

# PROGRAM PLANNING GUIDE

Buckingham Browne & Nichols Upper School

2024-2025

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## Mission

BB&N is an academically excellent, diverse, and inclusive community where students develop into lifelong learners who lead with kindness, curiosity, and integrity. We prepare students to be responsible and open-minded as they engage with the world around them.

## Core Values

**Inquiry:** We promote curiosity and critical thinking to inspire a lifelong love of learning.

**Integrity:** We strive to be honest, conscientious, and accountable in our actions even when no one is watching.

**Belonging:** We foster a culture of respect, well-being, and connection that values all individuals and empowers them to discover and be their authentic selves.

**Kindness:** We strengthen our communities by recognizing our common humanity and treating ourselves and others with respect and compassion.

## Motto

Honor - Scholarship - Kindness

## Diversity, Equity, Inclusion, and Global Education Commitments

**Equitable Learning:** Leveraging anti-racist, anti-bias, culturally responsive pedagogy and practices that provide equitable learning opportunities for all community members.

**Meaningful Relationships:** Building meaningful relationships with inquiry, intention, and compassion.

**Transparency:** Acting with transparency and accountability that support lasting systemic change.

**Self-Reflection:** Fostering a practice of critical self-reflection that invites individual and communal examination of our position, power, and privilege.

**Engagement:** Pursuing equity for all through exploring multiple perspectives, active solidarity, and community engagement.

## Global Education Program

BB&N has a strong and ongoing commitment to the principles of a global education. With social and local issues becoming increasingly global and interdependent, it is essential that the School cultivate global citizens. Students learn to be open and curious, to collaborate and communicate with each other and across boundaries, to appreciate multiple perspectives, and to recognize that the world is made up of interconnected and interdependent systems. As they develop these competencies, students investigate the world beyond the classroom, propose innovative solutions to problems, and act upon critical issues. These competencies are developed through the School's courses, study abroad opportunities, Global Online Academy, School-sponsored travel, virtual exchange programs, and extracurricular activities.

## Upper School Contact Information

**Upper School Director:** Jessica Keimowitz (jkeimowitz@bbns.org, 617-800-2130)

**Upper School Assistant Director:** Katrina Fuller (kfuller@bbns.org, 617-800-2138)

**Dean of Students:** Rory Morton (rmorton@bbns.org, 617-800-2165)

**Dean of Teaching and Learning:** Michael Chapman (mchapman@bbns.org, 617-800-2156)

**Diversity, Equity, Inclusion, and Global Education Practitioner:** (Maria Graciela Alcid, malcid@bbns.org; 617-800-2168)

**Director of Global Education:** Karina Baum (kbaum@bbns.org, 617-800-2250)

**Director of Student Support Services:** Kim Gold (kgold@bbns.org, 617-800-2227)

### Department Heads

Arts Department Head: Adam Howarth (ahowarth@bbns.org, 617-800-6206)

English Department Head: Ariel Duddy (aduddy@bbns.org, 617-800-2159)

History and Social Sciences Department Head: Susan Glazer (sglazer@bbns.org, 617-800-2163)

Mathematics and Computer Science Department Head: Meena Kaur (mkaur@bbns.org, 617-800-2278)

Science Department Head: Rachel Riemer (rriemer@bbns.org, 617-800-2185)

World Languages Department Head: James Sennette (jsennette@bbns.org, 617-800-2124)

Health and Wellness Curriculum Coordinator (B-12) (Dawn McGrath, dmcgrath@bbns.org, 617-800-6249)

### Athletics

Director of Athletics: Chuck Richard (crichard@bbns.org, 617-800-2145)

Director of Physical Education and Health (B – 12): Henri Andre (handre@bbns.org, 617-800-2143)

Associate Director of Athletics (Upper School): Kindyll Dorsey (kdorsey@bbns.org; 617-800-2149)

### College Counseling

Director of College Counseling: Amy Selinger (aselinger@bbns.org, 617-800-2106)

Associate Director of College Counseling: Fred Coyne (fcoyne@bbns.org, 617-800-2106)

Associate Director of College Counseling: Sharonda Dailey Thomspson (sdailey@bbns.org, 617-800-2106)

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College Office Manager: Antoinette Truman (atruman@bbns.org; 617-800-2106)

**Global Online Academy Site Director:** Stacey Spring (sspring@bbns.org, 617-547-6100 ext. 6209)

**Semester-Away Program Coordinator:** Scott Tang (stang@bbns.org, 617-800-2220)

## Upper School Graduation Requirements

Students in Grade 9 take five academic courses plus a sixth course in art. Students in Grades 10 – 12 take five academic courses and may take an arts course as a sixth course. Students may take an arts course as a sixth course without special permission. The Upper School Director, based on recommendations from the Educational Policy Committee, must approve any variations to the standard program.

Department	Graduation Requirement
Arts	1 year in Grade 9; 1 credit in Grades 10 – 12
Athletics	Grades 9 – 11: 3 seasons each year Grade 12: 2 seasons  Grades 10 – 11 students who participate in 2 interscholastic sports: 2 seasons
English	4 credits
History and Social Sciences	2 credits, including a U.S. History course in Grade 11 and a Modern Global History course *
Mathematics and Computer Science	3 credits, including 1 credit of Algebra 2 and 1 credit of Geometry **
Science	2 credits, including 1 credit of Biology and 1 credit of a physical science ^
World Languages	3 full, consecutive credits of the same language ^^
Bivouac	Required in Grade 9 ~
Health and Wellness	Required in Grades 9 and 10
Service Learning	40 hours during Upper School (Class of 2025 only)
Senior Spring Project	Approved individual project during spring trimester of Grade 12

### Notes

\* Only courses designated as Modern Global History courses meet the graduation requirement.

\*\* A student in Grade 11 must take a mathematics course unless the student has already completed Algebra 2 and Geometry and has Department Head approval to take the third unit in Grade 12.

^ All students in Grade 9 take Biology. Courses that meet the physical science requirement include Principles of Chemistry, Chemistry, Chemistry (Honors), Physics, and Physics (Honors). Students new to the school in Grade 10 or 11 who have already taken a biology, physics, or chemistry course may be granted BB&N graduation credit for the previous course based on departmental approval. All students new to the school in Grade 10 or 11 are required to take at least one year of science at BB&N to graduate.



^^ Students must take a language course through Grade 11, completing at least level three of a language. Students who previously studied a language not offered at BB&N and are new to the school in Grade 11 need to successfully complete two full years of a language at BB&N. New students repeating Grade 11 must take a language course in Grade 11 and complete at least level three of language at BB&N; alternatively, these students may take and successfully pass a new language for two years. Based on a placement test, freshmen who place higher than the III (Honors) level of their primary language studied (the language to be studied for three full, consecutive years) must choose another language to satisfy the three-year requirement. These students may choose to study the secondary language, beginning sophomore year, as part of the Double Language Program.

~ Full participation in the Bivouac experience is an integral and required part of the Grade 9 curriculum. For students entering the Upper School in Grade 9, Bivouac is a requirement for promotion to Grade 10 and for graduation.

Seniors who have not yet fulfilled the graduation requirement in a physical science course, a mathematics course, a U.S. History course, and/or a language course must take a full year of these courses (extending through Senior Spring Project).

Courses taken at other institutions are not given credit toward graduation requirements without the prior approval of the appropriate Department Head. After a student has enrolled at BB&N, all remaining graduation requirements must be fulfilled at BB&N or at a BB&N-sanctioned semester-away program. In cases where participation in a BB&N-sanctioned semester-away program does not allow a student to complete a BB&N graduation requirement (such as a physical science or arts course), the student needs to enroll in another BB&N course in a subsequent year or have an approved course plan from the Department Head to meet that graduation requirement.

Exceptions to the BB&N minimum graduation requirements are granted only under unusual circumstances and only upon recommendation of the Educational Policy Committee with approval by the Director of the Upper School.

# Four-Year Course Planning Worksheet

## Buckingham Browne & Nichols Upper School

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

Date: \_\_\_\_\_

Advisor: \_\_\_\_\_

**Graduation Requirements:** Students in Grades 9 – 12 must complete the following minimum requirements:

- **Arts:** 1 year in Grade 9 plus 1 credit in Grades 10 – 12
- **Athletics:** Grades 9 – 11: 3 seasons each year  
Grade 12: 2 seasons  
Grades 10 – 11 students who participate in 2 interscholastic sports: 2 seasons
- **English:** 4 credits
- **History and Social Sciences:** 2 credits, including a U.S. History course in Grade 11 and a Modern Global History course
- **Mathematics and Computer Science:** 3 credits, including Geometry and Algebra 2
- **Science:** 2 credits, including 1 year of Biology and 1 year of a physical science
- **World Languages:** 3 full, consecutive credits of the same language

Full participation in the Bivouac experience is an integral and required part of the Grade 9 curriculum. For students entering the Upper School in Grade 9, Bivouac is a requirement for promotion to Grade 10 and for graduation.

Department	Grade 9	Grade 10	Grade 11	Grade 12
<b>English</b>	English 9	English 10	AP English Literature and Composition	English 12
<b>History and Social Sciences</b>			A U.S. History (Honors) Course	
<b>Mathematics and Computer Science</b>				
<b>Science</b>	Biology			
<b>World Languages</b>				
<b>Art</b>				
<b>Other Elective</b>				

## GRADE 9 AT-A-GLANCE

### ARTS

**Required:** In Grade 9, all students take a full year of art courses designed to be an introduction to the elements and techniques in two broad areas of art: Visual Arts and Performing Arts. Students choose a one-semester course in each of these areas, but freshmen who participate in Jazz or Orchestra take these courses for the entire year, and freshmen in Chorale have the option to take Chorale for the entire year.

### ATHLETICS

**Required:** Students in Grades 9 must participate in the Athletics Program for all three seasons and must participate in interscholastic sports for at least two of those seasons. By the end of Grade 10, students must have participated in at least three interscholastic sports in total. Students in Grade 9 may take after-school Health and Fitness for the fall, winter, or spring season. Participation in a school theatrical production meets the interscholastic sport requirement for only one season per year. Participation in two theatrical productions within one school year does not fulfill the interscholastic sports requirement in Grade 9.

### ENGLISH

**Required:** English 9

### HISTORY AND SOCIAL SCIENCES

Grade 9 students who take a history course enroll in Global History I: The Individual in Society.

### MATHEMATICS AND COMPUTER SCIENCE

**Required:** Students continue in the math sequence (Algebra 1–Algebra 2–Geometry–Precalculus).

Based on the results of placement tests administered in April, performance in a Grade 8 math course, teacher approval, and SSAT/ERB scores, most students are placed into Algebra and Geometry 1, Algebra 2, or Algebra 2 (Honors). Students rising from BB&N's Middle School are primarily placed by the Middle School Math Department. Students new to BB&N are placed by the Upper School Mathematics and Computer Science Department Head and the placement coordinator. Successfully passing an Algebra 2 placement test would allow an advanced math student to be placed into Geometry (Honors) in Grade 9 if the student has already completed a full Algebra 2 curriculum in Grade 8.

Students who finish the year with a grade of D+ or below are required to do summer work under the direction of the Mathematics and Computer Science Department Head in preparation for the next course in the required math sequence.

### SCIENCE

**Required:** Students in Grade 9 take Biology, even those students who may have previously taken a biology course at another institution. Students from BB&N's Middle School are placed by the Middle School Science Department, while students new to BB&N are placed by the Upper School Science Department Head.

### WORLD LANGUAGES

**Required:** Successful completion of three full, consecutive years of the same language is required for graduation.

With permission of the Department Head, students have the option of taking a second language course in Grades 9 – 12. See the World Languages Department section for descriptions of the Double Language Program and the BB&N Language Scholar Program. Based on a placement test, freshmen who place higher than the III (Honors) level of their primary language studied (the language to be studied for three full, consecutive years) must choose another language to satisfy the three-year requirement. These students



may choose to study the secondary language, beginning sophomore year, as part of the Double Language Program.

### **HEALTH AND WELLNESS**

All Grade 9 students take a Health and Wellness course that meets approximately once per week for one semester. In this course, students develop their health literacy within a comprehensive curricular model that focuses on physical, mental, social, emotional, and intellectual health. This inclusive course builds on prior knowledge and skills and supports students as they consider the interconnectedness of these domains. As students explore core concepts of mental and emotional health, consent and healthy relationships, sexual health and identity, substance use, interpersonal violence prevention, and personal health and wellness, they practice life skills, including analyzing influences, accessing information, interpersonal communication, decision-making, goal setting, self-management, and advocacy.

### **BIVOUAC**

Full participation in the Bivouac experience is an integral and required part of the Grade 9 curriculum. For students entering the Upper School in Grade 9, Bivouac is a requirement for promotion to Grade 10 and for graduation.

## GRADE 10 AT-A-GLANCE

### ARTS

In Grades 10 – 12, students must complete at least one full credit of art, though the School encourages students to continue their study of art well beyond this minimum requirement.

### ATHLETICS

**Required:** Students in Grade 10 must participate in the Athletics Program for all three seasons. For students in Grade 10, participation in two interscholastic sports within one school year fulfills the athletics requirement for that year. By the end of Grade 10, students must have participated in at least three interscholastic sports. Students new to the school in Grade 10 must participate in at least two interscholastic sports within the academic year. Participation in a school theatrical production meets the interscholastic sport requirement for only one season per year. Participation in two theatrical productions within one school year does not fulfill the athletics requirement for students in Grade 10.

Students in Grade 10 may take Health and Fitness during the academic day. In addition, students in Grade 10 are eligible for the after-school Strength and Conditioning program, may manage a team (only one season per year), and may request an Athletics Waiver for Service Learning (only one season per year). Students taking Studio Arts: Afternoon must complete two sessions per week of Health and Fitness to meet the athletics requirement each season.

### ENGLISH

**Required:** English 10

### HISTORY AND SOCIAL SCIENCES

Grade 10 students take Global History II: Making an Interconnected World, American and Global History: Case Studies I (part one of a two-year course), or The Making of the Modern Middle East.

### MATHEMATICS AND COMPUTER SCIENCE

**Required:** Students continue in the math sequence (Algebra 1–Algebra 2–Geometry–Precalculus).

Electives: Computer Programming, Advanced Placement Computer Science, or Advanced Placement Statistics may be taken in addition to a standard math course with approval of the department. Enrollment in these courses is limited.

If there is sufficient interest, BB&N offers a summer course in Geometry (Advanced). This course is designed for students who have taken Algebra 2 in Grades 10 or 11 and may allow for advancement to a precalculus course the following year.

Students who finish the year with a grade of D+ or below are required to do summer work under the direction of the Mathematics and Computer Science Department Head in preparation for the next course in the required math sequence.

### SCIENCE

Students in Grade 10 may enroll in Physics, Physics (Honors), Chemistry, or Chemistry (Honors). Biology is required in Grade 10 if it has not yet been completed. Students new to the school in Grade 10 who have already taken a biology, physics, or chemistry course may be granted BB&N graduation credit for the previous course based on departmental approval. All students new to the school in Grade 10 are required to take at least one year of science at BB&N to graduate.

## **WORLD LANGUAGES**

**Required:** Successful completion of three full, consecutive years of the same language is required for graduation.

With permission of the Department Head, students have the option of taking a second language course in Grades 9 – 12. See the World Languages Department section for descriptions of the Double Language Program and the BB&N Language Scholar Program.

## **HEALTH AND WELLNESS**

All Grade 10 students take a Health and Wellness course that meets approximately once per week for one semester. In this course, students develop their health literacy within a comprehensive curricular model that focuses on physical, mental, social, emotional, and intellectual health. This inclusive course builds on prior knowledge and skills and supports students as they consider the interconnectedness of these domains. As students explore core concepts of mental and emotional health, consent and healthy relationships, sexual health and identity, substance use, interpersonal violence prevention, and personal health and wellness, they practice life skills, including analyzing influences, accessing information, interpersonal communication, decision-making, goal setting, self-management, and advocacy.

## GRADE 11 AT-A-GLANCE

### ARTS

In Grades 10 – 12, students must complete at least one full credit of art, though the School encourages students to continue their study of art well beyond this minimum requirement.

### ATHLETICS

**Required:** Students in Grade 11 must participate in the Athletics Program for all three seasons. For students in Grade 11, participation in two interscholastic sports within one school year fulfills the athletics requirement for that year. Participation in a school theatrical production meets the interscholastic sport requirement for only one season per year. Participation in two theatrical productions within one school year does not fulfill the athletics requirement for students in Grade 11.

Students in Grade 11 may take Health and Fitness during the academic day. In addition, students in Grade 11 are eligible for the after-school Strength and Conditioning program, may manage a team (only one season per year), and may request an Athletics Waiver for Service Learning (only one season per year). Students taking Studio Arts: Afternoon must complete two sessions per week of Health and Fitness to meet the athletics requirement each season.

### ENGLISH

**Required:** AP English Literature and Composition

### HISTORY AND SOCIAL SCIENCES

**Required:** United States History (Honors), United States History (Honors): African American History, United States History (Honors): Gender and Sexuality Studies, or American and Global History (Honors): Case Studies II (part two of a two-year course). Grade 11 students may take a second History and Social Sciences course with permission of the Department Head.

### MATHEMATICS AND COMPUTER SCIENCE

**Required:** Students continue in the math sequence (Algebra 1–Algebra 2–Geometry–Precalculus).

Electives: Computer Programming, Advanced Placement Computer Science, or Advanced Placement Statistics may be taken in addition to a standard math course with approval of the department. Enrollment in these courses is limited.

If there is sufficient interest, BB&N offers a summer course in Geometry (Advanced). This course is designed for students who have taken Algebra 2 in Grades 10 or 11 and may allow for advancement to a Precalculus course the following year.

Students who finish the year with a grade of D+ or below are required to do summer work under the direction of the Mathematics and Computer Science Department Head in preparation for the next course in the required math sequence.

### SCIENCE

Students new to the school in Grade 11 who have already taken a biology, physics, or chemistry course may be granted BB&N graduation credit for the previous course based on departmental approval. All students new to the school in 11 are required to take at least one year of science at BB&N to graduate. If a student has not yet met the one-year physical science requirement, the student is encouraged to do so in Grade 11. Physical science courses include: Physics, Physics (Honors), Advanced Placement Physics 1, Chemistry, Chemistry (Honors), and Advanced Placement Chemistry. Elective options include Anatomy and Physiology (Advanced), AP Biology / Advanced Biology (Honors): Mechanisms of Biological Systems, AP Physics C:

Mechanics, Biochemistry (Advanced), Engineering Principles and Practice (Advanced) / Engineering Principles and Practice, Environmental Studies (Advanced), Experimental Biology (Honors), Infectious Diseases (Advanced) / Infectious Diseases, Marine Ecology (Advanced) / Marine Ecology, Organic Chemistry (Honors), Physics 2 (Honors), and Scientific Ethics (Advanced) / Scientific Ethics. See the course descriptions for information about prerequisites.

## **WORLD LANGUAGES**

**Required:** Successful completion of three full, consecutive years of the same language is required for graduation.

Students who previously studied a language not offered at BB&N and are new to the school in Grade 11 need to successfully complete two full years of the same language at BB&N. New students repeating Grade 11 must take a language course in Grade 11 and complete at least level three of language at BB&N; alternatively, these students may take and successfully pass a new language for two years.

With permission of the Department Head, students have the option of taking a second language course in Grades 9 – 12. See the World Languages Department section for descriptions of the Double Language Program and the BB&N Language Scholar Program.

## GRADE 12 AT-A-GLANCE

### ARTS

In Grades 10 – 12, students must complete at least one full credit of art, though the School encourages students to continue their study of art well beyond this minimum requirement. Students completing the arts graduation requirement in Grade 12 earn one full credit for the completion of a full-credit course during Trimesters 1 and 2.

### ATHLETICS

**Required:** Students in Grade 12 must participate in the Athletics Program for at least two seasons. Students in Grade 12 may take Health and Fitness during the academic day. In addition, students in Grade 12 are eligible for the after-school Strength and Conditioning program, may manage a team (only one season per year), and may request an Athletics Waiver for Service Learning (only one season per year). Students taking Studio Arts: Afternoon must complete two sessions per week of Health and Fitness to meet the athletics requirement each season. During Senior Spring Project, a senior is not allowed to participate in a Junior Varsity Team if that senior has not previously played the sport. Only seniors who have already completed the Service Learning graduation requirement and have not already completed a Season of Service during senior year are allowed to do a Season of Service in lieu of an athletics season during Senior Spring Project.

### ENGLISH

**Required:** English 12 (two separate trimester-long courses taken during the first and second trimesters)

### HISTORY AND SOCIAL SCIENCES

Students can elect to take one or two of the History and Social Science electives. Some electives require approval of the department.

### MATHEMATICS AND COMPUTER SCIENCE

Students who have completed three years of math including Algebra 2 and Geometry, or the two-year sequence of Algebra and Geometry 1 and 2, may choose from the following electives: Precalculus, Precalculus (Advanced), Precalculus AB (Honors), Precalculus BC (Honors), Calculus & Statistics, Calculus (Advanced), AP Calculus AB, AP Calculus BC, Linear Algebra and Multivariable Calculus (Honors), Statistics, AP Statistics, Computer Programming, AP Computer Science A (Plus Data Structures), and Advanced Topics in Computer Science (Honors). Enrollment in AP Statistics, Computer Programming, AP Computer Science, and Advanced Topics in Computer Science (Honors) is limited.

If a student has not yet fulfilled the three-year math requirement, including a full year of Algebra 2 and Geometry, the student must remain enrolled in their math course throughout Senior Spring Project.

### SCIENCE

Students who have not yet fulfilled the two-year science requirement or the one-year physical science requirement must take a physical science course and remain enrolled in the course throughout Senior Spring Project. Physical science courses include: Physics, Physics (Honors), Advanced Placement Physics, Chemistry, Chemistry (Honors), and Advanced Placement Chemistry. Elective options include Anatomy and Physiology (Advanced), AP Biology / Advanced Biology (Honors): Mechanisms of Biological Systems, AP Physics C: Mechanics, Biochemistry (Advanced), Current Topics and Research in Science and Technology (Honors), Engineering Principles and Practice (Advanced) / Engineering Principles and Practice, Environmental Studies (Advanced), Experimental Biology (Honors), Infectious Diseases (Advanced) / Infectious Diseases, Marine Ecology (Advanced) / Marine Ecology, Organic Chemistry (Honors), Physics 2 (Honors), and Scientific Ethics (Advanced) / Scientific Ethics. See the course descriptions for information about prerequisites.

## **WORLD LANGUAGES**

It is recommended that students continue their language study to the highest possible level and take four years of a language while in the Upper School. If a student has not yet fulfilled the three-year full, consecutive language requirement, the student must continue their language sequence. Seniors must take a full year of language (throughout Senior Spring Project) if they have not yet fulfilled the graduation requirement.

With permission of the Department Head, students have the option of taking a second language course in Grades 9 – 12. See the World Languages Department section for descriptions of the Double Language Program and the BB&N Language Scholar Program.

## **SENIOR SPRING PROJECT**

**Required:** An approved, individual project during the spring trimester of Grade 12



## Arts Department

During the freshman year, all students take a full year of art courses designed to be an introduction to the elements and techniques in two broad areas of art: Visual Arts and Performing Arts. Students choose a one-semester course in each of these areas, but freshmen who participate in Jazz and Orchestra take these courses for the entire year, and freshmen in Chorale have the option to take the course for the entire year.

In Grades 10 – 12, students must complete at least one full credit of art, though the School encourages students to continue their study of art well beyond this minimum requirement.

In Grades 10 – 12, full-credit courses generally meet four times per week and half-credit courses generally meet two times per week. Students completing the arts graduation requirement in Grade 12 earn one full credit for the completion of a full-credit course during Trimesters 1 and 2. Seniors enrolled in a semester-long class in the spring semester must continue in the course through Senior Spring Project. See the individual course descriptions for more information about the amount of credit granted for each course.

### VISUAL ARTS ARCHITECTURE

#### **Architecture** (Grades 10 – 12)

This introduction to architecture uses design as a creative process to understand and explore architectural principles. As students progress through a sequence of individual and collaborative projects that address a variety of design questions, they learn the basic tools of drafting and model making. Emphasis in the latter half of the course is on identifying real-world architectural problems and addressing them in an imaginative and creative way. Projects will include both residential and public space design. Coursework is complemented by viewing, and possibly visiting, important local architectural sites and design firms.

#### **Advanced Architecture** (Grades 11 – 12)

In this advanced level study of architecture, students explore increasingly complex relationships between space, form, function, and site. Greater emphasis is on spatial design in the context of culture, technology, and sustainability of the built and natural environment. Course studies include an introduction to landscape architecture and urban design. Using technical drawings and models, students develop and present a final project in a specific area of their interest. Enrollment is limited.

Seniors have the option of enrolling in this course for Trimesters 1 and 2 or for Trimesters 2 and 3. Seniors enrolling in this course during Trimesters 2 and 3 earn 0.5 credits for completion of Trimester 2 and Senior Spring Project hours for completion of Trimester 3. Enrollment in both trimesters is required. This course may run concurrently with Architecture.

Prerequisite: Architecture

#### **Advanced Architecture II** (Grade 12)

Building on the Advanced Architecture course, this course provides students with opportunities for creative, self-directed, and independent work in a class of similarly advanced and self-motivated students. Over the length of the course, each student develops and pursues substantial projects of their own choosing. Additionally, every student presents to the class on a subject that interests them. Through the range of individual projects, group exercises, class presentations, and field trips, students continue to expand their understanding of cultural, social, technological, and ecological issues of the built environment and engage in new ways of thinking about architecture, art, and design.

Seniors have the option of enrolling in this course for Trimesters 1 and 2 or for Trimesters 2 and 3. Seniors enrolling in this course during Trimesters 2 and 3 earn 0.5 credits for completion of Trimester 2 and Senior Spring Project hours for completion of Trimester 3. Enrollment in both trimesters is required. This course may run concurrently with Architecture or Advanced Architecture.

Prerequisite: Advanced Architecture

## **CERAMICS**

### **Ceramics: Elements and Principles of Design** (Grades 9 – 12)

This semester-long course concentrates on the basics of ceramic techniques, emphasizing spatial awareness, problem-solving, and the wide variety of sculptural and functional formations. Consideration is given to the range of ceramic forms in contemporary art and design, different cultural and historical contexts, and naturally occurring forms. A precise sequence of exercises and projects introduces the formal components of three-dimensional design. Students create projects dealing with line, form, shape, space, texture, value, and color.

### **Intermediate Ceramics** (Grades 10 – 12)

Building on Ceramics: Elements and Principles of Design as an introductory course, Intermediate Ceramics asks students to explore functional and nonfunctional ceramic forms. Students are expected to challenge themselves with scale and advanced glaze methods. Lectures, slide presentations, and critiques cover historical and contemporary issues in ceramics.

Prerequisite: Ceramics: Elements and Principles of Design

### **Advanced Ceramics** (Grades 11 – 12)

This course is a continuation of the introductory ceramics course with an emphasis on skill, techniques, and form. A variety of hand-building techniques will be used to create advanced forms. Students are also introduced to more advanced techniques and forms on the pottery wheel. Students practice the development of aesthetic ideas through intermediate to advanced ceramic hand-building practices. Students gain knowledge of ceramics (historical and contemporary) and an appreciation of the aesthetics of three-dimensional form as manifested in ceramics objects. A portfolio of work will be completed by the end of the year.

Prerequisite: Intermediate Ceramics

### **Advanced Ceramics II** (Grade 12)

While Advanced Ceramics focuses on form, perfecting craftsmanship, and technique, Advanced Ceramics II requires students to concentrate on motif and the overall design of their work, as well as documenting their work. Students are asked to take into consideration and defend the conceptual elements of their work. At the culmination of the year, students in Advanced Ceramics II give a source presentation to the class showing their influences and the path they have followed over the last three years. Enrollment is limited.

Seniors have the option of enrolling in this course for Trimesters 1 and 2 or for Trimesters 2 and 3. Seniors enrolling in this course during Trimesters 2 and 3 earn 0.5 credits for completion of Trimester 2 and Senior Spring Project hours for completion of Trimester 3. Enrollment in both trimesters is required. This course may run concurrently with Advanced Ceramics.

Prerequisite: Advanced Ceramics

## **DRAWING, PAINTING, AND SCULPTURE**

### **Drawing and Mixed Media** (Grades 9 – 12)

This semester-long course is designed to develop and reinforce visual art skills using traditional drawing materials, collage, and mixed media. Working from observation and from creative approaches to image making, students grow foundational visual art skills by exploring the principles and elements of art and design such as line, tone, proportion, composition, and perspective. Projects promote personal expression, an emphasis on process, and creative problem-solving. Class time includes work sessions, critiques, and discussions of historical and contemporary art examples.

### **Intermediate Drawing and Painting** (Grades 10 – 12)

This course expands upon the techniques, tools, and skills developed in Drawing and Mixed Media to offer more advanced approaches to drawing and introduce the fundamentals of painting, including color theory,

color mixing, and paint application. Students work from a variety of different sources, including direct observation, photographs, and created environments to increase their strategies for image making. In this course, students undertake projects designed to spark curiosity, develop individual style, and establish a shared language for visual analysis and feedback. Class time includes studio work-in-progress and discussions of historical and contemporary art examples.

Prerequisite: Drawing and Mixed Media

### **Advanced Drawing and Painting (Grades 11 – 12)**

This is an advanced drawing and painting course designed to move students beyond the formal skills covered in the introductory course. Students are given open-ended prompts dealing with narrative and figuration with the goal of becoming more independent in their choice of imagery. Students work from a combination of direct observation and photography and are encouraged to explore what interests them visually and create a unique body of work. Class consists of work sessions, lectures, discussions, and critiques.

Prerequisite: Intermediate Drawing and Painting

### **Advanced Drawing and Painting II (Grade 12)**

In the Advanced Painting and Drawing II course, students create unique imagery, including at least one large-scale painting, through open-ended prompts. Students are guided on the technical aspects of art-making, as well as the more amorphous, but equally important work of finding one's own voice and path. Students are required to challenge assumptions, develop critical thinking skills, further develop their personal concepts, and continue to find their appreciation for visual concerns and aesthetic values. Students are also required to write and workshop individual artist statements and artist resumes. The goal is to encourage innovation and provide a platform for students to grow as artists. It is in this manner that the lessons learned in class transcend art-making and become applicable to other life situations. Enrollment is limited.

Seniors have the option of enrolling in this course for Trimesters 1 and 2 or for Trimesters 2 and 3. Seniors enrolling in this course during Trimesters 2 and 3 earn 0.5 credits for completion of Trimester 2 and Senior Spring Project hours for completion of Trimester 3. Enrollment in both trimesters is required. This course may run concurrently with Advanced Drawing and Painting.

Prerequisite: Advanced Drawing and Painting

### **Drawing, Collage, and Abstraction (Grades 10-12)**

In this semester-long dynamic course for the creatively curious, students embark on an exploratory journey of abstract image making. Using real world observations as jumping off points students cultivate abstract approaches and learn techniques for varied mediums such as collage, drawing, and printmaking. While interpreting the observable world and cultivating expressive voices, students develop a deeper understanding of 2D design, color theory, and the elements of art. Throughout this course, students are encouraged to think creatively, experiment boldly, and develop a rich and personal artistic language, setting the foundation for their future artistic endeavors.

### **Mixed Media Sculpture (Grades 10-12)**

This is a semester-long course for students who enjoy variety and who love to build and get their hands around things. Students construct, assemble, mold, and paint to create three-dimensional art works. Students get to explore a variety of materials from wood, plaster, and wire to found objects in new and unique ways of making art. The course also explores different ways of creating colored and textured surfaces with materials ranging from wax to spray paint. This course is open to all, including beginners and experienced students, who wish to try new approaches to art making. All that is needed is an adventurous spirit.

## PHOTOGRAPHY

### **Photography (Grades 9 – 12)**

In this semester-long course, students learn the basics of 35mm film camera operation, film development, and darkroom skills while exploring the language of black and white photography. Field trips are likely and help to provide visual stimuli and content for work in the lab. Projects promote personal expression, emphasis on process and technique, and creative problem-solving. Class time includes lab work in the darkroom, critiques, and discussions of historical and contemporary art examples. Students wishing for a deeper exploration of darkroom and digital photography should take the full-year course offered in Grades 10 – 12.

### **Intermediate Photography (Grades 10 – 12)**

This course expands on the techniques, tools, and skills developed in Intro to Photography. Students will continue to explore the art of black and white photography, beginning with basic 35mm single-lens reflex camera and darkroom techniques, then moving farther 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. In the second trimester, students are introduced to digital imaging and color photography. An extended project of the student's own choosing concludes the year.

Prerequisite: Photography

### **Advanced Photography (Grades 11 – 12)**

This course is for students who are serious about extending their exploration of the photographic medium. Students enhance their skill in fine printing, including split filtering and myriad photographic papers and sizes. Medium format and alternative cameras are introduced as a means of inspiring new and creative ways of seeing. In addition to exploring color photography, students complete a portfolio of their work by the end of the year, as well as possible book sequencing. Throughout the course, the focus is on deepening personal vision and extending technical mastery.

Prerequisite: Intermediate Photography

### **Advanced Photography II (Grade 12)**

This course builds upon the work students completed in the Photography and Advanced Photography courses, taking students to the next step of seeing their artwork in the context of the history of photography. Students create a number of extended photographic projects in several genres of photography. Emphasis is placed on identifying the intention of each project and committing to one's own passions, curiosities, and visions. Through readings, slide talks, and museum trips, students learn about the history of photography, become aware of the vast range of contemporary approaches to photography, and are better able to define their own photographic directions.

Seniors have the option of enrolling in this course for Trimesters 1 and 2 or for Trimesters 2 and 3. Seniors enrolling in this course during Trimesters 2 and 3 earn 0.5 credits for completion of Trimester 2 and Senior Spring Project hours for completion of Trimester 3. Enrollment in both trimesters is required. This course may run concurrently with Advanced Photography.

Prerequisite: Advanced Photography

## WOODWORKING

### **Woodworking and 3D Design (Grades 9 – 12)**

Students in this semester-long course design and build a variety of woodworking and digital fabrication projects including mobiles with suspended hand carved objects, modular hanging lanterns with laser cut panels, and wood boxes with hand-cut joinery, in addition to smaller side projects. Students 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 a unique opportunity to learn the fundamentals of woodworking and 3D design.

### **Intermediate Woodworking and 3D Design (Grades 10 – 12)**

This course provides a unique opportunity to gain a solid foundation in woodworking and 3D design. In addition to learning how to safely and properly use the power tools in the studio, students also develop a repertoire of woodworking and digital fabrication techniques while working through a series of design prompts during the year. Student projects include laser cut jewelry, furniture pieces, stereo cabinets, lathe-turned bowls, and more. This course is a great option for those who like to work with their hands.

Prerequisite: Woodworking and 3D Design

### **Advanced Woodworking and 3D Design (Grades 11 – 12)**

This course is open to students who wish to develop their sculptural, 3D design, and woodworking skills through a series of self-directed projects. By the end of the year, students create a portfolio of individualized projects with thoughtful design, well-executed aesthetic vision, and clear conceptual foundations. Depending on their projects, students explore more advanced techniques and processes such as steam bending, jig making, and the iterative design process. Students also learn the safe and proper use of more advanced tools including the table saw and handheld routers.

Prerequisite: Intermediate Woodworking and 3D Design

### **Advanced Woodworking and 3D Design II (Grade 12)**

In Advanced Woodworking and 3D Design II, students design and construct a variety of increasingly complex and sophisticated woodworking projects that build on skills practiced in Advanced Woodworking and 3D Design. Students learn more advanced woodworking and digital fabrication techniques through the construction of their individual and self-directed projects. Space in this course is limited and the small class size allows students to further refine their woodworking and 3D design skills and explore design and fabrication techniques in greater depth.

Seniors have the option of enrolling in this course for Trimesters 1 and 2 or for Trimesters 2 and 3. Seniors enrolling in this course during Trimesters 2 and 3 earn 0.5 credits for completion of Trimester 2 and Senior Spring Project hours for completion of Trimester 3. Enrollment in both trimesters is required. This course may run concurrently with Advanced Woodworking and 3D Design.

Prerequisite: Advanced Woodworking and 3D Design

## **OTHER VISUAL ARTS COURSES**

### **Advanced Placement Art History / Art History (Honors) (Grade 12)**

This course tells the story of painting, sculpture, architecture, and the decorative arts by focusing on the College Board's selection of two hundred and fifty specific works of art spanning human history from antiquity to the present. This course meets three times each week, with a weekly double-block in the Museum of Fine Arts (MFA); students also visit the Harvard Art Museum, the Isabella Stewart Gardner Museum, and several other sites. During MFA visits, three students each week lead class by giving presentations about individual masterpieces in the museum's collection that supplement the material studied aligned with the Advanced Placement content explored that week. Later in the year, students apply their historian skills to a project that examines local public art with historical and contemporary lenses and create responses with consideration of inclusive ideals. The course may include an international trip during the first week of Spring Break. Enrollment is limited.

Students who wish to take the Advanced Placement exam may remain enrolled in the course during Senior Spring Project or prepare the final unit, on contemporary art, independently. A student who chooses not to continue in this course during Senior Spring Project and does not complete the final unit receives credit on the transcript for completion of Art History (Honors).

This course fulfills one year of the two-year History and Social Science graduation requirement but does not fulfill the required second year of the Arts Department graduation requirement. This course fulfills the Modern Global History requirement.

### **Printmaking** (Grades 10 – 12)

Printmaking is a group of techniques with an unparalleled wealth of potential. Essentially, it is the process of using one surface, a matrix, to make an image on another surface, in this case, paper. Using their own experiences and imagination, nature, and abstraction as source materials, students explore their personal expressive potential. In this one-semester course, students develop a foundation of knowledge about various printmaking techniques, possibly including monoprint, relief, silkscreen, and intaglio. Tools used to aid the creation of the matrix may include the vinyl cutter, the laser cutter, and the photocopier. This course receives 0.5 credit for each semester of participation and may be taken in the fall and/or spring.

### **Studio Arts: Afternoon** (Grades 9 – 12)

In this visual arts course, students work independently and amongst peers to realize projects of their own design. Whether seeking an extended opportunity to explore ideas initiated in other arts classes or interested in learning a new skill twice a week, students find an opportunity to pursue personal expressive ambitions with guidance and support. Work in the following media is available: drawing, painting, printmaking, and with permission of the instructor, photography, and ceramics. All skill levels are welcome in this course. Students attend two afternoons per week (Monday, Tuesday, or Thursday from 3:30 – 5:00 p.m.). This course runs during the fall, winter, and spring athletics seasons, and students can enroll in one or more seasons per year. For students in Grade 9, this course is only available during the winter or spring season. This course receives 0.25 arts credits for each trimester of participation and must be taken in conjunction with two Health and Fitness classes per week to meet the athletics requirement for that season.

## **PERFORMING ARTS CHORAL ENSEMBLES**

### **A Cappella Ensemble: Knightingales** (Grades 9 – 12)

The Knightingales are BB&N's select A Cappella close-harmony, all-gender singing group. The group performs popular music in the A Cappella style at both school concerts and in the surrounding communities; recent repertoire has included Alicia Keys, Taylor Swift, The Weeknd, Olivia Rodrigo, Bon Iver, music from Pitch Perfect, and much more. The group meets twice per week, once on Tuesday evening and once in a class block with Chorale. Membership in the Knightingales is by audition and is limited to 16 members, including at least one vocal percussionist/beatboxer. Members are expected to be able to learn music on their own either by ear or from a musical score. While membership is open to all BB&N students, priority for membership (and for solo assignments) is given to students who are also concurrently enrolled in Chorale. Auditions are held after Spring Break for the following year. Interested students should contact the director to schedule an audition. Members receive 0.5 arts credit for each year of participation.

Pre- or corequisite: Chorale (Fall), Chorale (Spring), or Intermediate/Advanced Chorale.

### **Chorale (Fall): Holiday** (Grades 9 – 12)

The Chorale is BB&N's large singing ensemble, which has 25-40 members and performs both at in-school events and in surrounding communities. Unlike the Knightingales, which is voice-only, the Chorale performs many musical styles, with rock band, orchestra, or piano accompaniment. In the Fall 2024 season, the Chorale will learn and perform songs for seasonal holidays celebrated by members of our community—which may include Christmas carols, Hanukkah & Klezmer music, solstice songs, and so on—to be performed at a Holiday concert in December. Chorale (Fall) students meet 3 times per week, including both standard Chorale rehearsals, as well as a dedicated meeting for members to learn singing technique, score navigation, and additional or challenging material as needed. Members of Chorale (Fall) do not need to

audition or read sheet music, but they do need to be able to learn parts by ear. Advanced pianists may audition to be a Chorale accompanist– interested musicians should contact the director. Note that interested freshmen may sign up for an entire year of Chorale (Fall and Spring) for a full credit and be exempted from the Grade 9 visual arts requirement.

### **Chorale (Spring): Beatles** (Grades 9 – 12)

The Chorale is BB&N's large singing ensemble, which has 25-40 members and performs both at in-school events and in surrounding communities. Unlike the Knightingales, which is voice-only, the Chorale performs many musical styles, with rock band, orchestra, or piano accompaniment. In the Spring 2025 season, the Chorale will learn and perform songs written by members of The Beatles. These themes come only once in your high school career– if you are interested in the music of John, Paul, George and Ringo, now is the time to take Chorale (Spring)! Students meet 3 times per week, including both standard Chorale rehearsals, as well as a dedicated meeting for Chorale (Spring) members to learn singing technique, score navigation, and additional or challenging material as needed. Members of Chorale (Spring) do not need to audition or read sheet music, but they do need to be able to learn parts by ear. The Beatles program will have an auditioned band– interested musicians should contact the director. Note that interested freshmen may sign up for an entire year of Chorale (Fall and Spring) for a full credit and be exempted from the Grade 9 visual arts requirement.

### **Intermediate/Advanced Chorale** (Grades 10 – 12)

The Chorale is BB&N's large singing ensemble, which has 25-40 members and performs at both in-school events and in surrounding communities. Unlike the A Cappella ensemble, which focuses on voice-only popular music, the Chorale performs many musical styles, with rock band, orchestra, or piano accompaniment. In the Fall 2024 season, the Chorale will learn and perform songs for seasonal holidays celebrated by members of our community– which may include Christmas Carols, Hanukkah & Klezmer music, Solstice songs, and so on– to be performed at a holiday concert in December. In the Spring 2025 season, the Chorale will learn and perform songs written by members of The Beatles. These themes come only once in your high school career– if you are interested in the joyous harmonies of the Holidays, or the music of John, Paul, George and Ringo, now is the time to take Chorale! Members of Chorale do not need to audition or read sheet music, but they do need to be able to learn parts by ear. Advanced pianists may audition to be a Chorale accompanist and the Beatles program will have an auditioned band– interested musicians should contact the director. Intermediate/Advanced Chorale members rehearse twice per week, with additional dress rehearsals and performances, and receive 0.5 arts credit for a full year of participation.

Prerequisite: Chorale (Fall) and/or Chorale (Spring)

## **DANCE**

### **Dance Foundations** (Grade 9)

This course exposes students to a variety of dance styles and choreographers from the twentieth century. Students learn about classical jazz, contemporary hip hop, swing, and musical theater dance while completing progressions across the floor and short routines based on the style being studied. Beginning and experienced dancers are welcome.

### **Dance: Contemporary** (Grades 10 – 12)

This contemporary dance course focuses on various styles of contemporary and modern dance. Classes begin with learning about rudimentary and fundamental technique while working towards deeper flexibility and strength using a ballet barre. Progressions across the floor and building technique in the center of the room make up the middle section of each class, while routines and working towards performances will conclude classes. Students are encouraged to work towards building their own choreography for solo assignments, as well as group work for informal performances in class. Assignments include choreography work, research of choreographers, as well as some journal writing. No prior dance



experience is required; all levels are welcomed and encouraged. This course meets two times per week for one semester (either Fall or Spring). This course receives 0.5 arts credit for each semester taken and may be taken in conjunction with two Health and Fitness classes per week to meet the athletics requirement for one season. Students who take two semesters of Dance and do not concurrently take Health and Fitness receive credit for one athletics season.

#### **Dance: Musical Theater and Swing** (Grades 10 – 12)

This course focuses on the styles of the great legendary choreographers of musical theater, both past and present, as well as partner work and high energy jazz dance as related to big band music for swing style. This class is a great opportunity for students interested in theater and who want to be more proficient in choreography or for dancers who want to add a variety of styles into their technique. No prior dance experience is required; all levels are welcomed and encouraged. This course meets two times per week for one semester (either Fall or Spring). This course receives 0.5 arts credit for each semester taken and may be taken in conjunction with two Health and Fitness classes per week to meet the athletics requirement for one season. Students who take two semesters of Dance and do not concurrently take Health and Fitness receive credit for one athletics season.

### **FILMMAKING AND AUDIO PRODUCTION**

#### **Filmmaking: Sound and Vision** (Grades 9 – 12)

This semester-long course is a hands-on, technology-focused storytelling class that explores the unique relationship between cinematic visual storytelling and the world of sound design and scoring. Using cameras and microphones as paintbrushes, students explore the language of cinema and sound, developing short personal pieces that focus on artistry and personal voice. Every student gets a chance to be a director, sound designer, composer, editor, and performer. Students learn the basics of audio production using Digital Audio Workstation (DAW) software such as Soundtrap, Garageband, or Logic Pro, and are introduced to video editing in Adobe's Premiere Pro.

#### **Intermediate Filmmaking** (Grades 10 – 12)

Intermediate Filmmaking combines elements of film history and appreciation with a hands-on approach to the cinematic arts. It starts by examining film in its simplest form: traditional hand-drawn animation. The class explores the complicated history of animation while also examining the technical challenges of the medium. Each student creates a short cartoon portrait of themselves and in the process learns advanced editing skills, including masking, keyframe animation, and rotoscoping. The second half of the year focuses on personal documentary filmmaking, with students working both individually and in collaborative groups to plan, shoot, and edit short personal works. The filmmaking program uses the Adobe creative suite of applications, with emphasis on Premiere, Photoshop, and After Effects. A primary goal of media literacy is achieved through a combination of hands-on projects and in-class viewings and discussions.

Prerequisite: Filmmaking: Sound and Vision

#### **Advanced Filmmaking** (Grades 11 – 12)

Advanced Filmmaking takes a deeper dive into the world of cinema, building on the knowledge gained in the introductory Filmmaking course. This course focuses on developing one's individual voice within the medium. What do you have to say? Who needs to hear it? Students focus on developing unique stories for film pulled from their own experiences. Students further their media literacy by having open, candid discussions about media, how it manipulates, and how to be both an effective content creator as well as a critical thinker. Between these discussions and creating their own content, students develop a critical approach to filmmaking. Enrollment is limited.

Prerequisite: Intermediate Filmmaking

### **Advanced Filmmaking II (Grade 12)**

What is the future of filmmaking and visual storytelling? Advanced Filmmaking II looks to explore these questions and more through the adoption of new technologies and new tools for creating. In this course, students explore how virtual reality (VR) and 360-degree video can create a new kind of viewer experience through the creation of our own VR and 360-degree video content. In addition, students continue developing their cinematic language through the examination and dissection of important works from cinema history.

This course is only offered during Trimesters 1 and 2 and may run concurrently with Advanced Filmmaking.

Prerequisite: Advanced Filmmaking

### **Podcasting (Grades 9 – 12)**

This semester-long course is for students who are interested in learning how to use audio on the internet to share stories, host interviews, create audio theater, or prepare themselves for a world reliant on audio presentations, virtual interviews, and meetings. The class focuses equal parts on technology and performance theory, beginning with examining example podcasts. The class then splits into two groups rotating between two teachers; one providing hands-on experience with technology and the other presentational instruction (all students experience both aspects of the course). The class then culminates in personal and group projects led by both teachers, focusing on an interview including field recording, a multi-participant group podcast, and a short radio-style play. On the technology side, students investigate how live streaming works, including recording and editing software, microphone types and best use techniques, the basics of sound mixers and processing, field recording, and foley. As a content creator/presenter students explore how to engage and entertain an audience with a range of styles. Speakers learn how to share the passion of their subjects, develop interview techniques, develop scripts, and analyze source material.

## **INSTRUMENTAL ENSEMBLES**

### **Chamber Music (Grades 10 – 12)**

Advanced instrumentalists may elect to participate in smaller music ensembles, called Chamber Music Ensembles. Chamber Music Ensembles are formed based on instrumentation, students' musical strengths, and students' schedules; therefore, placement in a Chamber Music Ensemble is not guaranteed. Chamber Music Ensembles prepare repertoire for two formal concerts per year, with additional performance opportunities like assemblies, class meetings, or receptions. Practicing individual parts, score study, and active listening fill the necessary learning time outside of class. A Chamber Music Ensemble may choose to focus on music composition or music theory in addition to or in lieu of preparing for musical performances, based on student interest and scheduling. String, woodwind, and brass players may choose to participate in the Orchestra for two days per week and in one Chamber Music Ensemble, which amounts to 1.0 arts credit for each year of participation. Students who only participate in one Chamber Music Ensemble earn 0.5 arts credit for each year of participation and each additional Chamber Music Ensemble earns an additional 0.5 arts credit for each year of participation. Admission to the Chamber Music Ensembles is by audition only (held before or during the first week of school).

### **Orchestra and Chamber Music (Grade 9)**

The Upper School Orchestra is an ensemble that features string, woodwind, and brass players. Comprised of 30 – 40 students from Grades 9 – 12, the Orchestra prepares two formal concerts per year, with repertoire that centers on classical music and also broadens instrumental students' horizons with contemporary and collaborative projects. Past performances have included Mozart Symphony Nos. 35, 41; Beethoven Symphonies Nos. 1, 3, 5, 6, 7; Schubert Symphonies Nos. 5, 8; overtures, concerto movements, and individual pieces ranging from Bach and Handel to Copland and modern American composers. Examples of exploratory collaborations include "Shri Raga," a new structured improvisation developed in collaboration

with a BB&N student tabla player and Terry Riley's "In C," performed outdoors with members of the jazz ensembles and faculty musicians. Admission to Orchestra is based on audition (held before or during the first week of school) and students are expected to play their instruments at an intermediate to advanced student level as well as practice outside of rehearsals, complete occasional written reflection assignments, and participate verbally and non-verbally during rehearsal.

In Grade 9, Orchestra students rehearse three times per week, twice in the Upper School Orchestra and once in a Chamber Music ensemble or additional repertoire study class. Pianists and harpists are admitted to Orchestra on a case-by-case basis, and rarely in Grade 9, however opportunities to re-audition for Orchestra and audition for Chamber Music become available again in Grade 10.

### **Orchestra (Grades 10 – 12)**

The Upper School Orchestra is an ensemble that features string, woodwind, and brass players. Comprised of 30 – 40 students from Grades 9 – 12, the Orchestra prepares two formal concerts per year, with repertoire that centers on classical music and also broadens instrumental students' horizons with contemporary and collaborative projects. Past performances have included Mozart Symphony Nos. 35, 41; Beethoven Symphonies Nos. 1, 3, 5, 6, 7; Schubert Symphonies Nos. 5, 8; overtures, concerto movements, and individual pieces ranging from Bach and Handel to Copland and modern American composers. Examples of exploratory collaborations include "Shri Raga," a new structured improvisation developed in collaboration with a BB&N student tabla player and Terry Riley's "In C," performed outdoors with members of the jazz ensembles and faculty musicians. Admission to Orchestra is based on audition (held before or during the first week of school) and students are expected to play their instruments at an intermediate to advanced student level, as well as practice outside of rehearsals, complete occasional written reflection assignments, and participate verbally during rehearsal. Pianists and harpists are admitted to Orchestra only on a case-by-case basis, though are always welcome to audition for Chamber Music. This course meets two times per week and receives 0.5 arts credit for each year of participation.

### **Jazz (Grade 9) (Grade 9)**

The emphasis of the Grade 9 Jazz Ensemble is on improvisational techniques and group playing, with musical selections composed by jazz greats. In addition, students will explore the history of jazz music and various jazz styles. There are at least two performances per year. Admission to Jazz 9 is based on audition (held during spring or during the first week of school), 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. Freshmen participating in Jazz 9 continue with the course for the entire year.

### **Jazz Ensemble (Grades 10 – 12)**

Participating within a small jazz ensemble, students rehearse and perform compositions by jazz greats such as Duke Ellington, Thelonious Monk, Charles Mingus, and others. The art of ensemble playing and improvisation is the primary focus of this course. Students with the appropriate backgrounds may also contribute as composers or arrangers. There are at least two performances per year. Admission to the Jazz Ensemble is by audition only (held during the first week of school). This course meets one time per week (Monday or Tuesday evening) and receives 0.5 arts credit for each year of participation.

## **THEATER**

### **Theater Arts and Performance (Grade 9)**

This semester-long course provides students the opportunity to dive into the world of theater through a creative, energetic, and interactive exploration of the key skills to create stories for the stage. Over the length of the course, students explore character and story development through the lens of actor, director, designer, and playwright. The course provides an entry point to further theatrical electives as well as a wonderful opportunity to develop communication and interpersonal skills.

**Theater Arts: Acting and Directing** (Grades 10 – 12)

This semester-long course is designed to provide students the opportunity to explore the world of the actor and director. Studies include script analysis, character development, improvisation, acting for the stage, plays of the last fifty years, notable theater creators, and acting methodologies. This course is not only for students with a passion for acting and directing, but also for students interested in developing key life skills in a safe and creative space. The course culminates in a student presentation of either something studied during the course or of a piece of work created by the group.

**Theater Arts: Playwrights of the Future** (Grades 10 – 12)

This semester-long course is designed for students with an interest in exploring the world of the playwright. Designed for students interested in creative writing and theater arts, the class not only looks at notable works from the last fifty years, but also the way in which theater storytelling has evolved over the same amount of time. Students explore the multiple ways in which stories can be created for the stage, culminating with creating a one act play to be performed by students in the Spring.

**Theater Arts: Shakespeare and the Stage** (Grades 10 – 12)

This semester-long course is ideal for students who are interested in exploring the works of William Shakespeare, the Bard, or the world of theater. Students look at how to perform theater based on the principles of John Barton and also explore all notable theater directors who have reinvented the ways in which his works can be performed. Creators such as Peter Brook, Sir Peter Hall, and Tina Packer are examined as students find their own way of creating engaging Shakespeare productions for a new audience.

**Advanced Theater Arts** (Grades 11 – 12)

Advanced Theater Studies includes an intensive study of William Shakespeare, one American Playwright, one international playwright, a theater creator, and one notable development to the theater world since 1900. Students have the opportunity to work with their peers in an ensemble setting towards performing a piece built around their studies or directing a main stage play during the Spring.

Prerequisite: Theater Arts

**Theatrical Production** (Grades 9 – 12)

Students who participate in one of the School's theatrical productions through acting, stagecraft, or costume design may elect to participate in this Theatrical Production course. Satisfactory completion of this course includes full participation in the show (play or musical) along with the completion of a rehearsal journal. The rehearsal journal documents the student's weekly activity, the development of skills and knowledge in the role, and includes research and critical observations of the process. Additionally, students regularly meet with the show's Director to discuss progression and goals. This course receives 0.25 arts credit for each season of participation.

**Advanced Theatrical Production** (Grades 10 – 12)

Students who participate in one of the School's theatrical productions through acting, stagecraft, or costume design may elect to participate in this Advanced Theatrical Production course after the successful completion of at least two seasons of Theatrical Production. Satisfactory completion of the course includes full participation in the show (play or musical) along with the completion of a rehearsal journal. The rehearsal journal documents the student's weekly activity, the development of skills and knowledge in the role, and includes research and critical observations of the process. Additionally, students completing this course at the advanced level write a final paper on the production. The final paper discusses their personal progression through the process, includes a critical examination of the production performed at BB&N, and compares BB&N's production to previous productions of the show. Students also regularly meet with the show's Director to discuss progression and goals. This course receives 0.25 arts credit for each season of participation.

Prerequisite: Completion of two trimesters of Theatrical Production

## ATHLETICS ALTERNATIVE ACTIVITIES

**Artistic Independent Activity:** Students with a major commitment and demonstrated ability in the arts (Grades 9 – 12) who participate in a significant arts program outside of BB&N may apply for a Waiver for Artistic Independent Activity. This Waiver allows students to continue the pursuit of a non-BB&N arts endeavor and waives the requirement to participate in BB&N athletics for that season. All Waiver for Independent Activity (WIA) Forms must be submitted to the Head of the Arts Department no later than the first week of seasonal tryouts. The committee reviews all WIA Forms and notifies students if the activity is approved. WIA Forms are available in the Athletics Department Office and on the School's website.

Students in Grades 10 – 12 who receive an exemption for an Artistic Independent Activity are expected to participate in the Athletics Program for at least one other season per academic year. Students in Grade 9 who receive an exemption for an Artistic Independent Activity are expected to participate in the Athletics Program for at least two other seasons per academic year.

Although a Waiver for Artistic Independent Activity may be granted, non-BB&N art programs do not fulfill the two-year Arts graduation requirement.

**Dance:** Students in Grades 10 – 12 taking Dance: Contemporary and/or Dance: Musical Theater and Swing have the option to take these courses for athletics credit in addition to arts credit. These courses receive .5 arts credit for each semester taken and must be taken in conjunction with two Health and Fitness classes per week to meet the athletics requirement for one season. Students who take two semesters of Dance and do not concurrently take Health and Fitness receive credit for one athletics season.

**Studio Arts: Afternoon:** Students who have a true interest in art may participate in the Studio Arts: Afternoon course two days per week (Monday, Tuesday, or Thursday from 3:30 – 5:00 p.m.) For students in Grade 9, this course is only available during the winter or spring season. This course receives 0.25 arts credits for each trimester of participation and must be taken in conjunction with two Health and Fitness classes per week to meet the athletics requirement for that season.

**Theatrical Program:** Three faculty-directed plays and one senior-directed play are staged each year.

**Acting:** Auditions are open to the entire student body, and students with any level of acting experience are encouraged to audition. All students get the opportunity to enjoy a comprehensive production experience in a creative and empowering environment from the first day of rehearsals to the final performance. Rehearsals take place after school (Monday – Friday) and Saturday mornings during the eight-week rehearsal period.

**Stage Crew:** This program is open to all students interested in learning about scenery, lighting design, and technical production. Students help design, construct, and paint the scenery, as well as install lighting for the shows. Students also participate in the stage crew by shifting scenery, operating lighting and sound boards, and utilizing other equipment such as followspots and fog machines. Students attend four after-school sessions per week and Saturday mornings as production week approaches.

**Costume Design:** This program is open to students who wish to work under the supervision of the Costume Designer to develop and construct costumes used in the School's theater productions. Students learn about costume history, millinery, costume props and accessories, hair and makeup design, practical machine and hand-sewing skills, pattern reading, pattern drafting and draping, and all other aspects of costume building. Students attend three to four after-school sessions per week.

**Musical Pit Orchestra:** Pit orchestra musicians may only qualify at the discretion of the pit orchestra director and musical directors. In such cases, the rehearsal commitment would include rehearsals with the cast, significant individual practice time, and all regularly scheduled pit orchestra rehearsals and

performances. Depending on the needs of the show and the particulars of the instrumental part, the rehearsal commitments may be altered by the pit orchestra director.

Participation in a BB&N theater production, through acting, stage crew, costume design, or musical pit orchestra waives the requirement to participate in BB&N athletics for that season and earns credit for participation in an interscholastic sport for one season per year.

### **Petropoulos Art Scholars Program**

Each year the Arts Department creates a varied program of extracurricular events that are of interest to motivated performing and visual arts students. The program includes sessions with visiting artists, workshops on the use of new materials or techniques, and field trips to galleries, museums, artist studios, and theaters. Students who participate in 75 – 80 percent or more of these enriching events are designated as Petropoulos Art Scholars at the end of the academic year.

**Global Online Academy Courses:** The following arts courses are offered to students in Grades 11 and 12 through Global Online Academy:

- **Arts Entrepreneurship** (Spring)
- **Graphic Design** (Fall and Spring)

For more information on this course, please refer to the Global Online Academy section of this Program Planning Guide.

### **Courses Not Offered in 2024 – 2025**

- Audio Production and Music Technology
- Advanced Audio Production and Music Technology
- Ceramics
- Chorale Band
- Chorus 9
- Dance (Grades 10 – 12)
- Filmmaking 9
- Guitar
- Gospel Band
- Orchestra 9
- Photography 9
- Queen Cover Band
- Singing: Developing the Voice
- Stagecraft
- Theater Arts: Art of Presentation
- Theater Studies 9
- Theater Studies
- Visual Arts 9
- Visual Design, Communication, and Social Media (Grade 12)
- Woodworking and 3D Design 9

## Athletics Department

**Requirements:** Students in Grades 9 – 11 must participate in the Athletics Program for three seasons each year. Students in Grade 12 must participate in the Athletics Program for at least two seasons.

- For students in Grades 10 and 11, participation in two interscholastic sports within one school year fulfills the athletics requirement for that year.
- During Grade 9, students must participate in interscholastic sports for at least two seasons.
- By the end of Grade 10, students must participate in at least three interscholastic sports in total.
- Students new to the school in Grade 10 must participate in at least two interscholastic sports within the academic year.
- Participation in a school theatrical production meets the interscholastic sport requirement for only one season per year.
- Participation in two theatrical productions within one school year does not fulfill the interscholastic sports requirement in Grade 9 nor fulfill the athletics requirement for students in Grades 10 and 11.

FALL SEASON			
<b>Interscholastic: Boys</b>  Cross Country V, JV Football V, JV Soccer V, JV, 3 (22) Team Manager	<b>Interscholastic: Girls</b>  Cross Country V, JV Field Hockey V, JV, 3 (18) Soccer V, JV, 3 (22) Volleyball V, JV (12) Team Manager	<b>Non-Interscholastic: All-Gender</b> Game Manager  Health and Fitness Sculling Strength and Conditioning	
WINTER SEASON			
<b>Interscholastic: Boys</b>  Basketball V, JV (18) Fencing V Hockey V, JV (21) Squash V (12) Team Manager	<b>Interscholastic: Girls</b>  Basketball V, JV, 3 (15) Hockey V, JV (21) Squash V (12) Team Manager	<b>Interscholastic: All-Gender</b> Fencing V Wrestling V Team Manager	<b>Non-Interscholastic: All-Gender</b>  Game Manager Health and Fitness Rock Climbing (20) Strength and Conditioning (20)
SPRING SEASON			
<b>Interscholastic: Boys</b>  Baseball V, JV (18) Lacrosse V, JV (30) Crew V, JV Tennis V, JV (12) Team Manager	<b>Interscholastic: Girls</b>  Softball V, JV (15) Lacrosse V, JV (18) Crew V, JV Tennis V, JV (12) Team Manager	<b>Interscholastic: All-Gender</b>  Sailing V (20) Golf V, JV (12) Track and Field V Team Manager	<b>Non-Interscholastic: All-Gender</b>  Game Manager Health and Fitness Strength and Conditioning

For interscholastic teams, a tryout process will be used if necessary. Each team must have at least the required number of players in order to compete at an interscholastic level. If there are an insufficient number of players, the team will not be offered. Certain varsity teams limit roster size; those teams, along with the maximum number of athletes per team, are indicated in parenthesis above. If changes to roster size are required, the head coach will consult with the Director of Athletics, who will make the final determination. During Senior Spring Project, a senior is not allowed to participate in a Junior Varsity Team if that senior has not previously played the sport.



## **PROGRAM DESCRIPTIONS**

### **Health and Fitness (Grades 9 – 12)**

Offered all three seasons, the Health and Fitness course emphasizes the concept of a sound mind in a healthy body. Through this individualized program, students participate in physical training based on their needs and interest and develop their mental and physical potential through relaxation and exercise. Students learn to create a balance between the four pillars of health: getting enough sleep, eating nutritious, healthy, and delicious food, exercising to power up the body and mind, and dealing positively with stress. Students in Grades 10 – 12 attend four classes per week during the regular academic day. Students in Grade 9 attend four after-school classes per week (Monday – Thursday), each lasting for one hour. These include one yoga class, one class devoted to nutrition and principles of training, and two classes of physical conditioning.

### **Instructional Tennis (Grades 9 – 12)**

Offered in the fall, this course is for students who are novices at tennis and would like to improve basic tennis skills under the guidance of experienced coaches. Students attend four after-school classes, each lasting 75 minutes. Advanced tennis players or players on the previous year's tennis team may not enroll in this course.

### **Managing (Grades 10 – 12)**

#### **Game Manager**

Game Managers assist the Athletics Department in a variety of ways, such as running a game clock, setting up equipment prior to a game, keeping a scorebook, and helping with field clean-up following a game. Students who wish to be Game Managers are assigned by the Athletics Department to attend a variety of games based on the needs of the department. The time commitment is typically between four and six hours per week. Students may enroll in either the Team Manager or Game Manager program for only one season per academic year.

#### **Team Manager**

Team Managers are assigned by the Athletics Department to assist a specific athletics team. Responsibilities may include attending all home games and some practices and traveling with the team to away games. Additional responsibilities may include transporting the medical kit, providing water bottles, keeping a scorebook, and other tasks as assigned by coaches. The time commitment is typically between six and ten hours per week. Students may enroll in either the Team Manager or Game Manager program for only one season per academic year.

### **Rock Climbing (Grades 9 – 12)**

Offered in the winter, this course provides students with instruction on climbing and belaying. Students attend three after-school classes per week, each lasting two hours. The School provides all equipment as well as transportation to and from the facility (Central Rock Gym in Watertown). Enrollment in this course is limited; preference is given to students in Grade 12.

### **Sculling (Grades 9 – 12)**

Offered in the fall, this course is intended for students who are novices in the sport of sculling and wish to improve their skills under the guidance of experienced rowing coaches. Students attend three after-school classes each week (Monday – Thursday), each lasting 90 minutes. Practices occur in the Fitness Center and on the Charles River, rowing out of the BB&N Boathouse. No previous rowing experience is necessary.

### **Strength and Conditioning (Grades 10 – 12)**

Offered all three seasons, the Strength and Conditioning course is designed for students who are preparing for and aspiring to play on a varsity team. Topics that are taught include strength training, conditioning,

speed development, and agility training. Students attend three after-school classes per week (Monday, Wednesday, and Friday). Enrollment is limited to students in Grades 10 – 12.

### **ALTERNATIVE ACTIVITIES**

**Athletic Independent Activity:** Students with demonstrated ability, history of participation, and a major commitment to training for a sport or activity that BB&N does not offer (such as riding, skiing, swimming, or figure skating) may apply for a Waiver for Athletic Independent Activity. This waiver allows the student to participate in the non-BB&N sport or activity while waiving the requirement to participate in a BB&N athletics program for that season. Some non-BB&N activities, such as participation on a swimming team, grant credit for participation in an interscholastic sport. All Waiver for Independent Activity (WIA) Forms must be submitted to the Athletics Department no later than 30 days prior to the first day of sports for that season. The committee will review all WIA Forms and notify students prior to the start of the athletics season if the activity is approved. WIA Forms are available in the Athletics Department Office and on the School's website.

Note that 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." For example, a student who participates in soccer may not also receive athletics credit for participation in a club soccer program.

#### **Other Independent Activities:**

**Artistic Independent Activity:** Students with a major commitment and demonstrated ability in the arts (Grades 9 – 12) who participate in a significant arts program outside of BB&N may apply for a Waiver for Artistic Independent Activity. This Waiver allows students to continue the pursuit of a non-BB&N arts endeavor and waives the requirement to participate in BB&N athletics for that season. All Waiver for Independent Activity (WIA) Forms must be submitted to the Head of the Arts Department no later than the first week of seasonal tryouts. The committee reviews all WIA Forms and notifies students if the activity is approved. WIA Forms are available in the Athletics Department Office and on the School's website.

Students in Grades 10 – 12 who receive an exemption for an Artistic Independent Activity are expected to participate in the Athletics Program for at least one other season per academic year. Students in Grade 9 who receive an exemption for an Artistic Independent Activity are expected to participate in the Athletics Program for at least two other seasons per academic year.

Although a Waiver for Artistic Independent Activity may be granted, non-BB&N art programs do not fulfill the two-year Arts graduation requirement.

**Dance:** Students in Grades 10 – 12 taking Dance: Contemporary and/or Dance: Musical Theater and Swing have the option to take these courses for athletics credit in addition to arts credit. These courses receive .5 arts credit for each semester taken and must be taken in conjunction with two Health and Fitness classes per week to meet the athletics requirement for one season. Students who take two semesters of Dance and do not concurrently take Health and Fitness receive credit for one athletics season.

**Math Team:** The Math Team meets after school two times per week during the fall and winter seasons. Students may participate in the Math Team for either the fall or winter season and must take two Health and Fitness classes per week to meet the athletics requirement for that season. Participation in Math Team is not considered participation in an interscholastic sport for that season.

**Robotics Team:** The Robotics Team meets daily during the fall trimester. Students in who wish to participate on the Robotics Team are exempt from the athletics requirement for the fall season. Participation in the Robotics Team is considered participation in an interscholastic sport for that season.

**Service Learning:** Upper School students in Grades 10 – 12 with a significant interest in pursuing a specific commitment to service learning may apply for a Season of Service Learning in lieu of one athletics season per academic year. Students must demonstrate significant dedication to their area of interest through a documented commitment of 40 hours during the season. At the end of the service, students are required to write a 500-word reflective essay. Participation in a Season of Service Learning is not considered participation in an interscholastic sport. During Senior Spring Project, only seniors who have already completed the Service Learning graduation requirement and have not already completed a Season of Service during senior year are allowed to do a Season of Service in lieu of an athletics season.

Season of Service Learning Proposal Forms must be submitted to a Service Learning Coordinator during the first week of seasonal tryouts. The proposals are reviewed individually and approved by the Service Learning Coordinators. Season of Service Learning Proposal Forms are available on the BB&N Service Learning website as well as in the Service Learning Coordinators' offices.

**Studio Arts: Afternoon:** Students who have a true interest in art may participate in the Studio Arts: Afternoon course two days per week (Monday, Tuesday, or Thursday from 3:30 – 5:00 p.m.) For students in Grade 9, this course is only available during the winter or spring season. This course receives 0.25 arts credits for each trimester of participation and must be taken in conjunction with two Health and Fitness classes per week to meet the athletics requirement for that season.

**Theatrical Program:** Three faculty-directed plays and one senior-directed play are staged each year.

**Acting:** Auditions are open to the entire student body, and students with any level of acting experience are encouraged to audition. All students get the opportunity to enjoy a comprehensive production experience in a creative and empowering environment from the first day of rehearsals to the final performance. Rehearsals take place after school (Monday – Friday) and Saturday mornings during the eight-week rehearsal period.

**Stage Crew:** This program is open to all students interested in learning about scenery, lighting design, and technical production. Students help design, construct, and paint the scenery, as well as install lighting for the shows. Students also participate in the stage crew by shifting scenery, operating lighting and sound boards, and utilizing other equipment such as followspots and fog machines. Students attend four after-school sessions per week and Saturday mornings as production week approaches.

**Costume Design:** This program is open to students who wish to work under the supervision of the Costume Designer to develop and construct costumes used in the School's theater productions. Students learn about costume history, millinery, costume props and accessories, hair and makeup design, practical machine and hand-sewing skills, pattern reading, pattern drafting and draping, and all other aspects of costume building. Students attend three to four after-school sessions per week.

**Musical Pit Orchestra:** Pit orchestra musicians may only qualify at the discretion of the pit orchestra director and musical directors. In such cases, the rehearsal commitment would include rehearsals with the cast, significant individual practice time, and all regularly scheduled pit orchestra rehearsals and performances. Depending on the needs of the show and the particulars of the instrumental part, the rehearsal commitments may be altered by the pit orchestra director.

Participation in a BB&N theater production, through acting, stage crew, costume design, or musical pit orchestra waives the requirement to participate in BB&N athletics for that season and earns credit for participation in an interscholastic sport for one season per year.

## English Department

### ENGLISH 9

*Who am I? What does it mean to belong? Who am I in relation to others?* English 9 looks at journeys characters undertake both in the world and within the self. Students use analytical, personal, and creative writing to develop critical thinking skills, discover connections, and consider their own identities. Starting with *The Odyssey* and *The Leavers* and complemented by contemporary short stories and poetry, students work on the foundational skills of BB&N English students: how to ask a meaningful question, how to annotate a text, how to be part of a classroom community, and how to develop and express authentic ideas. Students also continue their study of vocabulary, spelling, punctuation, syntax, and grammar.

### ENGLISH 10

English 10 focuses on texts by a diverse range of authors that encourage students to evaluate their place in the world. Combining American texts, such as *The Great Gatsby* and *Their Eyes Were Watching God*, with world literature, such as *We Need New Names* and “*Master Harold*”... *and the boys*, students explore their own identity development as well as their relationship to communities both familiar and other. In addition to using the classroom as a space for inquiry and exploration of ideas both personal and analytical, students continue to hone their skills as writers. With particular emphasis placed upon crafting and proving an analytical argument, teachers build upon the skills discussed and practiced in English 9. Class-wide debates in the winter term provide practice in research as well as valuable experience in collaboration and public speaking. Students also continue the study of vocabulary, usage, and grammar.

### ENGLISH 11

#### Advanced Placement English Literature and Composition

All Grade 11 English courses focus on developing analytical thinking, reading, and writing skills to a more sophisticated level. The third trimester’s work includes the writing of an eight- to ten-page profile about an interesting person at work. While all juniors are enrolled in an Advanced Placement (AP) English Literature and Composition course, each course prepares students to take either/both the AP English Language and Composition exam or/and AP English Literature and Composition exam.

#### African American Literature: Race and Identity

This course presents an introduction to the development and evolution of African American life and culture through literature. Students will read works spanning four centuries, focusing on the underlying historical context, cultural values, and modes of expression. Beginning with poetry written during the 1700s and the slave narrative of Douglass, students will examine the primary issues facing African Americans during the eighteenth and nineteenth centuries. They will address the complex issues and divergent perspectives in major representative texts, such as Larsen’s *Passing*, Morrison’s *The Bluest Eye*, Baldwin’s *The Fire Next Time*, Walker’s *The Color Purple*, and Coates’ *Between the World and Me*. Students will also read selected short stories, essays, and poetry by various authors to deepen their understanding of how African Americans constructed racial and cultural identities. Through reading, writing, and student-centered discussion, we will explore and redefine concepts of freedom, citizenship, class, color, and gender within the black community.

Participation in both United States History (Honors): African American History and African American Literature: Race and Identity (AP English Literature and Composition) will be noted on a student’s transcript as completion of the African American Studies Program.

#### Aliens

Sometimes people feel like aliens even in their own lives. Consider, for example, ordinary Japanese Americans suddenly imprisoned during WWII, some young adults who discover the dizzying truth of their childhood identities, Chippewa tribal members whose culture and very existence are threatened by encroaching white society. These alienated individuals experience a disconnection from the larger entity—a

family, nation, race, culture—with which they once identified and confront what it is to be a member of that larger entity as well as an individual. Students will have the opportunity to reflect on their own experiences, too, in writing. Texts may include Trevor Noah's *Born a Crime*, Ishiguro's *Never Let Me Go*, Otsuka's *When the Emperor Was Divine*, Erdrich's *Tracks*, Baldwin's *The Fire Next Time*, and Larsen's *Passing*, as well as stories and poems by Chimamanda Ngozi Adichie, Toni Cade Bambara, Alice Munro, Ernest Hemingway, Nathaniel Hawthorne, Robert Frost, Gwendolyn Brooks, and others.

### **British Literature**

For over a thousand years, lovers and rogues, heroes and traitors, serious souls, irreverent fools, royal figures, and common folk have all come to life in the literature of this little corner of Europe, Britain. Discover how hilarious and harrowing these works can be—and how they continue to shape our understanding of ourselves and others from centuries past to the modern day. Works may include the first English epic, *Beowulf*; the witty character sketches in *The Canterbury Tales*; a play about our most famous tragic hero, Hamlet; a novel depicting the perils that beset well- and ill-behaved women in *Pride and Prejudice*; the complex social tensions of Smith's *White Teeth*; and poems by writers such as Donne, Milton, Pope, Keats, and many others. Written assignments primarily address analytical approaches to literature, though students will have opportunities to write creatively as well.

### **Dynamic Duos**

Sometimes an idea, story, or character can only best be known through its opposite, or its double, or its retelling. This course will explore individual works of literature through specific pairings: the depiction of slavery deepens once you've read both the autobiographical *Narrative of the Life of Frederick Douglass* and then the novel *Beloved*; *Heart of Darkness* benefits from a shift in gender, century, and continent in *State of Wonder*, and *Hamlet* broadens its concerns through its modern retelling in *Rosencrantz and Guildenstern are Dead*. Smaller pairings of short stories and poems will also appear throughout the year.

### **Ethics and Literature**

Can literature help us understand how to act and live ethically? Is it possible today to make meaningful statements about “right” and “wrong,” and what do we mean when we use these terms? In this class, students will study works of literature and explore the ethical difficulties they present. We will begin by studying the “Big Three” ethical frameworks: virtue ethics, deontology, and utilitarianism. We will then read *Frankenstein*, *In Cold Blood*, *Hamlet*, and *Beloved*. We'll also read excerpts from *The Philosopher's Way*, a few short stories, and other supplementary readings. Students will also demonstrate their learning by completing multi-step, extended projects centered around outreach to gain a deeper understanding of a contemporary issue of their choosing.

### **It's Complicated**

In this course, we will examine love and relationships of all types: romantic, marital, platonic, and familial. What kind of love do we celebrate, and what kind do we minimize, shame, or reject? From a dystopian society in which marriage is controlled by a right-wing theological government to the fraught relationship between a lesbian daughter and her closeted father, we will consider how our concepts of love affect our individual relationships and society's values as a whole. Possible readings may include Margaret Atwood's *The Handmaid's Tale*, James Baldwin's *Giovanni's Room*, Alison Bechdel's *Fun Home*, Toni Morrison's *The Bluest Eye*, Nella Larsen's *Passing*, Alice Walker's *The Color Purple*, Jane Austen's *Pride and Prejudice*, and Virginia Woolf's *Mrs. Dalloway*.

Participation in both United States History (Honors): Gender and Sexuality Studies and AP English Literature and Composition: It's Complicated will be noted on a student's transcript as completion of the Gender and Sexuality Studies Program.

## **Magical Realities**

A magical island with spirits, monsters, and a wizard-king. An old house haunted by restless, spiteful ghosts. A man who discovers that his dreams can alter reality. Another who wakes to find he has transformed into a large insect. For centuries, writers have incorporated elements of fantasy, magic, and unreality into their narratives to introduce suspense and mystery—but also to explore the unseen forces of their worlds and of the human mind. In this class, we will explore a diverse selection of literature that mixes realism with magic, the everyday with the fantastical. In so doing, we might just better understand ourselves and the worlds we inhabit. Main texts for the course will likely include Vonnegut's *Slaughterhouse-Five*, Kafka's *The Metamorphosis*, Shakespeare's *The Tempest*, Coleridge's *Rime of the Ancient Mariner*, Morrison's *Beloved*, Baldwin's *The Fire Next Time*, and LeGuin's *The Lathe of Heaven*. In addition, we will read a variety of short stories and poems from writers such as Nathaniel Hawthorne, John Cheever, and Ursula K. LeGuin.

## **Masks**

When characters in literature and in life experience difficult circumstances, they mask themselves for all sorts of reasons—to disguise, to deceive, to disrupt or revenge; to flirt, to critique, to conform, or defend. Whether intentional or not, such masking almost always incurs some consequence to personal identity, some confusion or disfigurement with which the masked character must ultimately reckon. Masks will examine this theme and others as we read closely and write regularly in response to literature spanning four centuries. Along with a selection of poems and essays, our main texts will include Shakespeare's *Hamlet*, Austen's *Pride and Prejudice*, Dostoevsky's *Notes From Underground*, and short stories by Franz Kafka, Octavia Butler, Manuel Gonzales, Ling Ma, and Toni Morrison. We may also read and write modest proposals.

## **Trapped Together and Alone**

What qualities and flaws emerge when people find themselves trapped together in unusual circumstances? Whether through shifting family dynamics, a hostage crisis, exile (both self-imposed or externally ordered), a writer's choice to isolate characters can serve as a way to examine the qualities that make us human, for better or worse. Through a variety of genres, students consider what traits surface in extreme conditions. In addition to novels and nonfiction works, students also consider how plays, too, present a particularly effective way of creating a sense of limited options. Texts may include Baldwin's *The Fire Next Time*, Butler's *Kindred*, Shakespeare's *Hamlet*, Patchett's *Bel Canto*, excerpts from Thoreau's *Walden*, Krakauer's *Into The Wild*, and Beckett's *Waiting for Godot*.

## **Travelers and Transients**

Through the lens of roots, one's birthplace, family, and culture; and resilience, one's creation of identity through exploration, questioning, and, at times, resistance, we will study characters and authors who remain optimistic about the future of a country that oppresses them, who persist despite facing inhospitable climates and people, who resolve to assert their full humanity at any cost. During class discussions, we will consider how the values and expectations of one's family, community, and country mold one's sense of self and relationship to one's birthplace. Readings in this course will include a wide variety of genres, including contemporary poetry, nonfiction essays, and novels, in addition to works such as Hernan Diaz's *In the Distance*, James Baldwin's *The Fire Next Time*, Frederick Douglass's *Narrative of the Life of Frederick Douglass*, Chinua Achebe's *Things Fall Apart*, Yaa Gyasi's *Homegoing*, and Tim O'Brien's *The Things They Carried*.

## ENGLISH 12

Seniors take two trimester-long English courses, offering the opportunity to read classic and modern literature, to work on a particular form of writing, or to focus more narrowly on a text.

### ENGLISH 12 FALL COURSES

#### **Doppelgangers and Distorted Mirrors**

What happens when a character meets his creepy double? It is not unusual for an author to create a character to serve as a foil for the protagonist to emphasize, through contrast, traits that reveal distinctive qualities of the main character. In the texts we read for this course, characters meet and confront their distorted selves, and we will explore the consequences of these encounters. Texts may include the following: *Song of Solomon* by Morrison, *The Strange Case of Dr. Jekyll and Mr. Hyde* by Stevenson, and *Richard III* by Shakespeare. Writing will include analytical essays, emulative pieces, and a personal essay.

#### **Get to Work**

In his classic oral history, *Working*, Studs Terkel explains that his book is “about a search...for daily meaning as well as daily bread, for recognition as well as cash, for astonishment rather than torpor; in short, for a sort of life rather than a Monday through Friday sort of dying.” Because the average American will spend roughly 90,000 hours at their job, it’s clearly worth our time to examine different types of work, its place in our lives, and the stories we are told and tell ourselves about it. Do our jobs lift us up or grind us down? Does everyone have the same ability to find “meaning” in work? If not, is that a problem? How much thought do you give to work and the place it will occupy in your life? In this class, students will study texts that explore work, workers, and how class, race, and gender shape one’s working life. Readings will include Kazuo Ishiguro’s *The Remains of the Day* and Chang-Rae Lee’s *On Such a Full Sea*. We will also read a number of supplementary texts to deepen and complicate our thinking about the world of work and our place in it.

#### **Imagine a World**

Speculative fiction transports us to both believable and fantastical worlds in which we can explore the complexities of the human experience. Rather than writing simple settings, science fiction and fantasy authors craft worlds in which the familiar challenges our preconceived notions of what will unfold in the future; whether caused by a natural disaster, disease, societal conflict, and other phenomena, world shifts call upon readers to question what they have known and imagine what could be. Science fiction and fantasy allow us to bend space-time so that we can re-examine our past and reflect on what makes us who we are. Students in this course will study how authors create characters shaped by their unique worlds and will explore how our world has shaped us as we examine our own core values and beliefs through traditional and new-age works. Readings may include selections from Asimov, Atwood, Bradbury, Butler, Clarke, Jemisin, Le Guin, Liu, Martin, Staveley, Tolkien, Vonnegut, and Wells.

#### ***Moby-Dick*: A Whale of a Work**

Though you might think that the story of a sperm whale ramming and sinking a ship in 1820 would have nothing to offer you in 2024, think again. This tale of a mad captain, his elusive prey, a tattooed harpooner, and an introspective rookie is still viewed as one of the greatest American novels. Through the many interpretations of this masterpiece, we will explore issues of race, sexuality, environmentalism, history, seamanship, science, philosophy, religion, and even modern pop culture. The opening line alone—“Call me Ishmael”—raises issues of names, culture, identity, and so much more. Come on board!

#### **Rebel Writers**

What does it mean to break with tradition? How can an author question their readers’ assumptions about nation, identity, and literature? In this course, we will focus on established authors who in their own times were considered rebels, as well as contemporary authors who are currently challenging the status quo and broadening the literary canon. Readings may include major works by Flannery O’Connor, Sinclair Lewis, Assata Shakur, and John Steinbeck, as well as shorter works by Flannery O’Connor, Assata Shakur, Carmen



Maria Machado, and John Steinbeck, as well as shorter works by Chimamanda Ngozi Adichie, Kate Chopin, Ernest Hemingway, Langston Hughes, Emily Dickinson, and Walt Whitman.

### **Redeeming the Past**

Stories have the power to heal wounds and transform individual, communal, and national identity. In this course, students will explore the restorative power of stories by reading literature in which characters, as well as authors, strive to make sense of war, family dysfunction, or personal rejection to move forward with their lives. Our ultimate concern will be to consider if and how language helps define, resolve, distort, or redeem human experience. Our readings may include Ian McEwan's *Atonement*, Rebecca Makkai's *The Great Believers*, Toni Morrison's *The Song of Solomon*, and Kazuo Ishiguro's *The Remains of the Day*, along with selected poems and essays. Students will continue to hone their writing skills through analytical, personal, and creative writing.

### **Shakespearean Power, Shakespearean Hierarchies**

The outsider becomes the Outsider, the one whom power structures repress, the one who pushes back. On the Elizabethan stage, stories enacted again and again the fierce tensions that emerge when Outsiders seek power—whether that is political, social, or personal—or seek merely to maintain their own place in the world. And again and again we see the cost of that desire for power. What then happens to the people outside of the small circles of power, to the women, people of color, and other disenfranchised characters? How rigid is the hierarchy? To explore this question, we will immerse ourselves in a number of ageless works, which may include texts such as the dark and bleak tragedies *King Lear* and *Othello*, the startling and delightful comedies *Twelfth Night* or *As You Like It*, a history play from the Henry tetralogy, as well as many of Shakespeare's sonnets. We will also examine how these plays are represented in modern culture.

### **Sibling Bonds and Rivalries**

"Blood is thicker than water." "Am I my brother's keeper?" "Mom always liked you best." From Cain and Abel to Cinderella and her stepsisters to the Simpsons' children, the interactions of siblings have been a recurrent theme of storytellers. Through the readings, in this course we will explore the complexities of sibling relationships, such as the demands of family honor in Ian McEwan's *Atonement*, the fierce rivalries in August Wilson's *The Piano Lesson*, and the life-saving bonds in Jesmyn Ward's *Salvage the Bones*. In addition to those previously mentioned, other main texts may include Shakespeare's *As You Like It* or Sophocles' *Antigone*. We will also read poetry and scientific literature related to our theme, and course assignments will include opportunities for creative emulation and personal writing as well as critical analysis.

### **Sound and Song**

In the juxtaposition of two powerful 20th-century American masterpieces by Nobel Prize-winning authors, Toni Morrison's *Song of Solomon* and William Faulkner's *The Sound and the Fury*, we examine the lives of complex families—one Black, one white—that are inextricably entwined with place, culture, and the profound legacy of slavery in America. As the characters struggle with issues pertaining to their identities and heritages, they prompt in us questions about who we *are* and who we *want* to be as individuals and as a society. The Flying Africans mythology and excerpts from *The New York Times'* recent *1619 Project* will supplement our work with the two novels. Linking those works with the present day, Jocelyn Nicole Johnson's *My Monticello*, a dystopian tale stemming from the 2017 Charlottesville conflict between white nationalists and anti-racist counter-protestors, will be the summer reading book to prime our thinking.

### **True Stories and the Personal Essay**

Truth can be stranger and more fascinating than fiction. In this course students will read short personal narratives, memoir excerpts, and expository essays to experience how literary voices that speak individual truths and reflect openly on the world can be as compelling as fiction's best-loved narrators. Students will also cultivate their own voices, sometimes playfully imitating the writers we read and other times creating

original pieces about the people, places, and experiences significant to them. Together we will discuss how to recognize good material, manage memory, and dig down for truths that are unaffected and satisfying. In weekly writing workshops during the long block, the class will review each other's work with an eye toward finishing the course with individual writing portfolios worthy of submission to contests. Readings will include essays from Joan Didion, Annie Dillard, Langston Hughes, and George Orwell, as well as excerpts from Richard Rodriguez's *Hunger for Memory*; Elizabeth Gilbert's *Eat, Pray, Love*; Alice Sebold's *Lucky*; David Sedaris' *When You Are Engulfed in Flames*; Anne Lamott's *Grace (Eventually)*, and Bryan Stevenson's *Just Mercy*.

### **Word to Ya Motha**

From graffiti to rap, Hip-Hop breathes new life into English languages. Hip-Hop is an umbrella term for art, music, dance, literature, identity, style, and politics. This course will focus on the diverse social, political, cultural, and spiritual elements represented within the various genres of Hip-Hop music through an analysis of song lyrics. Through the elements of Hip-Hop—Graffiti, MCing, DJing, and Breakdancing—we'll explore in detail how they pertain to the culture and its overall importance. In addition, various societal issues within Hip-Hop will be thoroughly examined: race, sexuality, class, authenticity, violence, gender, and censorship. Students will conduct these examinations through argumentative essays, music reviews, raps, poetry, and narrative writing. Artists explored may include KRS-One, Grandmaster Flash, DJ Kool Herc, Sugarhill Gang, OUTKAST, Queen Latifah, Jay-Z, Nas, Kendrick Lamar, Dr. Dre, Lil Kim, Tupac Shakur, and others. Authors explored may include H. Samy Alim, Jeff Chang, Geneva "Docta G" Smitherman, Joycelyn A. Wilson, Bettina Love, Elaine Richardson, and others.

## **ENGLISH 12 WINTER COURSES**

### **Fiction Writing**

In this writing-intensive workshop, students will consider published short stories by twentieth- and twenty-first-century authors, write and rewrite their own short stories, and review their classmates' short stories, preparing online commentary and participating in robust group discussions aimed at productive revision. Most weeks we'll talk craft and do practice exercises, but at least half of our meetings will be full-group workshops, the majority of our texts being stories written by and for the class. Good time management, a desire to write regularly, and a willingness to give and receive thoughtful, constructive feedback are a must for those who enroll. In addition to studying essential plot components, characterization, escalation, and the art of dialogue, we'll explore how to activate setting, how to manage narrative distance and point of view, when to use scene versus summary, where to begin and end a story, and how to slow and speed up time.

### **Four Centuries of Wit**

Like a quick wit? Every century offers works of literature that wield wit wondrously well—but what does *that* mean for *us* as twenty-first century readers? Some works seem to speak only to their era, some works appeal even now. We'll ask why this dichotomy exists and then go about the joyful task of looking for answers. We take as our core wits John Donne, Alexander Pope, and Jane Austen, from the seventeenth, eighteenth, and nineteenth centuries respectively—each author famous for wit and satire. In reading their challenging and sophisticated work, we will come to understand how authors construct wit and to see the socio-historical contexts in which their wit thrived. This course will also explore how twentieth-century wit embodies a bleakness suitable to its own historical context, and finally we will consider the very present now when students become the curators of today's wit.

### **Latin American Literature**

Over the past century, our neighbors to the south in Latin America have produced some of the boldest, most inventive fiction in the world. From the wondrous magical realism of Gabriel García Márquez, Isabel Allende, and others, to the stylistic innovations of Jorge Luis Borges and Julio Cortázar, Latin American writers have been pushing the boundaries of what novels, short stories, and poems can be. In this course, we will read a selection of works in translation from such countries as Colombia, Chile, Argentina, and Mexico. As we read, we will also investigate social and cultural trends that influenced these writers and their work. Main texts for the course will likely include García Márquez's *Chronicle of a Death Foretold*, Manuel Puig's *Kiss of the Spider Woman*, Ariel Dorman's *Death and the Maiden*, and Juan Rulfo's *Pedro Páramo*, with short stories and poetry by Jorge Luis Borges, Rosario Castellanos, Gabriela Mistral, Pablo Neruda, and others.

### **Poetry Writing**

This poetry workshop will require the original composition of a significant body of work by each student. Each week we will focus on a different form or element of poetry. We will likely compose sonnets, dramatic monologues, villanelles, and protest poems. Each week we will read samples of the types of poems we're writing and short critical pieces about form and composition. Our major texts are Mary Oliver's *A Poetry Handbook* and Mark Strand and Eavan Boland's *The Making of a Poem*.

### **Prize-Winning Literature**

Immerse yourself in an inspiring pool of literature by award-winning authors. These texts are recognized for their innovation and contribution to the world of literature. We may read works such as Jhumpa Lahiri's *Interpreter of Maladies*, Kendrick Lamar's *DAMN*, Tony Kushner's *Angels in America*, and Cormac McCarthy's *The Road*. As we read, we will explore what makes a text excellent and discuss how its impact on the reading audience has earned it a place in literary history. Additionally, we will interrogate prize-bestowing bodies, such as the Pulitzer Prize and their historical role in determining what writing is deemed exemplary. Get to know the literature that has gained widespread attention and respected accolades, and enter the discussions of readers everywhere.

### **Ralph Ellison's *Invisible Man***

Ralph Ellison's *Invisible Man* is a groundbreaking work of American literature, exploring themes of identity, race, power, and the search for selfhood in a racially divided society. This course provides a detailed examination of Ellison's iconic work and will foster students' critical thinking skills, enhance their analysis of literary texts, and offer insights into the complexities of racial identity and societal constructs such as racial prejudice, social invisibility, and the pursuit of individuality. Students will participate in discussions, delving deeply into the protagonist's journey as an enigmatic African American individual struggling in a society blind to his existence. As well as discussing the text, students will write and make projects about the layers of allegory, metaphor, and symbolism embedded in the novel. Students will also learn to appreciate the power of literature to tell stories, evoke emotion, and explore how literature can be used to challenge and reflect our own social values.

### **Reading Pop Culture**

This course is based on the premise that popular culture is never solely an amusement or diversion. The images, sounds, and stories in popular texts – television shows, film, music video, TikToks, songs, etc. – are also media through which we construct our values, identities, and goals. The norms sustained and contested by popular culture are evident in our constructions of ourselves – from the looks we aspire to and the clothes we buy to the ways we understand love and romance. In this course, we will “read” pop culture texts as we have been taught to read literature in order to think critically about the images, practices, and narratives that perpetuate and/or disrupt these norms. Readings will include essays by scholars such as John Berger, Kimberle Crenshaw, Richard Dyer, Stuart Hall, and bell hooks and memoirs by authors such as Hanif Aburraqib, Roxane Gay, and Jia Tolentino.

### **The Short Story**

At its most basic definition, a short story is a prose piece that can be read in one sitting. Yet, within that span, each tale strives to find unity, totality, truth, or at the very least a single effect. Edgar Allan Poe knew how these limitations can daunt an author: “If his very initial sentence tend not to the outbringing of this effect, then he has failed in his first step.” Similarly, John Cheever insists, “With a short story, you have to be in there on every word; every verb has to be lambent and strong. It’s a fairly exhausting task.” We will see how a range of contemporary writers takes on this task through the individual pieces selected for the 2023 and 2024 editions of *The Best American Short Stories*.

### **To Hell and Back**

This course focuses on Dante’s *Inferno*, the first and probably most widely read of *The Divine Comedy*’s three volumes. Full of colorful characters, imaginatively conceived beasts, and grotesque punishments, this epic poem depicts man’s physical and spiritual journey through darkness toward the light. We will also examine some art inspired by the *Inferno*, one of the texts that artists have most frequently depicted throughout the ages. After a quick glance at Dante’s *Purgatorio* and *Paradiso*, we will look at some modern poems his work inspired, including T.S. Eliot’s “The Love Song of J. Alfred Prufrock,” before moving on to another view of Hell in Jean Paul Sartre’s existential play *No Exit*. Students’ work will include a couple of short critical papers and the creation of their very own three circles of Hell, detailed in a written narrative and in a piece of artwork.

### **Winning Arguments**

What constitutes a persuasive argument? Are we more compelled by emotion or logic, stories or statistics? This course aims to help students build the critical thinking skills and rhetorical know-how to become informed citizens of the world. Students will read current and classic essays on the most important topics of our day, including racism and racial justice; climate change and the environment; gender identity, feminism, and LGBTQ rights; class structure and the economy; and the use of language in politics and government. Readings may include classic texts such as George Orwell’s “Politics and the English Language,” Jonathan Swift’s satire “A Modest Proposal,” and Michael Pollan’s critique of the meat industry, as well as current essays by writers such as climate change journalist David Wallace Wells, cultural critic Jia Tolentino, and activist Ta-Nehisi Coates. In addition to analyzing the techniques of these writers, students will learn to hone their own argumentative voice through writing op-eds on current topics of their choice.

### **Writing Life Stories**

In this course, a writing workshop, students draw from their own experience to craft nonfiction stories. Students will read short personal narratives that will serve as models, both in terms of style and content, for their weekly writing assignments. Their own stories will focus on experiences that they find resonant and significant. In addition to the shorter readings, students will read two full-length memoirs, one chosen from a list of suggested texts and one of the student’s own choosing. Students will work from memoir prompts and experiment with some poetry exercises as a way of finding their topics. They will put their writing through the drafting, revision, and proofreading process to work on producing pieces that are clear, well written, and compelling. The authors we will use as models include E.B. White, Joan Didion, Tim O’Brien, Amy Tan, Edward Abbey, Sarah Vowell, David Sedaris, and Leslie Jamison.

## History and Social Sciences Department

Grade 9 students enroll in Global History I: The Individual in Society. Grade 10 students enroll in Global History II: Making an Interconnected World, American and Global History: Case Studies I, or Making of the Modern Middle East. All Grade 11 students are required to take a full-year U.S. History (Honors) course (Students who take American and Global History: Case Studies I in Grade 10 take American and Global History (Honors): Case Studies II in Grade 11). Grade 11 students may take a second History and Social Sciences course with permission of the Department Head. In Grade 12, students may choose from a variety of History and Social Sciences electives. Variations to the above sequence require approval of the History and Social Sciences Department.

**Global History Sequence (Global History I and Global History II):** At the dawning of the twenty-first 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. Although Global History I and II are tightly coordinated, each course operates as an independent unit. Grade 10 students can also choose to enroll in the two-year course, American and Global History: Case Studies I and II, which completes the Global History sequence and satisfies the U.S. History graduation requirement.

### GRADE 9

#### **Global History I: The Individual in Society**

In Global History I, students face important moral questions about leadership and the role of the individual in society. The course helps students gain a sense of social responsibility and encourages them to become active global citizens. As part of their full year course of study, all Grade 9 history students take an opening unit drawn from the Facing History and Ourselves program. In exploring the Holocaust, students are challenged to consider human behavior, the place of the individual in society, the power of authority, the desire to be part of a group, the treatment of the other, and the psychology of obedience. In the next units, students continue to grapple with the relationship between individuals and society as they examine the rise of complex societies and regional empires globally in the ancient world, explore the environments in which world religions developed through an exploration of the roots of Hinduism, Buddhism, Judaism, Christianity, and Islam, and discover how the world became interconnected through overland and overseas trade and the regional networks. Writing and research skills are emphasized throughout the year. Open to Grade 9 students only.

### GRADE 10

#### **Global History II: Making an Interconnected World**

This yearlong course addresses how the highly interconnected, globalized world of today came to be, with a particular focus on the theme of exchange. Students study exchange in terms of goods and services, ideas, culture, technology, diseases, and conflict. Students explore how the global community first emerged around 1450 and how it developed to the present. The course begins with a unit on globalization in the twenty-first century, and then considers empire-building, early trade, the Enlightenment, the Scientific Revolution, the Atlantic revolutions, the Industrial Revolution, colonization and decolonization, World Wars I and II, and the Cold War, among other topics. Skills developed include critical reading of the textbook, primary sources, and other material, note-taking, research skills, and essay writing. In addition to enhanced skills and content knowledge, the course aims to foster global competency in students as they enrich their understanding of the diverse experiences and perspectives of the people globally.

Open to Grade 10 students only. This course fulfills the Modern Global History requirement.

### **American and Global History: Case Studies I**

American and Global History: Case Studies is a two-year course of study that examines global processes as well as the serendipitous creation and eventual development of the United States as a superpower from 1453 to the present. This course utilizes a series of thematic, self-contained, problem-based case studies and encourages students to develop the critical-thinking skills of the historian by exploring primary and secondary sources organized around essential questions. This course is appropriate for all learners; it relies not only on written assessments but also on project-based assessments using a variety of media.

In the first year of the course, students explore recent globalization before going back in time to examine the following case studies from the middle of the fifteenth century to the end of the nineteenth century: Trade, Conquest, and the Making of the Atlantic World; Ideology and Protest in the Age of Revolution; Constitutionalism and Distributions of Power; the American Civil War as a Catalyst for Social Change and State Formation; and Experiencing Industrial Society.

Open to Grade 10 students only. This course fulfills the Modern Global History requirement.

### **The Making of the Modern Middle East**

This course explores the making of the modern Middle East, especially in the twentieth and twenty-first centuries. Students gain an understanding of the complicated relationships of peoples within the region and their tumultuous relationship with outsiders. Topics covered by this course include: the intellectual, social, and political foundations of the Abbasid and Ottoman Empires; imperialism and the post-WWI mandate system that limited local self-determination; the creation and evolution of nation-states, focusing on Egypt, Iran, Iraq, Israel, Saudi Arabia, and Turkey; the Arab-Israeli wars; the status and treatment of stateless peoples in the region, including the Armenians (until 1990), Kurds, and Palestinians; the Iranian Revolution and its strategic, political, and ideological reverberations; the geopolitical impacts of oil; the interventions during and after the Cold War, including three American wars in Iraq and the Global War on Terror after 9/11; and the radicalization of religion and politics throughout the region. Students develop skills such as how to read the textbook, primary sources, and other material with a critical eye; note-taking; essay writing; and research skills. In addition to these enhanced skills and content knowledge, the course aims to foster global competency in students as they enrich their understanding of the diverse experiences and perspectives of the people of the broader Middle East. Open to Grade 10 students only. This course fulfills the Modern Global History requirement.

## **GRADE 11**

### **United States History (Honors)**

This course explores themes that emerge repeatedly when examining how the nation's past shapes its present and future. Each unit centers around one or more essential questions, such as: What does it mean to be an American? How inclusive is American democracy? What is the United States' role in the world, and how did it evolve? And what role has geography played in United States history, and how have geography and place shaped American identity? What is my role in a democratic society? Students refine their historical thinking, research, and communication skills through a variety of assessments and modalities, such as primary source analysis, source-based written analysis, presentations, discussions, and debates.

### **United States History (Honors): African American History**

This course explores African American History from the age of European Exploration through to the end of the twentieth century. Students will grapple with a variety of sources, perspectives and interpretations of the past to build a more coherent and nuanced understanding of American history and the role of African Americans in making it. Particular attention will be given to the intersections of race, ethnicity, class, gender, and generational differences as they have impacted African American and American history. Each unit is organized around a series of essential questions that provide a framework for exploring the social,

cultural, political and economic organization of African Americans. Students engage with a variety of primary and secondary sources including articles, books, visual texts, music and multimedia installations.

Participation in both United States History (Honors): African American History and African American Literature: Race and Identity (AP English Literature and Composition) will be noted on a student's transcript as completion of the African American Studies Program

### **United States History (Honors): Gender and Sexuality Studies**

Students in this course explore the main themes and events that have shaped this nation and grapple with a variety of sources, perspectives, and interpretations of the past to build a more coherent and nuanced understanding of American history. Students do a deep dive into the experience of traditionally marginalized and less studied groups with particular attention given to the intersections of race, ethnicity, class, gender, and sexuality. Each unit of this course explores one or more essential questions, such as: What does it mean to be an American? How inclusive is American democracy? How have societal and cultural expectations and rules concerning gender and sexuality shaped America and American institutions? How have individuals been empowered and silenced in American history by gender and sexual norms? Students refine their skills by reading various types of sources, working collaboratively to decode and analyze documents, writing analytical essays, presenting on individuals and topics that are not commonly explored, and completing social justice projects.

Participation in both United States History (Honors): Gender and Sexuality Studies and It's Complicated (AP English Literature and Composition) will be noted on a student's transcript as completion of the Gender and Sexuality Studies Program.

### **American and Global History (Honors): Case Studies II**

This is the second part of a two-year course. In this course, students explore the period between 1914 and 2016 by examining the following, potential case studies: Colonial World Wars (I and II); U.S. Government Redefined (the New Deal and After); The Cold War; Decolonization; Civil Rights (Plessy to the Voting Rights Act of 1965); and Globalization in Culture and Economy.

Students enrolled in American and Global History: Case Studies I are expected to enroll in American and Global History (Honors): Case Studies II. Any exceptions to this rule must be granted by the department. This course fulfills the Modern Global History requirement.

Prerequisite: American and Global History: Case Studies I

## **HISTORY ELECTIVES**

The courses below are open to Grade 12 students and to students in Grade 11 wishing to take a second History and Social Sciences course. Some electives require approval of the History and Social Sciences Department.

### **Advanced Placement African American Studies/African American Studies (Honors) (Grade 12)**

AP African American Studies is an interdisciplinary course that examines a constellation of African American philosophers, performers, leaders, artists, and thinkers who have reframed the landscape of American and global culture, pollinating African American artistic, literary, and intellectual history. This course is designed to provide students with a comprehensive understanding of the African American experience (social, political, and economic) from its roots in Africa to the present day, emphasizing critical thinking, analytical skills, and a nuanced perspective on the historical and contemporary issues faced by African Americans. In the third trimester, students engage in thoughtful seminars, combined with an independent research project designed to deepen their understanding of the diverse and dynamic African

American experience. The independent research project requires students to engage various outside organizations such as The Hutchins Center for African & African American Research, The Schomburg Center for Research in Black Culture in Harlem, the National Museum of African American History and Culture, and The Schlesinger Library, in Cambridge, MA.

Students who wish to take AP African American Studies must remain in the course during Senior Spring Project (SSP). A student who chooses not to continue in this course during Senior Spring Project and does not complete the final project receives credit on the transcript for completion of African American Studies (Honors). This course does not fulfill the United States history course requirement.

Prerequisite: U.S. History (Honors), U.S. History (Honors): African American History, or U.S. History (Honors): Gender & Sexuality Studies, or an equivalent U.S. History course from another institution.

### **Advanced Placement Art History / Art History (Honors) (Grade 12 only)**

This course tells the story of painting, sculpture, architecture, and the decorative arts by focusing on the College Board's selection of two hundred and fifty specific works of art spanning human history from antiquity to the present. This course meets three times each week, with a weekly double-block in the Museum of Fine Arts (MFA); students also visit the Harvard Art Museum, the Isabella Stewart Gardner Museum, and several other sites. During MFA visits, three students each week lead class by giving presentations about individual masterpieces in the museum's collection that supplement the material studied aligned with the Advanced Placement content explored that week. Later in the year, students apply their historian skills to a project that examines local public art with historical and contemporary lenses and create responses with consideration of inclusive ideals. The course may include an international trip during the first week of Spring Break. Enrollment is limited.

Students who wish to take the Advanced Placement exam may remain enrolled in the course during Senior Spring Project or prepare the final unit, on contemporary art, independently. A student who chooses not to continue in this course during Senior Spring Project and does not complete the final unit receives credit on the transcript for completion of Art History (Honors).

This course fulfills one year of the two-year History and Social Science graduation requirement but does not fulfill the required second year of the Arts Department graduation requirement. This course fulfills the Modern Global History requirement.

### **Advanced Placement Comparative Government**

This course prepares students for the Advanced Placement (AP) Comparative Government and Politics exam while also introducing key concepts and historical context in the field of political science. The primary focus of this course is careful examination of the politics of Russia, China, Mexico, Nigeria, Iran, the United Kingdom, and the European Union. The course begins with an introduction to political philosophy in order to determine what questions best guide our comparative approach to such a wide range of political systems. After considering philosophical departure points, the course provides students with an understanding of the diversity of world political systems, as well as an introduction to the frameworks and methods political scientists use to compare those systems. Students explore the historical origins and intentions of each system's organizational structure as well as each institution's pathway to potential change. Students also consider each nation's society and citizenry, its political behavior, and the impact of culture on campaigns and elections. In addition to a comparative politics textbook, this course includes excerpts from political theorists and philosophers, as well as article-length work by modern political scientists and current events coverage in both domestic and foreign media outlets. By the end of the course, students become more comfortable with analyzing the similarities and differences among countries using the language, methods, and tools of political science and specifically the sub-field of comparative politics. This course fulfills the Modern Global History requirement.



### **Advanced Placement European History**

How did global events impact European development? What led to the rise of the West? What are its consequences, both positive and negative for the world? These central questions guide the study of European and Global history as students examine the forces (economic, social, political, intellectual, and artistic) that helped to shape the world today. Students review primary and secondary sources written from European and non-European viewpoints, including films, and novels, and take part in group projects (such as presentations and rap battles) and field trips, to learn about the major developments, discoveries, events, people, trends, and key turning points in Europe, how the rest of the world influenced and shaped Europe, and the places Europeans influenced from the high Renaissance (approximately 1450) to the present. Writing skills are emphasized. This course fulfills the Modern Global History requirement.

### **Advanced Placement Human Geography**

Advanced Placement (AP) Human Geography seeks to answer two fundamental questions. First, what are the most significant world systems that dictate and define your day to day life? Second, are the consequences of those systems worth enduring in order to continue to reap the benefits they provide? For example, every year the modern agricultural system grows more and more food with fewer and fewer acres of land. Accompanying this abundance, however, are issues of health, environmental degradation, and rural poverty. Is the food worth the cost? In this course, students seek to answer questions like these. The course is, in many respects, an "appetizer sampler" of both history (looking at the origins of these world systems is as important as understanding their present-day effects) and other social sciences; the fields of environmental sustainability, anthropology, urban studies, political science, sociology, ethnic studies, demography studies, and economics all come together here, united by the course's shared interest in examining how modern global systems influence lived experiences. In this discussion-based course, students review videos and short readings drawn from current events, complete a number of projects over the course of the year, and enhance learning with local field trips. This course fulfills the Modern Global History requirement.

### **Advanced Placement Macroeconomics**

This rigorous, multi-faceted course gives students the foundational skills necessary to understand major macroeconomic topics: scarcity, opportunity cost, supply and demand, inflation, unemployment, the business cycle, fiscal policy, monetary policy, and international economics. The first trimester of the course establishes the aggregate supply and demand model by which countries' elected representatives can determine the best course of stabilization policy through their power to tax and spend. Students examine the role of these policies on budgets, deficits, national debt, and future economic growth. The second trimester digs deep into money creation through fractional reserve banking and how central banks influence the money supply through interest rate targets. The 2008 Financial Crisis and how this event affected the Federal Reserve System's tools of monetary policy is a special focus, culminating in an opportunity for students to craft a prediction of the upcoming Fed rate target decision. Analysis of domestic and global current events supplements the economic theories and data studied in the course, encouraging students to apply class concepts to recent headlines. Not only does the course seek to impart content and skills required by the field of economics, but it also aims to contribute to students' global competency through a consideration of the interdependence, diversity, and complexity of the global economy. Finally, the course assessments serve to prepare students to take the Advanced Placement (AP) Macroeconomics exam in May.

### **Advanced Placement United States Government and Politics**

In this course, students explore and discuss key political concepts, ideas, institutions, policies, and roles of the political culture of the United States. The structure of the course follows the framework of the Advanced Placement (AP) U.S. Government and Politics curriculum, which is divided into five units: Foundations of American Democracy, Interactions Among the Branches of U.S. Government, Civil Liberties and Civil Rights, American Political Ideology and Beliefs, and Political Participation. Coursework is project-based and

includes scaffolded moot court arguing of landmark Supreme Court cases, a mock congress simulation, presentations on current cases involving the First Amendment, analysis of political data, exploration of public policy topics of interest to each student, and opportunities for civic engagement. By the end of the course, students will be more knowledgeable about U.S. government and politics, more comfortable analyzing government documents and political data, and more adept at formulating and communicating their insights into American political issues in oral, written, graphical, and audio-visual formats.

### **Environmental Studies (Advanced)**

#### **Learning Locally, Thinking Globally**

In the early nineteenth century, German naturalist Alexander von Humboldt wrote, “In this great chain of causes and effects, no single fact can be considered in isolation.” Following Humboldt’s lead, this course combines science and history to consider the ways humans interact with the natural world. Units drawing simultaneously from both disciplines emphasize systems thinking to examine how societies encounter the challenges of resource use, conservation and preservation, and population growth, from the twentieth century through present day. Through lenses ranging from local to global, this course examines how shifting perceptions of nature, facts, and values over time influence our choices. Field work and case studies enable students to utilize both scientific and historical thinking skills, gain practical tools for understanding the complexity of our world, and emerge with a contemporary understanding of ecology.

This is an interdisciplinary course offered through the Science Department and the History and Social Sciences Department. This course fulfills the Modern Global History requirement.

Prerequisite: Biology

### **History Research Seminar (Honors) (Grade 12 only)**

In this course, students research and write a 15- to 20-page history research paper with the goal of submitting the finished paper to a student conference or journal. At the end of the second trimester, students present their papers to an audience of BB&N members and friends and family. Students have the opportunity to present their work at a history conference organized at BB&N during the third trimester, and students in this course have the opportunity to help with the planning of this conference. Enrollment is limited; students interested in this course should speak to the History and Social Sciences Department Head. Depending on a student’s research interests, this course may fulfill the Modern Global History requirement.

### **Psychology**

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. This course explores 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. Throughout the course, students seek to better understand, explain, predict, and control people, their behaviors, and mental processes, as well as their environments. Lecture, research, simulations, and outside readings are utilized in the investigation of behaviors ranging from conditioned reflexes to creative and social behavior.

### **Senior History Seminar: The Deaf and Differently-Abled in U.S. History**

What does an examination of Deaf culture and the experience of the d/Deaf community teach us about the experiences of differently-abled groups in the United States? Throughout this course, students participate in the long standing debate around the deaf community and Deaf rights as a lens into understanding how American history and present day views and engages with its differently-abled citizens. Students explore the historical trajectory of D/deaf people in America, analyzing and discussing the major social reforms of the nineteenth and twentieth centuries, including Oralism, American Sign Language (ASL), and DeafSpace, as well as the educational, cultural, political, and economic issues confronting the D/deaf both past and present. In doing so, students also examine how d/Deaf individuals navigate their world through shared

customs, spaces, language, technology, attitudes, and values, exploring different fields in linguistics, sociology, and psychology. The course involves gaining a deep understanding of current trends in the contemporary Deaf movement through close partnership with local D/Deaf and auditory institutions and individuals, learning basic ASL to communicate effectively with our visitors. Additionally, conversations with disabilities lawyers and other community members challenge students to understand the nuances of intersectional identities within the d/Deaf and differently abled communities in the US. Through a critical analysis of D/deaf history, a student-directed pursuit of research, and project-based learning, students will, by the end of this course, have a more informed understanding of the lives of their differently-abled Americans.

### **Senior History Seminar: Modern American Culture and Society**

The twentieth century has been colloquially referred to as the “American century” to symbolize America’s emergence as a global superpower. During this time, the nation underwent profound and far-reaching social, demographic, political, economic, and cultural changes. Depending on their position and power, Americans experienced these changes in dramatically different ways. In this seminar, students use a social history and cultural history approach to explore pivotal moments in the century (e.g., the Great Depression, World War II, the Cold War, and the social movements of the 1960s and 1970s). They examine not only events and experiences but also how issues of race, ethnicity, gender, sexuality, class, ideology, and other forms of identity find expression in culture. Students discuss academic writing as well as art, music, literature, and film. The class is conducted in a seminar format, and students are expected to co-design the course and lead discussions. Additional assessments include presentations and other focused research projects.

**Global Online Academy Courses:** The following history and social sciences courses are offered to students in Grades 11 and 12 through Global Online Academy:

- **Applying Philosophy to Global Issues\*** (Fall)
- **Business Problem Solving** (Fall and Spring)
- **Climate Action and Sustainability** (Fall and Spring, History/Science Interdisciplinary Course)
- **Entrepreneurship in a Global Context** (Fall and Spring)
- **Gender and Society\*** (Spring)
- **Genocide and Human Rights\*** (Fall)
- **International Relations\*** (Fall and Spring)
- **Introduction to Blockchain and Cryptocurrency** (Spring)
- **Introduction to Branding and Marketing** (Fall and Spring)
- **Introduction to Legal Thinking** (Fall and Spring)
- **Investing I** (Fall and Spring)
- **Investing II** (Spring)
- **Prisons and Criminal Justice Systems** (Fall and Spring)
- **Positive Psychology** (Fall)
- **Race and Society** (Fall)
- **Religion and Society** (Spring)
- **Social Psychology** (Fall and Spring)

\*Courses that fulfill BB&N’s Modern Global History Requirement

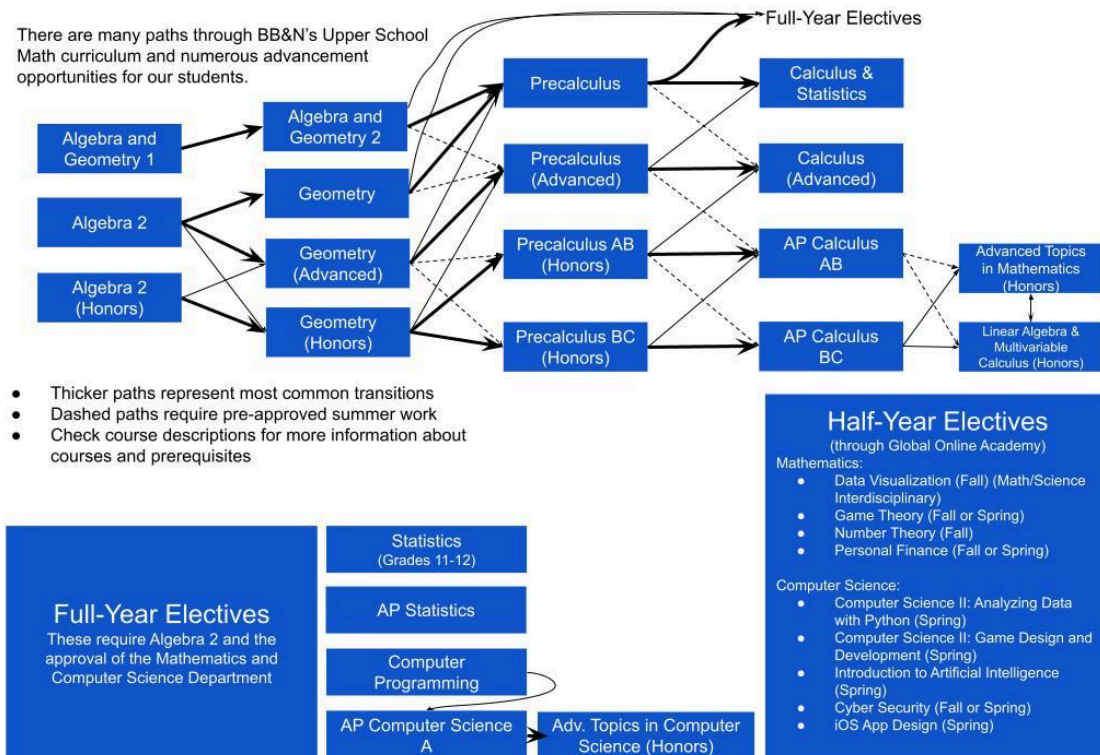
For more information on these courses, please refer to the Global Online Academy section of this Program Planning Guide.

### **Courses Not Offered in 2024 – 2025**

- Advanced Placement Comparative Government and Politics/Advanced Placement U.S. Government and Politics
- Advanced Placement Comparative Government and Politics/ U.S. Government and Politics (Honors)
- Advanced Placement World History: Modern

- African American History
- Global Economics
- Latin American History
- Modern China
- Philosophy
- Politics in a Global Age
- Russian History
- Senior History Seminar: World History Since 1945
- U.S. in the Modern World I and II
- The United States in the Nuclear Age
- World Religions and Philosophies: Historical and Contemporary Contexts

# Mathematics and Computer Science Department



## Algebra and Geometry 1 and 2 (2-year program)

The Algebra and Geometry 1 and 2 courses are part of a two-year sequence that provides students with a robust and cohesive understanding of algebra and geometry. Reasoning and problem-solving skills are developed in concert with various technological tools and physical manipulatives to provoke inquiry and lead to the discovery of the intricate connections between these two foundational disciplines. Students start with exploring linear functions and systems of equations and connect this to geometric points, lines, planes, and angles. By the end of the first year, students know how to model shapes they see in the world algebraically. The second year includes learning about quadratic equations and trigonometry then ends with an introduction to conic sections and logarithms. Completion of the two-year sequence fulfills the Geometry graduation requirement.

## Algebra 2 and Algebra 2 (Honors)

The topics studied in this course include linear equations, quadratic functions, transformations, polynomial functions, exponential and logarithmic functions, and inequalities. Additional topics in the honors course may include symmetry, linear programming, rational functions, and triangle trigonometry. In some cases, technology (including graphing calculators and online graphing apps) is used as an efficient approach to a solution, while at other times it is used to explore and enhance the students' understanding of algebraic concepts and relationships.

Prerequisite: Algebra 1

## Geometry

This course approaches Euclidean Geometry with an in-depth analysis of plane, solid, and coordinate geometry as they relate to both abstract and concrete mathematical concepts as well as to real-world problem situations. To develop critical thinking and logic skills, students are exposed to informal proof and

different technological tools and manipulatives as they discover geometric relationships. In place of more formal proof taught in other geometry courses, there is a greater emphasis on applying algebra skills to geometry topics. Topics include parallel lines and polygons, perimeter and area analysis, volume and surface area analysis, similarity and congruence, right-triangle trigonometry, and conic sections. Additional topics may include statistics and circular trigonometry.

Prerequisite: Algebra 2

### **Geometry (Advanced)**

Like Geometry, this course approaches Euclidean Geometry with an in-depth analysis of plane, solid, and coordinate geometry as they relate to both abstract and concrete mathematical concepts as well as to real-world problem situations, yet at a faster pace. To develop critical thinking and reasoning skills, students are exposed to different technological tools and manipulatives as they discover geometric relationships. Topics include more formal deductive and inductive proof, parallel lines, perimeter and area analysis, volume and surface area analysis, similarity and congruence of polygons, right-triangle trigonometry, circular trigonometry, and an investigation of conics and circles. Additional topics may include analytical geometry and computer programming in Java.

Prerequisite: Algebra 2 (Honors) (generally with a grade of B- or higher) or Algebra 2 (generally with a grade of A- or higher) and approval of the Mathematics and Computer Science Department

### **Geometry (Honors)**

This fast-paced course encourages students to think in new ways. Students learn to build on what they know to be true and to avoid making false assumptions. Deductive reasoning and discovery are the common threads that run through each unit in this course. Students make frequent use of technology and participate in frequent group assessments that allow students to complete more challenging material. In addition to exploring the topics taught in Geometry, the Geometry (Honors) course also studies conic sections, circular trigonometry, trigonometric identities/equations, the Laws of Sines and Cosines, probability, and combinatorics. Students code in Java during the unit on computer programming.

Prerequisite: Algebra 2 (Honors) (generally with a grade of B+ or higher) or Algebra 2 (generally with a grade of an A+), and approval of the Mathematics and Computer Science Department

### **Precalculus**

Students in this course study polynomial functions, trigonometric functions, exponential, and logarithmic functions. Other topics studied include transformations and rational functions. This course is generally designed for students who are ready for a precalculus course but not yet ready for the increased rigor of Precalculus (Advanced). Successful completion of this course could prepare Grade 12 students for an advanced college precalculus course or a humanities-level college calculus course, and Grade 11 students for Calculus & Statistics or the yearlong Statistics course.

Prerequisites: Algebra 2, Geometry (generally with grades of B- or higher), and approval of the Mathematics and Computer Science Department

### **Precalculus (Advanced)**

Students in this course study transformations and modeling, polynomial and rational functions, real and complex roots of polynomials, sequences and series, exponential and logarithmic functions, and circular trigonometry. The study of trigonometry includes the six trigonometric functions (their definitions, graphs, applications, and inverses), a variety of trigonometric identities, the polar form of complex numbers, and the Laws of Sines and Cosines. Other topics may include statistics, combinatorics and probability, and vectors.

Prerequisites: Algebra 2 (generally a grade of B+ or higher) and Geometry (Advanced) (generally with a grade of B+ or higher) or Geometry (generally with a grade of A or higher) and approval of the Mathematics and Computer Science Department

### **Precalculus AB (Honors) and Precalculus BC (Honors)**

The honors courses take a toolkit approach to a large variety of functions that can be transformed to model phenomena. Precalculus AB (Honors) studies precalculus topics for the entire year, while Precalculus BC (Honors) accelerates to include an introduction to limits and differential calculus. Since Precalculus BC (Honors) begins the AP Calculus syllabus after Spring Break, students in Precalculus BC (Honors) who move on to Calculus the following year are expected to take the Advanced Placement Calculus BC course. A deviation from this sequence is rare and requires approval of the Mathematics and Computer Science Department.

Prerequisites: Algebra 2, Geometry, and approval of the Mathematics and Computer Science Department

### **Calculus & Statistics**

This course provides an introduction to both calculus and statistics topics. The first trimester focuses on calculus concepts, including limits, derivatives, and integrals. The second trimester focuses on statistics and introduces students to the fundamental concepts and techniques employed when working with data. Additional topics in calculus and statistics are studied during the third trimester.

Prerequisites: Precalculus and approval of the Mathematics and Computer Science Department

### **Calculus (Advanced)**

Major topics of this calculus course are limits, differential calculus and integral calculus, and their many applications. In addition, some sections may do non-calculus enrichment topics or projects.

Prerequisite: Precalculus (Advanced) (generally with a grade of a B+ or higher) and approval of the Mathematics and Computer Science Department

### **Advanced Placement Calculus AB**

Major topics of this course are limits, differential calculus and integral calculus, and their many applications. The course includes, as a minimum, all topics stated in The College Board Advanced Placement (AP) Calculus AB syllabus (generally equivalent to one semester of college calculus), but usually includes numerous topics beyond the AP curriculum. Seniors who do not continue with this course during Senior Spring Project are required to complete the AP curriculum, which may require additional assignments or class meetings before or during the third trimester.

Prerequisite: Precalculus AB (Honors) (generally with a grade of B+ or higher) or Precalculus (Advanced) (generally with a grade of an A+), and approval of the Mathematics and Computer Science Department

### **Advanced Placement Calculus BC**

Major topics of this course are limits, differential calculus and integral calculus, and their many applications. Infinite series, advanced techniques of integration, vectors, parametric, and polar equations are also covered. The course includes, as a minimum, all topics stated in The College Board Advanced Placement (AP) Calculus BC syllabus (generally equivalent to two semesters of college calculus), but usually includes numerous topics beyond the AP curriculum. Seniors who do not continue with this course during Senior Spring Project are required to complete the AP curriculum, which may require additional assignments or class meetings before or during the third trimester.

Prerequisite: Precalculus BC (Honors) or approval of the Mathematics and Computer Science Department

### **Linear Algebra and Multivariable Calculus (Honors)**

Students in this yearlong course study two semesters of college mathematics beyond the Advanced Placement Calculus BC curriculum. A half-year of multivariable calculus includes the generalization of calculus concepts to two and three dimensions; they include partial derivatives, multiple integrals, optimization problems (using Lagrange multipliers), other coordinate systems (cylindrical, spherical), and vector calculus (Green's Theorem, Stokes' Theorem, etc.) A half-year of linear algebra includes 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. This course may also include some discussion of differential equations and Fourier series.

Prerequisite: AP Calculus BC (AP Calculus AB only allowed with the approval of the Mathematics and Computer Science Department)

### **Advanced Topics in Mathematics (Honors)**

This course offers students the opportunity to learn college level mathematics beyond Calculus. In this course, topics may include set theory, real analysis, differential geometry, abstract algebra, graph theory, combinatorics, or number theory. This course provides students with the foundations of high-level proof writing and problem solving.

Prerequisite: AP Calculus BC and approval of the Mathematics and Computer Science Department (AP Calculus AB only allowed with the approval of the Mathematics and Computer Science Department)

### **Statistics\*** (Grades 11 – 12)

Students in this course are acquainted with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students 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 allow students to focus deeply on the concepts involved in statistics. Juniors enrolled in this course spend the third trimester preparing for Precalculus.

Prerequisite: Algebra 2 and Geometry

### **Advanced Placement Statistics\*** (Grades 10 – 12)

Students in the Advanced Placement (AP) Statistics course are acquainted with the major concepts and tools for collecting, analyzing, and drawing conclusions from authentic data. Students frequently work on projects and 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. The use of technology allows students to focus deeply on the concepts involved in statistics. This course prepares students for the AP Statistics exam. For students in Grades 10 and 11, this course is generally taken in addition to a math course in the normal sequence. For students in Grade 12, this course can be an appropriate college-preparatory alternative to Calculus. Seniors who do not continue with this course during Senior Spring Project are required to complete the AP curriculum, which may require additional assignments or class meetings before or during the third trimester.

Prerequisite: Algebra 2 and approval of the Mathematics and Computer Science Department

### **Computer Programming\*** (Grade 12; Grades 10 – 11 with approval from the Mathematics and Computer Science Department)

This introductory computer science course provides students with a comfortable and engaging first programming experience. Topics include programming methodology, conditionals, loops, methods, arrays, strings, and the use and creation of objects. This course is designed to prepare students for a college-level programming course, including BB&N's AP Computer Science A course. The primary language is Java.

Prerequisite: Generally a grade of B or higher in the current math course and approval of the Mathematics and Computer Science Department

### **Advanced Placement Computer Science A (Plus Data Structures)\*** (Grades 10 – 12)



This is an introductory college-level computer science course with an emphasis 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 A exam. This course goes beyond the AP syllabus, including the set of topics typically composing a full year of college level computer science. The primary programming language is Java. Previous programming experience is not necessary.

Prerequisite: Generally a grade of B or higher in an honors math course, a B+ or higher in Computer Programming or comparable programming experience, and approval of the Mathematics and Computer Science Department

### **Advanced Topics in Computer Science\* (Honors) (Grade 12)**

This course offers students the opportunity to learn about topics that go beyond the Advanced Placement Computer Science A curriculum. In recent years, students in this course constructed a simulated computer system as they learned about the interactions of hardware, software, compilers, and operating systems. Other topics studied in this course could include advanced data structures and algorithms, parallel computing, machine learning, iOS app development, and computer graphics. This is a hands-on course and students learn through a series of individual and small-group projects. Students interested in this course are encouraged to contact the teacher or Department Head for more information about what topics will be taught in the upcoming year.

Prerequisite: Prior programming experience (at the level of AP Computer Science or beyond) and approval of the Mathematics and Computer Science Department

\*Enrollment in Statistics, AP Statistics, Computer Programming, AP Computer Science A, and Advanced Topics in Computer Science (Honors) is limited. A lottery may be used if a course is over-enrolled.

**Global Online Academy Courses:** The following mathematics and computer science courses are offered to students in Grades 11 and 12 through Global Online Academy:

### **Mathematics**

- **Data Visualization** (Fall, Math/Science Interdisciplinary Course)
- **Game Theory** (Fall and Spring)
- **Number Theory** (Fall)
- **Personal Finance** (Fall and Spring)

### **Computer Science**

- **Computer Science II: Analyzing Data with Python** (Spring)
- **Computer Science II: Game Design and Development** (Spring)
- **Cyber Security** (Fall and Spring)
- **Introduction to Artificial Intelligence** (Fall and Spring)

For more information on these courses, please refer to the Global Online Academy section of this Program Planning Guide.

### **Courses Not Offered in 2024 – 2025**

- Accelerated Algebra 1

## Science Department

The science program at BB&N aims to empower students to think critically and act ethically by instilling a systemic approach and scientific lens to problem solving. The curriculum employs a laboratory and project-based discovery model in the belief that insights are best developed in an exploratory and experimental setting. Objectivity in observation, accuracy in data gathering and recording, identification and control of variables, the manipulation and presentation of data, and the evaluation of the validity of experiments are lab skills emphasized as appropriate to the grade level and discipline. At all levels, themes of sustainable development, scientific research, and decision-making on a global scale are incorporated. The program challenges students to appreciate science as an imaginative, impassioned, human endeavor essential to preserving our world for generations to come.

### **Biology** (Grades 9 – 10)

In this required foundational course, students are introduced to a variety of skills that provide an anchor for future coursework in the sciences. Emphasis is placed on the skills centering the development of data representation and analysis, argumentation, concept explanation, visual representation, and reflection using the topics of cell biology, genetics, ecology, and physiology as a lens. Correlated lab work and activities allow for opportunities of growth and development of these core practices. Students are also challenged to utilize their content and skill knowledge to think critically about how biology has and can be used to help and harm society. An understanding and appreciation of how personal identities and the identities of others shape scientific views and perspectives is explored.

### **Physics** (Grades 10 – 12)

This is a lab-based 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 includes mechanics, motion, and energy as well as electricity, simple circuits, and waves. 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. There are also various projects, including a science and art co-curricular photography project, integrated into the course and designed to allow students explore and apply the concepts learned in the course in a creative way.

Recommended Prior Course: Algebra 2

### **Physics (Honors)** (Grades 10 – 12)

Physics (Honors) is a lab-based course that stresses the discovery of physical relationships through lab experiences. The year begins with a study of motion, proceeds through conservation of energy, electricity, circuits, simple harmonic motion, and ends with the examination of sound and light. Algebra 2 is a prerequisite for enrollment since Algebra is used extensively in the interpretation of data and in the expression of ideas.

Prerequisite: Algebra 2 and approval of the Science Department

Recommended Prior Course: Algebra 2 (Honors) or enrollment in Physics (Honors) as a third-year science course

### **Advanced Placement Physics 1** (Grades 11 – 12)

Advanced Placement (AP) Physics 1 is an algebra and trigonometry-based, lab intensive, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, and waves. The curriculum extends past the topics noted on the college board for AP Physics 1 to include some study of electrostatics, electricity, and magnetism to align with the Science Department's mission to have foundational physics courses cover a breadth of topics. Students enrolled in this course are expected to have robust algebraic skills and knowledge of trigonometric functions. Students enrolled in this course are expected to complete some summer work

prior to the start of the course. Seniors who enroll in AP Physics 1 must continue in the course throughout Senior Spring Project.

Prerequisite: Two full years of science, Algebra II, Geometry, and approval of the Science Department

Corequisite: Precalculus (Advanced) or higher level mathematics course

Recommended Prior Course: Algebra 2 (Honors) and Geometry (Honors)

Recommended Corequisite: Precalculus AB (Honors) or Precalculus BC (Honors)

### **Chemistry (Grades 10 – 12)**

This course includes the standard college-preparatory material required for continued work in chemistry, biology, or pre-medical studies. Topics include the structure of atoms and molecules and 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. Recommended Prior Course: Algebra 2

### **Chemistry (Honors) (Grades 10 – 12)**

Chemistry (Honors) includes the same topics as the Chemistry course but the pace is quicker and each subject is examined in greater depth. Strong math and science skills are essential. Prerequisite: Algebra 2 and approval of the Science Department

Recommended Prior Course: Algebra 2 (Honors) or enrollment in Chemistry (Honors) as a third-year science course

### **Advanced Placement Chemistry (Grades 11 – 12)**

Advanced Placement (AP) Chemistry is an introductory college-level chemistry course. Students cultivate their understanding of chemistry through inquiry-based lab investigations as they explore the four Big Ideas: scale, proportion, and quantity; structure and properties of substances; transformations; and energy. The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. Students enrolled in this course are expected to complete some summer work prior to the start of the course. Seniors who enroll in AP Chemistry must continue in the course throughout Senior Spring Project.

Prerequisite: Two full years of science, Algebra II, and approval of the Science Department

Recommended Prior Course: Algebra 2 (Honors) and Geometry (Honors)

Recommended Corequisite: Precalculus AB (Honors) or Precalculus BC (Honors)

## **SCIENCE ELECTIVES**

Students who have completed the Science Department graduation requirement may request to enroll in one of the science electives described below. Science electives allow students to explore a topic of interest in depth with a continued emphasis on the development of critical thinking and scientific reasoning skills.

As schedules allow, juniors enrolled in science electives participate in an interdisciplinary study and project during the third trimester of the course. During these projects, juniors work collaboratively with students from other science electives and are taught by all science elective teachers. The regular course meeting block might be altered during the third trimester in order to allow students to work collaboratively with students from another elective, though changes will not affect the student's schedule in other courses. Students are expected to meet with the teacher and other student collaborators at least three times per week and have additional independent work to complete between class meetings.

Juniors and seniors enrolled in Engineering Principles and Practices, Infectious Diseases, Marine Ecology, or Scientific Ethics may complete the course at the Advanced level by maintaining a science portfolio and doing supplemental coursework during the first two trimesters.

Enrollment in the following courses is limited: Anatomy and Physiology (Advanced), AP Biology / Advanced Biology (Honors): Mechanisms of Biological Systems, AP Physics C: Mechanics, Biochemistry (Advanced), Current Topics and Research in Science and Technology (Honors), Engineering Principles and Practice (Advanced) / Engineering Principles and Practice, Environmental Studies (Advanced), Experimental Biology (Honors), Infectious Diseases (Advanced) / Infectious Diseases, Marine Ecology (Advanced) / Marine Ecology, Organic Chemistry (Honors), and Scientific Ethics (Advanced) / Scientific Ethics. Seniors are given priority for enrollment. A lottery may be used if a course is over-enrolled.

### **Anatomy and Physiology (Advanced) (Grades 11 – 12)**

Anatomy and 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 muscular, circulatory, respiratory, and nervous systems. The interrelationships between various physiological systems are explored and applications related to clinical conditions are addressed, particularly in end-of-term projects. Field trips to local institutions, which in the past have included the Beth Israel Surgical Skills and Simulation Center and the Russell Museum of Medical Innovation, complement material discussed in class. Participation in dissection is a required part of this course.

Prerequisite: Biology

### **Advanced Placement Biology / Advanced Biology (Honors): Mechanisms of Biological Systems (Grades 11 – 12)**

This course leverages the enduring understandings learned in introductory Biology to deeply explore a selection of topics from the Advanced Placement (AP) Biology curriculum. The course is divided roughly into thirds: evolution and cell biology are discussed in the fall trimester; cell signaling, genetics and molecular biology in the second trimester; and animal behavior and ecology in the spring trimester. This course, when taken with Experimental Biology (Honors) fully prepares students for the AP Biology exam. Ideally students take both classes concurrently but it is possible for students to take each class at separate times. If doing so, it is recommended that Advanced Biology (Honors) be taken during the Senior year. Seniors who enroll in AP Biology by taking this course in conjunction with or following Experimental Biology (Honors) must continue in the course throughout Senior Spring Project. Seniors who do not wish to remain enrolled in this course throughout Senior Spring Project must enroll in the Advanced Biology (Honors): Mechanisms of Biological Systems course.

Prerequisites: Biology, Chemistry, and approval of the Science Department

Recommended Prior Course: A yearlong chemistry course

### **Advanced Placement Physics C: Mechanics (Grades 11 – 12)**

The focus of this course is on Newtonian Mechanics, which includes 1-D and 2-D kinematics, Newton's laws, work and energy, momentum, rotational motion, and oscillations and waves. The curriculum extends past the topics required in the College Board's AP Physics C: Mechanics curriculum to include some study of electrostatics, electricity, and magnetism to align with the Science Department's mission to have foundational physics courses cover a breadth of topics. Significant emphasis is placed on the development of strong lab skills, including error analysis and problem solving, both qualitatively and quantitatively. From the outset of the course, differentiation and integration are used extensively to understand the physics concepts in more depth. Students are expected to have robust algebraic, trigonometric, and differentiation skills at the outset of the course. Students enrolled in this course are expected to complete some summer work prior to the start of the course.

Prerequisites: Two full years of science, Precalculus BC (Honors) or completion of a math course that introduces differentiations, and approval of the Science Department

Corequisite: Calculus BC (Honors) or a higher level math course

\*With Departmental approval, this course can be a first-year physics course for juniors who have completed or are concurrently enrolled in Advanced Placement Calculus BC.

### **Biochemistry (Advanced) (Grades 11 – 12)**

Biochemistry (Advanced) is an interdisciplinary science course designed to study topics in chemistry and biochemistry with the intention of applying those topics to modern scientific problems, such as the legality and ethics of the pharmaceutical industry, outbreaks of disease, and the effect of geography, culture, and nutrition on disorders throughout the world. The course includes a detailed review of key concepts from biology and chemistry, specifically relating to living organisms, then delves into more complex topics such as pharmaceutical drug design, advanced metabolism, and modern techniques and equipment used for structure analysis of substances, such as spectrometry and crystallography. These topics are investigated through reading scientific journals and news articles, researching scientific concepts, and looking at medical case studies, both in the United States and throughout the world. The course culminates with an independent research project that investigates an issue in modern science, and includes a research paper and a presentation regarding findings.

Prerequisites: Biology and Chemistry

Recommended Prior Course: A yearlong chemistry course

### **Current Topics and Research in Science and Technology (Honors) (Grade 12)**

This course is designed for students to explore topics in science and technology, both within and beyond BB&N, by critically reviewing current literature, understanding and presenting recent findings in science, visiting scientific destinations throughout the Greater Boston area, and undertaking an independent research project outside of BB&N during Senior Spring Project. The topics studied are primarily chosen by the students, applying both local and global perspectives and frequently exploring the intersection of science and society in their work. As part of the course, students identify areas of personal scientific interest, develop their understanding of the topic, and work toward creating a symposium of current topics in science that is shared with the BB&N community in the winter. In past years, students have investigated representation in clinical trials, proposed solutions to global medical emergencies or natural disasters, researched innovations in and accessibility of personalized medicine, and explored the evolution of wolves to domesticated dogs. By the end of January, students are expected to establish a connection with a mentor outside of BB&N so they can undertake a research or technology related project during the spring trimester as part of their Senior Spring Project. Internships are typically 10 – 15 hours per week and students continue to share their learning by meeting as a class one hour per week throughout this time.

Prerequisites: Successful completion of three years of science and approval of the Science Department.

Recommended co-requisite: Enrollment in a science elective at BB&N or through the Global Online Academy.

### **Engineering Principles and Practice (Advanced) / Engineering Principles and Practice (Grades 11 – 12)**

Engineering Principles and Practice is a hands-on, project-based course that is designed for students who are interested in the applications of Engineering to current and evolving technologies. This course includes but is not limited to, the exploration of mechanical engineering, civil engineering, manufacturing engineering, electrical engineering, engineering ethics, and environmental engineering. Students become familiar with the design process and will be able to take an idea through the design, prototype, and build phases. Students learn by doing while receiving in-process support. They become creative problem-solvers as they overcome obstacles throughout the design-test-build process. Field trips to various manufacturing facilities complement classroom work and expose students to actual product realization. This course is

based in math and science, but is designed for all students interested in learning more about the expanding field of engineering.

Prerequisites: Physics, Algebra 2, and Geometry

Recommended Prior Course: A yearlong physics course

### **Environmental Studies (Advanced)** (Grades 11 – 12)

Learning Locally, Thinking Globally

In the early nineteenth century, German naturalist Alexander von Humboldt wrote, “In this great chain of causes and effects, no single fact can be considered in isolation.” Following Humboldt’s lead, this course combines science and history to consider the ways humans interact with the natural world. Units drawing simultaneously from both disciplines emphasize systems thinking to examine how societies encounter the challenges of resource use, conservation and preservation, and population growth, from the twentieth century through present day. Through lenses ranging from local to global, this course examines how shifting perceptions of nature, facts, and values over time influence our choices. Field work and case studies enable students to utilize both scientific and historical thinking skills, gain practical tools for understanding the complexity of our world, and emerge with a contemporary understanding of ecology.

This is an interdisciplinary course offered through the Science Department and the History and Social Sciences Department. This course fulfills the Modern Global History requirement.

Prerequisite: Biology

### **Experimental Biology (Honors)** (Grades 11 – 12)

This course includes many of the laboratory exercises and experiments normally contained in an introductory college biology course. The laboratory work is taken from widely used Advanced Placement (AP) Biology lab manuals and serve as a foundation for students to expand upon these topics by planning and executing their own experiments. Students expand upon these topics by planning and executing their own experiments. Evaluation is based on lab work, including collaboratively designed and executed research projects presented using scientific posters, PowerPoint presentations, and lab reports. Additionally, there are lab-practical and written tests. This course, when taken in conjunction with or prior to Advanced Biology (Honors): Mechanisms of Biological Systems, fully prepares students to take the AP Biology exam.

Prerequisites: Biology, Chemistry, and approval of the Science Department

Recommended Prior Course: A yearlong chemistry course

### **Infectious Diseases (Advanced) / Infectious Diseases** (Grades 11 – 12)

In this course, students are introduced to the epidemiology, clinical manifestations, immunity, diagnosis, and strategies for prevention and treatment of a variety of infectious diseases. They examine the social inequalities including systemic discrimination, economic status, and access to health care that can affect the severity of infection and influence the outcome for individuals and entire communities, both locally and globally. Although the key infectious diseases studied are HIV, malaria, and COVID-19, factors associated with other diseases (such as smallpox, SARS, Ebola, measles, cholera, tuberculosis, and influenza) are also addressed. The pathogenic microorganisms that cause these diseases, including bacteria, viruses, and parasitic eukaryotes, are also studied.

### **Marine Ecology (Advanced) / Marine Ecology** (Grades 11 – 12)

Marine Ecology is designed for students who are interested in learning about the diverse marine environments, the biology of marine organisms, and the relationships between the ocean’s inhabitants and their surroundings. Topics include: the ocean environment, the various ecosystems within and supporting the Earth’s oceans, and the comparative physiology of the diverse species that inhabit the Earth’s oceans. This course also affords students an opportunity to explore larger connections with a focus on global marine conservation issues. Field trips to local marine centers, which in the past have included the Northeastern University Marine Science Center and Woods Hole, as well as lab-based investigations and

research projects, encourage the development of observational and research skills. The second trimester includes dissections as a method of studying marine life in a hands-on way.

Prerequisite: Biology

### **Organic Chemistry (Honors)** (Grades 11 – 12)

This course is an advanced science elective designed to explore the fundamental concepts of organic chemistry and study how it has impacted and shaped modern society. The course focuses on material traditionally covered in first semester collegiate organic chemistry while providing students with an opportunity to further sharpen problem solving and critical thinking skills through the mastery of “orgo’s” more conceptual approach to understanding matter. Students begin the year with an overview of organic molecular structure and isomerism before delving deep into organic reactions and mechanisms. Along the way, students explore the history of the field and how synthetic organic chemistry is connected to and impacts a variety of modern topics, including clean energy initiatives, oral contraception, and cancer therapeutics. Students are given opportunities to research and present on organic chemistry’s role in topics important to them through group projects and class discussions. The class culminates in a retrosynthetic analysis project, where students employ their acquired knowledge of chemical reactivity to design a synthetic approach to a complex organic molecule.

Prerequisites: Chemistry (Honors) (yearlong course), or a yearlong chemistry course with instructor approval

### **Physics 2 (Honors)** (Grades 11 – 12)

Having built a foundation in classical Newtonian physics, students are introduced to concepts on the frontiers of modern physics. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory investigations as they explore these topics: fluids; thermodynamics; electricity, magnetism and electromagnetic induction; optics; geophysics, and quantum, atomic, and nuclear physics.

Prerequisites: Algebra 2 and either Physics, Physics (Honors), Advanced Placement Physics 1, or Advanced Placement Physics C: Mechanics.

### **Scientific Ethics (Advanced) / Scientific Ethics** (Grades 11 – 12)

In an effort to further the mission of inspiring young scientists to “act ethically,” this course explores how moral reasoning can be used to dictate choices in the scientific world, with a focus on both past and current issues. Through discussion, debates, labs, and other activities, students gain an overview of ethical theories before applying them to various scenarios of both instructor and student choice, while also gaining a stronger scientific background. Possible topics include those in bioethics, environmental ethics, nuclear ethics, and the ethics of technology. Throughout this course, students are challenged to reflect on their own reasoning as well as a variety of different perspectives, to utilize evidence and moral judgment to help shape opinions, to explain the “what” and the “why” of scientific beliefs, and to understand how an ethical view of science can help influence decision making on a national and global scale. In addition, this course develops students’ ability to listen, especially to ideas different from their own, as well as students’ understanding of the intersection of scientific ethics and equity in today’s interconnected world.

**Global Online Academy Courses:** The following science courses are offered to students in Grades 11 and 12 through Global Online Academy:

- **Climate Action and Sustainability** (Fall and Spring, History/Science Interdisciplinary Course)
- **Data Visualization** (Fall, Math/Science Interdisciplinary Course)
- **Global Health** (Fall)
- **Medical Problem Solving I** (Fall and Spring)
- **Medical Problem Solving II** (Fall and Spring)
- **Neuropsychology** (Fall and Spring)

For more information on these courses, please refer to the Global Online Academy section of this Program Planning Guide.

**Courses Not Offered in 2024 – 2025**

- Advanced Placement Physics C: Electricity and Magnetism / Advanced Physics: Electricity and Magnetism
- Biology (Honors)
- Environmental Science
- Forensics
- Principles of Chemistry



## **World Languages Department**

All students must take three full, consecutive years of the same language in the Upper School to fulfill their World Languages graduation requirement. Students must take a language course through Grade 11, completing at least level three of a language.

Students who previously studied a language not offered at BB&N and are new to the school in Grade 11 need to successfully complete two full years of the same language at BB&N. New students repeating Grade 11 must take a language course in Grade 11 and complete at least level three of language at BB&N; alternatively, these students may take and successfully pass a new language for two years. Based on a placement test, freshmen who place higher than the III (Honors) level of their primary language studied (the language to be studied for three full, consecutive years) must choose another language to satisfy the three-year requirement. These students may choose to study the secondary language, beginning sophomore year, as part of the Double Language Program.

### **Language Programs**

The Upper School offers six languages: Arabic, Chinese, French, Latin, Russian, and Spanish. World Languages offer first, second, third, fourth, and fifth-year language study. In addition, French, Latin, and Spanish have Honors sections starting in the second and third year, as well as upper-level electives (described below). Chinese has an Honors section starting in the third year. Chinese, French, Latin, and Spanish offer Advanced Placement-level courses.

### **Double Language Program**

A student who completes seven years or more of language study during Grades 9 – 12 qualifies as a Double Language Student. Only courses taken at BB&N or a previous secondary school (for students new to the School in Grades 10 or 11 only) fulfill the seven-year requirement. Courses taken with Global Online Academy do not fulfill any part of the seven-year requirement. Students may begin this program in Grades 9 or 10, although the recommendation is that students begin in Grade 10.

### **BB&N Language Scholar Program**

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 a 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 Advanced Placement courses through the end of senior year (through Senior Spring Project) and to take the Advanced Placement exam in May. Only courses taken at BB&N or a previous secondary school (for students new to the School in Grades 10 or 11 only) fulfill the requirement for the BB&N Language Scholar Program. Courses taken with Global Online Academy do not fulfill any part of the BB&N Language Scholar requirement.

### **Global Exchange Ambassador Program**

The Global Exchange Ambassador Program seeks to recognize students who commit to and engage deeply in a BB&N World Languages Exchange Program. The Global Exchange Ambassador Program has limited enrollment for students in Spanish, French, and Russian who wish to complete extensive preparation for their respective cultural exchange program and also reflect upon the experience afterward. To receive the Global Exchange Ambassador designation on the transcript, students must be accepted into the program through an application process (which takes place during the spring prior to the exchange program) and satisfactorily complete all aspects of the program (including attendance on the exchange program, six to eight additional meetings per year, independent research on a topic of the student's choosing, completion of a portfolio, and a final presentation).

## **ARABIC**

### **Arabic I**

The first third of this course is dedicated to the mastery of the phonetics and phonology of Modern Standard Arabic (MSA). The Arabic I course focuses on the development of vocabulary, as well as analyzing and producing basic structures in speaking, reading, writing, and listening. Throughout the application of the language, students use texts, articles, the Internet, audio-visual materials, and discussions 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. Students actively engage with the pattern and root system that serves as the underpinning of Arabic word meaning. They continue to work with authentic materials from across the Arabic-speaking world. Presentations and projects reinforce cultural material and strengthen fluency throughout the year. This course aims to increase students' cultural competency in Arab cultures and prepare them for interaction with native speakers.

### **Arabic III**

Building on the skills from Arabic I and II, students delve deeper into the Arabic language with more focus on reading and listening to authentic material. Their vocabulary expansion at this level equips them to communicate at levels outside of their immediate surroundings. Cultural presentations, written essays, and skit performances enhance and strengthen their fluency. This course engages students at an intermediate level.

### **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**

### **Chinese I**

This course is 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 recordings, Chinese computer software, and other aids are used. Students are expected to learn the basic structures of Mandarin Chinese and to acquire a basic oral competency in simple daily communications. Students learn approximately 500 simplified characters and acquire proficiency in reading and writing in simplified characters. Exposure to Chinese history, culture, and geography is also provided.

## **Chinese II**

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

## **Chinese III/Chinese III (Honors)**

This course helps students learn complex sentence patterns and vocabulary. Short newspaper articles, simplified literary works, and video and audio recordings supplement the text. Oral proficiency and grammatical accuracy are emphasized. Students learn approximately 500 characters, increase their vocabulary to nearly 1,500 words, and type short papers in Chinese characters.

Prerequisite for Chinese III (Honors): Chinese II and approval of the World Languages Department

## **Chinese IV**

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

## **Advanced Placement Chinese Language and Culture**

Students who take this course follow the College Board's Advanced Placement (AP) Chinese Language and Culture curriculum. This course focuses on increasing the students' level of Chinese proficiency across three communication modes (interpersonal, interpretive, and 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.

Prerequisite: Chinese III (Honors) and approval of the World Languages Department

## **Chinese V (Honors)**

Chinese V (Honors) is a full-year elective for qualified students who are interested in perfecting their study of Chinese language and culture. In this course, students continue to build upon their language skills in listening, speaking, reading, and writing. Texts of greater complexity and various styles are introduced to students in the cultural context of Chinese-speaking societies. At the end of this course, students can communicate, in both spoken and written Chinese, at the intermediate- to mid-level of proficiency, as defined by the American Council on the Teaching of Foreign Languages. This course is entirely conducted in Chinese. This course is also open to Chinese-heritage students, upon approval of the World Languages Department, who want to have one year of advanced study in Chinese after fulfilling their BB&N World Languages graduation requirements.

Prerequisite: Advanced Placement Chinese or fluency in Chinese and approval of the World Languages Department

# **FRENCH**

## **French I**

French I is an introductory course in French language and culture. Students develop skills in the four language modalities (speaking, listening, reading, and writing). Emphasis is put on meaningful oral communication as well as accuracy of expression. Students develop basic structured sentences and acquire vocabulary to ask questions and provide information on likes and dislikes, personal and school life, family and friends, and travel and vacation. Interactive and group activities, audio and video recordings, and online material 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. By the end of the year, this course is taught mostly in French.

## **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 more fluent speech. Students also acquire proficiency in reading short texts and writing simple compositions in French. The goal of the course is to develop the four linguistic skills (speaking, listening, reading, and writing) and to help students gain an understanding and appreciation of the French language and the peoples and cultures of the French-speaking world. This course is based on the use of a grammar book and some short reading comprehension texts, supplemented by the use of films, podcasts, projects, and online material. This course is conducted in French.

## **French II (Honors)**

Students in the French II (Honors) course complete the French II curriculum at a more rapid pace. In addition, they study an intensive and extensive grammar program. Students are encouraged to use the language creatively and apply basic conversational patterns of French speech toward functional communication. Emphasis is put on meaningful oral interpersonal communication. Connecting to the world around them, they also read, research, and present on topics relevant to French-speaking regions such as environmental issues and solutions. They complete the reading of *Le Petit Prince* by Saint-Exupéry in its original version accompanied by audio documents. They study its film adaptation in French and watch other video material. This course is conducted in French.

Prerequisite: French I and approval of the World Languages Department

## **French III**

French III offers a comprehensive review of intermediate French, and students continue to refine the skills necessary to acquire proficiency in the language. In addition to continuing their grammar study, this course emphasizes speaking and listening, as well as continuing to develop written skills in a meaningful context. Cultural topics are integrated through a communicative approach, so students will develop the necessary language tools to converse in French. Themes will focus on topics such as the Middle Ages, family/relationships, health, the environment, "green" travel, and the future. In addition to various poems, the course also includes the reading of a complete work of French literature. Recent literary works have included Goscinný's *Le Petit Nicolas* and Gavalda's *35 kilos d'espoir*. The course is conducted in French, and students are expected to use the language as much as possible.

## **French III (Honors)**

French III (Honors) is a multifaceted course that includes an in-depth and fast-paced review of all major grammar concepts. The course also includes the reading of a complete work of French literature. Recent literary works have included *Rhinocéros* by Eugène Ionesco and *Kiffe Kiffe Demain* by Faïza Guène. Students also study culture throughout the French-speaking world by reading shorter texts, articles, poems and stories. Thematic units include cultural heritage in Quebec, France's relationship with the Maghreb region of North Africa, and public service and political structures in various French-speaking countries. Students improve their writing, comprehension skills, and oral fluency through daily conversation, expository writing, and literary analysis. This course is conducted exclusively in French.

Prerequisite: French II (Honors) and approval of the World Languages Department

## **French IV**

Students in this course will deepen their understanding of the French language and culture by studying various media (literature, songs, movies, articles, etc.) from the francophone world. A review of essential grammar points occurs throughout the school year, though the course emphasizes conversation and interactive activities. Students will discuss various topics related to both historical and contemporary French society and Francophone cultures around the world, in addition to reading authentic literature such as Pineau's *Un papillon dans la cité*. Students will also explore culture through films and television series.

This course is open to students from French III and French III (Honors) who want to practice and refine their speaking and writing skills as an alternative to the Advanced Placement (AP) French Language and Culture course. This course is conducted exclusively in French.

### **Advanced Placement French Language and Culture**

Students in this course study the four language skills (speaking, listening, reading, and writing) utilizing six major themes (Families in Different Societies; The Influence of Language and Culture on Identity; Influences of Beauty and Art; How Science and Technology Affect our Lives; Factors that Impact the Quality of Life; Environmental, Political, and Societal Changes). Students complete a variety of individual and group activities, as well as research, bringing them from proficiency to fluency. They examine authentic documents from various media such as news articles, and podcasts, to enhance their learning. This course also refines the students' study of literature through the reading of poems and books such as *Persepolis* by Marjane Satrapi and *Le Coeur à rire et à pleurer* by Maryse Condé. Students explore culture through films such as *Entre les Murs*. Throughout the year, each student completes an in-depth study of a French-speaking country. The teacher and students use French exclusively in this course. This course prepares students to take the Advanced Placement French Language and Culture exam in May.

Prerequisite: French III (Honors) or French IV and approval of the World Languages Department

### **French V (Advanced): Cinema for French Conversation**

This course is an elective cinema course that culminates in the making of a movie that is written and performed in French and filmed by the students themselves. Emphasis is placed on conversation through interactive activities drawn from the study of French films. This includes group research, oral presentations, debating the issues presented in a film, and exploring cultural units related to the film. The films are chosen based on their historical, literary, linguistic, or geographical significance and may vary from year to year. Recent selections include *Monsieur Ibrahim*, *Welcome*, *Le Fabuleux destin d'Amélie Poulain*, *La Veuve de Saint-Pierre*, *La Cour de Babel*, *Mommy*, and *Cyrano de Bergerac*. This course is open to students in French IV who want to practice and refine their listening and speaking skills and is conducted exclusively in French. Students from the Advancement Placement French Language and Culture course may be accepted with the approval of the World Languages Department.

### **French V (Honors): Culture and Cuisine in Films and Fiction**

This is an elective French language and culture course in which students use literature and cinema to examine the role, importance, and evolution of food in French society. Students continue to develop and refine their reading and writing skills with the in-depth study of a complete work (*Petit Pays*, by Gaël Faye) and excerpts from other classical and contemporary authors. Emphasis is placed on oral fluency through conversation, discussion, presentations, and the study of authentic French movies (*Les Saveurs du Palais*, *La Brigade*, *Délicieux*). Using the class' interactive website, students work in groups on project-based units: they work on subjects relevant to the focus of this course, explore a local food market, take a cooking class, organize a food tasting, visit a local restaurant to write a food critic, and conclude the last four weeks of this course by writing, performing, and filming a cooking show. This course is conducted exclusively in French. Prerequisite: Advanced Placement French Language and Culture or fluency in French and approval of the World Languages Department

## **LATIN**

### **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 and presents it to the class.

## **Latin II**

Latin II begins with a rapid review of Latin fundamentals, after which the class masters the vocabulary, grammar, and syntax in Chapters 25 – 50 of *Jenney's First Year Latin*. Students read adapted selections of Ritche's *Fabulae Faciles* and other suitable texts to hone their skills as translators. The majority of the readings deal with Roman mythology, culture, and history.

## **Latin II (Honors)**

After a rapid review of Latin I, students master the vocabulary, grammar, and syntax in Chapters 25 – 55 of *Jenney's First Year Latin*. Students read increasingly longer selections from Sarah Roche's *Libellus* as well as short passages from Martial and adapted passages from other authors.

Prerequisite: Latin I and approval of the World Languages Department

## **Latin III**

Latin III is a prose Latin course moving from adapted Latin reading about early Roman history and culture to the unadapted reading of Caesar. Students may read Livy, Plautus, Petronius, and other authors. Students learn the history of Republican and Imperial Rome. They also study cultural, topographical, and biographical material. Students complete projects on the topics of Roman history, culture, and architecture.

## **Latin III (Honors)**

Latin III (Honors) is a prose Latin course moving from adapted Latin reading about early Roman history and mythology to the unadapted reading of Caesar's *Bello Gallico*. Students learn some of the history of Republican and Imperial Rome. They also study cultural, topographical, and biographical material. Students complete projects on the topics of Roman history, culture, and architecture.

Prerequisite: Latin II (Honors) and approval of the World Languages Department

## **Latin IV**

Students in Latin IV study Roman poetry, including authors such as Ovid, Vergil, Catullus, and Horace. To deepen their understanding of Latin literature, students study dactylic hexameter, read scholarly articles, and learn rhetorical device. To further hone their agility with the language, students learn advanced aspects of Latin prose composition.

## **Advanced Placement Latin**

Students who take this course follow the College Board's Advanced Placement (AP) Latin curriculum. Students will read selections from Vergil's *Aeneid* and Julius Caesar's *Bellum Gallicum*. This course emphasizes literary analysis and essay writing.

Prerequisite: Latin III (Honors) or Latin IV and approval of the World Languages Department

## **Latin V (Honors)**

This course includes readings, including Catullus, Horace, and Ovid, along with additional works of Neo-Latin authors. With an emphasis on literary analysis, students are expected to translate poems from Latin into English and supplement their own translation work by reading commentaries and selected poems in English translation.

Prerequisite: Advanced Placement Latin and approval of the World Languages Department

# **RUSSIAN**

## **Russian I**

Students in Russian I learn the basics of conversation, reading, writing, and listening in a fun and energetic setting. While building proficiency in communicating about their homes, families, cities, and schools, students learn most of the Russian case system, all the forms of the Russian verbs, and a number of idioms

and set phrases that are useful for real-world application. This course uses the American Council of Teachers of Russian (ACTR) book series *Live from Russia!* which includes an audio component for homework and also a soap opera-style movie about Kevin, an American living in Moscow. Ten percent of this course consists of Russian culture, politics, literature, and history, which we discuss in English.

## **Russian II**

Students in Russian II deepen their knowledge of many themes from Russian I: they aim to have control over Russian nouns and verbs and to learn more complicated sentence structures. While continuing to build vocabulary around the themes of school life and personal interests, students work to become conversationally proficient for the Olympiada of Russian Language in the spring. The course continues with the ACTR book *Live from Russia!*, working with Volumes I and II from the series, and continues to follow the adventures and misadventures of Kevin and his Russian friends. As with Russian I, ten percent of this course consists of Russian culture, politics, literature, and history, which we discuss in English.

## **Russian III**

Students in Russian III continue to build upon the four major language skills: speaking, listening, reading, and writing. Students in this course transition strive to move from the sentence level to the paragraph level in Russian and transition from expressing a single idea to presenting a series of ideas in a sophisticated context. While striving for mastery over the Russian case system, students also work to gain control over a number of irregular—but frequently used—Russian verbs. This course continues with the ACTR book *Live from Russia!*, Volume II, as Kevin continues to develop his knowledge of the Russian language and culture. Ten percent of this course consists of Russian culture, politics, literature, and history, which are discussed mostly in English.

## **Russian IV**

Students in Russian IV strive to complete their knowledge of beginning to intermediate-level Russian grammar, while also fortifying their conversational skills. This course aims to deepen the knowledge of practical Russian and ensure that students feel comfortable in a variety of real-world situations. Students produce longer, more focused monologues and also undertake more complex written compositions. The course continues with the ACTR series, moving on to the *Welcome Back!* text, where Kevin and his friends move into a more adult stage of their lives. Fifty percent of this course consists of Russian culture, politics, literature, and history, which are discussed mostly in Russian and English.

## **Russian IV (Honors)**

This course is the more demanding version of Russian IV, and students are accepted upon approval of the World Languages Department. In addition to the Russian IV components, students spend an additional 30 percent of their time outside of class developing their writing and listening skills. Students in this course are expected to participate in the ACTR-sponsored Russian Olympiada in the spring. Students are strongly encouraged to take the Russian National Examinations in World Languages (NEWL) Russian exam and also to continue Russian through their Senior Spring Projects.

Prerequisite: Russian III and approval of the World Languages Department

## **Russian V (Honors)**

Students in Russian V (Honors) engage with authentic cultural and linguistic material in order to deepen their understanding of the Former Soviet Union, Eastern Europe, and Central Asia. Over the course of the year, students build a portfolio where they register their reactions to their weekly activity of reading Russian news articles and literary pieces, listening to Russian podcasts, and watching Russian videos and films. Students are themselves responsible for seeking out and curating the material in their portfolios so students have free reign to develop their interests and follow their curiosity within the Russian-language cultural sphere. The portfolios culminate in trimester projects and presentations to the group. Russian V (Honors) students also join Russian IV students for a weekly Russian Table.

## SPANISH

### **Spanish I/Spanish IP**

In this first-year course, students are introduced to basic structures and high-frequency vocabulary, which 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 are 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. By the end of the year, this course is taught mostly in Spanish. This course is designed for students who have little to no background or experience studying Spanish.

Spanish IP is a course that is open to students who have previously taken Spanish prior to arriving at the Upper School, but who are not yet ready for the Spanish II course. Enrollment in this course is based on the results of the placement test and the decision of the World Languages Department. This course moves more quickly through the basic introductory vocabulary and grammar, but students spend more time learning and reviewing the present and preterit verb tenses and the more challenging grammar concepts that are necessary to master prior to Spanish II. By the end of the year, this course is taught mostly in Spanish.

### **Spanish II**

In this second-year course, students review and practice grammar structures introduced in Spanish I. They continue to learn many new grammar structures, including the preterite and imperfect tenses and all commands. They are also 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 will read a short book in Spanish. This course is conducted primarily in Spanish.

### **Spanish II (Honors)**

In this second-year course, students review and practice grammar structures introduced in Spanish I. They continue to learn many new grammar structures, including the preterite and imperfect tenses, the future and conditional tenses, and the subjunctive mood. They are also 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 will be held to high standards in all areas of their study of the language. Students read short stories as well as a book in Spanish. This course is conducted in Spanish.

Prerequisite: Spanish I/IP and approval of the World Languages Department

### **Spanish III**

This course is an intermediate Spanish course designed to improve students' speaking, listening, reading, and writing skills and to explore the culture of the Spanish-speaking world. This course integrates language and culture through a communicative approach. Students review and learn new forms of grammar with an emphasis on the subjunctive mood. New, more advanced vocabulary is introduced and applied in a variety of contexts. This course is conducted in Spanish.

### **Spanish III (Honors)**

Students in this course continue to develop and refine the skills necessary for acquiring proficiency in Spanish. The course provides students with further practice in reading, writing, listening, and speaking, with an increased concentration on accuracy and communicative functions. To this end, the course consists



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, and the viewing of at least one Spanish-language film. Oral work consists 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. This course is conducted exclusively in Spanish.

Prerequisite: Spanish II (Honors)

#### **Spanish IV: Culture and Conversation**

This fourth-year course takes a language acquisition approach to the Spanish language and culture by exposing learners to authentic resources including podcasts, interviews, news reports, and other cultural content such as music and films from a comprehensible input standpoint. Students focus on developing their listening and reading comprehension skills as well as their speaking and writing skills by diving into culture and current events while building up their vocabulary and grammar contextually. Students actively participate in spontaneous conversations, formal presentations, collaborative projects, and other interactive activities that replicate everyday communication situations where they have to interpret and negotiate meaning. This course is conducted in Spanish and students are expected to make every effort to use Spanish exclusively.

#### **Advanced Placement Spanish Language and Culture**

This is an Advanced Placement (AP) course in Spanish that focuses on language acquisition through authentic sources to provide students with a comprehensible and immersive language-learning experience. Through a variety of multimedia sources, including podcasts, interviews, documentaries, news reports, and other cultural content such as literature, music, and films, students engage with real-world language usage which will enable them to develop advanced proficiency in listening and reading comprehension as well as in oral and written communication. Students will actively participate in discussions to explore and express their opinions on contemporary issues in Spanish-speaking regions, such as social justice and identity, which will foster critical thinking and cultural sensitivity. In addition, students will collaborate on real-life communication projects related to some of the topics. For the most part, this course encourages students to take an active role in their language acquisition journey in preparation not only for the AP Spanish Language and Culture exam but also for meaningful engagement with Spanish-speaking communities. Students use Spanish exclusively in class.

Prerequisite: Spanish III (Honors) or Spanish IV and approval of the World Languages Department

#### **Spanish V: Contemporary Spanish and Latin American Cinema**

In this language and culture course, 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 give oral presentations, do frequent written assignments, and use online sources to listen to songs and read current articles in Spanish. This course is conducted exclusively in Spanish. Students from the Advancement Placement Spanish Language and Culture course may be accepted with the approval of the World Languages Department.

#### **Spanish V (Honors): Literature, Film, Art, and Multimedia**

This Spanish course is designed to propel students beyond language proficiency by immersing them deeply into Spanish and Latin American cultures. The course utilizes contemporary topics through literature and various multimedia resources to enhance students' language skills by exposing them to diverse linguistic registers while fostering a meticulous understanding of culture and historical contexts. Students will engage in critical analysis, discussions, and creative projects such as writing an original play to be performed in front of their peers in other Spanish courses. By the end of the course, students will be adept

at analyzing and discussing contemporary issues in the target language, making them culturally competent communicators in both academic and real-world settings. Students use Spanish exclusively in class.

Prerequisite: Advanced Placement Spanish Language and Culture or fluency in Spanish and approval of the World Languages Department.

**Global Online Academy Courses:** The following language courses are offered to students in Grades 11 and 12 through Global Online Academy:

- **Japanese I: Language Through Culture** (Yearlong)
- **Japanese II: Language Through Culture** (Yearlong)
- **Japanese III: Language Through Culture** (Yearlong)

For more information on this course, please refer to the Global Online Academy section of this Program Planning Guide.

## Online Courses With Global Online Academy

### Arts, History and Social Sciences, Mathematics and Computer Science, Science, and World Languages

BB&N partners with Global Online Academy (GOA), a consortium of independent schools worldwide, to provide students in Grades 11 and 12 with the opportunity to enroll in online elective courses and earn credit. Global Online Academy courses are interactive, instructional, and experiential, with semester-long options in a wide variety of subjects, ranging from graphic design to global health. All GOA courses have synchronous components (when students collaborate or work with their teacher at a set time, generally using video-conferencing software) and asynchronous components (when students choose at which time to participate). It is important to note that GOA courses require the same time commitment and have workloads similar to any other course students would take at BB&N. Students enrolled in these online courses are required to meet with the BB&N GOA Site Director regularly throughout the duration of the course to share what they are studying and to remain accountable to their other academic commitments.

Students can apply to enroll in a yearlong course or in one or two semester electives in Art, History and Social Sciences, Mathematics and Computer Science, Science, or World Languages (or a combination of disciplines). GOA fall courses run from September through December. Spring courses run from January through May (seniors enrolled in a spring GOA course are required to include this course as a part of their Senior Spring Project). BB&N students receive 0.5 credit for a semester-long course and 1.0 credit for a yearlong course; the student's transcript will contain the course name with an annotation to reflect that the course was taken with GOA.

Interested students must be motivated, independent learners capable of working within established timeframes to achieve curricular goals established by the GOA instructor. Requirements include concurrent enrollment in a BB&N-based elective of the chosen discipline (for all disciplines except Art), successful completion of the discipline's graduation requirements, and approval from the GOA Site Director. BB&N's Modern Global History graduation requirement may be fulfilled through a Global Online Academy course; in these special cases, students do not need to concurrently take a BB&N history course. Students will only be allowed to take a GOA course as a sixth course in addition to five BB&N non-arts courses. Enrollment is limited, and interested students are required to complete a short application submitted to the GOA Site Director. Students complete their GOA applications in the winter/spring in order to apply for a GOA course for the following semester or year. Interested students should attend the GOA informational meetings for further information on application deadlines.

### ARTS DEPARTMENT

(Concurrent enrollment in a BB&N Arts course is not required)

#### Arts Entrepreneurship (Spring)

In this course, aspiring visual artists, designers, filmmakers, musicians, and other creatives will learn how to find success in the dynamic fields of their choosing. Students will learn about arts careers and organizations by attending virtual events and interviewing art practitioners, entrepreneurs, and administrators. Beyond exploring trajectories for improving their crafts, students will build skills in networking and personal branding while examining case studies of a variety of artistic ventures—some highly successful and some with teachable flaws. Using real-world examples of professional and emerging creatives and arts organizations, students will gain a better understanding of the passion and dedication it takes to have a successful creative career.

### **Graphic Design (Fall and Spring)**

What makes a message persuasive and compelling? What helps audiences and viewers sort and make sense of information? This course explores the relationship between information and influence from a graphic design perspective. Using an integrated case study and design-based approach, this course aims to deepen students' design, visual, and information literacies. Students are empowered to design and prototype communication projects about which they are passionate. Topics include: principles of design and visual communication, infographics, digital search skills, networks and social media, persuasion and storytelling with multimedia, and social activism on the Internet. Student work will include individual and collaborative group projects, graphic design, content curation, analytical and creative writing, peer review and critiques, and online presentations.

## **HISTORY AND SOCIAL SCIENCES DEPARTMENT**

BB&N's Modern Global History graduation requirement may be fulfilled through completion of a Global Online Academy course; in these special cases, students do not need to be concurrently enrolled in a BB&N history course.

### **Applying Philosophy to Global Issues (Fall)**

This is an applied philosophy course that connects pressing contemporary issues with broad-range philosophical ideas and controversies, drawn from multiple traditions and many centuries. Students use ideas from influential philosophers to examine how thinkers have applied reason successfully, and unsuccessfully, to many social and political issues across the world. In addition to introducing students to the work of philosophers as diverse as Confucius, Immanuel Kant, John Rawls and Michel Foucault, this course also aims to be richly interdisciplinary, incorporating models and methods from diverse fields including history, journalism, literary criticism, and media studies. Students learn to develop their own philosophy and then apply it to the ideological debates which surround efforts to improve their local and global communities.

This course fulfills BB&N's Modern Global History requirement.

### **Business Problem Solving (Fall and Spring)**

How could climate change disrupt your production and supply chains or impact your consumer markets? Will tariffs help or hurt your business? How embedded is social media in your marketing plan? Is your company vulnerable to cybercrime? What twenty-first century skills are you cultivating in your leadership team? Students in this course tackle real-world problems facing businesses large and small in today's fast changing global marketplace where radical reinvention is on the minds of many business leaders. Students work collaboratively and independently on case studies, exploring business issues through varied lenses including operations, marketing, human capital, finance and risk management, as well as sustainability. As they are introduced to the concepts and practices of business, students identify, analyze, and propose solutions to business problems, engaging in research of traditional and emerging industries, from established multinationals to startups.

### **Entrepreneurship in a Global Context (Fall and Spring)**

How does an entrepreneur think? What skills must entrepreneurs possess to remain competitive and relevant? What are some of the strategies that entrepreneurs apply to solve problems? In this experiential course students develop an understanding of entrepreneurship in today's global market; employ innovation, design, and creative solutions for building a viable business model; and learn to develop, refine, and pitch a new start-up. Units include Business Model Canvas, Customer Development vs. Design Thinking, Value Proposition, Customer Segments, Iterations & Pivots, Brand Strategy & Channels, and Funding Sources. Students use the Business Model Canvas as a roadmap to building and developing their own team start-up, a process that requires hypothesis testing, customer research conducted in hometown markets, product design, product iterations, and entrepreneur interviews. An online start-up pitch by the student

team to an entrepreneurial advisory committee will be the culminating assessment. Additional student work includes research, journaling, interviews, peer collaboration, and a case study involving real world consulting work for a current business.

### **Gender and Society (Spring)**

This course uses the concept of gender to examine a range of topics and disciplines that might include feminism, gay and lesbian studies, women's studies, popular culture, and politics. Throughout the course, students examine the intersection of gender with other social identifiers: class, race, sexual orientation, culture, and ethnicity. Students read about, write about, and discuss gender issues as they simultaneously reflect on the ways that gender has manifested in and impacted their lives.

This course fulfills BB&N's Modern Global History requirement.

### **Genocide and Human Rights (Fall)**

Students in this course study several of the major genocides of the twentieth century (Armenian, the Holocaust, Cambodian, and Rwandan), analyze the role of the international community in responding to and preventing further genocides (with particular attention to the Nuremberg tribunals), and examine current human rights crises around the world. Students read primary and secondary sources, participate in both synchronous and asynchronous discussions with classmates, write brief papers, read short novels, watch documentaries and develop a human rights report card website about a nation of their choice.

This course fulfills BB&N's Modern Global History requirement.

### **International Relations (Fall and Spring)**

Are China and the U.S. on a collision course for war? Can the Israelis and Palestinians find a two-state solution in holy land? Will North Korea launch a nuclear weapon? Can India and Pakistan share the subcontinent in peace? These questions dominate global headlines and our daily news feeds. In this course, students go beyond the sound bites and menacing headlines to explore the context, causes, and consequences of the most pressing global issues of our time. Through case studies, students explore the dynamics of international relations and the complex interplay of war and peace, conflict and cooperation, and security and human rights. Working with classmates from around the world, students also identify and model ways to prevent, mediate, and resolve some of the most pressing global conflicts.

This course fulfills BB&N's Modern Global History requirement.

### **Introduction to Blockchain and Cryptocurrency (Spring)**

Much attention has been brought to the cryptocurrency space by the meteoric rise in the valuation of Bitcoin and other cryptocurrencies. More recently, meme tokens have also grabbed the spotlight. When thinking about cryptocurrency, there is much more to consider than just market capitalization or coins named after canines. Introduction to Blockchain and Cryptocurrency is an entry level course for anyone excited by the space. This course explores how we arrived at the place we are now, and what the current and possible applications of crypto are. The course explores how markets in crypto operate, where they've received practical application, and where the space may head in the future through the lenses of creators, consumers, and governments. In addition, students take a deeper look at blockchain, the underlying technology that powers cryptocurrencies, and it's many, far-reaching implications for the future of government, business, the arts and more. Each lens represents a different way to view the complex and interrelated causes and outcomes of the changing crypto landscape. Using a variety of technologies and activities, students work individually and with peers to evaluate each lens. Students then analyze and explore how these technologies may shape and disrupt the future not only of the crypto space, but of many current and future industries.

### **Introduction to Branding and Marketing (Fall and Spring)**

In our increasingly digitized world, we are bombarded by ads every day and presented with an immeasurable amount of content across all media platforms. It has become increasingly difficult for brands

to break through the noise and capture the attention of their intended audience. In this course, students learn what it takes to build an effective brand that can authentically connect with consumers and create long-term brand equity. The course starts with introducing what a brand is and goes on to explore how different branding elements, such as Visual Identity, Advertising Strategy, Content Marketing, as well as the intangible elements of the Customer Journey, come together to create a unique Brand Experience. By applying marketing theories, interviewing experts, and analyzing modern case studies, students develop and strengthen their competencies as brand strategists. Students also examine how responding to important ethical, social, and environmental issues can impact the brand's success. The course culminates in a final project where students collaborate to design an impactful brand campaign for a mission-driven company, organization, or initiative.

### **Introduction to Legal Thinking (Fall and Spring)**

Inspired by GOA's popular Medical Problem Solving series, this course uses a case-based approach to give students a practical look into the professional lives of lawyers and legal thinking. By studying and debating a series of real legal cases, students sharpen their ability to think like lawyers who research, write, and speak persuasively. The course focuses on problems that lawyers encounter in daily practice and on the rules of professional conduct case law. In addition to practicing writing legal briefs, advising fictional clients, and preparing opening and closing statements for trial, students approach such questions as the law and equity, the concept of justice, jurisprudence, and legal ethics.

### **Investing I (Fall and Spring)**

This course is a prerequisite to Investing II at GOA. In this course, students simulate the work of investors by working with the tools, theories, and decision-making practices that define smart investment. Students explore concepts in finance and apply them to investment decisions in three primary contexts: portfolio management, venture capital, and social investing. After an introduction to theories about valuation and risk management, students simulate scenarios in which they must make decisions to grow an investment portfolio. They manage investments in stocks, bonds, and options to learn a range of strategies for increasing the value of their portfolios. In the second unit, students take the perspective of venture capital investors, analyzing startup companies and predicting their value before they become public. In the third unit, students examine case studies of investment funds that apply the tools of finance to power social change. Throughout the course, students learn from experts who have experience in identifying value and managing risk in global markets. They develop their own ideas about methods for weighing financial risks and benefits and leave this course not just with a simulated portfolio of investments, but the skills necessary to manage portfolios in the future.

### **Investing II (Spring)**

In this course, students expand their knowledge of practices that define smart investment. They explore concepts in finance and apply them to investment decisions in four primary contexts: fixed-income investments, foreign exchange and crypto, commodities, and real estate. After an introduction to theories about behavioral finance, students simulate scenarios in which they must make decisions to add to their portfolio of equities. In the first unit, they learn how fixed-income assets like bonds fit into a larger portfolio to hedge risk in their portfolios. In the second unit, students examine forex trading and the cryptocurrency markets, a riskier and more volatile investment vehicle. In the third unit, students examine how commodities can be a part of a larger portfolio, but also how commodity prices might affect the larger economy. Finally, in the fourth unit, students learn about the array of strategies in real estate investing. Throughout the course, students learn from experts who have experience in identifying value and managing risk in global markets. They develop their own ideas about methods for taking calculated financial risks and build on their understanding from Investing I. They leave this course with a more nuanced view of their overall portfolio and the skills necessary to manage risk in the future.

Prerequisite: Investing I

### **Positive Psychology (Fall)**

What is a meaningful, happy, and fulfilling life? The focus of psychology has long been the study of human suffering, diagnosis, and pathology, but in recent years, however, positive psychologists have explored what's missing from the mental health equation, taking up research on topics such as love, creativity, humor, and mindfulness. In this course, we dive into what positive psychology research tells us about the formula for a meaningful life, the ingredients of fulfilling relationships, and changes that occur in the brain when inspired by music, visual art, physical activity, and more. We also seek out and lean on knowledge from positive psychology research and experts, such as Martin Seligman's well being theory, Mihaly Csikszentmihalyi's idea of flow, and Angela Lee Duckworth's concept of grit. In exploring such theories and concepts, students imagine and create real-world measurements using themselves and willing peers and family members as research subjects. As part of the learning studio format of the course, students also imagine, research, design, and create projects that they will share with a larger community. Throughout the development of these projects, students collaborate with each other and seek ways to make their work experiential and hands-on. Students leave the class with not only some answers to the question of what makes life meaningful, happy, and fulfilling, but also the inspiration to continue responding to this question for many years to come.

### **Prisons and Criminal Justice Systems (Fall and Spring)**

Criminal courts in the United States have engaged in an extraordinary social experiment over the last 40 years: they have more than quintupled America's use of prisons and jails. Has this experiment with "mass incarceration" produced more negative effects than good? Is it possible at this point to reverse the experiment without doing even more harm? In this course, students become familiar with the legal rules and institutions that determine who goes to prison and for how long. Along the way, students gain a concrete, practical understanding of legal communication and reasoning while grappling with mass incarceration as a legal, ethical, and practical issue. In an effort to understand our current scheme of criminal punishments and to imagine potential changes in the system, we immerse ourselves in the different forms of rhetoric and persuasion that brought us to this place: we read and analyze the jury arguments, courtroom motions, news op-eds, and other forms of public persuasion that lawyers and judges create in real-world criminal cases. Topics include the history and social functions of prisons; the definition of conduct that society will punish as a crime; the work of prosecutors, defense attorneys, and judges in criminal courts to resolve criminal charges through trials and plea bargains; the sentencing rules that determine what happens to people after a conviction; the alternatives to prison when selecting criminal punishments; and the advocacy strategies of groups hoping to change mass incarceration. The reading focuses on criminal justice in the United States, but the course materials also compare the levels of imprisonment used in justice systems around the world. Assignments will ask students to practice with legal reasoning and communication styles, focused on specialized audiences such as juries, trial judges, appellate judges, sentencing commissions, and legislatures. The work will involve legal research, written legal argumentation, peer collaboration, and oral advocacy. Note: This course is offered through Wake Forest University School of Law and is designed by Ronald Wright, the Needham Y. Gulley Professor of Criminal Law. Prof. Wright is also part of the teaching team for this course. Students who take this course should expect a college-level workload (8-10 hours a week). Successful completion of this course will be rewarded with a certificate from the law school.

### **Race and Society (Fall)**

What is race? Is it something we're born with? Is it an idea that society imposes on us? An identity we perform? A privilege we benefit from? Does our own culture's conception of race mirror those found in other parts of the world? These are just a few of the questions that students in this course explore together as they approach the concept of race as a social construct that shapes and is shaped by societies and cultures in very real ways. Throughout the course students learn about the changing relationship between race and society across time and across cultures. Engaging with readings, films, and speakers from a variety

of academic fields (history, sociology, anthropology, literature), students explore, research, reflect on, and discuss the complex set of relationships governing race and society.

### **Religion and Society (Spring)**

Religion is one of the most salient forces in contemporary society but is also one of the most misunderstood. What exactly is religion? How does religious identity inform the ways humans understand themselves and the world around them? How can increased levels of religious literacy help us become more effective civic agents in the world today? Students in this course conduct several deep dives into specific case studies in order to understand how religious identity intersects with various systems of power, including race, gender, class, sexual orientation, and ethnicity. By engaging with material from a variety of academic fields (history, sociology, anthropology, psychology), students grapple with the complex ways in which society and religious identity relate to one another.

### **Social Psychology (Fall and Spring)**

Are you thinking and acting freely of your own accord or is what you think, feel, and do a result of influences by the people around you? Social psychology is the scientific study of how and why the actual, imagined, or implied presence of others influences our thoughts, feelings, and behavior. The principles of social psychology help explain everything from why we stop at stop signs when there is no one around to why we buy certain products, why in some situations we help others and in some we don't, and what leads to more dramatic (and catastrophic) events such as mass suicides or extreme prejudice and discrimination. As we take up these topics and questions, students build and engage in a community of inquiry, aimed primarily at learning how to analyze human behavior through the lens of a social psychologist. Social Psychology invites students to explore, plan, investigate, experiment, and apply concepts of prejudice, persuasion, conformity, altruism, relationships and groups, and the self that bring the "social" to psychology. The course culminates in a public exhibition of a student-designed investigation of a social psychological topic of their choice. This course uses a competency-based learning approach in which students build GOA core competencies that transcend the discipline and learn how to think like a social psychologist. Much of the course is self-paced; throughout the semester, students are assessed primarily in relation to outcomes tied to the competencies.

## **MATHEMATICS AND COMPUTER SCIENCE DEPARTMENT**

### **Computer Science II: Analyzing Data with Python (Spring)**

In this course, students utilize the Python programming language to read, manipulate, and analyze data. The course emphasizes using real-world datasets, which are often large, messy, and inconsistent. The prerequisite for this course is familiarity with and hands-on experience using some high-order programming language, such as Java, C++, VisualBasic, or Python itself. Because of the powerful data structures and clear syntax of Python, it is one of the most widely used programming languages in scientific computing. There are a multitude of practical applications of Python in fields like biology, engineering, and statistics.

Prerequisite: Computer Programming or Advanced Placement Computer Science A

### **Computer Science II: Game Design and Development (Spring)**

In this course, students practice designing and developing games through hands-on practice. Comprised of a series of "game jams," the course asks students to solve problems and create content, developing the design and technical skills necessary to build their own games. The first month of the course is dedicated to understanding game design through game designer Jesse Schell's "lenses": different ways of looking at the same problem and answering questions that provide direction and refinement of a game's theme and structure. During this time, students also learn how to use Unity, the professional game development tool they use throughout the class. They become familiar with the methodologies of constructing a game using



such assets as graphics, sounds, and effects, and controlling events and behavior within the game using the C# programming language. Throughout the remainder of the course, students work in teams to brainstorm and develop new games in response to a theme or challenge. Students develop their skills in communication, project- and time-management, and creative problem solving while focusing on different aspects of asset creation, design, and coding.

Prerequisites: Computer Programming or Advanced Placement Computer Science A

### **Cyber Security** (Fall and Spring)

Cyber criminals leverage technology and human behavior to attack our online security. This course explores the fundamentals of and vulnerabilities in the design of computers, networks, and the internet. Course content includes the basics of computer components, connectivity, virtualization, and hardening. Students will learn about network design, Domain Name Services, and TCP/IP. They will understand switching, routing and access control for internet devices, and how denial of service, spoofing and flood attacks work. Basic programming introduced in the course will inform hashing strategies, while an introduction to ciphers and cryptography will show how shared-key encryption works for HTTPS and TLS traffic. Students will also explore the fundamentals of data forensics and incident response protocols. The course includes analysis of current threats and best practice modelling for cyber defense, including password complexity, security, management, breach analysis, and hash cracking. Computational thinking and programming skills developed in this course will help students solve a variety of cyber security issues. There is no computer science prerequisite for this course, though students with some background will certainly find avenues to flex their knowledge in this course.

### **Game Theory** (Fall and Spring)

Do you play games? Do you ever wonder if you're using the "right" strategy? What makes one strategy better than another? In this course, we explore a branch of mathematics known as game theory, which answers these questions and many more. Game theory has many applications as we face dilemmas and conflicts every day, most of which we can treat as mathematical games. We consider significant global events from fields like diplomacy, political science, anthropology, philosophy, economics, and popular culture. Specific topics include two-person zero-sum games, two person non-zero-sum games, sequential games, multiplayer games, linear optimization, as well as voting and power theory.

### **Introduction to Artificial Intelligence** (Fall and Spring)

Aspects of artificial intelligence permeate our lives and the algorithms power your favorite apps. How much do you really know about how AI works or how it is changing the world around us? This course explores the history of research into artificial general intelligence and the subsequent focus on the subfields of narrow AI: Neural networks, Machine Learning and Expert Systems, Deep Learning, Natural Language Processing, and Machine Vision and Facial Recognition. Students learn how AI training datasets cause bias and focus on the ethics and principles of responsible AI: fairness, transparency and explainability, human-centeredness, and privacy and security.

Learn how to design and build apps for the iPhone and iPad and prepare to publish them in the App Store. Students will work much like a small startup: collaborating as a team, sharing designs, and learning to communicate with each other throughout the course. Students will learn the valuable skills of creativity, collaboration, and communication as they create something amazing, challenging, and worthwhile. Coding experience is NOT required and does not play a significant role in this course. Prerequisite: For this course, it is required that students have access to a computer running the most current Mac or Windows operating system. An iOS device that can run apps (iPod Touch, iPhone, or iPad) is also highly recommended.

### **Number Theory** (Fall)

Once thought of as the purest but least applicable part of mathematics, number theory is now by far the most commonly applied: every one of the millions of secure Internet transmissions occurring each second

is encrypted using ideas from number theory. This course covers the fundamentals of this classical, elegant, yet supremely relevant subject. It provides a foundation for further study of number theory, but even more, it develops the skills of mathematical reasoning and proof in a concrete and intuitive way, good preparation for any future course in upper-level college mathematics or theoretical computer science. Students progressively develop the tools needed to understand the RSA algorithm, the most common encryption scheme used worldwide. Along the way, they invent some encryption schemes of their own and discover how to play games using number theory. Students also get a taste of the history of the subject, which involves the most famous mathematicians from antiquity to the present day, and see parts of the story of Fermat's Last Theorem, a 350-year-old statement that was fully proved only twenty years ago. While most calculations are simple enough to do by hand, students sometimes use the computer to see how the fundamental ideas can be applied to the huge numbers needed for modern applications. Students must have a desire to do rigorous mathematics and proofs.

Prerequisite: Precalculus, Honors Precalculus AB, or Honors Precalculus BC

### **Personal Finance** (Fall and Spring)

In this course, students learn financial responsibility and social consciousness. We examine a wide array of topics including personal budgeting, credit cards and credit scores, career and earning potential, insurance, real estate, financial investment, retirement savings, charitable giving, taxes, and other items related to personal finance. Students apply their understanding of these topics by simulating real life financial circumstances and weighing the costs and benefits of their decisions. Throughout the course, students have the opportunity to learn from individuals with varying perspectives and expertise in numerous fields. By reflecting on their roles in the broader economy as both producers and consumers, students begin to consider how they can positively impact the world around them through their financial decisions.

## **SCIENCE DEPARTMENT**

### **Global Health** (Fall)

What makes people sick? What social and political factors lead to the health disparities we see both within our own community and on a global scale? What are the biggest challenges in global health and how might they be met? Using an interdisciplinary approach to address these two questions, this course hopes to improve students' health literacy through an examination of the most significant public-health challenges facing today's global population. Topics addressed include the biology of infectious disease (specifically HIV and malaria); the statistics and quantitative measures associated with health issues; the social determinants of health; and the role of organizations (public and private) in shaping the landscape of global health policy. Students use illness as a lens through which to examine critically such social issues as poverty, gender, and race. Student work includes analytical and creative writing; research, and peer collaboration; reading and discussions of nonfiction; and online presentations.

### **Medical Problem Solving I** (Fall and Spring)

In this course students collaboratively solve medical mystery cases, which is similar to the approach used in many medical schools. Students enhance their critical-thinking skills as they examine data, draw conclusions, diagnose, and treat patients. Students use problem-solving techniques in order to understand and appreciate relevant medical/biological facts as they confront the principles and practices of medicine. Students explore anatomy and physiology pertaining to medical scenarios and gain an understanding of the disease process, demographics of disease, and pharmacology. Additional learning experiences include studying current issues in health and medicine, building a community-service action plan, interviewing a patient, and creating a new mystery case.

**Medical Problem Solving II (Fall and Spring)**

This course is an extension of the problem-based learning done in Medical Problem Solving I. While collaborative examination of medical case studies remains the core work of the course, students tackle more complex cases and explore new topics in medical science, such as the growing field of bioinformatics. Students in MPS II also have opportunities to design cases based on personal interests, discuss current topics in medicine, and apply their learning to issues in their local communities.

Prerequisite: Medical Problem Solving I

**Neuropsychology (Fall and Spring)**

Neuropsychology is the exploration of the neurological basis of behavior. Within this course, students learn about basic brain anatomy and function as well as cognitive and behavioral disorders from a neurobiological perspective. They do an in-depth analysis of neural communication with an emphasis on how environmental factors such as smartphones affect nervous system function, their own behaviors, and the behaviors of those around them. Students also have the opportunity to choose topics in neuropsychology to explore independently including Alzheimer's disease, Addiction, Neuroplasticity, and CTE and share their understanding with their peers in a variety of formats. The course concludes with a study of both contemporary and historic neuropsychological case studies and their applications to everyday life.

**WORLD LANGUAGES DEPARTMENT****Japanese I: Language Through Culture (Yearlong)**

This full-year course is a unique combination of Japanese culture and language, weaving cultural comparison with the study of basic Japanese language and grammar. While examining various cultural topics such as literature, art, lifestyle, and economy, students learn the basics of the Japanese writing system (Hiragana and Katakana), grammar, and vocabulary. Through varied synchronous and asynchronous assignments, including hands-on projects and face-to-face communications, students develop their speaking, listening, reading, and writing skills. The cultural study and discussion is conducted in English, with topics alternating every two to three weeks. The ultimate goal of this course is to raise awareness and appreciation of different cultures through learning the basics of the Japanese language. The focus of this course is 60 percent on language and 40 percent on culture. This course is appropriate for beginner-level students.

**Japanese II: Language Through Culture (Yearlong)**

Through language learning, students in this course share their voices, cultivate global perspectives, and foster appreciation of self and others. Students expand their knowledge of the basic skills introduced in Japanese I: Language Through Culture while further developing their speaking, listening, writing, and reading skills. Each unit follows the IPA model (Integrated Performance Assessment), blending three modes of communication: interpretation of authentic material in Japanese, synchronous and asynchronous practice in speaking and writing, and oral and written presentations. Each unit focuses on one of the following cultural topics: Design and Expression, Ecology, Entertainment, East meets West, Harmony, and Nature. In addition, students have the opportunity to select and pursue topics of their own interest. Grammar topics cover the essential forms that are typically introduced in the second and third year of a high school Japanese program. By learning the Dictionary Form, Nominalizer, TE form, TA form, NAI form, and Noun Modifier, students are able to add more complexity to their sentence construction. In doing so, they shift from forming simple sentences to communicating in a coherent paragraph. As online learners, students are expected to exhibit superb time management and communication skills, as well as take ownership of their learning. While grammar instruction will be delivered through asynchronous work and face-to-face meetings, much of the course content will be curated and created by students through their research and collaboration. The focus of this course is 60 percent on language and 40 percent on culture.

Prerequisite: Japanese I: Language Through Culture or permission from the instructor.

### **Japanese III: Language Through Culture (Yearlong)**

Students in Japanese III have mastered most of the conjugation patterns (TE/TA form, dictionary form, and NAI form) that are necessary to speak and write in complex structures. While advancing their grammatical knowledge (including giving and receiving, potential form, and honorific form), students compare and examine similar functions and their subtle differences. In speaking, students are allowed to speak in informal/casual style with each other and with the teacher in order to solidify their control of the Plain Form. Interpersonal communications are done through face-to-face conversation and recorded messages. In reading and listening, students curate, share, and practice with grasping the gist of authentic materials. Such material may include TV commercials, news, movies, children's books, online newspapers, and cooking recipes. In writing, students work on creative writing, expository writing, and analytical writing (compare-and-contrast in the AP format). Semester 1 incorporates JLPT N5 exam material. Taking the exam is not necessary but encouraged. In Semester 2, students participate in that GOA Catalyst Conference. Prerequisite: Japanese II: Language Through Culture or permission from the instructor.

## **INTERDISCIPLINARY COURSES**

**Climate Action and Sustainability** (Fall and Spring, History/Science, must be concurrently enrolled in a BB&N History and Social Sciences or Science course)

The course explores the critical issues of climate change and its profound impacts through the lenses of equity and sustainability. In an ever-changing world, students delve into the interconnected challenges of climate justice, agriculture, wildfires, renewable energy sources, sea level rise, and the consequences of invasive species. Students engage in comprehensive studies to interrogate the causes and effects of climate change, investigate public policy debates, and, most importantly, examine how these issues affect the diverse populations of our planet through hands-on activities. The course culminates with GOA's Catalyst Exhibition, as students share projects to spark change in local communities through well-informed activism. (Note: This course is a reimagined, redesigned, retitled version of the course that was called Climate Change and Global Inequality through the 2023-2024 school year. Students who have already taken Climate Change and Global Inequality should choose a different course.)

**Data Visualization** (Fall, Math/Science, must be concurrently enrolled in a BB&N Mathematics and Computer Science or Science course)

Through today's fog of overwhelming data, visualizations provide meaning. This course trains students to collect, organize, interpret, and communicate massive amounts of information. Students will begin wrangling data into spreadsheets, learning the basic ways professionals translate information into comprehensible formats. They will explore charts, distinguishing between effective and misleading visualizations. Employing principles from information graphics, graphic design, visual art, and cognitive science, students will then create their own stunning and informative visualizations. From spreadsheets to graphics, students in this course will practice the crucial skills of using data to decide, inform, and convince. There is no computer science, math or statistics prerequisite for this course, though students with backgrounds in those areas will certainly find avenues to flex their knowledge in this course.

## Semester-Away Programs-at-a-Glance

BB&N is proud to offer a robust Semester-Away Program for students in Grades 10 and 11. This program offers a unique opportunity for independent and adventurous students to live and study away from home while exploring topics in which they are interested.

Listed below are the schools with which BB&N partners. Rigorous academics coupled with experiential learning opportunities are hallmarks of each of these schools, although the focus and location of the schools vary. BB&N works with each school to align academic and extracurricular programs to create smooth transitions between schools. In cases where participation in a BB&N-sanctioned semester-away program does not allow a student to complete a BB&N graduation requirement (such as a physical science or arts course), the student needs to enroll in another BB&N course in a subsequent year or have an approved course plan from the Department Head to meet that graduation requirement. We aim to ensure that students who spend a semester away are given all of the same opportunities as their peers at BB&N.

Program	Grade/Semester Available	Program Emphasis
<b>Alzar School</b> (Cascade, Idaho) <a href="http://www.alzarschool.org">www.alzarschool.org</a>	Grade 10 or 11 Fall or Spring	Leadership, outdoor adventure, six-week cultural exchange in Chile
<b>High Mountain Institute</b> (Leadville, Colorado) <a href="http://www.hminet.org">www.hminet.org</a>	Grade 11 Fall or Spring	Leadership skills, wilderness experiences
<b>Maine Coast Semester at Chewonki</b> (Wiscasset, Maine) <a href="http://www.maine coastsemester.chewonki.org">www.maine coastsemester.chewonki.org</a>	Grade 11 Fall or Spring	Appreciation of the natural world, coastal ecology, community
<b>Mountain School</b> (Vernon, Vermont) <a href="http://www.mountainschool.org">www.mountainschool.org</a>	Grade 11 Fall or Spring	Working farm, sustainable living, community
<b>Outdoor Academy</b> (Pisgah Forest, North Carolina) <a href="http://www.enf.org/outdoor-academy">www.enf.org/outdoor-academy</a>	Grade 10 Fall or Spring	Wilderness leadership skills, traditional crafts, community
<b>St. Stephen's School</b> (Rome, Italy) <a href="http://www.sssrome.it">www.sssrome.it</a>	Grade 11 Spring	Classical and Italian culture, art history, travel
<b>The School for Ethics and Global Leadership</b> (Washington, D.C. or Johannesburg, South Africa or London) <a href="http://www.schoolforethics.org">www.schoolforethics.org</a>	Grade 11 Fall or Spring	Politics, leadership, global issues
<b>School Year Abroad</b> (Italy, France, Spain) <a href="http://www.sya.org">www.sya.org</a>	Grade 11 Yearlong, Fall, Spring	Immersion in the language and the culture of the country, home stay

<b>Swiss Semester</b> (Zermatt, Switzerland) <a href="http://www.swisssemester.org">www.swisssemester.org</a>	Grade 10 Fall	Humanities, hiking, skiing, travel, art history
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Please contact the Semester-Away Program Coordinator Scott Tang (617-800-2220, [stang@bbns.org](mailto:stang@bbns.org)) for more information about these programs, with questions about the application process, or with questions about how the academic programs at these semester-away opportunities align with the curriculum at BB&N.

# Upper School Service Learning Program

## PHILOSOPHY

The mission of the Service Learning Program at BB&N is to foster a school-wide culture of meaningful civic engagement and social action. Through the Service Learning Program, students partner with their local and global communities in order to not only impact change, but also to understand the root causes of critical social issues, as well as their role within systems beyond their school and home communities. By engaging in BB&N's Service Learning program, students learn to investigate issues of local and global significance, to build connections between themselves and their communities at large, to communicate effectively across differences and gain hands-on experience in teamwork, leadership, and advocacy. In doing so, all students continue to grow in the School's mission to prepare "students for lives of principled engagement in their communities and the world."

## GRADUATION REQUIREMENTS

### **A minimum of 40 hours of service learning work (For Class of 2025 only)**

- Students begin accruing hours in September of their first year in the Upper School. Hours can be earned during summers and vacations. Requirements are prorated at 10 hours per year for students admitted to BB&N in Grades 10 – 12; these hours must be completed while enrolled at BB&N.
- Students' service hours need to be recorded and verified by their site supervisor, via the School's online tracking system (x2VOL).
- Additional hours may be documented with no upper limit of service hours.
- Service must be unpaid work for a nonprofit organization and cannot result in academic or professional credit.
- Work at for-profit organizations (sports camps, wilderness camps, religious camps, etc.) is not eligible for service learning credit.
- Students are encouraged to connect with BB&N's community partners, as highlighted on the service learning hub and school website.
- Students may also elect to start their own nonprofit service initiatives, but should discuss their projects with a Service Learning Coordinator before doing so.
- Every attempt at participating in sustainable or long-term programs should be made; monetary donations cannot be a substitute for service.
- If a senior has not documented 40 hours of service by the date on which Senior Spring Project (SSP) proposals are due, the remaining required service hours must be a formal component of the SSP. Any exceptions must be approved by the Service Learning Coordinators and the Senior Spring Project Coordinator prior to the submission of the SSP proposal.

**A 500-word reflective essay:** Upon completion of service, students must submit a written reflection on their service. In the reflective essay, students should show evidence that the following was a part of their service experience:

- Investigation and understanding of the student's identity, community, strengths, and interests
- Communication, collaboration, and connection with peers, leaders, and service partners
- Action including proof of measurable impact at the service site
- Reflection upon what was learned, where it might be applied, and how it will be shared

## SEASON OF SERVICE LEARNING

Upper School students in Grades 10 – 12 with a significant interest in pursuing a specific commitment to service learning may apply for a Season of Service Learning in lieu of one athletics season per academic year. This program asks students to engage in collective learning and reflection alongside hands-on service for a total of 40 hours over the course of a season and culminates in a final presentation to be shared with

the BB&N community. Students wishing to participate in this program should connect with the Service Learning Coordinators prior to the start of seasonal tryout. Completion of the Season of Service Learning program meets the service learning graduation requirement for a student, including the reflective essay component.

Participation in a Season of Service Learning is not considered participation in an interscholastic sport. During Senior Spring Project, only seniors who have already completed the Service Learning graduation requirement and have not already completed a Season of Service during senior year are allowed to do a Season of Service in lieu of an athletics season.

### **SERVICE OUTSIDE OF BB&N**

While BB&N makes every effort to establish partnerships with trusted community organizations, students may fulfill their service requirement by working with groups or individuals outside of the BB&N community who may not have had criminal background checks and whom BB&N does not control.

Unanticipated situations and problems can arise in any activity which is not reasonably within the control of BB&N employees. Families with students participating in service outside of BB&N agree to release and hold harmless BB&N, its agents, officers, employees, and volunteers from any and all liability, claims, suits, demands, judgments, costs, interest and expenses (including attorneys' fees and costs) arising from such activities, including any accident or injury to the student and the costs of medical services, or any cause beyond the control of BB&N.



## Academic Considerations and Policies

### ACADEMIC CONCERNS AND ACADEMIC STATUS

The School aims to identify and support students who are struggling academically. As such, the system of Academic Watch, Academic Warning, and Academic Probation exists to ensure that these students receive appropriate support from both the School and home. Follow-up plans for students on Academic Watch, Academic Warning, or Academic Probation may include, but are not limited to, weekly progress meetings, work with the Learning Specialist, supervised study halls, limited participation in extracurricular or off-campus activities, and additional work with teachers. As the student works to improve and find greater success, the School closely monitors the student's program.

The Academic Review Committee (ARC) meets at the end of each trimester to review students who did not achieve a satisfactory academic record. The Committee makes recommendations regarding academic status to the Upper School Director. The Head of School has ultimate authority to review and amend the recommendations of the ARC and the Director.

**Academic Watch:** Any student who receives three or more grades in the C range or one C- at the middle of a trimester will be placed on Academic Watch for the remainder of the trimester. At the end of a trimester, any student who receives grades in the C range for three or more courses or one C- grade will be placed on Academic Watch for the subsequent trimester. In addition, the Director of the Upper School may place a student on Academic Watch at any point during the school year when there are significant concerns about performance, attendance, attitude, or other factors affecting academic achievement. When a student is placed on Academic Watch, the student's advisor notifies the student and the parent. At the end of the trimester, the ARC may review any student on Academic Watch.

**Academic Warning:** The first time a student receives one grade below C- at the end of a trimester, the student will be placed on Academic Warning for the subsequent trimester. When a student is placed on Academic Warning, the student, parent, advisor, and teachers receive written notification. A student on Academic Warning is not considered to be a student in good academic standing. A student on Academic Warning should not expect to participate in certain extra programs but may apply to do so. At the end of the trimester, the ARC will review any student on Academic Warning.

**Academic Probation:** Any student who has previously been on Academic Warning and receives one grade below C- at the end of any following trimester will be placed on Academic Probation for the subsequent trimester. When a student is placed on Academic Probation, the student, parent, advisor, and teachers receive written notification. A student on Academic Probation is not considered to be a student in good academic standing. A student on Academic Probation should not expect to participate in certain extra programs but may apply to do so. At the end of the trimester, the ARC will review any student on Academic Probation.

**Note:** At the end of a trimester in which an exam is administered, only year-to-date grades are used to determine academic status. At the end of a trimester without an exam, the trimester grade is used to determine academic status.

A student may be required to withdraw from the School under any of the following conditions:

- A student who has been on Academic Probation for two consecutive trimesters receives grades that would place the student on Academic Probation for the subsequent trimester.
- A student who has been on Academic Probation for three trimesters over the course of two consecutive years receives grades that would place the student on Academic Probation for the subsequent trimester.

- A student who has been on Academic Probation for any two trimesters in Grade 10 receives grades that would place the student on Academic Probation for the subsequent trimester.

### **ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES**

Based on testing administered within three years, students with a documented disability and a recommendation for accommodation may apply to their campus specific Learning Specialist for reasonable accommodation. Accommodation requests are typically reviewed and decisions made within two to four weeks after all documentation is received by BB&N. Accommodations will not be granted if they fundamentally alter the nature of the School's academic standards, policies, or program or if they cause an undue burden to the School.

For exams, all documentation must be received at least two weeks in advance of the start of the exam. Upper School Applications to the College Board or ACT for accommodations are handled by BB&N's SSD Coordinator.

### **ARTS DEPARTMENT CONTENT POLICY**

The Arts Department values the growth of the individual and the community through the creative exploration of ideas, topics, and language. There are times, however, when we must follow a process to determine whether the content of some student ideas or creations have a proper place in a project, gallery, or other area, as we recognize that some content is not appropriate for all ages, general spaces, or the school setting. Therefore, the Arts Department has created a process for determining whether such content is appropriate for the setting. Such content may include highly sexual images, images of self-harm, abuse, drug use, or gun imagery and graphic violence. The process involves Arts Department faculty and may include other BB&N faculty and administrators. The goal of this process is to protect students and to recognize the important intersection between content and setting.

### **CREDIT FROM OTHER SCHOOLS/SUMMER ACADEMIC WORK**

After a student has enrolled at BB&N, all remaining graduation requirements must be fulfilled at BB&N or at a BB&N-sanctioned semester-away program. Courses taken at other institutions will not be given credit towards graduation requirements without the approval of the appropriate Department Head.

Prior permission from the Department Head is necessary for a student to take a summer course outside of BB&N that will allow for advancement within the curriculum at BB&N. Without prior permission, a student will not be allowed to bypass any BB&N courses. Following summer coursework, a student may be required to take a placement test in order to advance. Non-BB&N summer courses taken for advancement will be noted without a grade on a student's transcript. A student cannot complete graduation requirements through non-BB&N summer coursework.

It is the responsibility of the student to provide the transcript from other institutions to colleges during the college application process.

Courses offered by BB&N and taken during the summer months will appear on the BB&N transcript if the student completes the course with a grade of C- or higher.

### **EXAMS**

Exams or culminating projects serving as exams are given in December at the end of Trimester 1, depending on the class. Exams are weighted such that they count for 10 – 20 percent of the Trimester 1 year-to-date grade. At least the last two class periods and corresponding homework assignments preceding exams are devoted to review.

Seniors are exempt from exams, unless the class is needed to fulfill the graduation requirement in a science course, a mathematics course, a U.S. History course, and/or a world languages course. Seniors take exams early in the exam week.

**GRADE DEFINITIONS**

Upper School teachers grade according to the following definitions:

- A:** Outstanding performance
- B:** Distinguished performance
- C:** Satisfactory completion
- D:** Minimal completion
- F:** Unacceptable performance
- I:** Incomplete (due to work that is legitimately late)

Students have two weeks to complete the work required to convert a grade of an Incomplete into a letter grade. The Upper School Assistant Director or Upper School Director may grant exceptions to this deadline.

Letter Grade	Numerical Equivalent
A+	97 - 100
A	93 - 96
A-	90 - 92
B+	87 - 89
B	83 - 86
B-	80 - 82
C+	77 - 79
C	73 - 76
C-	70 - 72
D+	67 - 69
D	63 - 66
D-	60 - 62
F	59 and below

Prior to advancing to the next level of a particular subject, students with a year grade of D+ or below will likely be expected to complete extra work in that course during the summer.

**GRADE REPORTS**

Grade Reports are sent to families in the middle of the first trimester and at the end of all three trimesters.

Grade Reports include a trimester grade (an average of all of the work completed during the trimester; not including any exam grades), an exam grade (when given), and a year-to-date or final grade. The year-to-date or final grade is an average of all work from the start of the school year, including exam grades.

Students participating in semester-away programs receive grade reports directly from those institutions.

## **HOMEWORK**

Students in Grades 9 and 10 may have up to 30 minutes of homework per class per night. Students in Grades 11 and 12 may have up to 45 minutes of homework per class per night. In mixed grade courses or some accelerated courses, the amount of nightly homework time allowed may be determined by the department, but should not exceed 45 minutes.

There will be no homework assigned during Thanksgiving Break, Winter Break, and Spring Break. When appropriate, “No Homework” nights are scheduled due to required school events and certain holidays.

In an effort to help students maintain an appropriately balanced workload, a schedule provides guidelines to teachers in regards to planning major assessments (including tests, projects, and papers). A student should have no more than two major assessments per day and no more than four major assessments per week. If a student has assessments beyond these guidelines, the student should notify the teachers so that the teachers can reschedule the assessment(s).

In addition, during periods when there is usually a heavy emphasis on assessments (i.e., the end of a marking period), the School provides additional support in order to help avoid overscheduling a student. During these periods, a student may have more than four major assessments per week, but should expect to have no more than two major assessments on any day.

## **HONORS**

A graduating senior who completes a full academic program is eligible for a Diploma with Honor if the student earned a cumulative 3.33 average during the last six trimesters (i.e., the junior and senior years). A student found to have committed an act of academic dishonesty (e.g., cheating or plagiarism) is ineligible for a Diploma with Honor if the act occurred in the junior or senior year.

## **INDEPENDENT STUDY PROGRAM**

The Independent Study Program is intended for juniors and seniors who have the capacity to work independently and have a strong interest in an academic area not included in the School’s curriculum. Students participating in the Independent Study Program receive academic credit and a letter grade for their work. A significant amount of work is required and each project culminates in a major paper, project, or exam.

Independent Study courses can last for either a year or a semester.

- Completion of a semester-long Independent Study course earns 0.5 credits. Students are required to meet with the supervising teacher for two periods and to complete six hours of independent study each week.
- Completion of a year-long Independent Study course earns either 1.0 credits or 0.5 credits. For a full-credit, year-long course, students are required to meet with the supervising teacher for two periods and to complete six hours of independent study each week. For a half-credit year-long course, students are required to meet with the supervising teacher for one to two periods and to complete two to three hours of independent study each week.
- Independent Study courses earn credit in the subject in which they are based. Therefore, students already taking five non-Arts academic courses need to petition the Educational Policy Committee for permission to add a non-Arts independent study as part of an exceptional program.

Applications for the Independent Study Program are available in the Upper School Office. Applications and the student's proposal should be submitted to the Upper School Dean of Teaching and Learning at least three weeks before the end of the semester preceding the project.

### **PASS-FAIL COURSES**

Taking a course on a pass-fail basis is an option for students who have a demanding course load yet wish to further their study in an area of interest.

Students in Grades 11 and 12 may take one elective course on a pass-fail basis, subject to the final approval of the Upper School Director. Elective courses are those courses that are not required for graduation credit.

When possible, the pass-fail option should be selected in the spring of the previous year, though students will be allowed to change to or from a pass-fail grade until two weeks after the close of the first midterm.

### **PROGRAM CHANGES: ADDING OR DROPPING A COURSE**

#### **Adding a Course**

Students may add a new course (not the same as changing course levels) during the first three weeks of the course.

#### **Changing Course Levels (Grade 9 Students and New Students in Grades 10 – 12)**

Grade 9 students and new students in Grades 10 – 12 may move between levels of a course, change between sequential courses (e.g., language courses, Algebra 1 and 2), or drop a course without a notation on the transcript until one week after the first midterm (or until seven weeks after the start of a course that begins during the second trimester or second semester).

Grade 9 students and new students in Grades 10 – 12 may switch from one level I language into another level I language, if space is available, until one week after the first midterm.

#### **Changing Course Levels (Returning Students in Grades 10 – 12)**

Returning students in Grades 10 – 12 may either drop a course or change levels of a course without a notation on the transcript during the first seven weeks of the course.

### **Policies Regarding Course Changes**

In order to initiate a course change, a student must speak to their advisor and current teacher. The Department Head will let the Academic Scheduler know when the change has been approved. A teacher will not admit a student to a new course (nor will course credit be given) without official notice from the Academic Scheduler that the course change has been made and the student's schedule has been changed.

When a student changes course levels, the grades earned in the original level carry over to the new level. In addition, the teachers, in consultation with the Department Head, determine the value of the work already completed and whether any additional or alternative assessments need to be given to account for differences between course levels. If the course change is made after the deadlines stated above, the transcript shows 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).

On rare occasions, a student may request to either change course levels or drop a course without a replacement course after the deadlines stated above. In these cases the transcript shows the most recent grade of record and the partial credit received for the dropped course. Even in these rare instances, the final determination of course placement must be made no later than the week prior to first trimester exams. In

these cases, the Upper School Director makes the final decision regarding whether or not a grade of record from the original course appears on the transcript.

On rare occasions, a Department Head may request to extend the deadline for switching levels of a course without a notation on the transcript if the department needs more time to assess for correct placement. Even in these rare instances, the final determination of course placement must be made no later than the week prior to first trimester exams. In these cases, the Upper School Director makes the final decision regarding whether or not a grade of record from the original course appears on the transcript.

It is the School's policy that course changes are not made to accommodate requests for a change in teacher. Students cannot choose teachers, nor do they change courses or sections based on teacher preference.

### **PROMOTION AND SATISFACTORY ACADEMIC STANDING**

To be promoted to Grades 10, 11, and 12 or to graduate, a student must pass all courses that must be taken in a particular grade and that are a part of the minimum requirements for graduation. In addition, the student must have a Satisfactory Academic Record for the current year.

A student has a Satisfactory Academic Record if the student's year-end grades include no more than one grade in the D range and no F's. Students taking only four full academic courses may not have any grades below C-. For these purposes, a grade of "Pass" in a course taken on a Pass/Fail basis will not be considered the equivalent of C- or higher unless the student has, in fact, an average of C- or higher in the course.

Even in cases where a student has a Satisfactory Academic Record, the Academic Review Committee or individual departments may require that a student complete summer work if the student receives a final grade below C- in any course. Returning to school in the fall will only then be possible upon satisfactory completion of such work.

In situations in which a student does not meet the minimum requirements for promotion, the Academic Review Committee may require that the student make up one or more academic deficiencies through an approved summer program or summer work on such conditions that the committee determines. The School reserves the right to determine if the work completed over the summer will allow for the student to be promoted.

### **REQUESTS FOR GRADE CHANGES**

Students have three weeks from the date grade reports are posted to request that a grade be reviewed. The request is made by contacting the teacher of the course. No requests for grade changes will be accepted after the deadline has passed.

### **SENIOR REQUIREMENTS**

The courses, programs, and experiences of the senior year are both socially and academically essential. Therefore, all seniors must fulfill their diploma requirements at BB&N rather than at another institution.

Graduation is contingent upon satisfactory completion of an approved Senior Spring Project. Most students in Grade 12 complete their senior year courses by having a passing record at the end of the second trimester and continuing on to an approved Senior Spring Project.

A senior who does not meet the requirements for graduating with the senior class may, at the discretion of the Upper School Director, be permitted to complete the requirements. Such a student must meet any requirements within one calendar year of the original graduation date to be eligible to receive a BB&N diploma.

## **SENIOR SPRING PROJECT**

All seniors are required to complete an individually planned project during the spring trimester of senior year. The Senior Spring Project is an opportunity for seniors to reflect upon one or more of the core values of BB&N: Honor, Scholarship, and Kindness.

To be promoted to Senior Spring Project, seniors must have a satisfactory academic record for the first trimester of senior year. In addition, second trimester grades must meet the following criteria:

- If the first trimester year-to-date grade was a B- or better, the second trimester grade must not be below a C.
- If the first trimester year-to-date grade was in the C range, the second trimester grade must not fall a full letter grade.
- If the first trimester year-to-date grade was in the D range, the second trimester grade must be a passing grade.

Seniors who have not yet fulfilled the graduation requirement in a physical science course, a mathematics course, a U.S. History course, and/or a world languages course must take a full year of these courses (extending through Senior Spring Project). These graduation requirements must be met by maintaining a passing record through the end of the school year.

If the athletics requirement has not been completed by the end of the second trimester, the remaining portion of the athletics requirement must also be included in the student's Senior Spring Project. During Senior Spring Project, a student is not allowed to participate in a Junior Varsity Team if that student has not previously played the sport.

If a senior has not documented 40 hours of service learning by the date on which Senior Spring Project proposals are due, the remaining required service hours must also be a formal component of the Senior Spring Project. During Senior Spring Project, only seniors who have already completed the Service Learning graduation requirement and have not already completed a Season of Service during senior year are allowed to do a Season of Service in lieu of an athletics season. Any exceptions must be approved by the Service Learning Coordinators and the Senior Spring Project Coordinator prior to the submission of the Senior Spring Project proposal.

Seniors enrolled in an Advanced Placement (AP) course are expected to continue with the AP course until the AP curriculum is completed.

- In some courses, the AP curriculum is completed by the end of the second trimester and the course does not continue throughout Senior Spring Project; in these cases, the student's transcript shows that credit was earned for completion of the AP course during senior year.
- In some courses, the AP curriculum continues into the third trimester. Seniors who do not continue with these courses during Senior Spring Project are required to complete the AP curriculum, which may require additional assignments or class meetings before or during the third trimester.