# Northern Burlington County Regional School District



# High School Program of Studies

2023 - 2024

## NORTHERN BURLINGTON COUNTY REGIONAL HIGH SCHOOL

#### PERSONNEL DIRECTORY

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Michael Figgs, President North Hanover Township James Specca, Vice President Springfield Township Chesterfield Township Laura Bond Mansfield Township Radiah Gamble Chesterfield Township F. Gerald Spence Mansfield Township Kellie Stobie Kevin Zimmer North Hanover Township North Hanover Township Vacant TBD Military Liaison-Joint Base McGuire-Dix-Lakehurst Caiden Ridgway Student Representative

## **CENTRAL OFFICE ADMINISTRATORS**

Andrew Zuckerman, Ed.D. Superintendent School Business Administrator/Board Secretary Richard Kaz Director of Curriculum, Instruction and Professional Development, AFJROTĆ Amy Stella, Ed.D.

#### **DISTRICT DIRECTORS**

Amy Stella, Ed.D.	Curriculum, Instruction & PD, AFJROTC	astella@nburlington.com	x2016				
Deborah Droke	Mathematics, Science	ddroke@nburlington.com	x2220				
Matthew Konowicz	21st Century Life & Career Skills, Visual & Performing Arts	mkonowicz@nburlington.com	x2008				
Kieshea Fitzgerald	School Counseling Services	kfitzgerald@nburlington.com	x2055				
Lisa Pirrello-Peters	Special Education	<u>lpeters@nburlington.com</u>	x2026				
Leslie Puente-Ervin, Ed.D.	English/Language Arts, Social Studies, AP Program, Gifted & Talented, Media Center	<u>Ipuente-ervin@nburlington.com</u>	x2074				
Daniel Uszaki, Ed.D	Athletic Director	duszaki@nburlington.com	x2094				
BUILDING ADMINISTRATORS							

Sally Lopez, Ed.D.	Principal, World Languages	slopez@nburlington.com	x2046
Brandon Bennett	Assistant Principal	bbennett@nburlington.com	x2044
Christopher Cataline	Assistant Principal, Health & Physical Education	ccataline@nburlington.com	x2212
Nancy Hoch	Assistant Principal	nhoch@nburlington.com	x2043

#### **COUNSELING DEPARTMENT**

Tara Corcoran	tcorcoran@nburlington.com	x2054	Marissa Pona	mpona1@nburlington.com	x2052
Colleen Seville	cseville@nburlington.com	x2073	Kenneth Mauss	kmauss@nburlington.com	x2049
Casey Faust	cfaust@nburlington.com	x2082	Kevin Patrick	kpatrick@nburlington.com	x2048
Vickie Sheppard, Registrar	vsheppard@nburlington.com	x2051	Danielle Haley, Secretary	dhaley@nburlington.com	x2050



#### **TABLE OF CONTENTS**

INTRODUCTION	
Graduation Requirements	1
GPA Calculation	2
College and Career Readiness	2 2 3
Course Selection Process	3
College Credit Opportunities	4
College Accelerated Program (CAP/CA	ASE) 4
AP & Honors Programs	5
State Seal of Biliteracy	5
Gifted & Talented Program	6
Senior Option Programs	6
Option II	7
Early Graduation	7
Early Dismissal	7
Physical Education	7
Academic Advancement	8
Summer Course Remediation	8
Athletic and Extracurricular Eligibility	9
ENGLISH HEALTH AND PHYSICAL EDUCATION INTERDISCIPLINARY STUDIES MATHEMATICS SCIENCE SOCIAL STUDIES SPECIAL EDUCATION WORLD LANGUAGE	10 13 15 18 23 27 31 32
21st CENTURY LIFE AND CAREER SKILLS Air Force JROTC Agriscience Applied Technology Engineering Business Family and Consumer Science	36 38 42 46 48
VISUAL AND PERFORMING ARTS (VPA) Art Music	49 51

53

Theatre

#### **OUR MISSION**

The Northern Burlington County Regional School District, in shared alliance with home and community, is to establish a dynamic and challenging academic environment that promotes lifelong learning. Our school will provide a safe and welcoming atmosphere where everyone is empowered to be a creative, independent, critical thinker and a responsible citizen in a rapidly changing global society.

#### **OUR BELIEFS**

We believe that all students have the right to an education in a safe and caring environment where learning is valued.

We believe that our students are our community's most valuable asset and our educators are our most valuable resource.

We believe that professional and personal growth creates a culture of lifelong learning.

We believe that an individualized, challenging curriculum is the foundation of an academically enriched, student-centered environment which supports all learners.

We believe in developing a culture that respects and honors the uniqueness of the individual and fosters responsibility toward the community while guiding students to meet their potential.

We believe all students must be conscientious, respectful, and purposeful users of information and communication technologies.

We believe that schools share the responsibility with home and community in teaching and modeling ethical behavior as well as positive social and academic skills.

Inspire the Desire...
...One Student at a Time

## INTRODUCTION

The **Program of Studies** provides students with a reference guide for long-range course scheduling. 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 post graduate aspirations. School counselors will work with individual students to create and monitor a four year plan for success.

All students are required to meet minimum state graduation requirements in order to receive a diploma. These requirements include 130 credits and represent the **minimum** number of credits for each academic category. Once a full course is completed with a minimum grade of 65, credits are awarded on the transcript.

#### MINIMUM GRADUATION REQUIREMENTS

#### **CREDIT REQUIREMENTS**

English I, II, III & IV	20 credits				
Health and Physical Education*	16-20 credits				
Mathematics	15 credits				
Science	15 credits				
Social Studies (World, US I & II)	15 credits				
21st Century Life and Careers	5 credits				
Visual and Performing Arts (VPA)	5 credits				
World Languages	5 credits				
Financial Literacy**	2.5 credits				
Electives	Remaining credits				
Total	130 credits				
* Required each year of enrollment					
**Fulfilled by 1 of 3 offerings: Personal Economics & Career Planning (Business), Economics (Social Studies), Consumer Finance (FCS); Does not satisfy dual credit for 21 CLC					

#### **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

# GRADE POINT AVERAGE (GPA) CALCULATION

Weighted GPA is based on final course 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. Seven (7) points are added to the final grade (for the calculation of the GPA) for Honors courses and ten (10) points for AP courses. A sample GPA calculation can be found on the counseling website.

#### ASSESSMENT REQUIREMENTS

New Jersey regulations (N.J.A.C. 6A:8-5.1) requires all students to demonstrate proficiency in English Language Arts (ELA) and Mathematics. To qualify for a high school diploma, students must meet the NJ high school graduation assessment requirements as described here: High School Graduation Assessment Requirements

#### INDICATORS OF COLLEGE AND CAREER READINESS

Entrance requirements vary greatly among colleges, universities, and technical schools. The best preparation and readiness for college and career is an appropriately challenging high school academic program. Most selective colleges use the strength of a student's academic schedule as a primary factor in admissions decisions. Students should seek additional information via <a href="Naviance Student">Naviance Student</a>. Please note: High school graduation requirements may differ from college admission requirements. It is recommended that students graduate with a minimum of 16 Academic Units. (English, Mathematics, Science, Social Studies, World Language)

Minimum requirements for most four-year institutions include:

- 4 years of English
- 3 years of Social Studies
- 2-3 years of laboratory Science
- 3-4 years of Mathematics (Algebra I, Geometry, and a course which builds upon Algebra and Geometry)
- 2-3 years of the same World Language
- 2 years of academic electives (English, Mathematics, Science, Social Studies, World Language)

#### COLLEGE READINESS ASSESSMENTS

Northern Burlington administers the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT), to all sophomores and juniors. The PSAT/NMSQT measures verbal reasoning, critical reading, math problem solving, and writing skills and is intended to provide an estimated SAT score. Students in Grade 11 may qualify for the National Merit Scholarship Program based on PSAT score. Please visit <a href="https://www.collegeboard.org/psat">www.collegeboard.org/psat</a> for additional information. The Armed Services Vocational Aptitude Battery (ASVAB) is designed to measure aptitudes in four domains: Verbal, Math, Science and Technical, and Spatial. This assessment is given to students as identified.

AP Potential is a predictive tool that allows schools to generate rosters of students who are likely to score a 3 or higher on a given AP Exam based on their performance on the PSAT/NMSQT or SAT. AP Potential is a research based calculation which shows moderate to strong correlations between PSAT/NMSQT scores and AP Exam results. PSAT/NMSQT scores are stronger predictors of students' AP Exam scores than the more traditional factors such as high school grades and grades in same-discipline course work. Qualified students are notified by the district, the counselor during course selections, and through their College Board account.

#### **COLLEGE ENTRANCE EXAMS**

It is the student's responsibility to check each institution's admission requirements. Please visit the following websites for more information and to register:

www.collegeboard.org
www.act.org
www.fairtest.org (for institutions that are test optional)

If a student requires testing accommodations, it is the parent/guardian's responsibility to complete and submit the appropriate application to The College Board and/or ACT. Testing accommodations are solely determined by The College Board and/or ACT.

#### COURSE SELECTION PROCESS

Jan	Feb	Mar	Apr	May	, Jun	Jul	Aug	Sep	Oct	Nov	Dec
		Selection									
		Appeal									
					S1 Cou	rse/Level	Change				
S2 Cour Level Ch								·			

The master schedule and staffing are determined by student course selections. Only courses with sufficient enrollment will be scheduled. Therefore, it is essential that students and parents carefully and deliberately choose their courses. Students are expected to honor their commitments to their course selections. Scheduling meetings are conducted by grade level between January and March, beginning with rising seniors; students must submit their Course Selections with consent by a parent/guardian. The administrative team reserves the right to designate student placements. The course selection process must be finalized by the end of March.

#### **COURSE WAIVER REQUESTS**

Students who wish to enroll in a course but have not met the *minimum grade requirement prerequisite* may complete a <u>Course Waiver Request</u> during the course selection process. A hardcopy of this form is required and must be submitted to the counselor. A level change request or a request to drop the course may **not** be considered for those students who have completed a waiver.

#### COURSE / LEVEL CHANGE

If students wish to change their course requests after the close of the course selection process, but prior to the first 10 days of the quarter the student should contact their school counselor. If students wish to change their course requests after the first ten days of the start of the semester, a <a href="Schedule Change Form">Schedule Change Form</a> must be completed. A hardcopy of this form is required and must be submitted to the counselor. If the request is granted, future requests for removal from the course will not be honored.

#### Schedule/Level changes may be considered for the following reasons:

- The correction of an error in the schedule including a conflict between two or more courses, failure of a prerequisite course, or more than one (1) study hall period per 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, assignment to a different teacher will be scheduled if another teacher is available.
- Option II/Early Dismissal (30 credits must be maintained)

#### Schedule/Level changes may not be considered for the following reasons:

- Change of course not included in primary or alternate selections
- Course content or expectations
- Course not needed for graduation
- Lack of available seats in course
- Student is appropriately placed in the course
- Teacher preference or inability to relate to the current teacher
- To lighten course load, for convenience, preference for another subject or class period, or to be with friends
- To enter a study hall

If the Director of Instruction approves the change, the course withdrawal will be reflected on the transcript as Withdraw Pass (WP) / Withdraw Fail (WF) according to the following timeline:

- If a course is approved to be dropped prior to the midpoint of the first marking period, no indication of enrollment will be indicated on the report card or transcript.
- If a course is approved to be dropped after the midpoint of the first marking period, the current grade at the time of withdrawal will be indicated on the report card and transcript as WF or WP.

#### **COLLEGE CREDIT OPPORTUNITIES**

#### COLLEGE ACCELERATED PROGRAM (CAP)

College Accelerated Program (CAP) courses offer students the option of obtaining Rowan College at Burlington County (RCBC) at the same time they earn high school credits through Northern Burlington's partnership with Rowan College at Burlington County (RCBC). Staff members who are recognized as adjunct faculty teach these courses during the regular school day. Students desiring to receive dual credit are responsible for completing the RCBC registration process and paying the RCBC tuition in the fall. Courses eligible to earn CAP credits have a notation \*CAP\* at the end of each description as applicable. Please note that RCBC reserves the right to revise the approved course list annually. RCBC credits are widely accepted by colleges and universities nationwide. However, it is recommended that students research the policies of colleges they are considering to determine if CAP credits will be accepted at their institution via <a href="https://www.right.num.nit.englist.org">www.nitransfer.org</a> prior to registration. For more information, please contact the Outreach and Admissions office at RCBC (http://www.rcbc.edu/cap).

#### AGRISCIENCE ARTICULATION AGREEMENTS

Articulation agreements with Delaware Valley College, Mercer County Community College, Rutgers University School of Environmental and Biological Sciences, and SUNY Cobleskill provide students an opportunity to earn both high school and college credit for selected courses. Students wishing to receive dual credit are required to complete the appropriate registration through their respective post secondary institution. See the Agriscience section of the Program of Studies or contact the Office of Instruction for more information.

#### ADVANCED PLACEMENT (AP) AND HONORS PROGRAMS

Advanced Placement (AP) and Honors courses are developed to further enhance students' ability to work independently and demonstrate high levels of critical analytical and original thinking. 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 strongly consider these courses. The AP and Honors courses include supplemental summer assignments.

**Honors** - Honors courses demand extensive academic commitment. These students have also demonstrated an interest in the subject and independent work ethic. Honors curricula is locally developed and commonly assessed.

Advanced Placement (AP) - These college level courses enrich the secondary school experience for students willing to apply themselves to the rigorous expectations. The national curricula correspond to the AP examinations offered by the College Board. AP students are expected to participate in the AP exam in May, which may result in the awarding of college credit. Students who qualify for Free or Reduced Meals are eligible to receive additional financial aid for exams. AP Exam registration occurs in the fall.

**AP Capstone™** is a College Board program that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. It cultivates curious, independent, and collaborative scholars and prepares them to make logical, evidence-based decisions.

AP Capstone<sup>™</sup> consists of two AP courses: AP Seminar and AP Research. The Capstone program is designed to complement and enhance the discipline-specific study in other AP courses. Northern Burlington uses the AP Capstone program to provide unique research opportunities for current AP students and to expand access to AP by encouraging students to master the argument-based writing skills that the AP Capstone program develops.

AP Capstone™ Diploma is a College Board diploma program based on two year long AP courses: AP Seminar and AP Research. Exams for both courses are required to qualify for a Capstone diploma or certificate. Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing receive the AP Capstone Diploma™ from College Board. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams receive the AP Seminar and Research Certificate™ from College Board. Obtaining an AP Capstone Diploma™ communicates to post-secondary institutions that the critical thinking, research, collaboration, time management, and presentation skills students need for college-level work have been developed.

#### HONORS & AP ENROLLMENT CRITERIA

To advance to an Honors or AP level, a final grade of "A" is required in the prerequisite course(s). For example: Desired course is English II Honors. Current course is English I (college prep). A final grade of "A" in English I is required for placement in English II Honors.

To advance two levels, a final grade of "A" is required for all the grade requirement prerequisites outlined in the course description. If students do not meet the prerequisite, they must complete a *Course Waiver Request* form. For example: Desired course is AP Language & Composition. Current course is English II. A Final Grade of "A" in both English II & grade-level Social Studies is required for placement in AP Language & Composition.

To remain eligible for AP or/and Honors level, a final grade of "B" is required. For example: Desired course is English I Honors. Current course is English I Honors. A final grade of "B" in English I Honors is required for placement in English II Honors.

Desired Level	Current Level	Grade Required
Honors	College Prep	А
Honors	Honors	В
AP	College Prep	A in all course prerequisites
AP	Honors	А
AP	AP	В

\*If a student has not performed at the required levels for enrollment in the AP and Honors courses a *Course Waiver Request* form is required.

#### STATE SEAL OF BILITERACY

The New Jersey Department of Education State Seal of Biliteracy identifies graduating high school students who are able to demonstrate proficiency in English in addition to one or more world languages. In order to obtain the State Seal of Biliteracy, a high school graduate must achieve the following criteria:

- Demonstrate proficiency in English by meeting English language arts graduation requirements or for English Language Learners, attain a score of 4 or better on Tier B or C of the ACCESS for ELLs 2.0 in all four language domains (during Grade 11/12). AND
- Demonstrate a linguistic proficiency level by achieving a score of Intermediate Mid (5 or higher) on the <u>STAMP</u> assessment in both Writing/Speaking and Reading/Listening levels (during Grade 11/12) or a minimum score of 4 on the AP Language and Culture Exam (during Grade 11).

#### **GIFTED & TALENTED PROGRAM**

The Gifted & 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 the Gifted & Talented Program is based on achieving qualifying scores on the nationally recognized Naglieri Nonverbal Ability Test (NNAT3) and the Otis Lennon School Ability Test (OLSAT). Please contact the Office of Academics for additional information.

#### SENIOR OPTION PROGRAMS

Senior Options Programs are available only to students in senior year, designed to provide robust, diverse experiences and/or leadership experiences. The programs listed below are by electronic application. The application period occurs between mid-November and early December annually. Students in Grade 11 who are interested in these options for senior year must apply during that application window.

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

Credits: 5

Prerequisite: By electronic application

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 retreat in the summer prior to the course.* 

Peer Mentoring (1126) Grade Level: 12 Credits: 5 Full Year

Prerequisite: By application

Peer Mentoring develops the leadership skills of high school students by teaching them how to build relationships, foster collaboration, increase their self-confidence, problem-solve, and resolve conflict. Peer Mentoring seeks to achieve three key outcomes for the peer leaders and students receiving mentoring: improved communication with peers, teachers, and families with an appreciation for people from different backgrounds, increased confidence in fulfilling academic and social responsibilities, and enhanced leadership skills and the ability to identify and solve problems. It fulfills the graduation requirement of Senior Health and Physical Education.

#### Senior Instructional Leadership Corps (SILC) (7021)

Credits: 5

**Prerequisite**: By electronic application

SILC introduces 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. This course is pass/fail and does not factor into the grade point average.

Technology Capstone: Material, Design & Engineering Honors (1828)

Credits: 5

**Prerequisite:** By electronic application

Technology Capstone: Material, Design & Engineering engages seniors in an experience emphasizing the expanding need for understanding and applying the principles of structural, robotic, mechanical, electronic, energy, power, transportation, biomedical and control systems as they relate to the identification of real world needs and development of practical solutions. Collaborative teams will construct with their technological understandings and experiences in real world challenges. A focus on higher education and career readiness culminate with extensive discussion and presentations. ^Summer Assignment

#### **OPTION II**

#### ALTERNATIVE LEARNING EXPERIENCES

District Policy 5460 permits students to apply for high school credits for alternative learning experiences in accordance with N.J.A.C. 6A:8-5.1(a)1ii that enables them to meet or exceed graduation requirements through credit advancement. Students seeking credits under this provision must submit the Option II Application to the Counseling Office for review by the Option II Committee. A hardcopy of this form is required and must be submitted to the counselor. The Option II Committee makes recommendations to the Board of Education each semester (three times per year). Examples of alternative learning experiences include community learning projects, internships, independent studies, online courses, Early Graduation Option and college courses. Students should review their four year plan and see their counselor for current information about timelines for approval, application packets and additional information. Per district policy, a limit of one Academic Advancement course is permitted to be taken during the school year (maximum of 45 credits per semester) and a limit of two courses during the summer (maximum 10 credits).

Middle school courses taken for high school credit do not fulfill high school graduation requirements in those subject areas and are not factored into the Grade Point Average (GPA).

#### **EARLY GRADUATION**

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 prior to the beginning of Grade 10. Early Graduation applications are presented to the Board of Education for approval in late fall.

#### EARLY DISMISSAL FOR WORK BASED LEARNING

Seniors may apply to pursue a partial day schedule for work experience. Work Based Learning is an educational strategy that provides students with real-life work experiences where they can apply academic and technical skills and develop their employability. Students enrolled in an Agriscience CTE program must complete the Option II Application form for Work Based Learning approval by the committee. Students making this request to begin in September must submit the Option II Application Form to the Counseling Office by the end of April. Students making this request to begin second semester must submit the Option II Application Form to the Counseling Office by the end of October. A minimum of thirty (30) credits must be scheduled for the school year.

#### PHYSICAL EDUCATION

All students are required to participate in three marking periods of physical education per school year (150 minutes per week, as required by NJSA 18A: 35-5, 7 & 8). Students who participate in an approved athletic activity under the direction of a qualified professional for a minimum of 25 hours per marking period may apply to receive credit for physical education via Option II. Students must complete the application for review by the committee no later than **the end of April** for first semester/full year or **the end of October** for second semester. Students are expected to complete and submit a log of activities signed by their instructor to receive appropriate P.E. credits each marking period. Based on the activity log, a pass/fail grade will be issued which is not factored into the Grade Point Average (GPA). Please note: Students are required to take Health at Northern Burlington and this course will not be considered for Option II.

#### ACADEMIC ADVANCEMENT & ENRICHMENT

Students who desire to pursue accelerated course work independently may receive approval to take courses for original credit. Students must complete the Option II Application for approval by the committee. Applications are reviewed by the committee three times a school year. The course must align with the NJ Department of Education's requirements for graduation and be offered at an accredited institution. A full course description must be attached to the application. It is the student's responsibility to submit the final course grade to the school counseling office at the end of the semester. Grades earned in summer one and summer two will be awarded to the transcript for the previous school year. Students participating in academic advancement and enrichment courses must register for the course and complete the application before the deadline indicated below.

Semester of course	Application Deadline
College Summer I and II	End of April
Semester I	End of May
Semester II	End of October

ONLINE PERSONAL ECONOMICS & CAREER PLANNING (Fulfills Financial Literacy graduation requirement)

Students entering the 11th or 12th grade can pursue a 2.5 credit accelerated and condensed, Online Personal Economics & Career Planning course that prepares students to manage their own finances. Topics include college costs, career exploration, employment, banking and credit, taxes, and communication skills. This course is for academic advancement of original credit only. There is no cost to participate. Summer Semester is July - August. Applications are available in January and are reviewed by the end of March.

#### SUMMER COURSES FOR REMEDIATION

The Counseling Office provides assistance with the enrollment process for various opportunities for remediation. All summer courses must receive administrative approval prior to enrollment. Applications are available in the Counseling Office. Students must complete summer courses and the Counseling Office must receive the final grade(s) prior to the end of August to enroll in the next sequential course. Parents are responsible for all summer courses and transportation costs (if applicable). The final course grade determines the credit designations below:

**Original Credit:** Students who receive a final grade of 49% or below will retake the course for original credit. The course must meet for a minimum of 120 hours, must align with the district's curriculum, and must be offered through an accredited institution. A full course description must be attached to the application and original credit courses must be board approved.

Credit Recovery: Students who receive a final grade of 50% - 64% are eligible to remediate the course for credit recovery. The course must align with the district's curriculum and be offered through an accredited institution. 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. Students who fail an honors/advanced placement course will remediate the college prep level which will be recorded on the transcript without honors/AP weighting.

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.

Please note: Failure to remediate a course <u>may influence eligibility for fall and winter sports and activities</u>.

Remediation of a 6 credit laboratory Science course will result in recovery of 5 credits.

#### ATHLETIC AND EXTRACURRICULAR ACTIVITY ELIGIBILITY

To be eligible for participation in interscholastic athletic programs, a student must meet all the eligibility requirements of the New Jersey State Interscholastic Athletic Association (NJSIAA). Eligibility rules apply to all freshman, sophomore, junior varsity, and varsity teams involved in interscholastic athletic competition. Please review the details regarding eligibility in the Athletic Student-Parent Handbook and NJSIAA guidelines.

Eligibility for sports or extracurricular activities is determined by students' academic and physical standing.

- First semester (September 1 to January 31), a student must have earned 30 credits during the immediately preceding academic year.
- Second semester (February 1 to June 30), a student must be passing 15 credits at the close of the preceding semester (January 31).
- Credits recovered in pre-approved summer school courses can only be applied to the preceding year, and must be completed by the sixth day of school for eligibility purposes.
- All first time 9th grade students are eligible during the first semester of the school year (September 1 to January 31).
- A student who attends Northern Burlington through the Interdistrict Public School Choice Program (Agriscience) is pursuant to regulations adopted by the New Jersey Department of Education and shall be subject to the transfer restrictions contained in Article V, Section 4.K(1) and (2).

Additional information can be found at www.nisiaa.org, New Jersey State Interscholastic Athletic Association.

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 first semester. Examples of full year activities are Student Council, the Robotics Club, and Interact.

# 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 to be eligible to participate in college. The application and approved courses to assist in determining eligibility is online at <a href="https://www.eligibilitycenter.org">www.eligibilitycenter.org</a>. Meeting the minimum NCAA eligibility requirements does not guarantee admission into the college of choice. Please confirm course requirements via the NCAA website at <a href="https://www.ncaa.org">www.ncaa.org</a>.

# COURSE DESCRIPTIONS

## **ENGLISH**

English provides students with the analytical skills needed to understand the many nuances of language arts. Comprehensive instruction indirectly prepares students for the PSAT and New Jersey's standardized assessments. Four years of English are required for graduation.

	Grade 9	Grade 10	Grade 11	Grade 12
	English I	English II	English III	English IV
Required	English I Honors	English II Honors	English III Honors	English IV Honors
			AP English Language &	AP English Literature &
			Composition	Composition
Electives (9-12)	Creativ	e Writing (sem)	Public Speaking (sem)	

#### **Enrollment Criteria**

2					
Desired Level	Current Level	Grade Required			
Honors	College Prep	А			
Honors	Honors	В			
AP	College Prep	A in all course prerequisites			
AP	Honors	А			
AP	AP	В			

# **English I** (1401)

Credits: 5 Full Year

English I is an overview of various literary and writing genres. Each unit focuses on a genre and a related theme, and students begin to read and respond to literary criticism. In formal seminar discussions, students further investigate philosophical and literary questions that arise in the texts. In addition to discussing and writing about works, students read poetry and excerpts of speeches. By the end of English I, students are prepared for focused literary study.

#### English I Honors (1400)

Credits: 5 Full Year

Prerequisite: English/Language Arts 8 (Final Grade of A)

English I is an overview of various literary and writing genres. Each unit focuses on a genre and a related theme and students begin to read and respond to literary criticism. In formal seminar discussions, students further investigate philosophical and literary questions that arise in the texts. In addition to discussing and writing about works, students read poetry and excerpts of speeches. By the end of English I Honors, students are prepared for focused literary study. This course is developed to advance students' ability to work independently and demonstrateion high levels of critical, analytical and original thinking. ^Summer Assianment

#### **English II** (1405) Credits: 5 Full Year

Prerequisite: English I or English I Honors

English II is devoted to a study of American literature. Because much of the early literature is nonfiction, there are many opportunities to analyze historical and informational texts. Students explore the relationship between fiction and nonfiction. Throughout the year, students make connections with history, art, and other subjects. Essays range from the analytical to the creative and build on writing skills from previous years; integrating multiple sources and perspectives into their work, reading literary criticism, and writing longer and more complex essays. By the end of the year, students have a solid foundation in American literature.

#### English II Honors (1403)

Credits: 5 Full Year

Prerequisite: English I Honors (Final Grade of B) or English I (Final Grade of A)

English II Honors is devoted to a study of American literature. Because much of the early literature is nonfiction, there are many opportunities to analyze historical and informational texts. Students explore the relationship between fiction and nonfiction. Throughout the year, students make connections with history, art, and other subjects. Essays range from the analytical to the creative and build on writing skills from previous years, integrating multiple sources and perspectives into their work, reading literary criticism, and writing longer and more complex essays. By the end of the year, students have an in-depth knowledge of American literature. This course is developed to advance students' ability to work independently and demonstrate high levels of critical, analytical and original thinking. Further, English II Honors prepares students for English III courses as well as AP Language & Composition. \*Summer Assignment\*

#### English III (1409) Credits: 5 Full Year

Prerequisite: English II or English II Honors

English III students study European literature. Through the immersion of a variety of Classical and Contemporary works, students relate a work to its historical circumstances, trace a symbol through a work or works, or consider a moral or philosophical question. By the end of English III, students have become familiar with some of the major works and ideas of European literature and have refined their skills in literary analysis and research.

#### **English III Honors** (1410)

Credits: 5 Full Year

Prerequisite: English II Honors (Final Grade of B) or English II (Final Grade of A)

Students in English III Honors study European literature. Through the immersion of a variety of Classical and Contemporary works, students relate a work to its historical circumstances, trace a symbol through a work or works, or consider a moral or philosophical question. By the end of English III Honors, students have a deep understanding and appreciation of some of the major works and ideas of European literature and have strengthened their skills in literary analysis and research. This course is developed to advance students' ability to work independently and demonstrate high levels of critical, analytical and original thinking. Further, English III Honors prepares students for English IV courses as well as AP Literature and Composition. 
^Summer Assignment

#### Advanced Placement English Language & Composition (1406)

Grade Level: 11

Credits: 5 Full Year

Prerequisite: English II Honors (Final Grade of A) or English II and U.S. History I (Final Grade of A)

The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Throughout the course, students evaluate, synthesize, and cite research to support their arguments. Students also develop a personal style of writing by making appropriate grammatical and stylistic choices modeled after writing exemplars. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. It is highly recommended that students take the AP English Language and Composition exam at the end of the course. \*CAP pending RCBC approval ^Summer Assignment

#### English IV (1417) Credits: 5 Full Year

Prerequisite: English III, English III Honors or AP English Language & Composition

English IV students study literature from around the world. Each unit allows for close study of literary works, as well as consideration of historical and cultural context. The units focus not only on geographical regions, but also on themes and literary forms. Students grasp the relationship between local concerns and universal questions. They become aware of the authors' views of literature itself—its forms, peculiarities, language, and relationship to reality. Throughout the year, students take part in seminars, write essays, and deliver speeches. Having read literature from a variety of cultures, students are focused on their unique role in the world. English IV is the final course in the English sequence.

#### **English IV Honors** (1411)

Credits: 5 Full Year

Prerequisite: English III (Final Grade of A), English III Honors (Final Grade of B) or AP English Language & Composition
Students in English IV Honors study literature from around the world. Each unit allows for close study of literary works, as well as consideration of historical and cultural context. The units focus not only on geographical regions, but also on themes and literary forms. Students grasp the relationship between local concerns and universal questions. They become aware of the authors' views of literature itself—its forms, peculiarities, language, and relationship to reality. Throughout the year, students take part in seminars, write essays, and deliver speeches. Having read literature from a variety of cultures, students are focused on their unique role in the world. This course is developed to advance students' ability to work independently and demonstrate high levels of critical, analytical and original thinking. English IV Honors is the final course in the English sequence. \*Summer Assignment\*

#### Advanced Placement English Literature & Composition (1414)

Grade Level: 12

Credits: 5 Full Year

Prerequisite: AP English Language & Composition (Final Grade of B), English III Honors (Final Grade of A), or English III and

U.S. History II (Final Grade of A)

The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. It is highly recommended that students take the AP English Literature & Composition exam at the end of the course. \*CAP pending RCBC approval \*Summer Assignment\*

#### English as a Second Language (ESL) (5007)

Grade Level: 9-12

Credits: 5 Full Year

English as a Second Language supports non-English speaking students in their acquisition of the English language. Students are identified through the WIDA Screener and/or ACCESS for ELLs Placement Test.

## **ENGLISH ELECTIVES**

Elective courses are offered based on sufficient student enrollment.

**Creative Writing (1460)** 

Grade Level: 9 -12 Credits: 2.5 Semester Prerequisite: None

Creative Writing 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.

Public Speaking (1426)

Grade Level: 9-12 Credits: 2.5 Semester Prerequisite: None

Public speaking introduces students to the power of effective communication. It focuses on developing a personal speaking style, composing and delivering speeches, and applying effective communication strategies. Students study great historical speeches to understand the power of contextual relevance. The course culminates in an evening TED Talk presentation.

#### HEALTH AND PHYSICAL EDUCATION

#### **HEALTH EDUCATION**

Health 9 (1106)

Credits: 1.25 / One Quarter

Health 9 introduces students to the topics of personality development and human emotions. Students develop skills in communication, stress management, resisting drugs, nutrition, and dating violence/relationships. Sexuality and promiscuity are discussed with a focus on emotional and physical wellness.

**Health 10** (1105)

Credits: 1.25 / One Quarter

Health 10 provides instruction in driver safety education, with an emphasis on decision making to reduce driving accidents, and common challenges to beginning drivers. The course also includes the effects of drugs and alcohol on driving performance. The course concludes with the opportunity to complete the New Jersey Motor Vehicle Driver's Exam.

\*NBC Behind the Wheel Driver Education Instruction Program is available. Parents are responsible for all costs. Health 11 (1101)

Credits: 1.25 / One Quarter

Health 11 enables students to become familiar with the American Red Cross techniques as they relate to Cardiopulmonary Resuscitation (CPR), using an Automated External Defibrillator (AED), and First Aid. These hands-on training skills help students respond correctly and safely to important emergency situations regarding infants, children, and adults.

Health 12 (1107)

Credits: 1.25 / One Quarter

Health 12 guides seniors in discussions on mental and physical health and wellness. Topics explored include: contraceptives, dating violence and relationships, marriage, parenting skills, social issues, and special needs individuals.

#### PHYSICAL EDUCATION

Physical Education Grade Level: 9 -12

Credits: 3.75 / Three Ouarters

Physical Education (9-12) assists students with their physical, mental, and social development. By participating in different activities, according to grade, students discover their own interests while learning the benefits of lifelong fitness. Portions of the courses stress the development of teamwork, trust, cooperation, leadership, and problem solving skills, as well as, building self-esteem and self-confidence.

Students also participate in FitnessGram, a nationally recognized physical fitness assessment program.

Adaptive PE (1616) Grade Level: 9 -12 Credits: 5 Full Year

Prerequisite: As per Individualized Education Plan (IEP) Adaptive Physical Education (9-12) enables students to participate in team and individual activities with support. Students learn skills that promote lifelong fitness through weight/strength training, stretching, health & wellness, nutrition, safety, hygiene, strength and endurance training.

#### Skill Development Activities include but are not limited to:

Badminton, Basketball, Flag Football, Floor Hockey (Pillow Polo), Golf, Lacrosse, Physical Fitness Testing, Pickleball, Recreational Games, Rope and Rockwall Courses, Soccer, Softball, Team Building, Tennis, Track Fitness, Ultimate Games, Volleyball, Weight/Strength Training, Yoga

Students will have choice within categories of skill development activities

#### PHYSICAL EDUCATION ELECTIVES

Lifetime Information for Everyone (LIFE) (1625)

Grade Level: 12 Credits: 5 Full Year

Prerequisite: By application

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 retreat in the summer prior to the course.* 

Peer Mentoring (1126) Grade Level: 12 Credits: 5 Full Year

Prerequisite: By application

Peer Mentoring develops the leadership skills of high school students by teaching them how to build relationships, foster collaboration, increase their self-confidence, problem-solve, and resolve conflict. Peer Mentoring seeks to achieve three key outcomes for the peer leaders and students receiving mentoring: improved communication with peers, teachers, and families with an appreciation for people from different backgrounds, increased confidence in fulfilling academic and social responsibilities, and enhanced leadership skills and the ability to identify and solve problems. This course meets one period a day.

## INTERDISCIPLINARY STUDIES

Interdisciplinary Studies combines various academic disciplines. Interdisciplinary course options cross traditional boundaries between academic disciplines or schools of thought and fulfill the electives requirement for graduation.

Grade 9	Grade 10	Grade 11	Grade 12					
	Yearbook							
		Celebratin	g Diversity					
Gifted & Talented Seminar I								
	Gifted & Taler	ted Seminar II						
		Gifted & Talen	ted Seminar III					
	AP Se	eminar						
		AP Re	search					
			SILC					

Yearbook (7002) Grade Level: 9-12 Credits: 5 Full Year Prerequisite: None

Yearbook students apply journalism skills to the production of the yearbook, *Northern Light*. With a focus on teamwork, responsibility, brainstorming, content, coverage, concept, reporting, writing, editing, photography, design, and graphics, the yearbook course provides students with a foundation in journalistic writing styles and desktop publishing. This course can be taken more than once as each year students' responsibilities increase and journalist skills are strengthened.

#### Celebrating Diversity (6999)

Grade Level: 11-12 Credits: 2.5 Semester Prerequisite: None

As the title suggests, this semester course is designed to celebrate the differences among cultures, ethnic groups, genders, and other marginalized groups. Through a Humanities approach, students will learn how to be more culturally sensitive, recognize the benefits of diversity, increase awareness of implicit biases and identity, and increase their knowledge of ways to be more empathetic and inclusive.

## **GIFTED & TALENTED PROGRAM**

The Gifted & 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 the Gifted & Talented Program is based on achieving qualifying scores on the nationally recognized Naglieri Nonverbal Ability Test (NNAT3) and the Otis Lennon School Ability Test (OLSAT). Please contact the Office of Academics for additional information.

#### Gifted & Talented Seminar I (1429)

Grade Level: 9 Credits: 5 Full Year

Prerequisite: Program Admittance

Gifted & Talented Seminar I is an honors level course offered to ninth graders identified as gifted. Ninth graders explore the concept of societal outliers and success through art and writing. Students also create a "Passion Project" of their choice which culminates with an extensive multimedia presentation. Throughout the course, students use and experiment with technology to enhance their learning on a daily basis.

#### Gifted & Talented Seminar II (1427)

Grade Level: 10-11 Credits: 5 Full Year

Prerequisite: Program Admittance

Gifted & Talented Seminar II is an honors level course offered to gifted tenth graders continuing in the program & first time tenth & eleventh graders identified as gifted. Students in this course explore social, global, and philosophical issues while advancing their skills for academic inquiry. Students also create a "Passion Project" of their choice which culminates with an extensive multimedia presentation. Throughout the course, students use and experiment with technology to enhance their learning on a daily basis.

#### Gifted & Talented Seminar III (1455)

Grade Level: 11-12 Credits: 2.5 Semester

Prerequisite: Program Admittance

Gifted & Talented Seminar III is an honors level course offered to gifted eleventh & twelfth graders continuing in the program & first time eleventh & twelfth graders identified as gifted. Students enrolled in this semester course explore the humanities from individual and social perspectives while sharpening their skills for academic inquiry. Students also create a "Passion Project" of their choice which culminates with an extensive multimedia presentation. Students continue to use and experiment with technology to enhance their learning.

#### CAPSTONE PROGRAM

**AP Capstone**<sup>™</sup> is a College Board diploma program based on two year long AP courses: AP Seminar and AP Research. The Capstone program is designed to complement and enhance the discipline-specific study in other AP courses. Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing receive the **AP Capstone Diploma** from Collegeboard. Obtaining an **AP Capstone Diploma** communicates to post-secondary institutions that the critical thinking, research, collaboration, time management, and presentation skills students need for college-level work have been developed.

#### Advanced Placement Seminar (2372)

Grade Levels: 10, 11 Credits: 5 Full Year

Prerequisite: None; however, reading and comprehending college level texts & writing well-developed extended responses and essays is expected

In this foundational Capstone course, students develop and strengthen analytical and inquiry skills by exploring two to four relevant issues chosen by the student and/or teacher. Students consider issues from multiple perspectives, evaluate the strength of an argument, and make logical, fact-based decisions. Students also question, research, pose solutions, argue, collaborate, and communicate using various media. Students enrolled in AP Seminar must commit to completing all aspects of the AP Seminar exam and pay the associated fees from CollegeBoard to qualify for the Capstone Diploma issued by Collegeboard. The cost of the exam will be paid for students who qualify for Free or Reduced Meals. Seminar students are required to take the AP examination.

#### Advanced Placement Research (2371)

Grade Levels: 11, 12 Credits: 5 Full Year

Prerequisite: Must score at least a 3 on AP Seminar exam

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper accompanied by a presentation.

# **SENIOR OPTION**

Senior Option Programs, available only to students in senior year, are designed to provide robust, diverse experiences and/or leadership opportunities. The programs require an electronic application. Students in Grade 11 who are interested in these options for senior year must apply during the annual application window between mid-November and early December.

## Senior Instructional Leadership Corps (SILC) (7021)

Credits: 5

Prerequisite: By electronic application

SILC introduces 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. This course is pass/fail and does not factor into the grade point average.

## **MATHEMATICS**

Three years of mathematics are required for graduation including Algebra I, Geometry, and a course which builds upon Algebra and Geometry. Four years of mathematics are strongly recommended.

Year 1	Year 2	Year 3	Year 4		
Algebra 1					
Geometry* / Ge	Geometry* / Geometry Honors*				
	Algebra 2* / Algebra 2 Honors* / Intro to Statistics				
	Pre-Calculus* / Precalculus Honors* Advanced Algebra and Trigonometry				
Calculus* / AP Calculus AB* AP Calculus BC* AP Statistics* / Intro to Statistics Project Based Mathematics-STEM (sem)					
Computer Science Courses					
AP Computer Science Principles Intro to Programming					
	Computer Programming & Algorithms				
	AP Computer Science A				

#### **ENROLLMENT CRITERIA**

Desired Level	Current Level	Grade Required
Honors	College Prep	А
Honors	Honors	В
AP	College Prep	A in all course prerequisites
AP	Honors	A
AP	AP	В

## Algebra I (1930) Credits: 5 Full Year

Prerequisite: Mathematics 8; If Algebra I was taken in grade 8 a Final Grade of B is required to advance to Geometry. Algebra I develops the foundation for all future math courses. Major topics include solving linear equations, solving systems of linear equations and inequalities, solving and graphing absolute value equations and inequalities, applying linear functions and inequalities to mathematical models, applying properties of exponents, and applying real world problems to exponential functions, polynomials and quadratics.

## Geometry (1941)

Credits: 5 Full Year

Prerequisite: Algebra I; If Algebra I was taken in grade 8, a Final Grade of B is required to advance to Geometry.

Geometry examines logical methods of problem solving, physical relationships, and properties of two- and three-dimensional figures. Points of exploration include: compass and straightedge constructions, deductive reasoning skills, congruence and similarity as related to the definition of rigid and nonrigid transformations, coordinate proofs, right triangle trigonometry and various methods of measuring length, angle measurement, area, and volume of geometric figures.

#### Geometry Honors (1942)

Credits: 5 Full Year

Prerequisite: Algebra I (Final Grade of A)

Geometry Honors advances logical methods of problem solving, physical relationships, and properties of two and threedimensional 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) Credits: 5 Full Year Prerequisite: Geometry

**Corequisite:** Geometry Honors or Geometry with Algebra I (Final Grade of A)

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, and complex numbers.

### Algebra II Honors (1932)

Credits: 5 Full Year

Prerequisite: Geometry (Final Grade of A), Geometry Honors (Final Grade of B) and Algebra I (Final Grade of A)

**Co-requisite**: Geometry Honors or Geometry with Algebra I (Final Grade of A)

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, conic sections, and an introduction to trigonometry. ^Summer Assignment

## Advanced Algebra and Trigonometry (1946)

Credits: 5 Full Year Prerequisite: 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)

Credits: 5 Full Year

Prerequisite: Algebra II or Algebra II Honors

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 Pending RCBC Approval

#### Pre-Calculus Honors (1934)

Credits: 5 Full Year

Prerequisite: Algebra II Honors (Final Grade of B) or Algebra II (Final Grade of A)

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

#### Calculus (1961) Credits: 5 Full Year

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 Pending RCBC Approval

#### Advanced Placement Calculus AB (1958)

Credits: 5 Full Year

Prerequisite: Pre-Calculus Honors (Final Grade of B) or Pre-Calculus (Final Grade of A)

AP Calculus AB is equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. It is highly recommended that students take the AP Calculus AB exam. \*CAP Pending RCBC Approval^Summer Assignment

## Math Lab (1975) Grade Level: 9-12

Credits: 2.5 Semester

Math Lab provides supplemental instruction and/or remediation for students who have not yet mastered foundational skills in Algebra I. When state standardized assessment data is available for Algebra I, students who did not meet or exceed expectations may be placed in this course. Although credits for this course do not satisfy math requirements for graduation, Algebra 1 is a foundational course for all other Mathematics courses and is strongly recommended for students who have not mastered the New Jersey Student Learning Standards.

#### Advanced Placement Calculus BC (1957)

Credits: 5 Full Year

Prerequisite: AP Calculus AB (Final Grade of B) or Calculus (Final Grade of A)

AP Calculus BC is equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topic of sequences and series. The AP course includes topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. It is highly recommended that students take the AP Calculus BC exam. \*CAP Pending RCBC Approval \*Summer assignment\*

## Advanced Placement Statistics (1970)

Grade Level: 11-12 Credits: 5 Full Year

Prerequisite: Algebra II Honors (Final Grade of B) / Algebra II (Final Grade of A)

The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. It is highly recommended that students take the AP Statistics exam. \*CAP Pending RCBC Approval ^Summer Assignment

#### Introduction to Statistics (1964)

Grade Level: 10-12 Credits: 5 Full Year Prerequisite: Geometry

Introduction to Statistics prepares students who are college bound and interested in pursuing diverse careers that require an analysis of statistics to be successful in interpreting real world data. The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Major topics include frequency distributions of empirical data, calculations of descriptive statistics, probability distributions, confidence intervals, hypothesis testing, and correlation. \*CAP Pending RCBC Approval

#### Project-Based Mathematics – STEM (1910)

Credits: 2.5 Semester Prerequisite: <u>Geometry</u> Co-requisite: <u>Algebra II</u>

Project-Based Mathematics enables students to apply their knowledge of algebra and geometry to the engineering design process, and to develop their knowledge of other mathematical concepts. In this STEM-based course, students analyze data and solve real-world problems from various fields of engineering and technology. Problem solving, measurement, geometric applications of algebra, functions, and statistical methods for estimation and prediction are studied in an application-centered environment. Students develop their technical writing skills which translate to effective communication with future coworkers and supervisors. Various technologies support students' exploration of the engineering design process from scheduling and planning through project completion.

## **COMPUTER SCIENCE**

## **Advanced Placement Computer Science Principles (1902)**

Grade Level: 9-12 Credits: 5 Full Year Prerequisite: Algebra I

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. Prior experience with programming is not necessary to take this course. It is highly recommended that students take the AP Exam. This course complements AP Computer Science A but is not a prerequisite. Summer Assignment

#### Introduction to Programming (1911)

Grade Level: 9-12 Credits: 5 Full Year Prerequisite: None

Programming Basics introduces students to basic concepts in computer programming. The course explores aspects of algorithmic thinking that will be required in higher-level languages. Students learn to code using objects, methods, functions, events, and control structures in a programming environment designed for 3-D animation. Projects will emphasize an object-oriented approach and strengthen math and logic skills with applications to interesting problems using 3-D animation. Programming Basics is recommended for all college-bound students.

#### Computer Programming and Algorithms (1912)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisite: Introduction to Programming or equivalent\*

Computer Programming and Algorithms augments previously learned skills and develops new ones that are needed to plan, design, write, and debug programs in a higher-level language. Topics include game-loop animation, graphics programming, and working with images from the Dark GDK library. The course covers logical structures, functions, parameters, and arrays. Students will design and code applications that emphasize algorithmic development, the use of Boolean logic and discrete math skills. Computer Programming and Algorithms is recommended for students considering studies in science, mathematics, business, or technical fields.

#### Advanced Placement Computer Science A (1901)

Grade Level: 11, 12 Credits: 5 Full Year

Prerequisite: Computer Programming and Algorithms or equivalent\*

AP Computer Science A is equivalent to a first-semester, college-level course in Java Programming. The course advances fundamental computer science concepts such as hardware, data representation in computers, and the software development life cycle. Problem solving through the use of higher-level language features and programming techniques is a major focus. Students will understand how object-oriented design makes programs adaptable and reusable. It is highly recommended that students take the AP Computer Science Exam A. This course complements AP Computer Science Principles but is not a prerequisite. \*CAP Pending RCBC Approval \*Summer Assignment\*

\*or equivalent: Students with prior knowledge can demonstrate proficiency through the Course Placement Review Process which must be submitted by June 1st.

## **SCIENCE**

Three years of science are required for graduation including Biology and two of the following courses: Environmental Science/ Chemistry/Physics/Physical Science.

	Year 1	Year 2	Year 3	Year 4
Required	Biology of Agriscience Biology Biology Honors	Chemistry / Chemistry Honors / Physical Science	Earth & Environmer	stry Honors / Physical Science ntal Science / AP Env Science ss / AP Physics 1
		Advanced Animal Science Advanced Plant Science		
Electives		Human Anatomy and Physiology Honors AP Biology AP Chemistry		
				AP Physics 2 AP Physics C Technology Capstone

#### **Enrollment Criteria**

Desired Level	Current Level	Grade Required		
Honors	College Prep	А		
Honors	Honors	В		
AP	College Prep	A in all course prerequisites		
AP	Honors	A		
AP	AP	В		

# Biology (Agriscience) (2217)

Credits: 5 Full Year 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 their maintenance. Content is intertwined with scientific and engineering practices, and crosscutting concepts, in this laboratory-based course, to support students' ability to explain ideas across the science disciplines.

#### Biology (2208) Credits: 5 Full Year 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. Students develop an understanding of key concepts that help them make sense of life science. Topics explored include: Structure and Function, Inheritance and Variation of Traits, Matter and Energy in Organisms and Ecosystems, Interdependent Relationships in Ecosystems, and Natural Selection and Evolution. Content is intertwined with scientific and engineering practices, and crosscutting concepts, in this laboratory-based course, to support students' ability to explain ideas across the science disciplines.

#### Biology Honors (2209)

Credits: 6 Full Year (Pending Schedule Implementation: 5 Credits Effective with the Class of 2027)

Prerequisite: Science 8 (Final Grade of A)

Biology Honors advances students' scientific interest by examining features of life at the molecular and cellular levels. Students develop a comprehensive understanding of key concepts that help them make sense of life science. Topics explored include: Structure and Function, Inheritance and Variation of Traits, Matter and Energy in Organisms and Ecosystems, Interdependent Relationships in Ecosystems, and Natural Selection and Evolution. Content is intertwined with scientific and engineering practices, and crosscutting concepts, in this laboratory-based course, to support students' ability to explain ideas across the science disciplines. Independent laboratory and ecosystem observations are an integral part of this course. ^Summer Assignment

#### Physical Science (2225)

Credits: 5 Full Year

Prerequisite: Biology or Biology (Agriscience)

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, motion and forces, chemical elements and reactions, and science and technology. Content is intertwined with scientific and engineering practices, and crosscutting concepts, in this laboratory-based course, to support students' ability to explain ideas across the science disciplines.

#### Chemistry (2249) Credits: 5 Full Year

Prerequisite: Biology (Agriscience), Biology or Biology Honors and Algebra I

Chemistry continues to develop students' understanding of the physical sciences. Topics and scientific practices include developing and using models, planning and conducting investigations, analyzing and interpreting data, using mathematical and computational thinking, and constructing explanations; and to use this knowledge to demonstrate understanding of the core ideas. Content is intertwined with scientific and engineering practices, and crosscutting concepts, in this laboratory-based course, to support students' ability to explain ideas across the science disciplines.

#### Chemistry Honors (2245)

Credits: 6 Full Year (Pending Schedule Implementation: 5 Credits Effective with the Class of 2027)

Prerequisite: Biology/ Biology (Agriscience) (Final Grade of A), Biology Honors (Final Grade of B), AND Algebra I (Final Grade of A) Chemistry Honors continues to develop students' understanding of the physical sciences. Topics and scientific practices include developing and using models, planning and conducting investigations, analyzing and interpreting data, using mathematical and computational thinking, and constructing explanations; and to use this knowledge to demonstrate understanding of the core ideas. Content is intertwined with scientific and engineering practices, and crosscutting concepts, in this laboratory-based course, to support students' ability to explain ideas across the science disciplines. This course is recommended for students who aspire to a career in science, engineering, or health professions. ^Summer Assignment

#### Earth and Environmental Science (2223)

Grade Level: 11, 12 Credits: 5 Full Year

Prerequisite: Biology or Biology (Agriscience) AND Chemistry or Physical Science

Earth and Environmental Science enhances students' scientific practices, literacy, and real world problem solving abilities by analyzing the interconnections between human populations and our impact on the environment around us. Topics explored include: earth systems, earth resources, global climate change, ecology, and populations. In addition students will complete field studies on air, land, and water resources and pollution. Content is intertwined with scientific and engineering practices, field work, scientific design, and crosscutting concepts, in this laboratory-based course, to support students' ability to explain ideas across the science disciplines and to improve scientific literacy.

#### Advanced Placement Environmental Science (2219)

Grade Level: 11, 12

**Credits:** 6 Full Year (Pending Schedule Implementation: 5 Credits Effective with the Class of 2027)

Prerequisite: Biology (Final Grade of A), Biology (Agriscience) (Final Grade of A) or Biology Honors (Final Grade of B)

AND Chemistry (Final Grade of A) or Chemistry Honors (Final Grade of B)

AP Environmental Science engages students with the scientific principles, concepts, and methodologies required to understand the interrelationship between human and natural systems. The course requires that students identify and analyze natural and anthropogenic environmental problems, evaluate the relative risks associated with these problems, and examine or propose alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, politics, chemistry, geography, and economics. Math and quantitative reasoning skills are regularly utilized in this course. It is highly recommended that students take the AP Environmental Science exam. \*CAP Pending RCBC Approval \*Summer Assignment\*

Physics (2259) Grade Level: 11, 12 Credits: 5 Full Year

Prerequisite: Biology or Biology (Agriscience) AND Chemistry or Physical Science

Physics develops students' understanding of the physical sciences. Topics and scientific practices include kinematics, dynamics, conservation laws, optics, acoustics, and some advanced topics in mechanics as students investigate matter and motion by mathematically examining and manipulating data. Content is intertwined with scientific and engineering practices, and crosscutting concepts to support students' ability to explain ideas across the science disciplines. Students' problem solving, critical thinking, and reasoning skills will expand by analyzing information in this laboratory-based course.

## **Advanced Placement Physics 1 (2257)**

Grade Level: 11, 12

Credits: 6 Full Year (Pending Schedule Implementation: 5 Credits Effective with the Class of 2027)

Prerequisite: Biology or Biology (Agriscience) AND Chemistry or Physical Science

Co-requisite: Algebra II or Algebra II Honors

AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power. Through inquiry-based learning, students develop scientific critical thinking and reasoning skills. It is highly recommended that students take the AP Physics 1 exam. \*CAP Pending RCBC Approval ^Summer

Assignment

#### **SCIENCE ELECTIVES**

These electives cannot substitute for any of the three required science courses. Elective courses are offered based on sufficient student enrollment.

## **Advanced Placement Biology (2211)**

Grade Level: 11, 12

Credits: 7 Full Year (Pending Schedule Implementation: 5 Credits Effective with the Class of 2027)

Prerequisite: Chemistry (Final Grade of A) or Chemistry Honors (Final Grade of B) and Biology or Biology (Agriscience) (Final Grade of A) or Biology Honors (Final Grade of B)

of A) or Biology Honors (Final Grade of B)

AP Biology is an introductory college-level biology course, equivalent to Biology I and II. Students cultivate their understanding of biology through inquiry-based and intensive laboratory investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. It is highly recommended that students take the AP Biology exam. \*CAP Pending RCBC Approval \(^{\text{Summer Assignment}}\)

#### Advanced Placement Chemistry (2243)

Grade Level: 11, 12

Credits: 7 Full Year (Pending Schedule Implementation: 5 Credits Effective with the Class of 2027)

Prerequisite: Chemistry (Final Grade of A) or Chemistry Honors (Final Grade of B) and Algebra II (Final Grade of A) or Algebra II

Honors (Final Grade of B)

The AP Chemistry course provides students with a foundation to support future advanced coursework in chemistry. Through inquiry-based learning, students develop critical thinking and reasoning skills. Students cultivate their understanding of chemistry and science practices as they explore topics such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. It is highly recommended that students take the AP Chemistry exam. \*CAP Pending RCBC Approval \*Summer Assignment\*

#### Advanced Placement Physics 2 (2258)

Grade Level: 12

Credits: 6 Full Year (Pending Schedule Implementation: 5 Credits Effective with the Class of 2027)

Prerequisite: Physics (Final Grade of A) or AP Physics 1 (Final Grade of B)

**Co-requisite**: Pre-Calculus

AP Physics 2 is an algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. Through inquiry-based learning, students develop scientific critical thinking and reasoning skills. It is highly recommended that students take the AP Physics 2 exam. \*CAP Pending RCBC Approval \*Summer Assignment\*

## Advanced Placement Physics C - Mechanics (2255)

and Advanced Placement Physics C - Electricity and Magnetism (2256)

Credits: 3.5 Each a Semester (Pending Schedule Implementation: 2.5 Credits Effective with the Class of 2027)

Grade Level: 12

Prerequisite: Physics (Final Grade of A) or AP Physics 1 (Final Grade of B)

Corequisite: Calculus

AP Physics C: Mechanics and AP Physics C: Electricity and Magnetism are each equivalent to a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. Mechanics explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation.. Electricity and Magnetism explores topics such as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus is used throughout the courses. It is highly recommended that students take the AP Physics C exam. \*CAP Pending RCBC Approval \*Summer Assignment\*

#### Human Anatomy & Physiology Honors (2203)

Grade Level: 11, 12

**Credits:** 6 Full Year (Pending Schedule Implementation: 5 Credits Effective with the Class of 2027) **Prerequisite:** Biology or Biology (Agriscience) (Final Grade of B) and Chemistry (Final Grade of B)

Human Anatomy and Physiology is a college level, honors weighted elective course that specializes in the human body and its functions. Students study all major body systems, with emphasis on structure, function, mechanics, and maintaining balance. Students investigate the anatomy of the human body by performing animal dissections, explore human physiology through laboratory explorations, and demonstrate learning through laboratory practical exams. \*CAP Pending RCBC Approval^Summer Assignment

#### Advanced Animal Science (2600)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisite: Biology (Agriscience) (Final Grade of B) or Biology (Final Grade of B) or Biology Honors

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 study 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. \*CASE

#### Advanced Plant Science (2601)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisite: Biology (Agriscience) or Biology or Biology Honors

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 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. \*CASE

## **SOCIAL STUDIES**

The Social Studies course sequence highlights the broader, more global context into which the United States fits and includes opportunities and responsibilities involved in citizenship in the United States. The progression of the Social Studies curriculum builds a firm foundation in history, geography, sociology, economics, law, government and current issues.

	Grade 9 Grade 10		Grade 11	Grade 12	
Required	World History World History Honors AP World History: Modern	World History Honors US History I Honors			
Electives			Criminology (sem) Current issues (sem) Economics (sem) Intro to Psychology (sem) Intro to Sociology (sem)		
				AP US Government & Politics AP Psychology	

#### **Enrollment Criteria**

2					
Desired Level	Current Level	Grade Required			
Honors	College Prep	А			
Honors	Honors	В			
AP	College Prep	A in all course prerequisites			
AP	Honors	A			
AP	AP	В			

#### World History (2326) Credits: 5 Full Year Prerequisite: None

World History students explore global events thematically within a chronological framework from the First Global Age to modern society. Students are challenged to think conceptually about the modern world after examining the similarities, differences and points of conflict among different societies.

#### World History Honors (2321)

Credits: 5 Full Year

Prerequisite: American History 8 (Final Grade of A)

World History students explore global events thematically within a chronological framework from the First Global Age to modern society. Students are challenged to think conceptually about the modern world after examining the similarities, differences and points of conflict among different societies. This course is developed to advance students' ability to work independently and demonstrate high levels of critical, analytical and original thinking. "Summer Assignment

#### Advanced Placement World History: Modern (2333)

Credits: 5 Full Year

Prerequisite: American History 8 and English/Language Arts 8 (Final Grade of A)

AP World History: Modern establishes students' abilities to think conceptually about world history as early as 1200 CE to the present. Five themes (environment, cultures, state-building, economic systems, and social structure) provide areas of historical inquiry for investigation throughout the course. AP World History: Modern encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions. It is highly recommended that students take the AP World History exam and have strong reading and writing skills. \*CAP pending RCBC approval \(^\infty\) Summer Assignment

## US History I (2322)

Credits: 5 Full Year Prerequisite: World History

US History I encompasses American history from the Civil War and Reconstruction to development of industry and emergence of modern America, World War I to the Roaring Twenties. This course advances students' historical understanding, analytical thinking and writing abilities with an emphasis on America's social, political, economic, and cultural development. Through the exploration of the people and events, students develop an understanding of the emergence of the American nation and its character.

#### **US History I Honors** (2315)

Credits: 5 Full Year

Prerequisite: World History (Final Grade of A), World History Honors (Final Grade of B)

US History I Honors encompasses American history from the Civil War and Reconstruction to development of industry and the emergence of modern America, to World War I to the Roaring Twenties. This course advances students' historical understanding, analytical thinking and writing abilities through a rigorous study of America's social, political, economic, and cultural development. Through the exploration of the people and events, students will develop an understanding of the emergence of the American nation and its character. This course is developed to advance students' ability to work independently and demonstrate high levels of critical, analytical and original thinking. 'Summer assignment

#### Advanced Placement US History I (2324)

Credits: 5 Full Year

Prerequisite: World History Honors (Final Grade of B) or World History and English I (Final Grade of A)

AP U.S. History I emphasizes chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narratives. Content learning objectives are organized around themes such as identity, people, and America in the world. This U.S. History survey course focuses on American history from 1491 to 1865. It is expected that students take the AP US History exam upon completion of AP US History II. \*CAP at the conclusion of AP US II \*Summer Assignment

# US History II (2323)

Credits: 5 Full Year Prerequisite: <u>US History I</u>

US History II encompasses American history from the Great Depression, New Deal, and World War II to Civil Rights and social change to contemporary domestic policies and international policies. This course advances students' historical understanding, analytical thinking and writing abilities through the study of America's social, political, economic, and cultural development to the present day. Through the exploration of the people and events associated with this era, students discover the United States as a world power and analyze our society's efforts to fulfill the potential of the democratic ideals upon which our nation was founded.

#### **US History II Honors** (2316)

Credits: 5 Full Year

Prerequisite: US History I Honors (Final Grade of B) or US History I (Final Grade of A)

US History II Honors encompasses American history from the Great Depression, New Deal, and World War II to Civil Rights and Social change to contemporary domestic policies and international policies. This course advances students' historical understanding, analytical thinking and writing abilities through the study of America's social, political, economic, and cultural development from to the present day. Through the exploration of the people and events associated with this era, students discover the United States as a world power and analyze our society's efforts to fulfill the potential of the democratic ideals upon which our nation was founded. This course is developed to advance students' ability to work independently and demonstrate high levels of critical, analytical and original thinking. ^Summer assignment

#### Advanced Placement US History II (2331)

Credits: 5 Full Year

Prerequisite: AP US History I (Final Grade of B) or US History I Honors (Final Grade of A) or US History I and English II (Final Grade of A)

The AP U.S. History II course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and an understanding of content learning objectives organized around seven themes, such as identity, peopling, and America in the world. This U.S. history survey course focuses on American history from 1866 to present. AP U.S. History II is designed to be the equivalent of the second semester of a college or university U.S. history course. It is expected that students take the AP US History exam; students review the AP US History I curriculum and prepare to take the AP United States History exam. \*CAP pending RCBC approval ^Summer Assignment

#### SOCIAL STUDIES ELECTIVES

Elective courses are offered based on sufficient student enrollment.

#### Advanced Placement United States Government and Politics (2398)

Grade Level: 12 Credits: 5 Full Year

Prerequisite: None; however, reading and comprehending college level texts & writing well-developed extended responses and essays is expected AP American Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes where students learn to apply disciplinary reasoning, assess the causes and consequences of political events. Students interpret data to develop evidence-based arguments. It is expected that students take the AP American Government and Politics exam. \*CAP pending RCBC approval ^Summer Assignment

#### Advanced Placement Psychology (2346)

Grade Level: 12 Credits: 5 Full Year

Prerequisite: None; however, reading and comprehending college level texts & writing well-developed extended responses and essays is expected

Suggested Prerequisite: Intro to Psychology or Intro to Sociology (Final Grade of B)

The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas. It is expected that students take the AP Psychology exam. \*CAP pending RCBC approval \*Summer assignment\*

#### Criminology (2390) Grade Level: 11-12

**Credits:** 2.5 Semester **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 in Media & Society (2399) Previously titled Current Issues

Grade Level: 11-12 Credits: 2.5 Semester Prerequisite: None

Through various news media outlets, students study current issues affecting modern society. Students will discuss a variety of topics regarding social media, sports, equity, civil and human rights, and so much more. Students will also learn to evaluate the authenticity and reliability of sources, such as social media influencers, celebrities, journalists, and others who report the news. Because of the diversity of the news stories, 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) Fulfills Financial Literacy graduation requirement

Grade Level: 11-12 Credits: 2.5 Semester Prerequisite: None

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 Semester 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 Semester 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.

## SPECIAL EDUCATION

Special Education student programs are selected in collaboration with the student, parents, child study team, and with input from teachers. The district program offerings are explained below:

#### In-Class Resource (ICR)

In-Class Resource is designed to provide support services to classified students in the general education setting in the content areas of English, mathematics, science, and social studies. Two teachers, a special education teacher and a content area general education teacher, work collaboratively to instruct and assist students within the classroom environment. All students are expected to meet general education curricular requirements with the support of individualized instructional strategies and modifications.

#### Replacement (R)

Replacement is offered to students who experience difficulty with the rigor, pace and/or structure of mainstream academic subjects. Resource classes are offered in the following content areas: English, mathematics, social studies and science. Small group instruction is provided by highly qualified teachers who modify the general curriculum to meet the individual needs of students. Efforts are made to transition students into general education classes by teaching compensatory skills and strategies.

#### Learning and Language Disability (LLD)

Learning and Language Disability (LLD) is designed to provide students who require greater academic and social support in the core academic subjects using a modified curriculum guide. As needed, students are provided with instruction in adult daily living, and vocational opportunities to acquire job related skills through the district's Career Orientation Program.

#### Multiple Disabilities (MD)

The MD class prepares students to maximize achievement and skills according to their individual potential in the areas of language pragmatics and communication, social interaction, academic coursework, functional life skills, and vocational skills. Academic course work is individualized within the program. Utilizing a behavioral approach, the program seeks to increase a student's independent functioning within the school, home, and community. Vocational programming is included, based upon individual student needs, through the Career Orientation Program.

#### Career Orientation Program (COP)

The primary purpose of this program is to address the individual needs of the students in order to develop functional job-related skills for adult life. This program will include instruction in communication for working as part of a group in order to participate on a job site, following written or oral directions, and asking for or offering assistance. Time on task, initiating, and following through to complete tasks will be emphasized. Student interests and talents will be examined to identify possible career paths. Specific job skills will be explored, as appropriate, for possible community based, supported, or sheltered placements. Opportunities within the school building will be explored, including tasks in the student services office, nurse's office, and in the school building in general. In addition, the student will develop a sense of responsibility, pride, and accomplishment.

#### **Academic Support**

Academic Support provides individual and small group instruction intended to provide compensatory skill development, remediation, pre-teaching of vocabulary and concepts, study skills, organizational strategies and reinforcement. Academic Support class is not typically appropriate for students in Replacement courses.

## **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.

Languages	Levels						
Chinese	I	II	III	IV Honors	AP Lan	AP Language & Culture	
French	I	II	III	IV Honors	AP Lar	AP Language & Culture	
	I	II	III	IV Honors	AP Language & Culture	AP Literature & Culture	
Spanish	Native Speakers Intermediate Mid				Native Speakers Intermediate High		
	Spanish Culture & Conversation						

#### STATE SEAL OF BILITERACY

The New Jersey Department of Education State Seal of Biliteracy identifies graduating high school students who are able to demonstrate proficiency in English in addition to one or more world languages. In order to obtain the State Seal of Biliteracy, a high school graduate must achieve the following criteria:

- 1. Demonstrate proficiency in English by meeting English language arts graduation requirements or for English Language Learners, attain a score of 4 or better on Tier B or C of the ACCESS for ELLs 2.0 in all four language domains (in junior year of high school). **AND**
- 2. Demonstrate a linguistic proficiency level by achieving a score of Intermediate Mid (5 or higher) on the <u>STAMP</u> assessment in both Writing/Speaking and Reading/Listening levels or a score of a 4 on the AP Language and Culture Exam (prior to senior year in high school).

#### **CHINESE**

Chinese I (1505) Grade Level: 9-12 Credits: 5 Full Year

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 Full Year Prerequisite: Chinese I

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 *Pending RCBC Approval* 

Chinese III (1507) Grade Level: 10-12 Credits: 5 Full Year 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.

Chinese IV Honors (1510)

Grade Level: 11, 12 Credits: 5 Full Year

Prerequisite: Chinese III (Final grade of B)

Chinese IV Honors refines essential communication skills on a more advanced level . Developing oral proficiency is a major goal of the course. Thematic units are used to present the language. To best facilitate the study of language and culture, the course is taught almost exclusively in Chinese. Students read and discuss contemporary articles from authentic target language sources.

Chinese culture remains an integral part of the curriculum. ^Summer Assignment

AP Chinese Language and Culture (1511)

Grade Level: 12 Credits: 5 Full Year

Prerequisite: Chinese IV (Final grade of B)

The AP Chinese Language and Culture course emphasizes communication by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. This course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught exclusively in Chinese. The AP Chinese Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products, laws, conventions, practices and perspectives. It is highly

recommended that students take the AP Chinese Language and Culture Exam. ^ Summer Assignment

#### **FRENCH**

French I (1512) Grade Level: 9-12 Credits: 5 Full Year

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 Full Year Prerequisite: French I

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 Pending RCBC Approval

French III (1514) Grade Level: 10-12 Credits: 5 Full Year 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 *Pending RCBC* 

Approval

French IV Honors (1517)

Grade Level: 11, 12 Credits: 5 Full Year

Prerequisite: French III (Final grade of B)

French IV Honors refines essential communication skills on a more advanced level. Developing oral proficiency is a major goal of the course. Thematic units are used to present the language. To best facilitate the study of language and culture, the course is taught exclusively in French. 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 *Pending RCBC Approval* ^Summer Assignment

## Advanced Placement French Language and Culture (1519)

Grade Level: 11-12 Credits: 5 Full Year

Prerequisite: French IV Honors (Final grade of B)

The AP French Language and Culture course emphasizes communication by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. This course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught exclusively in French. The AP French Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products, laws, conventions, practices and perspectives. It is highly recommended that students take the AP French Language and Culture Exam. \*CAP Pending RCBC Approval ^ Summer Assignment

#### **SPANISH**

## Spanish Culture and Conversation (1566)

Grade Level: 9-12 Credits: 5 Full Year 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 Full Year

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 course.

Spanish II (1553) Grade Level: 9-12 Credits: 5 Full Year Prerequisite: Spanish I

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 course. \*CAP Pending RCBC Approval

Spanish III (1554) Grade Level: 10-12 Credits: 5 Full Year 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 course. \*CAP Pending RCBC Approval

#### Spanish IV Honors (1575)

Grade Level: 11, 12 Credits: 5 Full Year

**Prerequisite:** Spanish III (Final grade of B)

Spanish IV Honors refines essential communication skills on a more advanced level . Developing oral proficiency is a major goal of the course. Thematic units are used to present the language. To best facilitate the study of language and culture, the course is taught exclusively in Spanish. 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 Pending RCBC Approval ^Summer Assignment

#### Advanced Placement Spanish Language and Culture (1550)

Grade Level: 11-12 Credits: 5 Full Year

Prerequisite: Spanish IV or Spanish for Native Speakers II/III (Final grade of B)

The AP Spanish Language and Culture course emphasizes communication by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. This course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products laws, conventions, practices and perspectives. It is highly recommended that students take the AP Spanish Language and Culture Exam. \*CAP Pending RCBC Approval ^ Summer Assignment

#### Advanced Placement Spanish Literature and Culture (1551)

Grade Level: 11-12 Credits: 5 Full Year

Prerequisite: AP Spanish Language (Final grade of B)

The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students develop proficiencies across the full range of communication modes (interpersonal, presentational, and interpretive), thereby honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media. It is highly recommended that students take the AP Spanish Literature and Culture Exam. \*CAP \*Pending RCBC Approval \*Calculate Summer Assignment\*

#### Spanish for Beginning Native Speakers (1570)

Grade Level: 9-12 Credits: 5 Full Year

Prerequisite: Approved Placement Review

This is a course designed to develop the proficiency of heritage speakers who are able to communicate on a basic level in the target language, but require improvements in the areas of reading, writing and speaking. This course is for students from Spanish-speaking households.

#### Spanish for Native Speakers Intermediate Mid (1571)

Grade Level: 9-12 Credits: 5 Full Year

Prerequisite: Approved Placement Review

This is a course designed to develop the proficiency of heritage speakers who are able to communicate on a intermediate low level in the target language, but need to improve 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 Intermediate High (1572)

Grade Level: 9-12 Credits: 5 Full Year

Prerequisite: Approved Placement Review

This course is designed for heritage speakers who are able to communicate on an intermediate mid/high level in the target language to continue developing 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.

## 21st CENTURY LIFE AND CAREER SKILLS

21<sup>st</sup> Century Life and Career Skills prepare students to succeed as global citizens for academic and career opportunities and to support healthy economic growth



## AIR FORCE JUNIOR RESERVE OFFICER TRAINING CORPS (AFJROTC)

Air Force Junior Reserve Officer Training Corps (AFJROTC) is a program designed to develop citizens of character dedicated to serving their nation and community. Each AFJROTC class consists of three components—aerospace science (AS), leadership education (LE), and wellness. Citizenship and character education, the heart of the curriculum program, is primarily embedded in the leadership education series of courses, while a sense of service and education in science and technology related aerospace science is primarily found in the aerospace science series of courses. Upper class cadets manage the unit including planning, organizing, coordinating and decision-making under the supervision of the AFJROTC instructors. A retired officer, the Senior Aerospace Science Instructor (SASI) and retired noncommissioned officers, the Aerospace Science Instructors (ASI) share the teaching, administrative, and supervisory responsibilities of the AFJROTC program; the SASI serves as the head of the AFJROTC department. To reinforce what is taught in the classroom, instructors and cadets participate in Curriculum In-Action (CIA) trips to military bases, aerospace facilities and industries, museums, civilian airports and other areas related to aerospace and leadership education. Additionally, AFJROTC offers the opportunity to participate in Leadership Development Requirements (LDR's) to include the Drill Team, Color Guard, Raider Team, Planning Committee, Summer Leadership Camp, JLAB (Academic Team), Tutoring and Kitty Hawk Air Honor Society. Community service projects are a major part of the AFJROTC experience and help instill a sense of civic pride and citizenship. Lastly, each week all cadets are required to wear the school issued uniform and participate in physical training activities. A high standard of dress and personal appearance, attitude, discipline, and respect is maintained. This full-year course satisfies the 21st Century Life and Career Skills graduation requirement. Please Note: New cadets attend a one day voluntary orientation prior to the start of the school year.

## Aerospace Science I and Leadership Education I - AFJROTC (2232)

Grade Level: 9-12; Prerequisite: None; Credits: 5 Full Year

Aerospace Science I, *Milestones in Aviation History 2nd Ed.* is the first course for all new cadets. This aviation history course focuses on the development of flight throughout the centuries. It starts with ancient civilizations and flight, then progresses through time to future developments in aerospace, with an introduction into cyber technologies. The intent of this textbook is to bring alive the significant discoveries in flight a reality, to tell the story of pride in Air Force heritage, and lay the foundation for future AF JROTC aerospace science courses. Throughout the course 21st century learning is adopted with readings, video clips, hands-on learner centered activities, and chapter project-based learning opportunities.

Leadership Education I, *Introduction to AFJROTC* - LE 100 introduces cadets to the history, organization, mission, traditions, goals, and objectives of JROTC for all military services. It introduces key military customs and courtesies, how to project a positive attitude, and examine the principles of ethical and moral behavior. It provides strategies for effective note taking and study skills for academic success. Lessons include how to be emotionally, mentally, and physically healthy. Cadets learn how to recognize types of bullying and how to advocate for prevention, to prevent and avoid violence in today's society, and how to make safe, drug-free, and responsible decisions. This textbook will also examine the negative effects of air and water pollution, and how to help keep the environment safe. Cadets will be introduced to civics and our national government, including a historical understanding of the American flag and other important national symbols. The final chapter covers how the US Constitution protects our rights and freedoms as American citizens.

#### Aerospace Science II and Leadership Education II - AFJROTC (2233)

Grade Level: 10-12; *Prerequisite:* Aerospace Science I and Leadership Education I; Credits: 5 Full Year Aerospace Science II, Cultural Studies: An Intro to Global Awareness. This course provides students with up-to-date information on exploring the concept of global awareness and the cultures of other regions throughout the world. It starts with an introduction of what global awareness is and the effects of technology on global culture. Students are then taken on a journey around the world, through different cultures in the Middle East, Asia, Africa, Latin America, Europe, and Australia. Finally, the students will be provided cultural information regarding Canada and Mexico.

Leadership Education II: Communication, Awareness, and Leadership, Second Edition, is a customized course designed to improve communication, enhance awareness of self and others, and provide the fundamentals of leadership and followership. The course focuses on the Air Force Junior Reserve Officer Training Corps (AFJROTC) mission to "develop citizens of character dedicated to serving their nation and community." Woven throughout is the underlying theme of developing personal integrity. The course also emphasizes leadership and values such as service and excellence. 21st century preparation includes development of critical thinking, communication, collaboration, and creativity.

Aerospace Science III and Leadership Education III - AFJROTC (2234)

Grade Level: 11-12; Credits: 5 Full Year

Prerequisite: Aerospace Science II and Leadership Education II

Aerospace Science III, Exploring Space: High Frontier 2nd Ed. is a third/fourth-year science course in the high school sequence of Aerospace Science courses for the Air Force Junior ROTC. This course has the latest information and teaching philosophies, incorporating 21st-century learning strategies. This course provides students with the latest information on exploring space and an introduction to cybersecurity and technology. This course will begin with early astronomy and the basic interest in the universe from the Greeks through the Renaissance and Enlightenment ages. Students will be provided an in-depth view of the solar system, including Earth, the Sun, the Moon, and planets. The course also discusses the history of space travel and more modern space probes and robotics. Students will examine the effects of space on the human body. This course also investigates the history of rockets, launch vehicles, and the coordinated systems required for a successful launch into space. Finally, this course will offer cybersecurity and the importance of cybersecurity in space and in daily life.

Leadership Education III, Life Skills and Career Opportunities, Second Edition - LE 300, provides an essential component of leadership education for today's high school students. This course is designed to prepare students for life after high school in the high-tech, globally oriented, and diverse workplace of the 21st century. Students will learn how to become a more confident financial planner and to save, invest, and spend money wisely, as well as how to avoid the credit trap. They will learn about real-life issues such as understanding contracts, leases, warranties, legal notices, personal bills, practical and money-saving strategies for grocery shopping, apartment selection, and life with roommates. The Holland Interest Inventory and other self-assessments will help them to reveal their attitudes, aptitudes, and personal skills. This self-understanding will allow them to explore career paths and understand requirements that they will need to be successful at work and in life. To help students increase their potential for success through education, they will learn how to select a school that is right for them; how to apply for admission to a vocational or technical school, community college, or college/university; and how to succeed in these learning environments. Information is provided on how to conduct the job search for students who wish to enter the workforce right after high school or after additional education and training. They will learn how to prepare a winning résumé, and how to develop effective interviewing skills. Students will become more skilled at using the Internet for career research and learn how to network safely using social media. This course also provides information on working for the federal government to include careers in the millitary, aerospace industry, and public service. Finally, students will consider the most important elements of life skills for all Americans: civic responsibilities, such as volunteering, registering to vote, jury duty, and draft registration

Aerospace Science IV and Leadership Education IV - AFJROTC (2235)

Grade Level: 12; Credits: 5 Full Year

Prerequisite: Aerospace Science III and Leadership Education III

Aerospace Science IV, Management of the Cadet Corps.- AS 400, is intended for 4th year cadets who hold corps management positions. It is not intended for cadets who do not hold corps management/leadership positions. This hands-on experience affords cadets the opportunity to put theories of previous leadership courses into practice. Planning, organizing, coordinating, directing, controlling, and decision- making will be done by cadets. They will put into practice their communication, decision- making, personal interaction, managerial, and organizational skills. There is no textbook for this course. The course syllabus will be structured so that cadets achieve course objectives by completing corps management activities.

Leadership Education IV, Fundamentals of Management - LE 400, further guides development of cadets' leadership skills. This course, coupled with what the cadets have already learned during their time in AFJROTC, will equip them with the qualities needed to serve in leadership positions in the corps. Cadets continue to develop their skills through discussions, case studies and role playing activities based on real life experiences.

## 21st CENTURY LIFE AND CAREER SKILLS

(Career and Technical Education - CTE)

## **AGRISCIENCE**

Agriscience education cultivates students' interest in animals, plants, and/or mechanics. Connections to engineering, environmental technologies, international trade relations, and natural resources prepare students for careers in this rapidly advancing industry. Students develop career and employability skills through Work Based Learning (WBL), also known as Supervised Agricultural Experiences (SAEs) and are members of FFA.

#### ARTICULATION WITH OUR AGRISCIENCE PROGRAM

Articulation agreements with Delaware Valley College, Mercer County Community College, Rutgers University School of Environmental and Biological Sciences, and SUNY Cobleskill provide students an opportunity to earn both high school and college credit for selected courses. Students wishing to receive dual credit are required to complete the appropriate registration through their respective post secondary institution.

Delaware Valley University	Advanced Plant Science	Advance Animal Science	Agricultural Mechanization
Mercer County Community College	Floral & Landscape Design	Advanced Floral Design	Advanced Plant Science
Rutgers University	Advanced Plant Science	Advance Animal Science	
SUNY at Cobleskill	Advanced Plant Science	Advance Animal Science	Agricultural Mechanization

Concentration	Grade 9	Grade 10	Grade 11	Grade 12	Complementary
Ag Power, Structural & Technical Systems					Metal Tool & Machine
		Small Engines Operations & Electricity*			Technology
Agricultural Mechanization			Advanced Ag Power, Structural & Technical Systems*		Wood Construction & Design Technology
				Nursery, Landscaping & Turfgrass Management*	Tech Capstone: Material, Design & Engineering Honors
	Greenhouse				Biology (Agriscience)
Greenhouse		Floral & Landscape Design			Earth & Environmental
Operation and			Advanced Floral Design*		Science
Management				Nursery, Landscaping & Turfgrass Management*	AP Environmental Science
		Greenhouse			Biology (Agriscience)
Horticulture		Nursery, Landscaping & Turfgrass Management*			Earth & Environmental Science
Operations		Advanced Plant Science*		AP Environmental	
		Floral & Landscape Design			Science
		Introduction to Animal Science			Biology (Agriscience)
Animal Science		Advanced Animal Science*			Human Anatomy & Physiology Honors

<sup>\*</sup>Prerequisites

## AGRICULTURAL MECHANIZATION

Agricultural Power, Structural & Technical Systems (2628) Previously titled: Agricultural Mechanics

Grade Level: 9-12 Credits: 5 Full Year Prerequisite: None

Agricultural Power, Structural & Technical Systems incorporates skills in tool identification and safety, ag power technology, metal fabrication, structures and machinery. Topics covered and specific skills developed include plumbing, electricity, ag structures, welding, fabrication, and machinery and equipment operation. \*SAE and FFA

## Small Engines, Operations & Electricity (2614)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisite: Agricultural Power, Structural & Technical Systems (Previously titled: Agricultural Mechanics)

Small Engines, Operations & Electricity develop students' proficiency in basic engine mechanics and repair. Students utilize lab engines to learn servicing and troubleshooting procedures on 4 stroke and 2 stroke engines. Other areas of study include safety, personal protective equipment, hand tool identification, principles of electricity and electrical wiring. Students are strongly encouraged to participate in related FFA small engine troubleshooting and mechanics contests. \*SAE and FFA

## Advanced Agricultural Power, Structural & Technical Systems (2630)

Previously titled: Advanced Agricultural Mechanics

Grade Level: 11-12 Credits: 5 Full Year

Prerequisite: Small Engines, Operations & Electricity

Advanced Agricultural Power, Structural and Technical Systems further develops skills in the areas of welding, metal fabrication, safe equipment operation and preventative maintenance. This course also explores farm and tillage equipment and machinery, diesel engines, power transmissions, and advanced welding processes. \*SAE and FFA

## Nursery Production, Landscaping & Turfgrass Management (2626)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisite: Greenhouse or Advanced Agricultural Power, Structural & Technical Systems\*

Nursery Production, Landscaping & Turfgrass Management incorporates current industry practices in design, installation, and maintenance of landscape projects. Students learn about the management of turfgrasses, soils, pruning techniques, safe operation and maintenance of mowers and 2 stroke landscape power equipment, and troubleshooting mechanical systems in power equipment. Students are prepared for NJ Commercial Pesticide Applicator and Certified Fertilizer Applicator licenses. \*SAE and FFA

#### GREENHOUSE OPERATION AND MANAGEMENT

#### Biology (Agriscience) (2217)

Grade Level: 9-10 Credits: 5 Full Year 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 their maintenance. Content is intertwined with scientific and engineering practices, and crosscutting concepts, in this laboratory-based course, to support students' ability to explain ideas across the science disciplines. \*SAE and FFA

## Greenhouse (2623) Grade Level: 9-12

Credits: 5 Full Year Prerequisite: None

Greenhouse incorporates 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 participate in all aspects of greenhouse crop production and are instructed in the principles of Integrated Pest Management (IPM). \*SAE and FFA

## Floral & Landscape Design (2620)

Grade Level: 10-12 Credits: 5 Full Year Prerequisite: None

Floral & 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. \*SAE

and FFA

## Advanced Floral Design (2606)

Grade Level: 11-12 Credits: 5 Full Year

Prerequisite: Floral & 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 the FFA Horticultural Exposition is strongly encouraged. \*SAE and FFA

## Nursery Production, Landscaping & Turfgrass Management (2626)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisite: Greenhouse or Advanced Agricultural Power, Structural & Technical Systems\*

Nursery Production, Landscaping & Turfgrass Management incorporates current industry practices in design, installation, and maintenance of landscape projects. Students learn about the management of turfgrasses, soils, pruning techniques, safe operation and maintenance of mowers and landscape equipment, and troubleshooting mechanical systems in power equipment. Students are prepared for NJ Commercial Pesticide Applicator and Certified Fertilizer Applicator licenses. \*SAE and FFA

## HORTICULTURAL OPERATIONS

## Biology (Agriscience) (2217)

Credits: 5 Full Year 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 their maintenance. Content is intertwined with scientific and engineering practices, and crosscutting concepts, in this laboratory-based course, to support students' ability to explain ideas across the science disciplines.

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

Greenhouse incorporates 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 participate in all aspects of greenhouse crop production and are instructed in the principles of Integrated Pest Management (IPM). \*SAE and FFA

## Nursery Production, Landscaping & Turfgrass Management (2626)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisite: Greenhouse or Advanced Agricultural Power, Structural & Technical Systems\*

Nursery Production, Landscaping & Turfgrass Management incorporates current industry practices in design, installation, and maintenance of landscape projects. Students learn about the management of turfgrasses, soils, pruning techniques, safe operation and maintenance of mowers and landscape equipment, and troubleshooting mechanical systems in power equipment. Students are prepared for NJ Commercial Pesticide Applicator and Certified Fertilizer Applicator licenses. \*SAE and FFA

## Advanced Plant Science (2601)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisite: Biology (Agriscience) or Biology or Biology Honors.

Recommended prerequisite: Greenhouse

Advanced Plant Science, developed with Curriculum for Agricultural Science Education (CASE), encompasses plant anatomy, physiology, classification, and the fundamentals of production and harvesting. Students acquire knowledge and skills to use 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. \*CASE \*SAE and FFA

## Floral & Landscape Design (2620)

Grade Level: 10-12 Credits: 5 Full Year Prerequisite: None

Recommended prerequisite: Greenhouse

Floral & 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. \*SAE and FFA

## **ANIMAL SCIENCE**

## Introduction to Animal Science (2616)

Grade Level: 9-12 Credits: 5 Full Year

Co-requisite: Biology (Agriscience), Biology, or Biology Honors

Introduction to Animal Science focuses on fundamentals including animal origin, domestication and uses, careers in the animal industry, animal safety and sanitation, ways animals help humans, taxonomy, and breeds. In addition, animals on site provide opportunities for students to learn the content, foundational leadership skills, responsibility, and cooperation needed to be successful. \*SAE and FFA

## Advanced Animal Science (2600)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisite: Biology (Agriscience) (Final Grade of B) or Biology (Final Grade of B) or Biology (Agriscience)

Advanced Animal Science, developed with Curriculum for Agricultural Science Education (CASE), exposes students to the world of animal agriculture and career opportunities. Students study animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. Live activity-based, project-based, and problem solving-based learning are experienced. Animals on site provide opportunities to explore husbandry, genetics, breeding, feeding and nutrition concepts and practices. Students are required to assist with the maintenance and feeding of the animals. \*CASE \*SAE and FFA

## 21st CENTURY LIFE AND CAREER SKILLS

## APPLIED TECHNOLOGY ENGINEERING EDUCATION

Applied Technology Engineering 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. The Technology Student Association (TSA) is an integral part of the program, and participation is strongly encouraged. <a href="https://www.tsaweb.org">www.tsaweb.org</a>

Concentration	Grade 9	Grade 10	Grade 11	Grade 12	Complementary Courses
	Material, Design & Engineering Technology				Metal Tool & Machine Technology Wood Construction & Design
	Industrial Design & Architecture 1				
	Industrial Design & Architecture 2*				
Problem Solving	Engineering I*				
			Engi	neering II*	Technology Project-Based Mathematics
				Tech Capstone: Material, Design & Engineering Honors*	
	Material, Design & Engineering Technology				Industrial Design & Architecture Engineering Small Engines, Ops & Electricity Ag Power, Struct & Tech Sys
	Metal Tool & Machine Technology				
Materials	Metal Manufacturing & Design Technology*				
(wood, plastic,	Wood Construction & Design Technology				
metal, composites)		Wood Production Technology*			Project-Based Math/STEM
composites				Tech Capstone: Material, Design & Engineering Honors*	3-Dimensional Art
	Graphic Design I			Art/ Art Canvas Creative Writing Yearbook Web Design/ Animation	
Communication	Graphic Design II*				
	Video Production I				
	Video Production II*				
		Video Production III*			

<sup>\*</sup>Prerequisites

## PROBLEM SOLVING CONCENTRATION

Material, Design & Engineering Technology (1825)

Grade Level: 9-12 Credits: 5 Full Year Prerequisite: None

Material, Design & Engineering Technology prepares students to apply technological concepts and processes that are the cornerstone for the high school applied technology Engineering, Design, Architecture, and Materials 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 I (1821)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisites: Material, Design & Engineering Technology

Engineering I combines current technologies and standard industry software with hands-on, design-based projects. Topics include orthographic/pictorial drawings, computer aided design (CAD), forces, structures, mechanisms, power, materials processing, and electrical systems. Students are introduced to robotic systems through the design, creation, and programming of an autonomous robot using the VEX Robotics microcontroller. \*CAP at the conclusion of *Engineering II Pending RCBC Approval* 

## Engineering II (1822)

Grade Level: 11-12 Credits: 5 Full Year Prerequisite: Engineering I

Engineering II explores careers, processes, and applications of the professional engineering world through hands-on, design-based projects. Students explore the role of computer control in assorted systems and create basic circuits using components such as breadboards, resistors, capacitors, and microcontrollers, sensors, emitters, and power sources. Students solve real-life problems by designing human and computer-controlled robotic systems and implementing programming skills. Students compete in local/regional robotic challenges such as FIRST or VEX. \*CAP at the conclusion of *Engineering II Pending RCBC Approval* 

## Industrial Design & Architecture I (1813)

Grade Level: 9-12 Credits: 5 Full Year Prerequisites: None

Industrial Design & Architecture I explores residential, commercial, civil, construction and production projects. Students develop software based two-dimensional, three-dimensional, and architectural plans. While practicing techniques in modeling software, students acquire industry's language, concepts, procedures, and processes to create drawings. Students also generate geometric constructions and prototype designs with consideration for human factors, form and function.

## Industrial Design & Architecture II (1814)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisite: Industrial Design & Architecture I

Industrial Design & Architecture II applies complex concepts associated with 2D and 3D sketching and modeling in residential, commercial, manufacturing and civil environments. Group and individual activities engage students in creating ideas, developing innovations, and assembling practical solutions for a variety of communities while considering systems, manufacturing, planning, and societal and environmental impacts.

## Technology Capstone: Material, Design & Engineering Honors (1828)

Grade:12

Credits: 5 Full Year

Prerequisite: By Application

Technology Capstone: Material, Design & Engineering Honors applies the principles of structural, robotic, mechanical, electronic, energy, power, transportation, biomedical and control systems as they relate to the identification of real world needs and development of practical solutions. Collaborative student teams construct solutions by utilizing technological understandings and experiences in real world challenges. A focus on higher education and career readiness culminate with extensive discussion and presentations. ^Summer Assignment

## MATERIALS CONCENTRATION

## Metal Tool & Machine Technology (1846)

Grade Level: 9 - 12 Credits: 5 Full Year Prerequisite: None

Metal Tool & Machine Technology introduces safe metalworking techniques to apply in fabrication processes. Constructed projects include: sheet metal forming, forging, metal stock machining, casting of molten metal and fastening by soldering, brazing

and welding.

## Metal Manufacturing & Design Technology (1844)

Grade Level: 10 - 12 Credits: 5 Full Year

Prerequisite: Metal Tool & Machine Technology

Metal Manufacturing & Design Technology reinforces previous experiences and introduces arc, gas, MIG, and TIG welding, forging, heat treating, aluminum casting, and pattern making. Metal lathe and milling machine skills are utilized to plan, engineer,

and fabricate several high-level projects.

## Wood Construction & Design Technology (1847)

Grade Level: 9 - 12 Credits: 5 Full Year Prerequisite: None

Wood Construction & Design Technology examines aspects of construction and technology. Students apply design principles, planning processes, and personal creativity to produce fabrications. Students learn the intricacies of fine woodworking and the

safe use of hand and machine tools.

## Wood Production Technology (1848)

Grade Level: 10 – 12 Credits: 5 Full Year

Prerequisite: Wood Construction & Design Technology

Wood Production Technology 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 woodturning are emphasized.

## Technology Capstone: Material, Design & Engineering Honors (1828)

Grade: 12

Credits: 5 Full Year

Prerequisite: By Application

Technology Capstone: Material, Design & Engineering Honors applies the principles of structural, robotic, mechanical, electronic, energy, power, transportation, biomedical and control systems as they relate to the identification of real world needs and development of practical solutions. Collaborative student teams construct solutions by utilizing technological understandings and experiences in real-world challenges. A focus on higher education and career readiness culminate with extensive discussion and presentations.

## COMMUNICATION CONCENTRATION

Graphic Design I (1872)

Grade Level: 9 - 12 Credits: 5 Full Year Prerequisite: None

Graphic Design I creates, plans, and produces printed materials. Topics include package design, desktop publishing, screen printing, and photography. Students design and produce screened t-shirts, memo pads, notebooks, stationery, three-dimensional models, and posters. Technology resources and devices, including computers, scanners, cameras, laser engravers, and task-specific machinery are used. \*CAP at the conclusion of *Graphic Design II Pending RCBC Approval* 

## Graphic Design II (1873)

Grade Level: 10 – 12 Credits: 5 Full Year

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' screen printing experience. Students utilize a technology resources and devices. In addition, students complete design and production tasks that simulate commercial studio operations. \*CAP at the conclusion of *Graphics Design II Pending RCBC Approval* 

## Video Production I (1877)

Grade Level: 9-12 Credits: 5 Full Year Prerequisite: None

Video Production I introduces video production and editing techniques. The history and evolution of communication technologies are explored. Students collaboratively write scripts, draw storyboards, record and edit productions. Students evaluate and critique their work as well as analyze multiple genres movie/video productions. This course requires participation in one (1) field production beyond the school day.\*CAP at the conclusion of *Video Production II Pending RCBC Approval* 

## Video Production II (1878)

Grade Level: 10-12 Credits: 5 Full Year

Prerequisite: Video Production I

Video Production II increases production skills and guides students to become multimedia producers, responsible for district related projects such as: motion computer graphic design, podcasts, live events, sports, Electronic Field Productions, documentaries, scores and soundtracks. By utilizing professional tools, portfolio development begins. This course requires participation in two (2) field productions beyond the school day. \*CAP at the conclusion of *Video Production II Pending RCBC Approval* 

#### Video Production III (1879)

Grade Level: 11-12 Credits: 5 Full Year

Prerequisite: Video Production II

Video Production III orients students to television studio broadcasting operations via "Northern TV", the district's public outlet for student productions. In various television show formats, lighting, set design, and on-air-talent techniques are practiced. Communication, leadership, and problem solving skills are the focus. Professional portfolio development continues. This course requires participation in four (4) field productions beyond the school day. \*CAP Pending RCBC Approval

## 21st CENTURY LIFE AND CAREER SKILLS

## **BUSINESS**

Business education prepares students interested in topics such as running a business, accounting, marketing, economics and web page creation. While exploring business career opportunities, critical knowledge and skills are provided for success. Student participation in DECA and Future Business Leaders of America (FBLA) is an integral part of the Business program.

	Year 1	Year 2	Year 3	Year 4	
	Business Concepts (sem)				
	Computer Applications for Business Productivity (sem)				
Marketing	Marketing I				
Warketing	Marketing II*				
	Entrepreneurship				
	Web Design (sem)				
	Business Concepts (sem)				
A secunding	Computer Applications for Business Productivity (sem)				
Accounting		Accounting I			
			Accour	nting II*	
Financial Literacy & Career Planning		Personal Economics and Career Planning (sem)			

<sup>\*</sup>Prerequisites

## Accounting I (1344)

Grade Level: 10-12 Credits: 5 Full Year Prerequisite: None

Accounting I challenges students to manage finances for a service/merchandising business. Topics include recording, analyzing, and interpreting financial information for two complete accounting cycles including payroll accounting procedures. Students will be introduced to software accounting systems. \*CAP at the conclusion of Accounting II *Pending RCBC Approval* 

#### Accounting II (1345)

Grade Level: 11-12 Effective with the Class of 2026 this course will receive Honors weighting

Credits: 5 Full Year
Prerequisite: Accounting I

Accounting II Honors broadens students' knowledge of corporate merchandising businesses. Students develop a greater understanding of financial analysis with emphasis on advanced concepts such as departmentalized accounting, inventory planning, stocks, dividends, depreciation, uncollectible accounts, accruals, and additional workplace skills. Students will utilize software accounting systems. \*CAP at the conclusion of Accounting II *Pending RCBC Approval* 

#### **Business Concepts (1317)**

Grade Level: 9-12 Credits: 2.5 Semester Prerequisite: None

Business Concepts prepares students for a basic understanding of business, law and economic concepts. This course teaches students about the main influences on business and what to expect in the business world. Some topics include the economy, money and banking, entrepreneurship, influences on business, economic resources, ethics, leadership styles and management styles. A basic understanding of business law will be incorporated including contracts, employment and labor law, and property (patent) law. Upon exiting this course the students will be on track for a business degree and successful future.

## Computer Applications for Business Productivity (1352)

Grade Level: 9-12 Credits: 2.5 Semester Prerequisites: None

Computer Applications for Business Productivity teaches students to utilize Microsoft Word and Excel the most widely used parts of the Microsoft Office Suite, while increasing speed and accuracy in keyboarding. Students will learn to create business and personal documents. Students will learn to create, analyze, and graph/chart numerical data. These spreadsheet skills can be applied to science labs, business-related documents, and personal uses such as finances.

## Entrepreneurship (1373)

Grade Level: 10-12 Credits: 5 Full Year Prerequisite: None

Entrepreneurship provides a foundation in business operations, entrepreneurship, and management. Students learn about the characteristics of business, leadership styles and the social, ethical, economic, and international environments in business. Students complete a business plan including: marketing research, analysis of the business opportunity, type of ownership, marketing plan, and a proposed financial plan. The plan includes demographics, legal requirements, financial capacity, and operational functions. Problem solving and leadership skills are integrated. Students enrolled in this course are eligible to become members of Future Business Leaders of America (FBLA). \*CAP Pending RCBC Approval

## Marketing I (1376) Grade Level: 9-12 Credits: 5 Full Year

Prerequisite: None

Marketing I offers students the opportunity to learn the basics of marketing, selling, and advertising. Students gain an understanding of the principles of marketing: product, price, place and promotion. Essential market research and identification of the target market are covered in detail, along with marketplace dynamics and the importance of marketing management. Participation in DECA, preparing leaders and entrepreneurs for careers in marketing, finance, hospitality and management, is required.

## Marketing II (1394) Grade Level: 10-12 Credits: 5 Full Year Prerequisite: Marketing I

Marketing II students learn and apply advanced concepts of marketing and management in the retail, sports/entertainment and event industries. Focus is on the study of marketing as it relates to promotion, digital communications, and event management and planning in retail operations, entertainment, sporting events, hospitality, tourism and fashion and more. Incorporation of hands-on experience will give the students the opportunity to apply learned skills. Participation in DECA, preparing leaders and entrepreneurs for careers in marketing, finance, hospitality and management, is required. \*CAP Pending RCBC Approval

## Personal Economics & Career Planning (1303) Fulfills Financial Literacy graduation requirement

Grade level: 11, 12 Credits: 2.5 Semester Prerequisite: None

Personal Economics & Career Planning prepares students to manage their own finances. Topics include college costs, career exploration, employment, banking and credit, taxes, and communication skills.

#### Online Personal Economics & Career Planning Fulfills Financial Literacy graduation requirement

Grade level: Entering 11-12 Credits: 2.5 Semester

Prerequisite: By Option II application

Accelerated and condensed, Online Personal Economics & Career Planning prepares students to manage their own finances. Topics include college costs, career exploration, employment, banking and credit, taxes, and communication skills. This course is for academic advancement of original credit only. There is no cost to participate. Summer Semester is July-August. Applications are available in January and are reviewed by the end of March.

Web Design (1364) Grade Level: 9-12 Credits: 2.5 Semester Prerequisite: None

Web Design is an introduction to business strategies utilized in web design. Students will explore the design process including; establishing website business goals, examining various web design platforms, defining website layout, generating content, optimizing for mobile platforms, additional design elements, website testing & publishing, search engine optimization (SEO), conversion rate optimization (CRO), reputation management, and more.

## 21st CENTURY LIFE AND CAREER SKILLS FAMILY AND CONSUMER SCIENCE

Child Development I (1730)

Grade Level: 10 – 12 Credits: 5 Full Year Prerequisite: None

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

## Child Development II (1731)

Grade Level: 11-12 Credits: 5 Full Year

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 and leadership in the Greyhound Puppies Playschool.

Consumer Finance (1304) Fulfills Financial Literacy graduation requirement

Grade Level: 11-12 Credits: 2.5 Semester Prerequisite: none

Consumer Finance addresses personal and family needs such as housing, food, and clothing. Topics include budgeting, sales and income tax (state and federal), purchasing decisions, saving, credit and loans, insurance (life, medical, property, automobile, etc.), payroll and payroll deductions, and banking. By addressing practical financial situations and career planning, students develop fundamental life and personal management skills.

## **VISUAL AND PERFORMING ARTS**

## **ART**

Concentration	Grade 9	Grade 10	Grade 11	Grade 12	
			Art 1		
	Art 2*				
2D			Art 3*		
			AP 2-D Art and Design*		
			AP Drawing*		
		3-Dimensional Art			
3D			Intermediate Ceramics*		
		Advanced 3-Dimensional Art*			
Digital	Digital Canvas				

## Art I (1203)

Grade Level: 9-12 Credits: 5 Full Year Prerequisite: None

Art I develops students' understanding of fine art in drawing and painting through self expression and creative problem solving. Students explore various 2D art mediums such as drawing, painting, watercolors, printmaking and collaging. Students will gain an understanding of art history, and build an art vocabulary of the elements and principles for critiquing.

## Art II (1204) Grade Level: 10-12 Credits: 5 Full Year Prerequisite: Art I

Art II further develops students' understanding of fine art in drawing and painting through advanced creative problem solving. Students explore various 2D art mediums such as acrylic painting, charcoal, graphite, watercolors, sumi ink, printmaking, collaging and mixed media. Students will apply an understanding of art history and continue to build an art vocabulary of the elements and principles.

## Art III (1205) Grade Level: 11, 12 Credits: 5 Full Year Prerequisite: Art II

Art III builds on the foundation of terms, concepts, and techniques developed in Art I and II. Students continue with various 2D art mediums such as acrylic painting, oil painting, charcoal, graphite, watercolors, printmaking, collaging, ink, and mixed media. Challenging long-term projects will be presented to assist the serious art student in building a strong and unique portfolio of artwork for the AP studio art exam the following year. \*CAP Pending RCBC Approval

## Advanced Placement 2-D Art and Design (1211)

Grade Level: 11-12 Credits: 5 Full Year

Prerequisite: Art II (Final Grade of B) and Portfolio Review via application

AP 2-D Art and Design engages the serious art student in creative thinking, enabling them to demonstrate their mastery of college-level course work through materials and processes such as graphic design, photography, collage, printmaking, fashion illustration, and collage. Challenging long term mixed media projects are encouraged to allow students to continue to develop the quality pieces for their portfolio. AP 2-D Art and Design is not based on a written exam; instead, students submit digital portfolios for evaluation at the end of the school year. A qualifying portfolio score can earn students college credit and/ or advanced placement. It is highly recommended that students submit an AP Art Portfolio in May. \*CAP^Summer Assignment Pending RCBC Approval

## Advanced Placement Drawing (1212)

Grade Level: 11-12 Credits: 5 Full Year

Prerequisite: AP 2-D Art and Design (Final Grade of B) or Art II (Final Grade of A) and Portfolio Review via application)

AP Drawing develops students skills in drawing as they experiment with different materials and processes. Students create artwork that reflects their own ideas and skills. AP Drawing is not based on a written exam; instead, students submit digital portfolios for evaluation at the end of the school year. A qualifying portfolio score can earn students college credit and/ or advanced placement. It is highly recommended that students submit an AP Art Portfolio in May. \*CAP^Summer Assignment Pending RCBC Approval

## 3-Dimensional Art (1255)

Grade Level: 10-12 Credits: 5 Full Year Prerequisite: None

3-Dimensional Art introduces tactile self expression and creative problem solving in a 3-D 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. The mediums of wood, metal, glass, and found objects are also introduced. By using these mediums, students develop and integrate concepts and critical analysis that investigate basic sculptural processes.

#### Intermediate Ceramics (1254)

Grade Level: 11, 12

Credits: 5 Full Year

Prerequisite: 3-Dimensional Art 1

Intermediate Ceramics continues hand building in 3-Dimensional Art with pinch, coil, and slab techniques and conquers the potter's wheel. Students refine centering skills, pull a cylinder, and create functional cups, bowls, and plates. Various finishing details explored include rims, handles, glazes, and decorating techniques. Students use conceptual ideas and bring them together through installation art. The Japanese firing technique of Raku is also explored. \*CAP Pending RCBC Approval

## Advanced 3-Dimensional Art (1256)

Grade Level: 12 Credits: 5 Full Year

Prerequisite: Intermediate Ceramics

Advanced 3-Dimensional Art enables students to experience specialized techniques and processes applied to ceramic sculpture, metal, glass, and found objects. By using these 3-D mediums, students will focus on a concentration that speaks to the individual students while creating a sketchbook/journal, researching designs, learning about marketing, and constructing exhibits. \*CAP Pending RCBC Approval

## Digital Canvas (1221)

Grade Level: 9-12 Credits: 5 Full Year Prerequisite: None

Digital Canvas is a course designed to educate students on creating and manipulating images on a digital tablet with a digital brush using industry standard software and hardware. Topics studied and projects covered include illustration design, animation, and photo manipulation. Students will create their digital identity.

## **MUSIC**

Concentration	Grade 9	Grade 10	Grade 11	Grade 12	
	Band Class				
Instrumental	Concert Band				
instrumentai	Symphonic Band				
		Wind Ensemble		semble	
	Music Appreciation				
Music	Music Theory				
	AP Music Theory				
Concert Choir					
Vocal	Chamber Choir				
VOCAI	Chorale				
		Treble Chorus			

#### 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 Full Year 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. In-class performance is required.

## Concert Band (2110)

Grade level: 9-12 Credits: 5 Full Year Prerequisite: By Audition

Concert Band immerses students in the fundamentals of 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: 10-12 Credits: 3/4/5 Full Year 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 required in two to three evening concerts

per year, Graduation, and possibly in-school assemblies. Please note: This course is taken for 3, 4, or 5 days.

## Wind Ensemble (2112)

Grade level: 11-12 Credits: 3/4/5 Full Year 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, Graduation, and represent the school at a minimum of two competitions. *Please note: This course is taken for 3, 4, or 5 days.* 

## Music Appreciation (2145)

Grade Level: 9-12 Credits: 5 Full Year

Note: For students with no prior experience in band or chorus

Music Appreciation introduces the fundamental components of music and guides students through exploration of the musical styles of various eras and cultures. Through discussion and analysis, students will understand the background and development of today's music. Students will also experiment with the digital development of music. Music Appreciation is limited to one section and placement is not guaranteed.

## Music Theory (2139)

Grade Level: 9-12 Credits: 5 Full Year Prerequisite: None

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 Full Year Prerequisite: By Audition

The AP Music Theory course corresponds to two semesters of a typical introductory college music theory course that covers topics such as musicianship, theory, musical materials, and procedures. Musicianship skills including dictation and other listening skills, sight-singing, and keyboard harmony are considered an important part of the course. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of music that are heard or presented in a score. Development of aural skills is a primary objective. Performance is also part of the learning process. Students understand basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials are emphasized. It is highly recommended that students take the AP Music Theory exam. \*CAP Pending RCBC Approval

## **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 lifelong learners.

## Concert Choir (2123)

Grade Level: 9-12 Credits: 5 Full Year Prerequisite: None

Concert Choir promotes vocal skills, including resonation 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 Full Year 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. A minimum of two evening performances are required.

# Chorale (2127) Grade Level: 10-12 Credits: 3/4/5 Full Year Prerequisite: By Audition

Chorale performs for community functions and statewide competitions. Students gain an understanding of college-level musical literature, terminology, historical background, breathing techniques, pronunciation, rhythm, and articulation. A minimum of two evening performances are required. *Please note: This course is taken for 3, 4, or 5 days.* 

Treble Chorus (2129) (previously titled: Chorale (Women's)

Grade Level: 10-12 Credits: 3/4/5 Full Year Prerequisite: By Audition

Treble Chorus is suited for Soprano and Alto voices performing a range of high level literature. This group performs for community functions and at statewide competitions. Students gain an understanding of college-level musical literature, terminology, historical background, breathing techniques, pronunciation, rhythm, and articulation. A minimum of two evening performances are required. *Please note: This course is taken for 3, 4, or 5 days.* 

#### **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.

Grade 9	Grade 10	Grade 11	Grade 12	
	Ţ	heatre Arts		
		Advanced Acting* (alt yrs)		
	Play Production* (alt yrs)			
	Directing a Play I* (sem)			
			Directing a Play II* (sem)	

## Theatre Arts (1430)

Grade Level: 9-12 Credits: 5 Full Year Prerequisite: None

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

## Directing a Play I (1437)

Grade Level: 11-12 Credits: 2.5 Semester Prerequisite: Theatre Arts

Co-requisite: Play Production or Advanced Acting

Directing a Play I immerses advanced theatre students in the entire process of directing a play. From casting through performance, students gain experience in 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 an afternoon 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 Semester

Prerequisite: 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 with which they may not have any familiarity. Students are required to attend an afternoon dress rehearsal, as well as the performance of "An Evening of Original Short Plays" in the spring.

#### Advanced Acting (1435)

Grade Level: 10-12 Credits: 5 Full Year Prerequisite: <u>Theatre Arts</u>

Offered in years: 2023-2024, 2025-2026, 2027-2028

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.

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## Offered in Alternate Years

## Play Production (1441)

Grade Level: 10-12 Credits: 5 Full Year Prerequisite: <u>Theatre Arts</u>

Offered in years: 2024-2025, 2026-2027, 2028-2029

Play Production develops performance skills while involving students in children's theatre, playwriting, and directing. Students gain experience in the play production process. Students are required to perform in a children's play during school for a peer audience, as well as perform in "An Evening of Original Short Plays" in the spring. An after school dress rehearsal is required. This course is offered on a rotating basis with Advanced Acting.