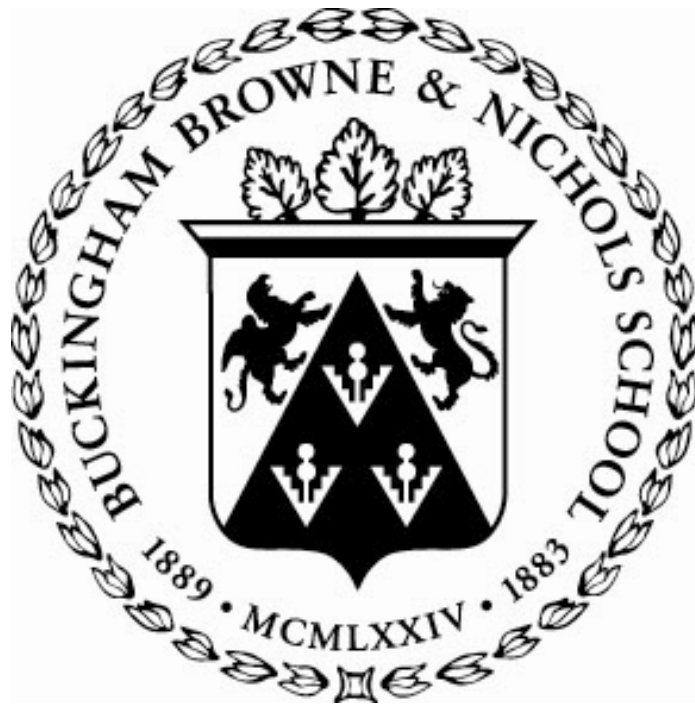


Program Planning Guide

2011~2012



**Buckingham Browne & Nichols
Upper School**

To the BB&N Student:

This guide is intended to assist you in selecting courses and sports for the upcoming school year. You will want to consider a number of factors in making these decisions: BB&N’s requirements, personal interests and aptitudes, and your goals beyond high school. Our advice is to aim for a challenging but manageable workload, one that acknowledges that your life not only includes classes, sports and extra-curricular activities but also important family and community responsibilities. It is helpful to plan for each year with a four-year overview in mind. Your course selection and sports choice forms should be signed by your parents and advisor before being submitted to the Upper School office. Students who complete the course selection process on time will be given first consideration for courses with limited enrollment. If you have questions, please call the specific department chair or the Academic Dean.

(N.B.: Information contained herein is current as of March 14, 2011, and is subject to change.)

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Upper School Requirements

Academic Course Load Expectations

Students and parents should carefully review the school's departmental requirements and should consult with the department heads when there are program questions. Students in Grades 9-12 generally take the equivalent of five full courses (20 academic units), which results in a program of study that goes well beyond the minimum requirements (16 units). This is done by taking additional courses in areas of strength and interest.

Appropriate variations in the standard program, for more or fewer than five regular courses, are possible with the approval of the Academic Dean. Students may take an Art elective as a sixth course without special permission. Students interested in a varying program should discuss its rationale with their advisor and appropriate teachers or department heads first.

Department	BB&N Requirement
Arts	1 unit in Grade 9; 1 unit** in Grades 10-12
English	4 units, Grades 9-12
World Languages*	3 consecutive sequential units of the same language
History/Social Science	2 units, including U.S. History Department encourages at least one course with a global emphasis
Mathematics*	3 units, including 1 unit of Algebra II and 1 unit of Geometry
Science	2 units, including 1 unit of Biology and 1 unit of Physical Science †
Bivouac^	required in Grade 9
Sexuality & Relationships	required in Grade 10
Sports/ Health & Fitness	9 seasons - 3 each in Grades 9-11/ 2 seasons - Grade 12
Community Service	40 hours during Upper School
Senior Project	Approved individual project for the spring term of senior year

Notes to Requirements/Expectations Table

- * Students entering grade 11 must continue language and mathematics through grade 11, completing at least level three of language and Algebra 2 and Geometry in mathematics.
- ** The 1-unit Arts requirement in Grades 10-12 may be satisfied by passing a full course offered by the Arts Department. Full or partial credit toward satisfying the Arts requirement will also be granted, as determined in advance by the head of the Arts Department, for significant participation in drama productions, in the Chorus, or in an instrumental activity under the supervision of the music faculty. In general, the amount of credit will depend upon the amount of time committed to the performance activity.
- † Courses that meet the Physical Science requirement: Physics, Principles of Chemistry, Chemistry, Honors Chemistry, Honors Physics. Students must take a full year of a physical science course (extending through senior project) if they have not already fulfilled their physical science requirement.

- ^ Full participation in the Bivouac experience is an integral and required part of the Grade 9 curriculum. It is a requirement for promotion to Grade 10 and for graduation for students entering BB&N in Grade 9.
- ++ All grade 11 students are expected to take US History

Community Service Policy (Updated February 10, 2011)

Community Service

The following is the current Community Service Policy at BB&N. Please note that a student community service group (Plan Action Committee, PAC) has been formed to help organize and oversee community service activities at BB&N. PAC, together with BB&N staff, will additionally be reviewing and revising current community service policies.

Requirement

- **Minimum of 40 hours of community service work**
- **500-word essay after completion of 40 hours**

Upper School students are required to complete a minimum of 40 hours of community service commencing in September of the ninth grade year, including summers. Requirements for tenth and eleventh grade admits are prorated at 10 hours per year. If seniors have not documented at least 30 hours of community service by the date on which Senior Spring Project proposals are due, service **MUST** be a formal component of their Senior Spring Project. To complete the requirement, one 500-word essay must be submitted to the Community Service Coordinators after 40 hours of service.

Beginning in the fall of 2009, incoming students will be required to perform a minimum of 10 community service hours at each organization for which they work. This rule does not apply to work done in BB&N-based activities such as the BB&N Circus and Community Service Afternoon.

Eligible Work

It is recommended that students receive prior approval from the Community Service Coordinators for all community service work. The following are some examples of the types of volunteer work that are eligible for community service credit:

- working directly with people in need; examples: interacting with patients at a hospital, work at a homeless shelter, nursing home, public schools, or soup kitchens, work with disabled people
- performing administrative duties for a non-profit & non-tuition or fee based organizations; examples: public library, public schools, hospitals, federal, state or municipal offices (in a non-political role),
- working with animals and the environment;
- the only eligible BB&N-based activities are the BB&N Circus, Peer Tutoring Program, and Books, Basketball, and Neighbors.

Non-Eligible Work

Though a valuable learning experience, the following do not meet the eligibility requirement:

- work with political campaigns
- laboratory research
- work at for-profit summer camps
- work at a private school or day care, or any tuition based program
- political, religious, or environmental advocacy work is not allowed (you cannot spread the message of a specific organization)
- fundraising (this includes walk-a-thons)

A student's best effort should be made to perform community service work in the Greater Boston area. A maximum of 20 hours may be awarded for work done outside of this area, either in the United States, or in another country.

If you have a question about whether your work is eligible as community service, then you should clear it with the office prior to completing the work. Otherwise, your hours may be ineligible and may not be counted.

Season-Off Sports

Students (Grades 10, 11, and 12) with a major commitment and demonstrated dedication to Community Service Projects (approved by the Community Service Faculty Advisors), may request an exemption from the Athletic Requirement for **one season per academic year**. All students who receive Community Service Exemptions must participate within the Athletic Program for at least one season per academic year, unless special request is granted. Proposals (fall, winter, spring) must be submitted to the Community Service Faculty Advisors no later than the first day of seasonal tryouts in order to seek approval. Seasonal tryout dates will be communicated to students/parents via www.bbns.org and the seasonal Athletic Department Information Letter. Waiver/Exemption forms are available in the Community Service Faculty Advisors Office.

Record of Social Service Form

Community service hours need to be fully documented by filling out a BB&N Record of Social Service Form for each site worked at OR by submitting a note on letterhead signed by the site supervisor. Although the school keeps track of hours, it is recommended that students also keep a record of their community service work. Copies of this form are available outside community service coordinators' office 162.

Community Service Coordinators:

Profesora Gabriela Gonzenbach, gabriela_gonzenbach@bbns.org

Eric Hudson, eric_hudson@bbns.org

Meena Kaur*, meena_kaur@bbns.org

* Contact Ms. Kaur directly to submit any documentation.

See community service info on the BB&N web site (www.bbns.org/upper-school/special-programs/community-service) for a downloadable copy of the Record of Social Service Form and a list of some organizations in the Greater Boston area at which BB&N students have volunteered.

BB&N Requirements - - Athletics/Physical Education

Grades 9-12 Athletic Programs:

- Students' grades 9-11 must participate in the Athletic Program for three seasons, 12th graders only need to participate for two seasons.
- Students' must participate in at least three interscholastic sports by the end of 10th grade; two of which must be completed in grade 9; new 10th graders must participate in at least one interscholastic sport within the 10th grade academic year.
- 9th graders (20) can choose the Health & Fitness "after-school" option fall, winter, or spring. The grades 10-12 Health & Fitness option is only offered during the academic day.
- Grades 10-12 are only eligible (on an approval basis) for the Strength & Conditioning program or to manage a team. Team managing is only an option for one season per academic year.
- (#) Represents the maximum number of players per team. A tryout selection process according to ability will be used if necessary.
- Student participation in a team sport must have enough players necessary in order to compete at an interscholastic level, if not the offering will be discontinued.
- Alternative programs may be granted. Please refer to the Student Handbook for details.

Fall

(Interscholastic)

Boys

Football V(30), JV(30)
 Soccer V(17-20), JV(17-20), 3rd(20)
 X-country V(12-14), JV(20)

Girls

Field Hockey V(15-18), JV(15-18), 3rd(18)
 Soccer V(17-20), JV(17-20), 3rd(20)
 X-country V(12-14), JV(20)
 Volleyball V (10-12), JV (16)

(Non-Interscholastic)

Co-ed

Instructional Tennis (24)
 Health & Fitness (60)
 Strength & Conditioning (25)
 Managing (18)
 Health & Fitness/ Afternoon Arts (approved on seasonal basis)

Winter

(Interscholastic)

Boys

Basketball V(12-15), JV(12-15), 3rd(15)
 Fencing (25)
 Hockey V(16-20), JV(22)
 Wrestling (30)

Girls

Basketball V(12-15), JV(12-15), 3rd(15)
 Fencing (25)
 Hockey V(16-20), JV(22)

(Non-Interscholastic)

Co-ed

Health & Fitness (70)
 Strength & Conditioning (25)
 Managing (18)
 Health & Fitness/ Afternoon Arts (approved on a seasonal basis)

Spring

(Interscholastic)

Boys

Baseball V(16-18), JV(18)
 Lacrosse V(18-20), JV(20)
 Crew V(20), JV(25)
 Tennis V(8-10), JV(10-12)

Girls

Softball V(12-16), JV(18)
 Lacrosse V(15-18), JV(18)
 Crew V(20), JV(25)
 Tennis V(8-10), JV(10-12)

Co-ed

Sailing V(12-15)
 Golf V(10-12), JV(10-12)

(Non-Interscholastic)

Co-ed

Instructional Sailing (10)
 Health & Fitness (50)
 Strength & Conditioning (20)
 Managing (18)
 Health & Fitness/ Afternoon Arts (approved on a seasonal basis)

Alternative Athletic Programs: Students with demonstrated ability and a major commitment to training for a sport/activity that BB&N does not offer (i.e. riding, skiing, swimming, figure skating), may apply for an off-campus Athletic Program Waiver. The Independent School League Bylaws state, "Multi-season, single sport: Athletes may not receive credit for participating in a sport (offered) for more than one season in an academic year." All such proposals, and any additional season requests (fall, winter or spring) must be submitted to the Director of Athletics no later than the first official day of seasonal tryouts in order to seek approval. Seasonal tryout dates will be communicated to

students/parents via www.bbns.org and the seasonal Athletic Department Information Letter. Waiver Forms are available in the Athletic Department Office.

Alternative Artistic Programs: Students with a major commitment and demonstrated ability in the arts (grades 9-12), including “in school” technical theater, drama, or dance, (grades 10-12) may request an exemption from the Athletic Requirement for the season of involvement. All students who receive Artistic Waivers should expect to participate within the Athletic Program for at least one season per academic year. All such proposals and any additional season requests (fall, winter or spring) should be submitted to the Head of the Arts Department no later than the first week of seasonal tryouts in order to seek approval. Waiver Forms are available in the Arts Department Office or on the BB&N website: www.bbns.org.

Community Service Exemption: Students in grades 10 & 11 who elect to make a significant contribution to a community service project, may request an exemption from the Athletic Requirement for one season during their time at BB&N. Proposals (fall, winter or spring) must be submitted to the Community Service Coordinator no later than the first day of seasonal tryouts in order to seek approval. Seasonal tryout dates will be communicated to students/ parents via www.bbns.org and the seasonal Athletic Department Information Letter. Exemption Forms are available in the Coordinator’s Office.

Notes for All Classes

Because of varying enrollment, scheduling, and/or staffing, not all electives may be available each year. Students should indicate a second option for electives. Final authority for scheduling and placement in courses rests with Academic Dean and the Director of the Upper School.

Honors/Advanced Placement Classes

Students are assigned to appropriate course sections by the department heads. Assignments are carefully based on input from teachers and advisors concerning such factors as past performance, class size, gender and aptitude/interest. Students do not choose teachers, nor do they change courses or sections based on teacher preference. Exceptions to departmental recommendations are only made with the approval of the department head, the Academic Dean and the Director of the Upper School.

Students approved to take an Advanced Placement class are expected to take the AP exam at their own expense in May (scholarship assistance is available upon request to the testing coordinator). Seniors registered for an AP course continue with the course in April and May (during their senior projects), and take the examination. For an exception to this policy, seniors must complete the “drop AP” portion of their senior spring project applications.

Courses Requiring Special Departmental Permission

In order to enroll in any of the courses listed below, you must first obtain departmental permission from the person indicated. Refer to the course description for more information about the course and the application process. To be considered for these courses, indicate your interest in advanced sections clearly on the course selection sheet and see the person indicated.

Arts

Advanced Chamber Music	Mr. Reasoner
Advanced Drama/Theatre	Mr. Lindberg
Advanced Photography	Ms. Dobson
Advanced Studio Art	Mr. Norton
Orchestra	Mr. Reasoner
Chamber Music	Mr. Reasoner
Chorale	Mr. Horning
AP History of Art	Mr. Leith

World Languages

French 2Honors, 3Honors	Mme.Roucher-Gudwin
French AP Lang, 5Honors	Mme.Roucher-Gudwin
Spanish 2Honors, Spanish 3Honors	Prof. Sanchez-Gomez
Spanish AP Lang, 5, 5 Honors	Prof. Sanchez-Gomez
Latin 3Honors, AP, 5Honors	Mr. Edbrooke

Mathematics*

Honors Algebra II	Ms. Oulton
Honors Geometry	Ms. Oulton
Honors Pre-Calculus BC or AB	Ms. Oulton
AP Calculus BC or AB	Ms. Oulton
AP Computer Science AB	Ms. Oulton
AP Statistics	Ms. Oulton
Linear Algebra	Ms. Oulton

**Enrollment in more than one mathematics course requires prior permission from Ms. Oulton, department head. For entry to advanced mathematics courses Ms. Oulton must sign the course selection form only if the current math teacher has not already approved the course.*

Science

Honors Physics	Dr. Cataldo
Honors Chemistry	Dr. Cataldo
Advanced Biology	Dr. Cataldo
Experimental Biology	Dr. Cataldo
Advanced Physics	Dr. Cataldo
Current Topics and Research	Dr. Cataldo

History/Social Studies

History Electives	Mr. Carrera
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Course Descriptions

(most Elective Courses; see the Program Guide for Department Overviews)

Arts Department

9th Grade Introduction To Art

As a requirement for the ninth grade, these courses introduce students to the elements and techniques in two broad areas of the arts. Students choose one semester course in the Visual Arts and a one semester in the Performing Arts.

Visual Arts for 9th Grade:

Intro to Photography: Students learn basic camera operation, film development and darkroom skills, while exploring the power of black and white photography. Students

wishing for a deeper exploration of both darkroom and digital photography should take the full year course in 10th, 11th, or 12th grade.

Intro to Wood: In this semester course, students design and build a variety of woodworking projects, such as wood boxes with hand-cut joinery, clocks, and lathe turned bowls. Student become proficient in the safe and proper use of both hand tools and power tools, such as the lathe, scroll saw, and drill press. This course offers unique opportunities to learn the fundamentals of woodworking.

Art Across Boundaries: This course is an opportunity to explore the imagination. Students will cut "across boundaries" to experience drawing, painting, printmaking, collage, sculpture, and mixed media while developing the ability to think visually. We will work to music, use clay for expressive sculpture, paint a fantasy landscape, tell a story with images, and build a world in a box.

Performing Arts for 9th Grade:

Drama The course focuses on acting. Using physical and vocal warm-ups, prepared pieces, and improvisation, students explore character work and the dynamics of stage movement and design.

Dance: This course exposes students to a variety of dance styles and choreographers in the 20th century. We will study classical jazz, contemporary hip hop, swing and musical theater dance. Students will learn progressions across the floor and short routines linked to the style being studied. Beginning and more experienced dancers welcome.

Choral Music: The 9th Grade Chorus sings repertoire which includes songs from the American musical theater tradition, folk songs from American, Latin-American, Eastern European, and Asian cultures, as well as repertoire from the western music tradition. Students sing in unison as well as parts and there are opportunities for solos. Class rehearsals focus on breathing, diction, intonation, and sight-

reading skills. Students learn the basics of music theory. Excellent preparation for participation in the BB&N Chorale, Knightingales, and Voices of the Knight.

Video/Film:

In this course, students are introduced to the basics of cinematic and narrative form through short self-directed projects. Using video cameras and computer-based non-linear editing suites, participants explore shooting vocabulary, and formal concepts such as matching action and the power of the edit. All projects are made in small groups and edited via iMovie. Every student gets a chance to be a camera person, director, performer and editor. A primary goal of media literacy is achieved through a combination of hands-on projects and in-class viewings and discussions.

Jazz* In this course, students rehearse and perform compositions by jazz greats such as Duke Ellington, Thelonious Monk, Charles Mingus, and others, arranged for small jazz ensemble. The art of ensemble playing and improvisation is the primary focus. Students with the appropriate backgrounds may also contribute as composers or arrangers. Admission to this course is based on audition (during the first week of classes). Parallel private instrumental instruction is strongly encouraged but not required. There is at least one performance per semester.

Orchestra* *See the description below.*

* Ninth Grade students electing these musical ensembles continue with them for the full year.

Visual Arts

Afternoon Art

Grades 9-12 (by season)

All students are welcome to take this course. You may explore drawing, painting, printmaking, collage and/or multimedia. The only requirement is that you are honestly interested in exploring art in the afternoon hours. Students must sign up for any two days, Monday, Tuesday or Thursday from 3:30-5:00. Offered Fall, Winter and Spring. *This course fulfills the Arts Requirement if attended for a total of four sports season. Taken in combination with two seasons of Health and Fitness, you will fulfill your Athletic requirement for the season.*

Ceramics

Grades 10-12

Students learn the skills of handbuilding with clay (pinching, coiling, soft-slab and hard-slab construction) as well as the processes and methods of throwing on the wheel. Students explore personal concepts while designing sculptural forms and functional works. They experiment with multiple surfacing techniques such as sgraffito, carving, slip-painting and burnishing, and different approaches to glaze application. In addition, they work with colored porcelain processes of neriage and agate ware, moldmaking and slump forming. Throughout the course, students are exposed to a variety of ceramic images for inspiration, both historical and contemporary, as they develop their own body of original works. It is also possible to take this course on a half-credit basis, meeting twice week, over two years.

Advanced Ceramics: Grades 11-12

In Advanced Ceramics, students will increase their skills and knowledge of techniques while developing their body of work. Students will receive instruction in the construction of support for larger pieces, mold-making, casting and advanced wheel-thrown forms. Alternative materials and surface treatments will be integrated for multi-media sculptures. A digital portfolio of their ceramic works will be created at the end of the semester. Prerequisite: Ceramics

Connections: A studio based exploration of Art and Science

Not Offered 2011-2012

Grades 10-12 Half-Credit

Through studio projects and research assignments, we will use art making as a tool to better understand science, and to use science as a source of inspiration in making art. Although we will primarily be working with paper and wood, students will also have the opportunity to work with metal, glass, and electronic components. From making wood block prints based on the divine proportion, to making electronic sculpture, students will explore the creative possibilities of making art inspired by science. This course is a half-credit course, open to grades 10-12. It meets two times a week for the full academic year. Each

year students will be exposed to a new collection of two-dimensional and three-dimensional projects, so that students taking the course for a second year will be exposed to new materials and assignments.

Design & Architecture Grades 10-12

This two semester course is a mix of graphic design and environmental design including architecture. There is strong emphasis put on discovering your own creative design process. Students will learn to solve practical problems when they design, whether it be a personal graphic logo, an inventive toy, a paper structure able to withstand an 8 foot egg drop or a tiny 100 square foot living unit to use a few of the examples from the past. The only skills that you need are an open curious mind and the ability to fully focus on the task at hand.

Drawing and Painting Grades 10-12

Exploring the basics of drawing and painting in a single year, this course is for both beginners and more experienced students who want a foundation in learning to draw in black and white and to paint with color. A variety of approaches, materials, and subjects will be explored including people, animals, objects, landscapes, color studies and abstract images. Whether you like working from observation or your imagination, the challenge is still the same: make it come alive as an image and as a creative process. This course is a pre-requisite for Advanced Studio Art.

Advanced Studio Art Grades 11-12

Open to a limited number of experienced drawing and painting students, this course will be theme oriented. There will be a strong emphasis on the development of a sense of each student's unique personal vision. The basic two semester Drawing & Painting course or a portfolio review is a pre-requisite for this course. Work completed in this course can be used as a portfolio for college applications.

Film and Video Grades 10-12

The goal of this hands-on course is to create an opportunity for students to become both informed viewers and creators of their own multi-media digital video productions. Through the study of film and video history, along with in-class discussions and critiques,

this course will focus on developing an appreciation of the complexities of time-based media. Using digital equipment and state-of-the-art editing software, students will develop an understanding of both the conceptual and technical elements that compose a video production. Emphasis is placed on self-expression, creative problem-solving, and an investigation of the influence of the medium, from its earliest forms to the prevalence of web-based phenomena such as YouTube. Class projects are collaboratively organized and will use digital audio and video to create short studies, documentary, commercial, and narrative pieces. Limited to 12.

Mixed Media 3-D **Grades 10-12**

This is a course for students who enjoy working with their hands, making projects out of a variety of materials. We will create projects using wood, stone, copper, handmade paper, glass, electronic components, and a variety of recycled materials to create three-dimensional art works. Past projects have included environmental sculptural, shadow boxes, jewelry, electronic sculpture, mechanical sculpture, and sculptural lights. You will learn how to solder metal, turn on the lathe, and carve a variety of materials. This course is open to all who wish to experiment and try new approaches to making art.

Photography **Grades 10-12**

This course explores the art of Black and White photography, beginning with basic camera and darkroom techniques, and moving deeply into the expressive power of the medium. Regular shooting assignments encourage students to explore form, abstraction, portraiture, documentary, and subjective photography. Periodic critiques and slide presentations focus on developing a critical vocabulary in the visual arts, and a sense of the history of photography. Second semester students are introduced to digital imaging and color photography. An extended project of the student's own choosing ends the year. The estimated lab fee will be \$140. (Scholarship funds available)

Advanced Photography **Grades 11-12**

This course is for students serious about extending their exploration of the photographic medium. We will begin with advanced techniques in fine

printing, including exposure control, different film and paper developers, and toning. We will study several alternative processes, including cyanotype, liquid light, and Van Dyke Brown prints. During second semester, in addition to a deep study of color photography, students will build a professional portfolio of their work. Throughout the course, the relationship between personal vision and technical decisions will be our central concern. Pre-requisite: Photography

Intro to Woodworking **Grades 10-12**

This course provides a unique opportunity to gain a solid foundation in woodworking and design skills. Students design all of their own projects while developing a repertoire of standard and advanced woodworking techniques including the safe and proper use of the power tools in the studio. Projects range from wood turning and cabinet making, to the construction of large furniture pieces. Some of the projects made by first year students are: bowls, stereo cabinets, jewelry boxes, chairs, mirrors, frames, tables, even baseball bats. This course is a great opportunity for those that like to work with their hands.

Advanced Woodworking **Grades 10-12**

This course is open to both beginning and advanced students who wish to develop their design, artistic, and woodworking skills through a series of individualized projects. Students explore lathe turning, carving, steam bending, and other woodworking and cabinet making techniques to create a portfolio of individualized projects. Students also become proficient in the safe and proper use of hand and power tools. Projects can include: sculpture, shadow boxes, secret compartments, cabinets, chairs, tables, jewelry, carvings, and a variety of lathe turned projects.

AP History of Art **Grade 12**

We will survey the history of painting, sculpture, and architecture, from antiquity through the Post-Modern era, with particular emphasis on the nineteenth and twentieth centuries. The class will meet three times weekly, including a Friday double block when we will make weekly visits to local museums. During these visits students will lead the class

with presentations on masterpieces in these collections that illustrate the history of art. Friday classes will take place not only in the Museum of Fine Arts but also in the Harvard Art Museums and the Isabella Stewart Gardner Museum. In the spring we will travel to New York to visit the Metropolitan Museum of Art and the Museum of Modern Art, and to conclude the year, we will go to New Hampshire to tour the only Frank Lloyd Wright-designed house open to the public. Students are expected to take the AP exam and remain in the course during the spring.

Performing Arts

Drama/Theatre

Grades 10-12

First Semester: An exploration of theatre performance. Dramatic works are studied as scripts to be brought to life by actors and designers. Monologue and scene work from the plays are supplemented by exercises to develop physical and vocal technique.

Second Semester: A continuation of the work of the first semester with a focus on contemporary dramatic works created since 1970. Scene work and vocal and physical training continue accompanied by a more extensive use of improvisation.

Advanced Drama/Theatre Grades 11-12

First Semester: Acting Shakespeare. A continuation of the acting work/script analysis of Drama/Theatre with an emphasis on period acting and the challenges of style.

Second Semester: Student director/performer project. Students choose either to direct a main stage play in the spring term or to prepare a series of scenes and monologues for public presentation. Drama/Theatre is a pre-requisite for this course.

Chorale

Grades 10-12

The Chorale is a select performing ensemble of approximately 45-50 students that meets twice weekly during G block. The repertoire includes spirituals, gospel, jazz folk songs, musical theater, and standard choral music from the Renaissance period through contemporary music.

Students sing in four to eight parts, depending on the size and experience of the group and occasionally perform all-male or all-female part songs.

The group gives formal concerts twice annually as well as numerous performances at school functions, in neighboring communities, and at high school choral events such as the GospelFest and the Wick Choral Festival. The ensemble tours internationally every 2-3 years and produces a CD of the best performances. Chorale members may fulfill their arts requirement by participating for two years but are encouraged to sing for all three years so as to refine their skill and technique.

Limit on participation: Participation in Chorale is a requirement for those wishing to audition for a cappella groups - *Voices of the Knight* and *Knightingales*.

Orchestra

Grades 9-12

The Upper School Orchestra is an audition ensemble for string, woodwind, and brass players. The group is comprised of 30-35 players from Grades 9-12, and rehearses twice a week (Monday G-Block and Thursday G-Block). The group focuses on music written between 1700-1940. Our performances of complete works have included Mozart Symphonies No. 25, 35, 39, 40, 41, Beethoven Symphonies No. 1, 2, 3, 4, 5, 7, Schubert Symphonies 5 & 8, overtures by Mozart, Beethoven, and Schubert, concerto movements by Mozart, Haydn, Beethoven, and Chopin, as well as individual pieces ranging from J.S. and C.P.E. Bach to Fauré, Bartok, and Copland. The group gives two formal performances per year. Members of the orchestra often participate "in the pit" for the annual Winter Musical drama production. Pre-requisite: audition and departmental approval. (NOTE: Orchestra is not open to pianists).

Chamber Music

Grades 10-12

Academic Credit

Advanced instrumentalists may elect to receive academic credit for their participation in music groups at BB&N. For string, woodwind and brass players, this would include four sessions per week of chamber music (i.e., trio for violin, cello and piano; string quartets; etc.) or two sessions of chamber music and two sessions of orchestra per week. For pianists, academic credit may be earned

in Grades 10-12 for playing in chamber groups and/or chorus for a total of four times per week. Pre-requisite: audition and departmental approval. Note: Ninth grade string and wind players may participate in a chamber group once or twice per week *in addition* to orchestra.

Chamber Music

**Grades 10-12
Arts Credit**

This course is designed for students who wish to continue playing throughout the year, without the full commitment to Chamber Music for Academic Credit. Two years of participation in this activity will satisfy the arts requirement. Groups meet for two chamber sessions per week. Pre-requisite: audition and departmental approval.

Jazz Ensembles

Grades 9-12

There are three jazz ensembles at BB&N - 9th grade, meets as a class three days a week, the two others meet after school once a week. All perform during jazz concerts held at the end of each semester as well as during other more informal settings.

9th Grade Jazz Ensemble is a performing group that meets for two semesters. The emphasis is on improvisational techniques and group playing. Musical selections vary, most are comprised of compositions by jazz greats. There is at least one performance per semester. A few classes per year are devoted to a comprehensive discussion of jazz history and styles.

Admission to this 9th grade course is based on audition (during May of the previous school year, or in special cases, during the first week of classes), as well as on the specific instrumental needs of the ensemble. The maximum size of this ensemble is fifteen, and there is a limit of two on the number of guitarists, pianists, bassists and drummers. Parallel private instrumental instruction is strongly encouraged but not required.

English Department

English 9

The program in grade 9 includes three classic works, several poems, and contemporary stories, novels, and plays. Most of the first semester is devoted to a detailed reading of *The Odyssey*. In

the second semester, all students read *Romeo and Juliet* and a major nineteenth century novel, usually either *Jane Eyre* or *Great Expectations*. Throughout the year, students write frequently, both in and out of class, on a variety of topics and in both creative and analytical formats. Students also continue the study of vocabulary, spelling, punctuation, syntax, and grammar begun in grades 7 and 8.

English 10

The literature program in grade 10 involves the study of several genres. Students read poems, short stories, novels (*The Great Gatsby* and *Sula*, for instance) and plays, both classic and modern, as well as some sections of the Bible. Plays include one by Shakespeare (*Macbeth*) and others of the teacher's choice, such as Sophocles' Theban plays and Miller's *Death of a Salesman*. A major focus of the writing program is the essay: students continue to practice the skills, introduced in grade 9, of formulating and developing an expository essay. Class-wide debates provide practice in research as well as valuable experience in cooperative learning and public speaking. Students also continue the study of vocabulary, usage, and grammar.

English 11

All junior English sections remain together for a full year. In the first trimester, classes focus on a literary topic, such as Landscape and Identity, The African-American Tradition, or The Irish Renaissance. The second trimester's work includes the writing an eight- to ten-page profile about a person at work. At the end of the third trimester, all juniors prepare for and have the opportunity to take an AP English exam, either Language or Literature. Junior English is offered as a list of electives, which becomes available each May. Students should simply list English 11 on their course selection sheets.

English 12

Seniors take two English electives. In the first trimester, they are based on literature, classic and modern. In the past these have included Aliens, Redeeming the Past, and Shakespeare. A list of the subsequent year's fall electives becomes available each spring. Each senior writes a "senior essay," either an analytical or an emulative piece about one of the works read for his/her elective. Second trimester courses meet for the ten weeks preceding

the Senior Project. Topics for these electives have included Creative Writing, The Short Story, and The Film Experience. A list of the second trimester offerings is distributed in December. Students should simply list English 12 on their course selection sheets.

World Languages Department

All students at the Upper School must take three consecutive years of the same language to fulfill their world language graduation requirement. Students entering in grade 11 who have not previously studied a language offered at BB&N need complete only two years of the same language. New students repeating grade 11 must study a world language in eleventh grade and complete at least the third year of language at BB&N, or take and pass a new language successfully for two years in order to fulfill BB&N's language requirement.

Double Language Student

A student who completes seven years or more of language study during grades 9-12 qualifies as a Double Language Student.

BB&N Language Scholar

A student who completes study in a primary language to the highest level offered (depending on the language); completes study in a secondary language to the third level (III), or the fourth level (IV) for a student who begins in the second level (II) in grade 9; and earns honor grades (B or above for final grades in every year studied) will be recognized as a BB&N Language Scholar. Language Scholars are expected to continue in their AP classes through the end of senior year and to take the AP examinations. Russian students are expected to participate in the Olympiada each year.

Language Programs

The Upper School offers six languages: Arabic, Chinese, French, Latin, Russian, and Spanish. Languages offer first, second, third and fourth year language study. In addition, French, Latin, and Spanish have Honors sections in the second and third year. Chinese has an Honors section in the third year. These classes fulfill the Upper School language requirement

and prepare students for the upper level electives described below.

Arabic I

The first third of this course is dedicated to the mastery the phonetics and phonology of Modern Standard Arabic (MSA). The goals of Arabic I focus on development of vocabulary, and analyzing and producing basic structures in speaking, reading, writing, and listening. Throughout the application of the language, students also use texts, articles, the internet, audio visual materials and discussion to create a geographical and cultural context for the language. Additionally, a passive familiarity with regional variation establishes a framework for Arabic language in practice.

Arabic II

Building on skills from Arabic I, Arabic II students increase the subtlety of their communication with expanded vocabulary and complex structures. At this stage, students actively engage with the pattern and root system that serves as the underpinning of Arabic word meaning. Continued work with authentic materials from across the Arabic-speaking world. Presentations and projects reinforce cultural material and strengthen fluency throughout the year. This class aims to increase students cultural competency in Arab cultures and prepare them for appropriate interaction with native speakers.

Arabic III

This course is designed to guide students away from the structure of a textbook and into the wider application of Arabic Language. A variety of literature, media and authentic audio materials serve as examples for structure and style as the students practice expressing their own thoughts in the target language. Students apply new structures and vocabulary in journals and audio recordings as a means of reinforcement. Projects and presentations are the most common form of assessment and allow the students to independently explore relevant areas of interest in language.

Arabic IV

Having mastered the core structures and concepts of Modern Standard Arabic (MSA),

Students in Arabic IV contextualize and expand their knowledge as the class journeys across the Arab world through film, television, news, art and literature. An emphasis on various spoken dialects allows students to gain a sense of variation within the vastly diverse geography of the Middle East and North Africa. This course is a window into the many manifestations of Arabic language and how they connect back to the essential structure and meaning found in MSA

Chinese I

Designed for students with no previous background in Mandarin Chinese. Students are introduced to and concentrate on pronunciation and the four tones through intensive phonetic and sentence-pattern drills. Audio and video tapes, Chinese computer software and other aids are used. Students are expected to learn basic structures of Mandarin Chinese and to acquire a basic oral competence in simple daily communications. Students are required to learn about 500 simplified characters over two semesters, and to acquire a proficiency in reading and writing in simplified characters. Some exposure to Chinese history, culture and geography is also given.

Chinese II

Chinese II is a continuation of Chinese I, conducted in pinyin and simplified characters. The goal is to develop a solid grammatical base, a strong listening and speaking ability. Audio and videotapes, oral and written exercises with increasing complexity help students to attain a higher level of competency in the language. Students are expected to learn approximately 500 characters and to increase their vocabulary to nearly 1,000 words. They will also be required to read and write short compositions either in pinyin or characters, and to further their study of Chinese culture. Prerequisite: Chinese I, or the permission of the Chinese coordinator.

Chinese III/Chinese III Honors

This course uses the basic textbook to help students learn complex sentence patterns and vocabulary. Short newspaper articles, simplified literary works, video and audiotapes supplement the text. Oral

proficiency and grammatical accuracy continue to be emphasized. Students are expected to learn approximately 500 characters and to increase their vocabulary to nearly 1500 words. They will be required to write short papers in Chinese characters on computer.

Chinese IV

While oral proficiency continues to be emphasized, more and more attention is given to reading and writing. Character-only materials replace character-pinyin texts. Students are expected to increase their character vocabulary to 2,000 words and learn to write with 300 characters.

AP Chinese IV

Students who choose to sign up for this course will follow the regular Chinese IV Advance Placement curriculum. This class focuses on increasing the students level of Chinese proficiency across three communication modes (interpersonal, interpretive, presentational) while interweaving Chinese culture throughout the course. Texts and supplementary materials are carefully selected or edited from authentic sources to support the linguistic and cultural goals of this course. Students will retain the AP designation only by completing the AP assignments on a consistent basis throughout the entire academic year and by taking the AP exam in May.

French I

French I is an introductory course of French language and culture. Students develop skills in the four language modalities (speaking, listening, reading, writing). Emphasize is put on meaningful oral communication as well as accuracy of expression. Students develop basic structured sentences and acquire daily life vocabulary to ask questions and provide information on likes and dislikes, personal and school life, family and friends, travel and vacation... By the end of the year, the class is taught mostly in French. Interactive and group activities, audio and video tapes, material from the Internet are regularly used in and outside the classroom. This first year course also provides a general overview of the geography and cultures of the French speaking world through readings and videos.

French II

French II offers a comprehensive review of introductory French while expanding and presenting structures, vocabulary and cultural material suited for intermediate levels. Students acquire a solid grammatical base, a stronger listening comprehension and a more fluent speech. Students also acquire proficiency in reading short texts and writing simple compositions in French. The goal is to develop the four linguistic skills (speaking, listening, reading and writing) and to help students gain an understanding and appreciation of French, its language, its people and its culture. This course is based on the use of a grammar book and some short reading comprehension texts, supplemented by the use of films, audiotapes, CDs, projects, and material on the Internet.

French II Honors

Students cover the French II curriculum at a quicker pace. In addition, they study an intensive and extensive grammar program. They are encouraged to use the language creatively and apply basic conversational patterns of French speech towards functional communication. They complete the reading of Le Petit Prince by Saint-Exupéry in its original version accompanied with audio and video material. They study L. Malle's film *Au revoir les enfants* without subtitles, and they watch other French movies such as *Kirikou* by M. Ocelo. They read and research various work (poems, traditional stories...) from French-speaking authors around the world. The class is conducted in French.

French III

Offers a comprehensive review of intermediate French. Students continue to refine the skills necessary to acquire proficiency in a foreign language. This course provides further practice in speaking and listening; the class is conducted exclusively in French. Students are expected to participate and to present research and projects on French-speaking countries. Students continue their grammar study and are encouraged to apply their knowledge in meaningful context through compositions. They complete the

reading of poems, Le Petit Prince by Saint-Exupéry and Les jeux sont faits by Sartre.

French III Honors

Students cover the French III curriculum at a quicker pace. They complete an in-depth grammar review. They practice the fine points of French language in writing and conversation through a variety of activities: journals, films, songs... They add Un papillon dans la cite by Guadeloupe's author Gisele Pineau (in place of Le Petit Prince) and Rhinoceros by Ionesco to their reading list.

French IV

This course is open to students from French III and French III Honors who want to practice and refine their speaking and writing skills, and as an alternative to the French AP class. One period a week is dedicated to the review of essential grammar points, but for the most part, the emphasis of the course is put on oral conversation and interactive activities. This involves the use of newspaper articles, the Internet, films, songs, games, projects and group work. Through the use of these different media, and in our Technology Center for the Humanities, the students discuss various topics related to contemporary French and Francophone culture and society. This course tries to take advantage of the unique and rich location of BB&N by taking a field trip to a local museum or French movie related to our studies.

French AP

This course is open to students from either French III Honors or French IV with departmental permission. Students in this course study the four language skills in-depth (speaking, listening, reading and writing). There is an emphasis on writing and speaking with a variety of activities, including the use of videos and websites in our Technology Center for the Humanities, preparing them for the French AP Exam. This course also introduces students to the study of literature through the reading of books (*L'école des femmes* by Molière, *Pierre et Jean* by Maupassant) and selected poems. It includes Francophone works and authors from around the world. This course leads to the AP French exam in May.

French V: Cinema for French Conversation

This course is an elective cinema course leading to the making of a movie written and performed in French, and filmed by the students themselves. This course is open to students in French 4 who want to practice and refine their listening and speaking skills. Students from French AP may be accepted with departmental permission. Emphasis is put on conversation through interactive activities drawn from the study of French films. This includes: group research and oral presentation of a film context, debating the issues presented in a film... The films are chosen according to their historical, literary, linguistic or geographical interest. They include *Cyrano de Bergerac*, *Les 400 coups*, *Ressources humaines*, *Camille Claudel*, *Chocolat* and others.

French V Honors: French Theater Course

This is an elective French theater course leading to the production of a French play written by the students themselves. Students read and act plays by Jean Anouilh, Marcel Pagnol, Georges Feydeau... Emphasis is put on conversation through interactive activities drawn from the study of the plays. This course is open to students who have taken the French AP course. Exceptions may be made for students who are very fluent in French with departmental permission.

Latin I

Latin I introduces the Latin language including the four verb conjugations and the five noun declensions. Students read simple adapted Latin while learning the rules of grammar and syntax. Students also learn basic elements of Roman civilization including mythology, the Roman house, and Roman history. Each student works on a project of their choosing each term and presents the results to the class.

Latin II/Latin Honors

Students are offered either a Regular course or an Honors course in Latin II which completes the mastery of Latin vocabulary, grammar, and syntax. Students read adapted Latin stories at the beginning of the course and

finish with unabridged Julius Caesar after the completion of the grammar book. Students learn more advanced Roman mythology, culture, and history. Each student selects a research project each term and must present the results to the class.

Latin III/Latin III Honors

Latin III is a prose Latin course on either the Regular or Honors level moving from adapted Latin reading about early Roman history and culture to unadapted reading of Cicero. Students may read Livy, Plautus, Petronius, and other authors of the teachers' choice. The students learn the history of Republican and Imperial Rome as well as cultural material including Roman topography, daily dates, and imperial biographies. Each student does a research project each term and reports on their research to the class.

Latin IV

Students will study Roman poetry, including authors such as Ovid, Vergil, Catullus, Horace. They are encouraged to take the SAT II for Latin in their junior year or early in the senior year and with this in mind are prepared with an advanced grammar review.

AP Latin Vergil

Students read Vergil's epic, *The Aeneid*, and must take the Advanced Placement exam. This class is for juniors. This class emphasizes literary analysis and essay writing in preparation for the AP exam. The students are encouraged to take the SAT II for Latin in December of this year and with this in mind are prepared with a review of advanced grammar.

Latin V Honors

This honors course in Latin poetry is for students who have taken Latin IV AP Vergil. This course includes readings by authors found on the former AP Latin Literature syllabus, including Catullus, Horace and Ovid, and some additional works, such the elegiac poetry of Propertius and Tibullus. With an emphasize on literary analysis, students are expected to translate poems from Latin into English, and supplement their own translation work by reading commentaries and select poems in English translation

Russian I

The objective of the course is to help students develop skills in all areas of the Russian language and to help students gain an understanding and appreciation of the Russian people and their culture. Students will work with an on-line textbook which introduces 1) the case paradigms and verbal system; 2) vocabulary and conversational themes; and 3) exciting and rich cultural information. Russian I students will acquire a working knowledge of the language so that they may begin to talk about themselves with the Russians who visit from our sister school, and be able to ask questions about the Russian students' lives. Russian I students will also be able to read simple texts and retell them both orally and in writing.

Russian II

Second year Russian is a continuation of the grammar studies of the first year, but at the same time, students work extensively on their writing skills and on conversational ability. Students maintain a weekly diary and write character descriptions based on our reading of "Superman" and our viewing of the film "Father Frost." Vocabulary building is another third year activity: regular vocabulary quizzes, reviewing the vocabulary of the year are a weekly occurrence. Students enter the National Essay Contest in the fall and the Oral Olympiada in the early spring.

Russian III

The third year of Russian starts with a comprehensive review of major topics of Russian grammar. The students will continue to refine the skills necessary to acquire proficiency in the Russian language with the main emphasis on contemporary conversational Russian, expand knowledge of Russian grammar and enlarge vocabulary base. The students will write short essays and make oral presentations on the topics of study and will write and perform a play based on one of the stories they will read. The course starts with reading A.P. Chekhov's short stories, and includes story "General's Daughter", audio course "James and Katrin go to Moscow", on-line Russnet resources on Russian culture that are related to the class readings as preparation for the Russian AP.

During this year the students will watch and discuss several Russian movies and will be introduced to original texts, audio and video materials of Russian mass media.

Russian IV

During the first trimester, students in this course will read Pushkin's historical novel "The Captain's Daughter," and related texts about Catherine the Great, Pugachov, and Russian culture of the second half of the nineteenth century. In the end students will watch and discuss Russian movie "Russkiy Boont" and write and perform a dramatic adaptation of "The Captain's Daughter." The course also includes reading and discussing several texts of contemporary Russian writers and journalist. Regular essay writing, oral presentations and class discussions throughout the year will help students enlarge their vocabulary base, improve their knowledge of grammar, and enhance their writing and conversational skills. Throughout the year the students will watch and discuss several original Russian movies, and continue working with the original texts, audio and video materials of Russian mass media based on major current events of political and cultural life in Russia and all over the world.

AP Russian IV

Students who choose to sign up for this course will follow the regular Russian IV curriculum. In addition, the AP students must complete the designated AP curriculum in Russian Language and Culture and take the AP Russian Exam in the spring. Students complete the AP assignments throughout the academic year and take the on-line administered AP exam.

Spanish I

In this first year course students will be introduced to basic structures and high-frequency vocabulary which will enable them to perform a variety of communicative functions such as asking questions and providing information; expressing likes, wishes and needs; describing and discussing daily life; and talking about past, present and future actions. Communicative ability is developed through structured contextual practice leading to more personalized, student

generated situations and presentations. A variety of strategies will be presented to help students develop successful techniques for speaking, reading, writing and listening in Spanish. This first year course also begins to expose students to the cultural riches of the Spanish speaking world.

Spanish II/Spanish II Honors

In this second year course students will review and practice grammar structures introduced in Spanish 1. They will continue on to learn many new grammar structures, including the preterit and imperfect tenses, the future and conditional tenses, and all of the commands. They will also be exposed to a variety of new vocabulary in order to advance their communicative skills. Emphasis is placed on applying the newly learned material to speaking and writing. Students engage in listening comprehension activities and are also exposed to cultural aspects of the Spanish-speaking world. Students are expected to give oral presentations and write compositions.

The Honors section will move at an accelerated pace through the grammar in order to study literature from the Spanish-speaking world in greater depth. Students are expected to give oral presentations and write compositions. The students are expected to read and write often and will be held to high standards in all areas of their study of the language.

Spanish III

This course is an Intermediate Spanish course designed to improve the speaking, listening, reading, and writing skills of students and to introduce participants to the cultural reality of the Spanish-speaking World. We integrate language and culture through a communicative approach. Students review grammar from past years and learn new forms with emphasis on the subjunctive mood. New, more advanced vocabulary is introduced and applied in a variety of contexts. The course is conducted entirely in Spanish.

Spanish III Honors

The aim of this course is to continue to develop and refine the skills necessary for acquiring proficiency in a foreign language.

The course will provide students with further practice in reading, writing, listening and speaking, with an increased concentration on accuracy and communicative functions. To this end, the course will consist of: an in-depth grammar review of all major structures; frequent oral and written composition work in which students can put these structures to use in meaningful contexts; guided listening and comprehension activities; readings of short stories and articles by well-known Hispanic authors, viewing of at least one Spanish language film. Spanish is used exclusively in class. Oral work will consist of both structured conversational exercises as well as more open-ended, student generated situations. Students are encouraged to focus on communicating as well as developing accuracy of expression at this level.

Spanish IV Culture & Conversation

This 4th year course is designed to build upon students' communication skills with an emphasis on authentic language and practical vocabulary for communication in real life situations. The course also strives to deepen students' cultural competency through exploring the influence of immigration and the Spanish language in the United States while also delving into the many different cultural and historical aspects of the Spanish speaking world. Short and comprehensible literary and cultural readings, authentic short films, TV clips and music will expose students to the Spanish language in meaningful contexts that will respond to a variety of interests and issues of the Hispanic world. Students will continue using Spanish in meaningful, creative and engaging contexts while developing their verbal and written communication skills for breadth and grammatical accuracy.

AP Spanish Language

This is an advanced course in Spanish that emphasizes the use of Spanish for active communication and will allow students to reach advanced levels in their oral, aural, reading and written skills. In addition, the course introduces students to the literary analysis of Chilean, Argentinean and Mexican literature and culture as well as to the discussion of current events around the world. The course is open to all students who have

successfully completed the 3 Honors Spanish class and who have been recommended by that teacher, or who have successfully completed the Spanish 4 class and who have been recommended by that teacher. It is the expectation that all students enrolled in this course will stay in the class through the end of the year.

Spanish V: Contemporary Spanish and Latin American Cinema

In this advanced language and culture class, students examine recent major works of film in their social, political and historical contexts. Films from throughout the Spanish-speaking world are viewed and analyzed both in class and as homework. Students develop their speaking skills as the themes, characters and cultural lessons from the movies serve as springboards for intensive conversation. In addition to classroom discussions, students are required to give oral presentations, do frequent written assignments, use the internet to listen to songs and read current articles in Spanish.

Spanish V: Latin American Studies

Through the study of film, art, and literature within an historical context students will explore social, political and cultural changes in Latin America in the twentieth and twenty-first centuries. This is an interdisciplinary course. The course aims at helping students acquire foreign language proficiency in the context of a study of culture and history. Readings, discussions and assignments will take place mostly in Spanish, but students will also be expected to read and discuss some secondary sources (as well as complete some assignments) in English. Some of the topics explored in the course will be urbanization, the effect of globalization on local cultures, and the democratization of nations in Latin America. Students must seniors who have completed a level 4 Spanish course in order to enroll in this course.

Spanish V Honors: Literature, Film, Art and Multimedia

This course combines the study of Spanish language and culture by interweaving literature, film and art from Spain and Latin America. It will introduce students to the

work of major dramatists, novelists, poets, filmmakers and artists. We will read Federico García Lorca, Miguel de Cervantes, Julio Cortázar, and Alfonsina Storni among others in combination with the analysis of films by directors such as Pedro Almodóvar and Alejandro Amenábar as well as other multimedia pieces in video and television. Furthermore, we will examine realism, surrealism, and cubism through the art of Spanish Masters such as Velázquez, innovators like Dalí, Picasso and Miró and contemporary painters like Antonio López García. Students will continue to refine all their skills in Spanish, broaden up their vocabulary and enhance their fluency. Class requirements include tests, analytical essays, creative writing, iMovies and dramatizations. This course is the equivalent of an AP Spanish Literature class, therefore it is open to students who have successfully completed Spanish AP Language and who have been recommended by their teacher.

History/Social Sciences Department

Global History Sequence

At the dawning of the 21st Century, we live in a global community. The world has grown smaller, trade and finance have created a global economy, communications technologies have built pathways for the global exchange of ideas and information; at the same time, we also face global environmental and overpopulation problems. But the process of globalization is not new. The Global History sequence seeks to answer the question: “how did we get here?” By taking a global approach to human history that focuses on the processes that have brought us to this point, these two courses look at all major regions of the world, from the Neolithic Revolution to the Digital Age. Although Global History I and II are tightly coordinated, each course operates as an independent unit. Sophomores can also choose to enroll in the two year course: The United States in the Modern World, which will complete both the Global History sequence and satisfy the US History graduation requirement.

Grade 9 Global History I: Early World Civilizations

As part of their full year course of study, all ninth grade BB&N history students take an opening unit drawn from a traditional BB&N offering “Facing History and Ourselves.” Students are challenged to consider the relationship of individuals and society, the psychology of obedience, and the impact of extreme situations on human behavior. This unit deliberately raises great moral questions and aims to promote in each student a sense of social responsibility, and citizenship.

Then students will focus on the spread of human kind across the globe, the Neolithic Revolution, and the rise of complex societies and regional empires in different areas of the world – from China to Peru. We will also examine how regional empires created the environment in which world religions developed. We will explore Hinduism, Buddhism, Judaism, Christianity, and Islam. We will conclude with a look at the importance of overland and overseas trade and the ways in which the channeling of goods and people into regional and then global networks. Those regional networks connected China, India, Africa and The Middle East and then Europe and the Americas.

Grade 10 Global History II: Making an Interconnected World

This course commences with an overview of the global community at the dawn of the 21st century; this is a preliminary introduction to the benefits and challenges of globalization. In 2010-2011, students explored the positive impact of global communications technologies, the environmental impact of the Gulf oil spill, the challenges posed by North Korea to international peace, the role of China in international trade, and the relationship between Islam and the West.

How and when did this global community first emerge and how has it spread?
Answering this question is the substance of this course, which picks up where Global History I left off: at the beginning of the 1500s

societies that had developed in relative isolation came into sustained contact. This contact was driven by the needs of a rapidly changing Europe and an evolving Atlantic trade with Africa and the Americas. Thus the Reformation, the Scientific Revolution, the Enlightenment, numerous political revolutions and the Industrial Revolution play a significant role on the transformation of the world. Imperialism, colonization and decolonization are the centerpiece of this course. It concludes with the Global Wars of the first half of the 20th Century, the Cold War, the rise of American global dominance and the challenges to that dominance today.

United States in the Modern World I

This first year of a two year course of study examines both the development of modern nations around the globe from the early 1300s through the mid 1800’s and the serendipitous creation of the United States during that time. The course begins with the Mongols invasions throughout Eurasia and highlights the interconnected world that developed as a result. As the various regions interacted with each other they developed shared and yet distinct institutions. Well into the 17th century the central focus of economic power lay largely in East and South Asia. By the end of the 18th century, however, Europe had become a key and sometimes dominant player in those global economic systems. In their shadow, colonies in the Americas, especially the United States, were formed and became crucial players. In the course, we will examine the regions of the world on their own terms, with their evolutions studied both independently and in the light of increasing European incursions. In due time, we will cover the colonization of North America, the road to revolution, the formation of the American Republic, the political and social developments of the 19th century, and the climactic Civil War and Reconstruction as part of the larger history of the world, while also accepting the special circumstances that both isolated the United States and later would force its entry onto the world stage. Students will develop their skills by reading various types of sources, taking notes, analyzing documents, writing essays and researching and writing a research paper. Map

work will be covered in several distinct units during the year.

Grade 11

United States History

This course explores the traditional major constitutional, political, economic and social themes in our nation's history from colonial time to the complex world of the 21st century. It also aims to prepare students for the world they are facing and to develop a more international context for U.S. History by examining the relationship between the United States and the rest of the globe. Students will refine their skills in reading various types of sources, taking notes, analyzing documents, writing essays and then researching and writing a major research paper. Map work will be covered in several distinct units during the year.

The United States in the Modern World II

Prerequisite: The United States in the Modern World I

This course is the second part of a two-year sequence that explores the global dimensions of American history. This year we will start in 1865 and end with the Gulf War. Traditional high school U.S. History courses, by their very nature, focus on our nation's unique qualities; they often describe our country's special place in the world. Therefore, they often miss important aspects of our national experience by narrowly focusing on domestic explanations for phenomena that are global in nature. U.S. in the Modern World aims to transcend those confines, and illuminate American history from a global perspective. This course's central narrative describes the processes by means of which the globe has become increasingly interdependent and America's role in shaping those processes and being shaped by them. Nonetheless, it will also cover traditional topics in US History from the Gilded Age to the Present. Students will develop their skills by reading various types of sources, as well as analyzing and discussing them, taking notes, writing essays as well as a major research paper.

Junior History Honors:

The Honors designation will be open to all students taking a full year of History in the 11th grade. The Honors Portfolio Program gives students an opportunity to demonstrate that, during the course of the year, they have done **superior work** in the field of History. **The Honors Portfolio process runs parallel to all 11th Grade History courses, but it is an independent process.** Students may elect, during the first quarter, to seek an honors designation by presenting a portfolio of selected assignments and self-assessments for review in the late spring to a panel of teachers. In class, there will be no distinction between students taking the course at honors or non-honors levels.

History Electives

Twentieth Century U.S. Culture and Society - Grade 12

Prerequisites: US History or US in the Modern World II

This course examines the social and cultural history of the United States since 1900. In a decade-by-decade approach, we explore how Americans live and why we live the way we do. We examine the varied fabric and common themes of American life: family and residential patterns, issues of class, race, gender and wealth, changes in social mores and the lives of women. The cultural expressions of these themes and values as shown in the art, commerce, radio & TV, music, film and fashion of each decade offer ample material for lively class reports. Class is conducted in a seminar (discussion) format. Students choose and investigate various topics and share their findings with their classmates.. In addition to traditional texts, we rely heavily on films and videos representative of the various periods under discussion. Completion of a course in U.S. History is a prerequisite of the course.

AP U. S. Government and Politics

Readings from Plato, Sun Tzu, Machiavelli, Locke, Hobbes, Jefferson, and Madison provide this study of US Government an emphasis on political philosophy. We view political speeches, interviews, documentaries and Congressional

committee hearings. We read the U.S. Constitution carefully. Active participation in class discussion will be expected and required. Students will write several papers and regularly lead class discussions. The text is Wilson and Dilulio's *American Government*. Students will prepare for the AP examination; this covers federalism, separation of powers, civil liberties, the Congress, the Presidency, the bureaucracy and the court system. Enrollment is limited. Students who commit to taking to AP exam will be given priority.

Politics in a Global Age

This senior elective focuses on the current challenges the United States faces in formulating foreign policy in the area known as the Fertile Crescent and beyond. Among the topics to be considered are (1) the India-Pakistan-Afghanistan conflict, (2) the rise of Iran as a world power, (3) Iraq and the Sunni-Shi'a-Kurd problem, and (4) the founding of the State of Israel and its relations with the Palestinian Authority.

There will not be a text but rather readings from works of history and political science, journal articles, and newspapers. Outside experts will be invited to participate, including those from the Kennedy School.

AP Macroeconomics

A day has not gone by in recent memory without some major news story regarding the state of the global economy. This rigorous, fast-paced course is designed to give students the foundational skills necessary to have an understanding of the major macroeconomic topics: scarcity, opportunity costs, GDP, supply and demand, inflation, unemployment, fiscal policy, monetary policy and the Fed, exchange rates and international economics. Analysis of current events will supplement the historical theories and data studied in the course. Frequent journal reviews and classroom debates will allow students to apply these concepts to recent headlines. The assessments will be designed to prepare students to sit for the AP examination in May. The course will terminate in March; students interested in preparing for the AP exam or continued study in economics may enroll in the economics mini-course as a part of their senior project.

Global Economics

This course will introduce students to the core elements of the global economy: trade, key macroeconomic concepts (inflation, unemployment, fiscal and monetary policies), supply and demand, foreign currencies, investing, accounting, financial reporting and profitability. The course will include a frequent discussion of current events and economic trends as well as business research projects and application activities. A unit on personal financial topics and responsibility will conclude the class. A student who is seeking a broader, top-level view of the global economy than what is offered in AP Macroeconomics should consider this course.

Modern China

This senior elective is an exploration of the historical transformations of China from the Opium War to the present. In fall this course begins with a quick overview of Chinese traditions and geography, and follows it with discussions on the confrontation between Chinese culture and Western influences, and the dilemma of revolution vs. reform in the 19th and 20th centuries. In spring we focus on the Chinese struggle to build a capitalist free-market economy under the guidance of a communist party. Major topics include the Opium War, the Taiping Rebellion, the Boxer Rebellion, the Qing Reform, the Republic Revolution, the Sino-Japanese Wars, the Communist Revolution, the Economic Reform, the Population Control and the China-US Relations. Special attention will be given to the impact and the role of the West (especially the U.S.A) in the shaping of a modern China. No textbooks are required. Students are given a wide range of curriculum materials including book excerpts, primary sources and video materials.

Philosophy, Physics, and the Brain

For thousands of years science was considered a branch of philosophy. Unfortunately, the two have drifted apart. In an attempt to answer timeless questions -- How do we know the world is real? Does the self have free will? Does it make any coherent sense to speak of the "world" or the "self" at all? -- this course aims to reunite philosophical and scientific inquiry. We will turn to writings both venerable and contemporary, eastern and western. As we consider the Buddhist doctrine of "no-soul", we'll be reading some of the latest

research in neuroscience about memory and consciousness. In our exploration of Descartes' radical skepticism, we'll also consider the uncertainty inherent in the heart of the atom as revealed by Heisenberg and others. Ethical treatises by Confucius and Aristotle will find new grounding in the study of evolutionary biology. Like the philosophy, the science in this course will be about ideas and concepts rather than numbers and equations. In the end we will span disciplines in an effort to learn more about our world and ourselves.

World Religions: Historical and Contemporary Contexts

Understanding of today's world requires study of its major religions: Christianity, Islam, Judaism, Hinduism, Buddhism, Taoism, and Confucianism. We will study the development of these religions and the way in which they have both influenced and been influenced by their historical contexts. Students will read portions of the sacred texts of these faiths, including selections from the Hebrew and Christian scriptures, the Qur'an, the Rig Veda, the Baghavat Gita, the I Ching, the Tao Te Ching, and the Analects. We will devote the latter portion of the course to examining the way in which followers of these religions impact world politics. Assignments will include tests, essays, and a research paper. Guests will visit the class to talk about their various faiths and religious practices. Students should plan to attend scheduled field trips to local churches, temples and mosques.

African-American History: Africans in the Making of the Atlantic World

Not Offered 2011-12

This course will examine the experience of the African diaspora and their struggle for freedom. Beginning with a study of the culture, politics, and economy in Africa the course will culminate with an intense study of the "modern civil rights movement" of the mid-1950s through 1965 in the United States. We will examine all of the elements related to the successes and failures of that movement. The course will include a study of the African experience in Latin America, the Caribbean but the course will concentrate in the experience of African-Americans, from the Colonial period through the present. A great deal of time will be spent examining racial attitudes then and now, here and elsewhere, with the idea of developing a greater understanding of the great

black leader W.E.B. Dubois' prophecy that America's greatest challenge will be solving its "Race Problem."

AP European History

Not Offered 2011-12

Following the established Advanced Placement chronology, we will examine political, intellectual, social, cultural and economic aspects of Western European history between 1450 and the present. In addition to the textbook, primary sources and several novels and films are also included in the syllabus. Writing skills are emphasized. Students are expected to take the Advanced Placement examination in May.

Psychology

Not offered in 2011-12

Throughout history there have been numerous examples of people demonstrating boundless acts of generosity as well as committing hideous atrocities. This range of human behavior has been and continues to be a fascination for people. Psychology will explore this fascination by adopting a scientific approach toward the traditional topics in Psychology: development, the brain and behavior, social influence, learning, sensation and perception, cognition, personality and abnormal behavior. In our course of study, we will seek to better understand, explain, predict and control people, their behaviors and mental processes as well as their environment(s). Lecture, research, simulations and outside readings will be utilized as we investigate behaviors ranging from conditioned reflexes to creative and social behavior.

Mathematics Department

Algebra 1

Topics in this standard introductory algebra course include equations, systems of equations, graphing, polynomials, rational expressions, radicals, quadratics, problem solving, and an introduction to the graphing calculator.

Algebra 2 and Honors Algebra 2

After a review and a more in-depth approach of many topics from Algebra I, new topics include statistics and data analysis,

polynomial functions, exponential functions, matrices, and transformations of functions. Additional topics in the honors section may include linear programming, probability and combinatorics, and Markov Chains.
Pre-requisite: Algebra 1.

Geometry and Honors Geometry

Geometry approaches plane Euclidean Geometry through proof and discovery. All classes will include units of trigonometry, conic sections, solid geometry, coordinate geometry, and statistics. Other topics may include transformations, vectors, matrices, fractals and non-Euclidean geometries, such as Taxi Cab or spherical. The honors section often includes other units, such as trigonometry, vectors, proof by induction and computer programming.
Prerequisites: Algebra 2

Principles of Precalculus

Grade 11 and 12

Students will study, polynomial functions, sequences and series, trigonometric functions, exponential, and logarithmic functions. Other topics are rational functions, transformations, modeling and statistics. This course has a pace and depth designed for students with a fair foundation in algebra (generally students who earned a C+ or B- in BB&N's Algebra II course). Successful completion of this course could prepare 12th Grade students for an advanced college precalculus course or a humanities level college calculus course, and 11th Grade students for Statistics.
Pre-requisites: Algebra 2 and Geometry (with grades of C+ or better or permission of the department)

Precalculus

Students study extended units on modeling, polynomial functions, sequences and series, trigonometry and logarithms. Other topics are rational functions, radical functions, transformations, symmetry, polar coordinates, and statistics.
Pre-requisites: Algebra 2 and Geometry (with grades of B or better or permission of the department)

Honors Precalculus AB and Honors Precalculus BC

The honors sections take a toolkit approach to a large variety of functions that can be transformed to model phenomena. Honors Precalculus AB studies precalculus topics for the entire year, while Honors Precalculus BC accelerates to include an introduction to differential calculus. Since Honors Precalculus BC begins the AP Calculus syllabus after spring break, students in Honors Precalculus BC who are moving on to Calculus are expected to take the Advanced Placement Calculus BC course. A deviation from this sequence is rare and requires permission of the Math Department.

Prerequisites: Algebra 2 and Honors Geometry (and permission of the department)

Calculus

Major topics of this calculus course are limits, differential calculus and integral calculus, and their applications. Some sections do non-calculus enrichment topics or projects before the course terminates.

Pre-requisite: Precalculus (with a grade of B- or better).

Advanced Placement Calculus AB

Major topics are limits, differential calculus and integral calculus, and their applications. This course covers, as a minimum, all topics stated in The College Board Advanced Placement Program Calculus AB syllabus.
Prerequisites: Precalculus (generally A- or higher) or Honors Precalculus AB, and permission of the department

Advanced Placement Calculus BC

Major topics are limits, differential calculus and integral calculus, and their applications. Infinite series, vectors, and parametric equations are also covered. This course syllabus includes, as a minimum, all topics stated in The College Board Advanced Placement Program Calculus BC syllabus.
Prerequisites: Honors Precalculus BC, and permission of the department

Honors Linear Algebra and Multivariable Calculus

Description: A half year of linear algebra will cover basic concepts involving vectors and

matrices, including solving systems of linear equations by Gaussian elimination, Cramer's Rule, and inverse matrices; the concepts of linear independence, spanning vectors, and basis vectors; the dot (inner) product and the cross product; eigenvalues, eigenvectors, and the diagonalization of matrices; abstract linear transformations and change of basis.

A half year of multivariable calculus will cover the generalization of calculus concepts to 2 and 3 dimensions; these include partial derivatives, multiple integrals, optimization problems (using Lagrange multipliers), other coordinate systems (cylindrical, spherical), and vector calculus (Green's Theorem, Stokes's Theorem, etc.). The course may also include some discussion of differential equations and Fourier series.

Pre-requisite: BC Calculus & permission of the department is required.

Statistics **Grades 11 and 12**

Statistics acquaints students with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will frequently work on projects involving the hands-on gathering and analysis of real world data. Ideas and computations presented in this course have immediate connections with actual events, and future applications for study in the social sciences, natural sciences, or business. Computers and calculators will allow students to focus deeply on the concepts involved in statistics. This course will cover many of the topics taught in AP Statistics, and use a similar approach.

Advanced Placement Statistics* **Grades 10-12**

Advanced Placement Statistics acquaints students with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will frequently work on projects involving the hands-on gathering and analysis of real world data. Ideas and computations presented in this course have immediate connections with world events. Appropriate use of technology will allow students to focus deeply on the concepts involved in statistics. This course prepares students for the Advanced Placement Examination in Statistics.

Pre-requisites: Satisfactory completion of Algebra 2 and permission of the department. Sophomores and juniors generally take A.P.

Statistics in addition to a math course in the normal sequence. For seniors, this course is an appropriate college preparatory alternative to Precalculus or Calculus.

Advanced Placement Computer Science Plus Data Structures*

Grades 10-12

This is an introductory college level computer science course using the programming language Java. The emphasis is on programming methodology, algorithms, and data structures. Major topics include arrays, methods, classes, objects, linked lists, trees, recursion, and searching and sorting algorithms. Participating students are prepared to take the AP Computer Science exam. This course goes beyond the AP syllabus, covering the set of topics typically comprising a full year of college level computer science. Permission of the instructor is required. Previous programming experience is not necessary.

*Enrollment in AP Statistics and AP Computer Programming is limited. All students who wish to sign up for either course must provide an alternate choice (in or out of the math department) on their official course request form. Seniors who have the recommendation of their current math teacher will be given priority for enrollment. A lottery may be needed and used if the course is over-enrolled.

Science Department

Biology **Grades 9-10**

Biology is an introductory course that surveys a variety of topics with an emphasis on cell biology, genetics, and physiology. A special attempt is made to provide students with the background needed to develop an understanding of the contemporary issues in science from a cellular, molecular and ecological perspective. Correlated lab work is emphasized, including a frog dissection. Honors level work in this course will satisfy the prerequisite for enrollment in Experimental or Advanced Biology. Students are approved for this course by their BB&N Middle School science teacher or by the Science Department Head.

Honors Biology **Grades 9-10**

Honors Biology covers similar material as Biology but the pace is quicker and topics are explored in greater depth. Students will build a foundation necessary to understand the contemporary issues in science from a cellular, molecular, biochemical and ecological perspective. Correlated lab work is emphasized, including a frog dissection. Students are approved for this course by their BB&N Middle School science teacher or by the Science Department Head. Algebra II is a recommended co-requisite with this course.

Physics **Grades 10-12**

This is a lab-oriented course designed for students who have completed Biology and who want to explore physical science with an emphasis on the practical nature of the physical world. The course will cover mechanics, motion, and energy during the first term, while the second half examines heat, electricity, simple circuits, magnetism and motors. Algebra is used in the interpretation of data and provides a link between the relationships elucidated by lab experiments and the practical applications of those principles.

Honors Physics**Grades 10-12/ Preference to Grade 10**

Honors Physics is an experiment-oriented course that stresses the inter-relationships of various kinds of energy, and gives students a strong introduction to mechanics. The year begins with a study of Newtonian physics and proceeds through buoyancy, pressure, electricity, heat, and ends with the examination of sound and light. Students who have earned honors level grades in Algebra II would be best suited for this course since Algebra is used extensively in the interpretation of data and in the expression of ideas. Summer work in Algebra 2 may be recommended for some students. Enrollment is limited, and permission of the department is required

Principles of Chemistry **Grades 11-12**

This course focuses on the conceptual aspects of Chemistry and covers topics including the structure of atoms and molecules, principles of chemical reactions including energy, reaction rates as they relate to equilibrium, acids and bases. Significant emphasis will be placed on the development of lab skills and problem solving both qualitatively and quantitatively. This course is not designed to

prepare students for the Chemistry SAT subject test but honors level work in this course will satisfy the prerequisite for enrollment in either Experimental or Advanced Biology. Algebra II is a pre-requisite and Physics is a recommended prior science course.

Chemistry **Grades 11-12**

This course covers the standard college preparatory material required for continued work in Chemistry, Biology, or pre-medical studies. Topics include the structure of atoms and molecules, principles of chemical reactions including energy, kinetics, equilibrium and reactions between acids and bases. Laboratory work, observation, and data analysis are emphasized and used as a means of examining the scientific thought process. Strong math skills are essential, Algebra II is a pre-requisite and Physics (either Regular or Honors) is a recommended prior science course.

Honors Chemistry **Grades 11-12**

The Honors section of Chemistry covers the same topics as the Chemistry class but the pace is quicker and each subject is examined in greater depth. Strong math skills are essential. Algebra II is a pre-requisite and Honors Physics in Grade 10 is a recommended prior science course. Enrollment is limited and permission of the department is required.

Human Physiology **Grades 11-12**

Human Physiology is a course in which lab work is used to study several major organs and organ systems of the body. The course covers cell, tissue and organ structure with a focus on the circulatory, respiratory and nervous systems. Neuroanatomy, muscle physiology and nutrition will be explored and applications related to clinical conditions will also be addressed. Participation in dissection and in exercise labs is a required part of this course. Preference is given to seniors.

Forensics **Grades 11-12**

Forensics is a lab-based course that stresses the importance of applying scientific principles to law. Students will learn the methodology needed to evaluate a crime scene, the proper lab mechanics needed to evaluate evidence, and how to compare samples that are both known and unknown.

Procedures in collecting and interpreting criminal evidence will be examined and modeled. The students will gain a basic understanding of forensic science and how it is used in criminal cases. Forensic experiments will include drug analysis, blood typing, hair and fiber analysis, gun shot residue tests, and fingerprint identification. The course will include lectures, labs, research projects, activities, and videos. Forensics is open to juniors and seniors who have fulfilled their science graduation requirement but preference is given to seniors. Chemistry is recommended but not required.

Environmental Science Grades 11-12

Environmental Science is a lab-based course that explores the inter-relationships of biological, physical, and social environmental factors. Field investigations and class discussions focus on the causes and the solutions of environmental problems on a local and on a global scale. Topics include ecosystems, renewable and nonrenewable resources, water quality, conservation biology, marine biology, and population studies. Laboratory investigations will focus on the local environment, including the Charles River and Mt. Auburn Cemetery. Learning via first-hand observations and analysis is emphasized. Biology is a prerequisite for this course. Preference is given to seniors.

Current Topics and Research in Science and Technology

Grade 12, half or full-credit

This course is designed for students to explore topics in science and technology both within and beyond BB&N by critically reviewing current literature, presenting recent findings in science, visiting scientific destinations throughout the Greater Boston area and potentially undertaking an independent research project outside of BB&N. Interested students must be motivated, independent learners capable of working within established timeframes to achieve research and presentation goals. Prerequisites include: successful completion of three years of science, concurrent enrollment in a science elective and approval by the Department Head. Students enrolled in this course will identify areas of scientific interest, pursue

independent research and work toward creating a symposium of current topics in science that will be shared with the BB&N community in the winter. By the end of November, students are expected to establish a connection with a science-mentor outside of BB&N who would be willing to have the student undertake a research project in their laboratory continuing through the Senior Spring Project period. It is most helpful, but not expected, that students spend the summer between their junior and senior year establishing this connection in anticipation of spending approximately 80 hours (an average of 10-15 hours per week) working on an independent research project outside of BB&N during their Senior Spring Project. Students will meet weekly as a class during Senior Spring Project to share their research with each other and the BB&N community in the spring. Enrollment is limited, and interested students are required to complete a short application due to Dr. Cataldo in April.

Advanced Biology Grade 12

This lecture course can be taken alone, or in combination with Experimental Biology (with the expectation that students remain enrolled in both courses for the full academic year to complete the AP curriculum). The content of this course is a selection of topics from the Advanced Placement syllabus. It is divided roughly into thirds: evolution, cell biology and genetics are covered in the fall term; molecular and organismal biology in the winter term; and animal behavior and ecology in the spring term. Advanced Biology, when taken in combination with Experimental Biology, results in AP notation on the student transcript. Biology and Chemistry are pre-requisites. Enrollment is limited, and permission of the department is required.

Experimental Biology Grade 12

This laboratory course can be taken alone, or in combination with Advanced Biology (with the expectation that students remain enrolled in both courses for the full academic year to complete the AP curriculum). This course will cover many of the laboratory exercises and experiments that are normally contained in an introductory college biology course. The laboratory work will be taken from widely used lab manuals and will be correlated with reading assignments in the

textbook used for the AP Biology course. Students will expand upon these topics by planning and executing their own experiments. Evaluation will be based on lab work, including collaboratively designed and executed research projects presented using scientific posters, PowerPoint slide shows and lab reports. Additionally, there will be lab-practical and written tests. An important part of this course involves a comparative dissection in which participation is mandatory. Experimental Biology, when taken in combination with Advanced Biology, results in AP notation on the student transcript. Biology and Chemistry are pre-requisites. Enrollment is limited, and permission of the department is required.

AP Biology

Grade 12

Advanced Biology, when taken in conjunction with Experimental Biology, will fully prepare students for the AP Biology exam. Students are expected to remain enrolled in both courses for the full academic year to complete the AP curriculum and are encouraged to take the AP exam. *Refer to Advanced Biology and Experimental Biology course descriptions above.*

Advanced Physics: Electricity Magnetism and Optics

Grades 11-12

The course covers the Electricity and Magnetism, Wave and Optics, Atomic and Nuclear sections of the AP Physics B curriculum. The course will include weekly labs, and significant emphasis will be placed on the development of strong lab skills, including error analysis and problem solving both qualitatively and quantitatively. In March, at the beginning of Senior Spring Project, juniors will begin an independent supervised research project due at the end of the year. Seniors may continue the course if they wish and participate in the projects or prepare for the AP Exam. Students must complete either Physics or Honors Physics before enrolling in this course. Since systems of equations and trigonometry will be used extensively throughout the year, a strong record in Algebra 2 (B+) and in the trigonometry portion of Geometry is a pre-requisite and pre-calculus is a co-requisite. Enrollment is limited and permission from the department is required.

AP Physics C: (Grade 11-12)

When taken in combination with Calculus and for the full academic year (through Senior Spring Project), enrollment in the

Advanced Physics course results in A.P. Physics C notation on the student transcript. During the spring term, the course will cover calculus-based concepts of the material in depth.

Considerations

Policy on Satisfactory Academic Standing

A student has earned satisfactory academic standing if:

- He or she passes all courses which must be taken in a particular grade/class and which are part of the minimum requirements for graduation.
- His or her record at the final marking period includes no more than one grade in the D range and no F's.

N.B.:

- A standard course load consists of five courses for Grades 10-12, and five academic courses plus the required introduction to the arts program for
- Grade 9.
- Students taking a reduced course load may not have any grades below a C-.
- Students taking more than a standard course load have earned satisfactory standing with one F if that failure is in a non-required course.
- In a course taken on a Pass/Fail basis, a grade of Pass will not be considered the equivalent of a C- unless the student has, in fact, an average of C- or higher in the course.
- All courses satisfying the minimum requirements are assumed to be full credit, yearlong courses. In calculating satisfactory standing, two half-credit courses will be averaged as a full credit course.

Pass-Fail

Students entering Grade 11 or 12 may take any one of their elective courses on a pass-fail basis, subject to the approval of the Academic Dean. Elective courses are courses not required for graduation. If possible, the pass-fail option should be elected in the spring of the prior year. Students will be allowed to change to or from a pass-fail basis until two weeks after the close of the first midterm. In

limited enrollment courses, priority may be given to students taking the course on a letter-grade basis.

Senior Year Requirements:

Most students in grade 12 complete their senior year courses by having a passing record as of the March vacation and continuing on to an approved Senior Spring Project. If a student has postponed meeting the departmental graduation requirements in math (3 years), science (2 years – biology and a physical science), History, or athletics/physical education, he/she must incorporate that course into his/her senior project. Seniors who fail to complete their Spring Projects in a satisfactory manner may also be ineligible to graduate.

Credit from Other Schools

After a student has enrolled at BB&N, credit will not be given for individual courses taken at other educational institutions except under unusual circumstances and then only upon recommendation by the Academic Dean and approval by the Educational Policy Committee.

Grade Changes

Students have three weeks from the date reports are mailed home to request that a grade be reviewed. This request is first made to the teacher giving the grade. No requests for changes will be accepted after this deadline has passed.

Program Changes/Adding a Course/Dropping a Course

Revised January 30, 2011

Students may add a new course (not the same as switching levels of a course) up to three weeks after the first day the class meets. On rare occasions an advisor, prior to seeking approval from the EPC, may petition the Department Head to extend this deadline for adding a new course.

Returning students in grades 10-12 may drop or change levels of a course without notation on the transcript within the first six weeks from the start of the course. The grades earned in the original course will carry over to the new section. In addition the academic dean in consultation with the department head and instructors of the courses will

determine whether any additional assessments need to be given in order to account for differences between the courses. After this date, the transcript will show the most recent grade of record for the dropped course (“grade of record” is the grade recorded at the end of any normal marking period, e.g., first midterm).

Grade 9 students and new students in grades 10-12 will have up to the first midterm to move from an Honors or AP level section to a regular section of a course or vice-versa. They may also change levels between sequential courses without notation on the transcript. On rare occasions, a department head may petition to extend this deadline for switching levels without notation on the transcript if the department needs more time to assess if the placement is correct. Even in these rare instances a final determination must be made no later than the week prior to first trimester exams. In this case, the academic dean makes the final decision regarding whether or not a grade of record from the original course will appear on the transcript.

In order to initiate either of these changes, a student must present a form (available in the upper school office) that will need the signatures of: the advisor, current teacher, department head, parents, college counselor (seniors only), and the academic dean. All signers should concur on the advisability of the change; the academic dean having final authority. Under exceptional circumstances the academic dean may approve a course change at other time when the educational interest of the student makes a compelling case for such a change.

Students are not formally enrolled in new or changed courses until they have completed and submitted the course change form to the upper school office. Teachers will not admit students to a new class (nor will course credit be given) without official notice that the change form has been received.

Independent Study

Students can petition for an independent study project, which receives academic credit. This program is intended for students who have the capacity to work independently and

a strong interest in an academic area not included in the school's curriculum.

General Requirements:

Proposals should be submitted to the appropriate department head and the academic dean at least three weeks before the end of the term preceding the project

Two regular periods per week with the supervising teacher and six hours of independent study for a full credit course; one to two meetings per week and two to three hours of independent study for a half credit course taken over the course of a year.

- Significant amount of written work (or its equivalent) culminating in a major paper, project, or exam
- Regular letter grades will be given, as well as academic credit

· Applicants for the independent study will need to:

- Secure the consent of a faculty member willing and able to supervise
 - Discuss the topics to be covered, materials to be used, written work and other assessments to be submitted

- Secure the signature of the supervising teacher, a parent or guardian, the advisor, the department chairperson, and the academic dean.

- Submit a carefully prepared proposal (at least two paragraphs) covering the topics, materials, written work and other assessments, and specifying the project's length as well as an independent study form available in the upper school office.