP Spanish Literature advances Spanish proficiency by exploring literary topics, cultural traditions, and current events. Reading selected news sources, poetry and prose, language and literature are also studied as an expression of the fundamental values of Hispanic culture. This intensive college-level course is largely determined by the course description published by the College Board. It is highly recommended that students take the AP Spanish Literature Exam. ^Summer assignment

Spanish for Native Speakers I (1562)

Grade Level: 9-12

Credits: 5

Prerequisite: By Permission of the Director of Instruction for World Languages

Spanish for Native Speakers I develops the reading and writing proficiency of heritage speakers in their own language. This course is designed for students from Spanish-speaking households.

Spanish for Native Speakers II (1563)

Grade Level: 10-12

Credits: 5

Prerequisite: Spanish for Native Speakers I

Spanish for Native Speakers II augments the reading and writing skills necessary for heritage speakers to gain proficiency in their native language. In addition, the course focuses on the heritage speaker's role in society, the issues facing today's world, the global community, and the realities of Hispanics in the United States. This course is for students from Spanish-speaking households.

Spanish for Native Speakers III (1564)

Grade Level: 11-12

Credits: 5

Prerequisite: Spanish for Native Speakers II

Spanish for Native Speakers III continues to develop students' critical thinking and writing skills necessary for heritage speakers to gain proficiency in their native language. Students will analyze the novels, poetry, and short stories from Latin America, the Caribbean, and Spain. In addition, the course focuses on Hispanic culture, its relevant issues, and its impact on North American culture. This course is for students from Spanish-speaking households.

CAREER & TECHNICAL EDUCATION

Career and Technical Education prepares students to succeed as global citizens for career opportunities for the 21st Century and to support healthy economic growth within the state.

AGRISCIENCE

Agriscience education cultivates students' interest in animals, plants, and/or mechanics. Connections to engineering, environmental technologies, international trade relations, and natural resources are highlighted as students prepare for careers in this rapidly advancing industry. Participation in FFA is required and is an integral part of the Agriscience program.

| Focus Area | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|---|--|--------------------------------------|---|--|
| Horticulture Focus | Greenhouse and Biology of Agriscience | Floral Design | Advanced Floral Design or Advanced Plant Science (CASE) or Advanced Animal Science (CASE) | Advanced Plant Science (CASE) or Advanced Animal Science (CASE) and/or Nursery Landscaping |
| Agricultural Mechanics Focus | Small Engine Repair and Biology of Agriscience | Agricultural Mechanics | Equipment Maintenance and Repair | Diesel and Turf Engines and/or Nursery Landscaping |
| Combination Horticulture and Agriculture Mechanics | Small Engine Repair and Biology of Agriscience | Agricultural Mechanics or Greenhouse | Equipment Maintenance and Repair and/or Advanced Plant Science (CASE) or Advanced Animal Science (CASE) | Diesel and Turf Engines and/or Nursery Landscaping |

HORTICULTURE FOCUS

Floral and Landscape Design (2620)

Grade Level: 10-12

Credits: 5

Prerequisite: None

Floral and Landscape Design develops students' understanding of the floral industry. Products include fresh flower, silk, and dried arrangements, corsages, wreaths, and holiday items. Students explore the landscape industry by drawing designs and using software to create them. Submission of a floral arrangement for judgment at the FFA Horticultural Exposition is encouraged.

Advanced Floral Design (2606)

Grade Level: 11-12

Credits: 5

Prerequisite: Floral and Landscape Design

Advanced Floral Design augments students' understanding of the floral industry. Products include arrangements for social affairs, as well as silk and dried arrangements. Students develop the management skills needed for floral retail. Submission of a floral arrangement for judgment in both the FFA Central Jersey Flower Show and the FFA Horticultural Exposition are encouraged.

Greenhouse (2623)*Grade Level: 9-12**Credits: 5**Prerequisite: None*

Greenhouse explores industry practices in commercial plant production, ornamental horticulture, and the maintenance of a greenhouse environment. Major components include production of poinsettias, spring bedding plants, and other seasonal crops. A hydroponics system introduces students to innovative technologies in food production. Students are required to participate in all aspects of greenhouse crop production.

Nursery Landscape Design & Turfgrass Maintenance (2625)*Grade Level: 10-12**Credits: 5**Prerequisite: Greenhouse*

Nursery Landscape Design and Turfgrass Maintenance introduces students to current industry practices including the design, installation, and maintenance of landscape projects. Pesticide safety practices as established by the EPA are implemented. Students are required to contribute to projects in the greenhouses and on school grounds.

Advanced Plant Science (2601)*Grade Level: 10-12**Credits: 5**Prerequisite: Biology of Agriscience or Biology*

The Advanced Plant Science/Curriculum for Agricultural Science Education (CASE) - Plant Science course studies plant anatomy, physiology, classification, and the fundamentals of production and harvesting. Students will acquire knowledge and skills required to utilize plants effectively. Greenhouse activities explore the environmental impact on growth, reproduction, development, and plant commerce production. Applications of asexual propagation techniques provide opportunities for plant/crop production. Pesticide safety practices as established by the EPA are implemented. Students are required to participate in greenhouse production projects such as poinsettia and bedding plant crops.

Advanced Animal Science (2600)*Grade Level: 10-12**Credits: 5**Prerequisite: Biology of Agriscience or Biology*

Advanced Animal Science exposes students to the world of agriculture, animal science, and career options. The Curriculum for Agricultural Science Education (CASE) - Animal Science is an activity-based, project-based, and problem solving-based learning experience. Students will be involved in the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. Animals on site provide opportunities to explore genetics, breeding, feeding and nutrition concepts and practices. Students are required to assist with the care and feeding of the animals.

AGRICULTURAL MECHANICS FOCUS**Agricultural Mechanics (2627)***Grade Level: 9-12**Credits: 5**Prerequisite: None*

Agricultural Mechanics develops students' understanding of machinery, mechanics, and fabrication. Topics include tractor and machinery operation, adjustment and repair, and small engines. Skills developed include arc welding, oxyacetylene welding, brazing, cutting, and equipment operation and safety.

Small Engine Repair & Machinery Controls (2603)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Small Engine Repair and Machinery Controls develops students' proficiency in basic engine mechanics. Other areas of study include basic electricity, switches and controls, and the use of common tools. Students are encouraged to participate in related FFA small engine troubleshooting and mechanics contests.

Equipment Maintenance and Repair (2615)

Grade Level: 10-12

Credits: 5

Prerequisite: Agricultural Mechanics

Offered in alternate years: 2012-2013 and 2014-2015

Equipment Maintenance and Repair expands the skills learned in prior agricultural mechanics courses. Students learn specialized welding techniques, diesel engines, hydraulics, machinery fabrication, operation, repair, and safety. This course alternates every other year with Advanced Agricultural Mechanics and provides students with the opportunity to become proficient equipment mechanics.

Diesel Engines and Turf Equipment Maintenance (2612)

Grade Level: 10-12

Credits: 5

Prerequisite: Small Engine Repair & Machinery Controls

Diesel Engines and Turf Equipment Maintenance advances students' understanding of diesel equipment, preventive maintenance, machine operation, adjustment, and safety. Operating principles, power transmission, tillage, irrigation, and turf grass equipment use and repair will also be emphasized.

Offered in Alternate Years**Advanced Agricultural Mechanics (2629)**

Grade Level: 10-12

Credits: 5

Prerequisite: Agricultural Mechanics

Offered in alternate years: 2013-2014 and 2015-2016

Advanced Agricultural Mechanics further develops skills from Agricultural Mechanics. Students learn advanced welding techniques, plasma cutting, farming equipment, and truck repair. Construction of farm buildings, rural electrification, diesel mechanics, hydraulics, and plumbing skills are also developed. Equipment operation and safety are emphasized. This course alternates every other year with Equipment Maintenance and Repair.

CAREER & TECHNICAL EDUCATION

APPLIED TECHNOLOGY EDUCATION

Applied Technology Education develops students' understanding of the nature and impact of technology, engineering, and technological design. Students explore the design world in relation to society and the environment. Participation in the Technology Student Association (TSA) is an encouraged, integral part of the program. www.tsaweb.org

| Year 1 | Year 2 | Year 3 | Year 4 | Complementary Courses |
|-------------------------------------|---------------------|--|--|---|
| Engineering & Innovation Technology | CADD II | CADD III | Advanced Engineering & Innovation Tech | Engineering Metal Tech Wood Tech |
| | Engineering II | Advanced Engineering & Innovation Tech | | CADD Metal Tech Wood Tech |
| Metal Technology I | Metal Technology II | | | E&I Tech CADD Wood Tech Engineering |
| Wood Technology I | Wood Technology II | Wood Technology III | | E&I Tech CADD Metal Tech Engineering |
| Graphic Design I | Graphic Design II | Graphic Design III | | Yearbook |
| Video Production I | Video Production II | Video Production III | | Journalism Graphic Design |

Engineering and Innovation Technology (1823) *Pending Board Approval*

Grade Level: 9-12

Credits: 5

Prerequisite: None

Engineering and Innovation Technology prepares students to understand and apply technological concepts and processes that are the cornerstone for the high school applied technology Engineering and CADD programs. Group and individual STEM activities engage students in creating ideas, developing innovations, and engineering practical solutions. Units include the relationship of technologies, design, manufacturing, construction, power, energy, information, communication and systems.

Engineering II (1822)

Grade Level: 10-12

Credits: 5

Prerequisite: Engineering I

Engineering II further explores the role of computer control in assorted systems. By studying electronic theory, students create basic circuits using components such as breadboards, resistors, capacitors, and microcontrollers, sensors, emitters, and power sources. Students solve real-life problems by designing and creating a variety of human and computer-controlled robotic systems. As an additional requirement for the course, students compete in a local/regional robotics challenge, such as FIRST or VEX. *CAP

Advanced Engineering and Innovation Technology (1824) Pending Board Approval

Grade Level: 11-12

Credits: 5

Prerequisite: Engineering II or CADD III

Advanced Engineering and Innovation Technology deepens a student's understanding in applying technological concepts and processes. This course is designed to engage students in exploring and deepening their understanding of "big ideas" regarding technology and makes use of a variety of assessment instruments to reveal the extent of understanding. Group and individual STEM activities engage students in creating ideas, developing innovations, and engineering practical solutions. Units include the relationship of technologies, design, manufacturing, construction, power, energy, information, communication and systems.

Computer Aided Drafting and Design II (1811)

Grade Level: 10- 12

Credits: 5

Prerequisite: Computer Aided Drafting and Design I

CADD II students further develop and apply complex concepts associated with 2-D drawing and 3-D modeling. While engaged in mechanical desktop software, students will manipulate prototype drawing files, system parameters, and icon settings. In addition, students work collaboratively to engineer parts, components, and build completed assemblies. *CAP

Computer Aided Drafting and Design III (1812)

Grade Level: 11-12

Credits: 5

Prerequisite: Computer Aided Drafting and Design II

CADD III introduces students to AutoDesk Inventor software, which allows for intelligent communication and production through drawings. Students undertake 3-D assembly design using the model base approach and specialize in architectural drafting and mechanical design projects. Concepts include Intelligent Parametric entities in mechanical solid modeling. Material properties and texture mapping will be applied for realistic modeling, testing, and data collection. *CAP

Metal Technology I (1842)

Grade Level: 9 - 12

Credits: 5

Prerequisite: None

Metal Technology I introduces students to safe metalworking practices through engagement in fabrication processes. These include sheet metal forming, forging, metal stock machining, casting of molten metal and fastening by soldering, brazing and welding. Students will practice each of these by constructing a number of projects.

Metal Technology II (1843)

Grade Level: 10 - 12

Credits: 5

Prerequisite: Metal Technology I

Metal Technology II reinforces previous experiences and introduces arc, gas, MIG, and TIG welding, forging, heat treating, aluminum casting, and patternmaking. Students will also use a metal lathe and milling machine. Utilizing advanced skills and refined craftsmanship, the metal working student will plan, engineer, and fabricate several high-level projects.

Wood Technology I (1832)

Grade Level: 9 - 12

Credits: 5

Prerequisite: None

Wood Technology I students examine various aspects of construction and technology. Students apply design principles, planning processes, and personal creativity to carry out fabrications. Students learn the intricacies of fine woodworking and the safe use of hand and machine tools.

Wood Technology II (1833)

Grade Level: 10 – 12

Credits: 5

Prerequisite: Wood Technology I

Wood Technology II reinforces basic wood tool processes and focuses instruction on the safe use, care, and adjustment of the power tools and machines. Investigations of materials, design principles, construction techniques, and finishing methods enhance and broaden students' experiences. Cabinetmaking, furniture construction, and wood turning are emphasized.

Wood Technology III (1834)

Grade Level: 11- 12

Credits: 5

Prerequisite: Wood Technology II

Wood Technology III furnishes a setting for advanced woodworkers to refine knowledge, skills, and creativity necessary for fine woodworking. Students study history, style, design, layout, technique, and methodology. Students research, plan, design, and construct a piece of furniture.

Graphic Design I (1872)

Grade Level: 9 - 12

Credits: 5

Graphic Design I draws on processes involved in the creation and layout of producing printed material. Topics include package design, offset printing, desktop publishing, screen printing, and photography. Students design and produce screened t-shirts, memo pads, notebooks, stationary, three-dimensional models, and posters. A variety of technology resources and devices, including computers, scanners, cameras, laser engravers, and task-specific machinery are used to demonstrate understanding of key concepts. *CAP

Graphic Design II (1873)

Grade Level: 10 – 12

Credits: 5

Prerequisite: Graphic Design I

Graphic Design II exposes students to careers, projects, and applications that crossover between printing and visual processes. Desktop publishing, digital imaging and computer layout are incorporated into all paper and web-based projects. Multi-color work expands students' offset printing and screen printing experience. Students continue utilizing a variety of technology resources and devices. In addition, students complete design and production tasks that simulate commercial studio operations. *CAP

Graphic Design III (1870)

Grade Level: 11 - 12

Credits: 5

Prerequisite: Graphic Design II

Graphic Design III introduces computer-savvy students to higher-level software such as Adobe Flash, Photoshop, Illustrator, and 3-D modeling. Software and other lab equipment for screen printing, laser engraving, digital imaging, and printing are incorporated in the production of tactile and digital products. Entrepreneurial skills will be developed as students complete design and production tasks in a commercial operation. *CAP

Video Production I (1877)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Video Production I introduces basic video production and editing techniques. The history and evolution of communication technologies are explored. Students collaborate on writing scripts, drawing storyboards, taping and editing productions. In addition, students evaluate and critique their work as well as genres of movie and video productions. *CAP

Video Production II (1878)

Grade Level: 10-12

Credits: 5

Prerequisite: Video Production I

Video Production II further develops production skills and guides students to become multimedia producers, responsible for district related projects such as: motion computer graphic design, podcasts, live events, sport productions, documentaries, and soundtracks. By utilizing professional tools, portfolio development begins. In addition, outside of class, this course requires work in 2 field productions. *CAP

Video Production III (1879)

Grade Level: 11-12

Credits: 5

Prerequisite: Video Production II

Video Production III exposes students to television studio operations. In various television show formats, lighting, set design, and on-air-talent techniques are practiced. Communication, leadership, and problem solving skills are the focus. "Northern TV" serves as a public outlet for student productions. Professional portfolio development continues. In addition, outside of class, this course requires work in 4 field or news gathering productions. *CAP

CAREER & TECHNICAL EDUCATION
BUSINESS AND TECHNOLOGY

Accounting (1344)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Accounting challenges students to manage finances for a service/merchandising business. Topics include payroll accounting procedures as well as recording, analyzing, and interpreting financial information for two complete accounting cycles. Students develop an understanding of QuickBooks, Microsoft Excel, and accounting databases.

Marketing Education (1390)

Grade Level: 10-12

Credits: 5

Prerequisite: None

Marketing Education develops skills that prepare students to enter the field of marketing. Points of examination include foundations of business, management, entrepreneurship, economics, professional development, communication and interpersonal skills. Additional areas of study include distribution, advertising, selling, pricing, promotion, and product/service management. Participation in Distributive Education Clubs of America (DECA) is required. *CAP

Web Design and Animation (1363)

Grade Level: 10-12

Credits: 5

Prerequisite: None

Web Design and Animation focuses on the use of animations for the creation of games, web sites, stand-alone applications, and cartoons. Students demonstrate an understanding of web design and appreciate the use of animation.

Documents and Publications (1350)

Grade Level: 9-12

Credits: 2.5

Prerequisites: None

Documents and Publications advances students' skills utilizing the Microsoft Word and Microsoft Publisher applications.

Databases and Presentations (1351)

Grade Level: 9-12

Credits: 2.5

Prerequisites: None

Documents and Publications advances students' skills utilizing the Microsoft Excel and Microsoft Power point applications.

Contemporary Business (1309)

Grade Level: 9-12

Credits: 2.5

Prerequisite: None

Contemporary Business provides students with an understanding of world economics, specifically the effect of business and government policies on the standard of living. This course explores the role of technology in business, trends in employment, consumer practices, and small business management. *CAP

Business Law (1313)

Grade Level: 10-12

Credits: 2.5

Prerequisite: None

Business Law instills an awareness of legal rights and responsibilities under the American civil legal system. Topics include the purpose of law, the history of our legal system, and the legal aspects of everyday contracts and current issues.

Sports and Entertainment Marketing (1393)

Grade Level: 10-12

Credits: 2.5

Prerequisite: None

Sports and Entertainment Marketing promotes an understanding of sports, entertainment, and event marketing. Topics include marketing strategies for sporting events and entertainment venues. Emphasis is placed on licensing, target marketing, on-site merchandising, security, and human relations.

Personal Economics (1302)

Grade level: 11, 12

Credits: 2.5

Prerequisite: None

This semester class fulfills the personal economics graduation requirement.

Personal Economics broadens students' understanding of life after high school by exposing them to financial transactions common in adulthood. Points of exploration include the college search process, career development, employment tips, banking and credit, taxes, and communication skills. Beginning with the Class of 2011, this semester course is a graduation requirement.

COMPUTER PROGRAMMING

Visual Basic Programming (6000)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Visual Basic Programming develops students' abilities in the practical application of computer programming. This entry level course establishes students as programmers through the use of Microsoft Visual Basic. Students program solutions to real world problems and create programs such as tic-tac-toe, chance, memory, hangman, minesweeper, and driving test.

Programming Basics (6005)

Grade Level: 9-12

Credits: 5

Prerequisite: Algebra I

Programming Basics provides an introduction to Computer Programming. Students are engaged in the concepts of planning, design, object-oriented, event driven programming through the use of the Alice environment. Students work with Visual Basic, C++, HTML/JavaScript and Java. Game programming and animation concepts are introduced using C++. This course provides an excellent foundation for first time programmers. *CAP

Computer Programming C++ (6001)

Grade Level: 10-12

Credits: 5

Prerequisite: Programming Basics

Computer Programming augments previously learned skills and develops new skills needed to plan, design, write, and debug C++ programs. Topics include program flow control, functions, classes, objects, arrays, and database and animation concepts. This course is recommended for students planning to enter science and technical fields.

Advanced Placement Computer Science A (6002)

Grade Level: 11, 12

Credits: 5

Prerequisite: Structured Computer Programming C++

AP Computer Science A advances fundamental computer science concepts such as hardware, data representation in computers, and the software development life cycle. This course focuses on problem solving through the use of language features and programming techniques. Students understand how object-oriented design makes programs adaptable and reusable. This course is equivalent to a college-level course in Java Programming. It is highly recommended that students take the AP Computer Programming exam. *CAP

FAMILY AND CONSUMER SCIENCE

Foods and Nutrition (1724)

Grade Level: 9 – 12

Credits: 5

Prerequisite: None

Foods and Nutrition explores the basics of nutrition, safety, equipment, measurement, baking, cooking, menu planning, meal preparation, and hospitality careers. Students demonstrate an understanding of principles necessary to succeed in a domestic or commercial kitchen.

Child Development I (1730)

Grade Level: 10 – 12

Credits: 5

Prerequisite: None

Child Development I introduces the organizational culture of a typical nursery school as preparation for participation in the Early Child Learning Center. Units include children's literature, nutrition, health, safety, discipline, child abuse, birth defects, and prenatal care. Students prepare age appropriate lessons for the pre-schoolers to understand the needs of these children.

Child Development II (1731)

Grade Level: 11, 12

Credits: 5

Prerequisite: Child Development I

Child Development II expands students' understanding of child development from birth to age five. Units include family matters such as divorce, abuse, sibling rivalry, legal custody, and cultural differences. Students advance their skills in developing age-appropriate lessons for pre-school children.

VISUAL & PERFORMING ARTS

ART

The Art curriculum offers students creative visual art experiences. An objective is to develop the artistic skills and perspectives necessary to better appreciate the contribution of diverse artists throughout history.

Sculpture (1246)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Sculpture creates a venue for self-expression and creative problem solving in 3-D. Students explore various sculptural materials and gain an understanding of the significance of art history. *CAP

Art I (1203)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Art I develops students' understanding of fine art in drawing and painting through self-expression and creative problem solving. Students explore various art materials, express themselves through art, gain an understanding of art history, and build an art vocabulary of elements and principles.

Art II (1204)

Grade Level: 10-12

Credits: 5

Prerequisite: Art I

Art II engages creative minds beyond Art I. Students develop their creative abilities, and an understanding of color theory, drawing, painting techniques, and the fundamentals of art.

Art III (1205)

Grade Level: 11, 12

Credits: 5

Prerequisite: Art II

Art III builds on the foundation of terms, concepts, and techniques developed in Art I and II. Challenging long-term projects will be presented to assist the serious art student in building a strong and unique portfolio of artwork. *CAP

Art IV (1206)

Grade Level: 12

Credits: 5

Prerequisite: Art III

Art IV further advances the terms, concepts, and techniques developed in previous art courses. Individualized projects are encouraged to allow students to continue to develop portfolio projects for college entry requirements. *CAP

Advanced Placement Studio Art 2D Design (1209)

Grade Level: 12

Credits: 5

Prerequisite: Art III

AP Studio Art 2D Design engages the serious art student in creative thinking. Students gain an understanding of digital portfolio design and prepare an Advanced Placement portfolio. The course requires additional hours outside of school and presentation of a solo exhibition. *CAP

Ceramics (1251)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Ceramics introduces tactile expression in a three dimensional form. Students develop technical skills with clay by constructing and decorating projects using the methods of pinching, coil building, slabbing, glazing, slip casting/mold pouring, sculpture and modeling. Methods of surface decoration are also included. Students' understanding of the role of art in society is broadened.

Intermediate Ceramics I (1252)

Grade Level: 10-12

Credits: 2.5

Prerequisite: Ceramics

Intermediate Ceramics I conquers the potter's wheel! Students refine centering skills, pull a cylinder, and create functional pottery. Various finishing details explored include rims, handles, glazes, and decorating techniques.

Intermediate Ceramics II (1253)

Grade Level: 10-12

Credits: 2.5

Prerequisite: Intermediate Ceramics I

Intermediate Ceramics II empowers students to throw virtually any form from the potter's wheel! Students' development of technical skills and craftsmanship continues, while a new understanding of these techniques is combined with wheel projects. Functional and sculptural pottery, including a tea service will be designed. *CAP

Advanced Ceramics (1248)

Grade Level: 11, 12

Credits: 5

Prerequisite: Intermediate Ceramics II

Advanced Ceramics enables students, armed with a palette of techniques and skills, to create pieces of their dreams! Students may create a sketchbook/journal, research designs, learn about marketing, and construct exhibitions. *CAP

MUSIC

Instrumental Music

Four levels of instrumental classes are offered to inspire the musical talents of our students. Placement is determined by skill level and an audition. Students are required to purchase supplies and, in most cases, their own instruments.

Band Class (2104)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Band Class introduces students to the formal study of concert band instruments. It focuses on basic playing techniques, reading skills, and the fundamentals of music theory. Performance in class is required.

Concert Band (2110)

Grade level: 9-12

Credits: 5

Prerequisite: By Audition

Concert Band immerses students in the fundamentals of superior performance technique. Students advance their understanding of music theory and vocabulary. Performances in two to three evening concerts per year and possibly in school assemblies are also required.

Symphonic Band (2111)

Grade level: 9-12

Credits: 3/4/5

Prerequisite: By Audition

Symphonic Band engages students in the intermediate level of performance techniques. Through the study of concert band music, students gain an understanding of music theory and vocabulary. Performances in two to three evening concerts per year and possibly in school assemblies are also required.

Wind Ensemble (2112)

Grade level: 10-12

Credits: 5

Prerequisite: By Audition

Wind Ensemble enables intermediate to advanced students to refine their skills in instrumental ensemble. Students gain an understanding of music theory and vocabulary. Students are required to perform in a minimum of two concerts per year, and represent the school at a minimum of two competitions.

Music Theory (2139)

Grade Level: 9-12

Credits: 5

Prerequisite: By Audition

Music Theory addresses the fundamentals of written music and instills a greater understanding of music rudiments. Students are expected to apply theories of music to harmonization and composition. Students are required to write music and perform their composition at the end of the course.

Advanced Placement Music Theory (2197)

Grade Level: 10-12

Credits: 5

Prerequisite: By Recommendation

AP Music Theory advances student skills in reading and analyzing notated music and aural training. Emphasis is placed on developing listening skills, sight singing ability, and understanding rhythm, melody, harmony, form, and other compositional devices. Students are required to present their original compositions at a public presentation in June. It is highly recommended that students take the AP Music Theory exam. *CAP

Vocal Music

Vocal music emphasizes theory, skills, and advanced performance techniques. Students may repeat a course as the music selections change each year. The program encourages students to set goals and develop into life-long learners.

Concert Choir (2123)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Concert Choir promotes vocal skills, including resonance of the voice, intonation, phrasing, breathing techniques, balance, rhythmic accuracy, and articulation. Students gain an understanding of music literature and theory. A minimum of two evening performances are required.

Chamber Choir (2128)

Grade Level: 9-12

Credits: 5

Prerequisite: By Audition

Chamber Choir exposes students to a higher level of music. A diverse collection of musical styles are explored such as: Jazz, early composition, musical reviews, and Rock. Students also gain an understanding of music literature and theory. At least two evening performances are required.

Chorale (2127)

Grade Level: 10-12

Credits: 5

Prerequisite: By Audition

Chorale performs for community functions and state-wide competitions. Students gain an understanding of college-level musical literature, terminology, historical background, breathing techniques, pronunciation, rhythm, and articulation. At least two evening performances are required.

Chorale (Womens) (2125)

Grade Level: 10-12

Credits: 5

Prerequisite: By Audition

Chorale performs for community functions and state-wide competitions. Students gain an understanding of college-level musical literature, terminology, historical background, breathing techniques, pronunciation, rhythm, and articulation. At least two evening performances are required.

THEATRE

Theatre Arts actively engages students in performance. Production work based on personal experiences, cultural contexts, heritage, literature, and history enables students to better understand how art imitates life. Through performance, students gain insight into how people think, feel, and live as they develop essential life skills.

Theatre Arts (1430)

Grade Level: 9-12

Credits: 5

Prerequisite: None

Theatre Arts involves students as observers and participants. Through individual and group pantomimes, monologues, original sketches, and improvisations, students gain self-confidence in speech and body movement. Students are also exposed to theatrical history, stage make-up, set and costume design, and play critiques. In addition, students are required to attend and critique the school's fall play, perform in the annual "Evening of Short Plays", and attend two evening rehearsals associated with it.

Directing a Play I (1437)

Grade Level: 11-12

Credits: 2.5

Prerequisite/Corequisite: *Play Production*

Directing a Play I immerses advanced theater students in the entire process of directing a play. From casting through performance, students gain an understanding of the director's role. During the second semester only, students are placed into one of the Theatre Arts classes in order to direct and stage manage one of the class' short plays. Students are required to attend the afternoon or evening dress rehearsal, as well as the performance of "Evening of Short Plays" in the spring.

Directing a Play II (1439)

Grade Level: 12

Credits: 2.5

Prerequisite/Corequisite: *Directing a Play I*

Directing a Play II further extends the student's experiences as a director. Students delve further into the role of director by directing the different genres of plays that they may not have any familiarity with. Students are required to attend the afternoon or evening dress rehearsal, as well as the performance of "Evening of Short Plays" in the spring.

Play Production (1441)

Grade Level: 10-12

Credits: 5

Prerequisite: *Theatre Arts*

Offered alternate years: 2012-2013 and 2014-2015

Play Production develops performance skills while involving students in children's theatre, playwriting, and directing. Students gain a deeper understanding of the play production process through experience. For the children's play, students are required to attend an evening dress rehearsal and perform on a Saturday afternoon; they will also perform at elementary schools for assembly programs. Students are required to perform in "An Evening of Original Short Plays" in the spring. An after school or evening dress rehearsal and a set-painting session are required. This course is offered on a rotating basis with Advanced Acting.

Offered in Alternate Years**Advanced Acting (1435)**

Grade Level: 10-12

Credits: 5

Prerequisite: *Theatre Arts*

Offered in alternate years: 2013-2014 and 2015-2016

Advanced Acting further develops the skills introduced in Theatre Arts and applies them extensively to various periods and styles of acting. Students gain experience through audition monologues, group interpretation, and television/film acting. The "Evening Showcase," offered each spring, requires students to perform their greatest works. This course alternates every other year with Play Production. *CAP

Program Planner and Worksheet

PROGRAM PLANNER AND WORKSHEET

Please bring completed planner to your scheduling appointment with your counselor.

| Grade 9 | | |
|-----------------------|--------------------------------------|--|
| 1 | English I | |
| 2 | Algebra or Geometry | |
| 3 | Biology or Biology of Agriscience | |
| 4 | World History | |
| 5 | Health/PE | |
| 6 | World Language | |
| 7 | CTE or VPA Elective | |
| 8 | Elective or Study Hall | |
| Total Credits: | | |

| Grade 10 | | |
|-----------------------|---------------------------------------|--|
| 1 | English II | |
| 2 | Geometry or Algebra II | |
| 3 | Chemistry or Environmental Science | |
| 4 | US History I | |
| 5 | Health/PE | |
| 6 | World Language | |
| 7 | CTE or VPA Elective | |
| 8 | Elective or Study Hall | |
| Total Credits: | | |

| Grade 11 | | |
|-----------------------|--------------------------------|--|
| 1 | English III | |
| 2 | Algebra II or Pre-Calculus | |
| 3 | Physics or Physical Science | |
| 4 | US History II | |
| 5 | Health/PE | |
| 6 | World Language | |
| 7 | Personal Economics Elective | |
| 8 | Elective or Study Hall | |
| Total Credits: | | |

| Grade 12 | | |
|-----------------------|--|--|
| 1 | English IV | |
| 2 | Advanced Algebra/Trig, Pre-Calculus or Calculus | |
| 3 | Science Elective | |
| 4 | Social Studies Elective | |
| 5 | Health/PE | |
| 6 | Elective | |
| 7 | Elective | |
| 8 | Elective or Study Hall | |
| Total Credits: | | |

To graduate from Northern Burlington, students must earn 130 credits as follows:

| | |
|--------------------------------------|-------------------|
| English I, II, III & IV | 20 credits |
| Health & Physical Education | 16 credits |
| Mathematics | 15 credits |
| Science | 15 credits |
| U.S. History I & II | 10 credits |
| World History/Cultures | 5 credits |
| Visual & Performing Arts (VPA)* | 5 credits |
| Career & Technical Education (CTE)** | 5 credits |
| World Languages | 5 credits |
| Personal Economics*** | 2.5 credits |
| Electives | Remaining credits |

* Art, Music, Theatre

** Selected Agriscience courses, Applied Technology, Business, Computer Programming, Family and Consumer Science.

*** Personal Economics, Financial Math, or Economics

Please list electives in order of preference:

1. _____

2. _____

3. _____