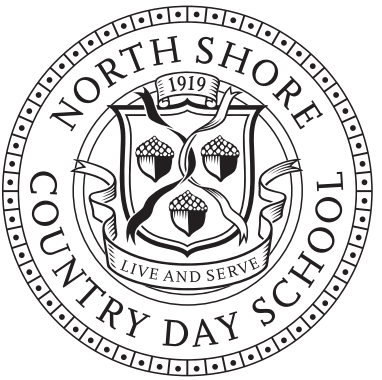
# 2019 2020

Upper School Curriculum

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1919-2019

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*Teachers, contents, texts and emphasis are subject to change. North Shore Country Day School reserves the right to cancel a course if there is insufficient student enrollment or insufficient faculty availability.*

# NORTH SHORE COUNTRY DAY SCHOOL

**Upper School Administration**

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|---|---|
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## OUR MISSION

We prepare students with a challenging education that prompts them to think critically, communicate effectively and engage fully in their intellectual growth and personal development. In doing so, they become self-confident, ethical citizens of the world who embody our motto, "Live and Serve."

## OUR VALUES

### ACADEMICS

Through a range of experiences in and out of the classroom, students are immersed in science, mathematics, humanities, language and the arts. Our broad and ever-evolving curriculum challenges and engages students to strive for personal growth and academic excellence.

### CHARACTER

We believe in the importance of developing individuals who are resilient, creative, confident and who persevere. We teach students to be self-advocates and expect them to own their education and actions, preparing them for lives marked by integrity, kindness, respect and fulfillment.

### PARTICIPATION

Realizing that students discover and develop their talents and passions through action, we require full participation in arts, athletics and service. Engagement in multiple disciplines expands our students understanding, commitment, teamwork and potential.

### DIVERSITY

We embrace diversity and global literacy to build acceptance, strengthen compassion, instill social responsibility and expand competencies that enable students to succeed in a multicultural world. Students are enriched by the inclusion of individuals with varied talents, voices and backgrounds.

### COMMUNITY

Our students are known and celebrated as individuals. Connections are formed with teachers that endure beyond graduation. Multi-age relationships emerge from our JK-12 campus to foster a strong sense of community. And, we leverage knowing each and every students with our active network of faculty, parents and alumni to help students reach their goals and aspirations.

### RESOURCES

Although people make up the core of our educational experience, we recognize the value and importance of the campus environment and resources. Our thoughtfully designed classrooms, course materials, outdoor spaces and campus facilities provide the resources necessary to maximize learning.

## CURRICULUM

In planning a student's course of study, several factors should be taken into consideration: the student's previous academic record; abilities and interests; co-curricular commitments; future college plans; and the school's graduation requirements. The aim is to provide each student with a well-rounded education that has a solid core and offers students opportunities for advanced work in subjects that meet their strengths and interests. The following expectations should be kept in mind:

- Meet all graduation requirements
- Consider strengths and seek out appropriate challenges
- Look for opportunities for growth
- Strive for a balanced combination of academic courses and co-curricular commitments

Course selections should be made with a four-year program of courses in mind. Therefore, students will need to work with their parents, advisors, teachers and administrators each spring to plan the academic program for the succeeding year.

## GRADUATION REQUIREMENTS

The upper school is a four-year college-preparatory program. To earn a North Shore Country Day School diploma, students have to meet a number of academic and co-curricular expectations. They must be enrolled in at least five academic subjects each semester. Advisors, the appropriate department head and the head of upper school need to approve any exceptions to these requirements.

To graduate, students have to successfully complete a minimum of 23 credits, including:

- 4 full years of English
- 3 full years of social studies, including 1 year of United States history
- 3 full years of the same language
- 3 full years of mathematics
- 3 full years of science that includes physics, chemistry and biology
- 2 full years in the fine and/or performing arts
- 4 years of PE/wellness

#### Other requirements for graduation

There are some requirements in programs that are not part of the typical academic day. These include:

- Students are required to perform *onstage* in the fall play, winter play, spring musical or 10-minute play festival at least once in four years. In addition, students are required to participate either onstage or *offstage* in the fall play, winter play, spring musical, or 10-minute play festival once during the four years of upper school. *Therefore, the overall requirement is two dramatic or musical productions over a four-year high school career.*
- Over a four-year period, students must plan on participating in at least one community service project organized through our Interim Week experience.
- 9th-graders must participate in a fall sport.

- Students must participate in one season of athletics during the 10th- and 11th-grade years.
- 12th-graders must complete a Senior Service Project in May.

**Co-curricular Program**

There are three co-curricular seasons—fall, winter and spring—during which students are required to participate in an area(s) that meets their unique interests. Developing expertise in co-curricular endeavors is an important component of a well-rounded North Shore experience. This involves participation in athletics and performing arts. Most co-curricular activities occur at the completion of the academic day, after 3:10 p.m.

## GRADING SYSTEM

North Shore does not rank students or have an honor roll system. Grades are issued as letters in the upper school. There are plus and minus grades for each category with the exception that there is no grade of A+.

**A** indicates excellent work
**B** indicates above average work
**C** indicates average or satisfactory work
**D** indicates below average work
**NS** indicates a failure

SENIOR GRADES: Seniors must pass all second-semester courses in order to graduate from North Shore Country Day School.

ACADEMIC PROBATION: Students who are not meeting the academic expectations of the school will be reviewed by the faculty and may be placed on Academic Probation. (See Academic Probation policy in the Upper School Handbook.)

INCOMPLETES: When a student's work is incomplete at the end of a semester, the teacher may assign a failing grade at that time or grant the student an extension. An extension is normally granted only when a severe medical problem exists. In any event, the school will not grant credit for a course unless all major assignments have been completed. Incompletes at the end of a semester must be made up before the mid-semester mark of the second semester.

PASS/FAIL: Students have an option of taking a course for credit on a pass/fail basis if it is not a requirement for graduation. The department head and head of upper school must approve the program for students who want to take any course pass/fail. In addition, approval from the college counselor is required for a senior. This option exists to encourage students to explore academic areas that they might not otherwise pursue. Students cannot take AP courses pass/fail. They can make, at most, one course pass/fail per year. If the pass/fail option is elected, students must receive a minimum grade of C- to pass. Students wishing to take a course pass/fail need to denote this as an option on their initial registration or make the appropriate request through the division head in the same time frame as for adding, dropping or changing a course. Final approval rests with the department head and the head of upper school.

GRADE REPORTS: The school year is divided into semesters with each semester having a mid-semester point. Students receive letter grades for each course at mid-semester and letter grades and teacher comments at semester's end. Advisors and parents receive copies

of these grades and comments. Only year-end grades, or semester grades in the case of a semester course, are entered on a student's transcript. The mid-semester grades are intended to serve as indicators of a student's progress in courses to that point in time. They are not recorded on student transcripts.

YEAR-END EXAMS: Cumulative exams or projects are given at the end of the academic year in most disciplines. These exams account for anywhere from 10 to 20 percent of the year-end grade.

## OTHER PROGRAMS

### Advanced Placement

Advanced Placement (AP) courses are offered to qualified students in English, United States history, calculus (AB and BC), statistics, computer science, chemistry, biology, physics, French, Spanish (language and literature), Chinese, comparative government and politics, studio art, and music theory. Students have the opportunity to earn college credit and/or advanced standing for the above AP courses by taking the AP exam in the late spring of each academic year. All students enrolled in an AP course are required to take the exam unless permission not to take the exam is given by the teacher and department head. If an AP student is not meeting the AP course requirements or if an AP student is late or absent more than six classes in one semester, the student's status in the AP class is to be reviewed by the head of upper school, the AP teacher and the student's advisor.

### Independent Study

Independent study is designed to support juniors or seniors who have fulfilled the graduation requirements within a department and are interested in pursuing an advanced course of study. Independent study is an opportunity for students to design a course that allows them to pursue an interest that goes beyond the curriculum offered in the course of study. Students should not submit independent study proposals for courses in the catalog that cannot be scheduled. The independent study course must be a fifth or sixth course, taken for credit, and may be graded or taken pass/fail.

If a student wishes to design an independent study, the student must find a faculty sponsor in the department in which the independent study is being proposed. Together with that sponsor, the student writes up a detailed description of the work to be done. The head of upper school and the department head in which the work is to be done must approve the proposal. The proposal form is available in the upper school office. A preliminary application for independent study is due at the time of course registration. The final, detailed proposal must be completed by the first week of June (the deadline is listed on the form). Students having questions about independent study should speak to the head of upper school or assistant head of upper school.

### Interim Week

One week in the fall is set aside from regularly scheduled classes so that students can participate in an in-depth experience of educational value outside the traditional classroom environment. Teachers seek to establish a learning experience that will challenge students to expand their horizons. The philosophy of Interim Week reflects the origin of the word educate: to lead out into the world.

All projects are faculty sponsored or approved and participation is mandatory. Interim

Week projects must be planned so that at least one of the four experiences is in the category of community service.

The knowledge gained benefits not only the individual students but also the entire school community when students share their experiences during Interim Night and Morning Ex. A student who needs financial aid for an interim trip should see the head of upper school.

INTERNSHIPS: A student may apply to do a weeklong internship during Interim once in four years. Internships are individually planned projects in the wider community. Students must work with a full-time on-site professional for a minimum of 30 hours. They are encouraged to seek an opportunity that might be an introduction to a future personal goal or to extend beyond their normal experience. Students must be in their junior or senior year and have completed a community service Interim in order to be eligible to apply for an internship. A student may only participate in one internship experience during Interim.

Recent Interim Week offerings have included being teachers' aids at a bilingual elementary school, learning about stage acrobatics and circus arts at the Actors Gymnasium, designing and creating art with a laser cutter, providing care to infants at a local YMCA while learning more about day care in the United States, and building homes for the underprivileged in Lake County through Habitat for Humanity while learning more about poverty and homelessness. Individual internships have included shadowing a pediatrician for a week, interning at a biotech manufacturer doing biomedical research, and capturing the Korean-American experience through film making and other media.

#### Community Service

Community service is an ongoing part of upper school life and helps to build character as students learn to give of themselves. Every North Shore Country Day student is encouraged to perform community service during their time in the upper school. This service is coordinated through the community service club and the community service director, and may be fulfilled during free periods of the school day, after school, on weekends and during school-year vacations. All students are required to participate in one community service project as part of their Interim Week experience over a four-year period.

#### Senior Service Projects

During the second semester, all seniors conceive, design, prepare and complete their own service projects. Students may work individually or in groups of four or fewer. Students are encouraged to be independent and to make this opportunity one that is personal, worthwhile and representative of the student's total North Shore experience. It is our hope that each student will learn more about serving a larger community and learn something about him or herself.

Participation in the Senior Service Project is a requirement. Seniors who participate must have completed all other graduation requirements. They are expected to meet all other school obligations while on their service project, such as athletics, yearbook, student government, etc. Students should be engaged in their project for a minimum of six hours per day for the designated two-week time period in May.

#### Classes at Northwestern University

North Shore juniors and seniors in good academic standing, can audit courses at Northwestern University free of charge during the summer. (North Shore does not note Northwestern courses on its transcripts.) Students will not receive credit or a transcript from Northwestern University unless tuition is paid.

Available courses will be limited based on the following guidelines:

- Students may take courses intended for college freshmen or sophomores (usually 100 or 200 level courses);
- Because Northwestern University is concerned for the safety of our students, they are not permitted to take night classes.

## GUIDELINES FOR COURSE SCHEDULING

REGISTRATION FOR COURSES: Course registration should be undertaken with the intent of taking the courses which are selected. Current students register for courses in February/ March. New students begin their course registration in April. *All course registrations are subject to changes depending on availability and class size.*

ADDING, DROPPING AND CHANGING COURSES: All adds, drops and changes to semester-long courses must be made through the upper school office. Students may make course changes during a designated period of 10 school days at the beginning of each semester. This period begins on the first day of school for the first semester and at the designated start of the second semester for second-semester electives. It is the responsibility of the students to be aware of the final date for course changes.

*Any course dropped after the mid-semester mark will appear on the student's transcript as withdrawn (WD).* In certain extenuating circumstances, students may appeal this policy through their advisor and the department head to the head of upper school. Students may not withdraw from a yearlong course after the mid-semester mark of the first semester unless they have permission from the department head and Upper School Head.

A *Course Change Form* is obtained from the upper school office and requires the approval of the advisor, teacher, department leader, assistant head of upper school and parent(s). Juniors and seniors making a course change must also consult with the college counselor.

In cases where a student wishes to shift from a 15-level course to a 10-level course, the shift must occur prior to the week after the first mid-semester. Students who make the shift prior to the week after mid-semester will receive credit for their work in the 15-level course but will not have any carry over of academic performance grades when shifting into the 10-level course. After the week following mid-semester, students may not switch from a 15 to a 10-level course until the end of the first semester. Students who shift from a 15-level course to a 10-level course at the semester mark will receive a grade for the 15-level course in the first semester and a grade for the 10-level course in the second semester.

## IMPORTANT INFORMATION FOR COURSE SIGN-UP

- In exceptional circumstances, another course may be substituted for one of the requirements upon recommendation by the administration and the appropriate department head.
- There are instances where it is appropriate for a student to seek a waiver of a graduation requirement. Although exceptions are not made lightly, students and parents may explore and request the waiver of graduation requirements when a good educational reason suggests that this modification would better serve a particular student's needs. A first step in the process is consultation with the student's advisor, teacher, department head

and head of upper school. The student must then submit a written petition to the head of upper school. *Until the student and parents have received official written notice from North Shore Country Day that a waiver has been approved, it is expected that the student will be enrolled in the course that would satisfy the requirement.*

- Students do not receive credits for courses completed during 8th grade.
- New students entering 10th, 11th, or 12th grade will have their graduation requirements established at the time of acceptance at the discretion of the head of upper school.
- Generally, students will be required to make up a failed course in a pre-approved summer school or to repeat the course the following year. The exception to this is English, which must be taken and passed at North Shore during the academic year. Failing English, in most cases, makes it unlikely that a student can remain at North Shore Country Day.
- In order to be eligible for graduation, seniors must pass all of their second semester courses.

## INFORMATION FOR FIRST-YEAR STUDENTS

The transition to the upper school at North Shore Country Day presents many challenges for first year students. Besides simply the transition of moving from one school setting to the upper school at North Shore Country Day, for many, the expectations of our college-preparatory program are intense and the work becomes much more analytical. It is important, therefore, for first year students to recognize quickly the expectations and demands which will be placed upon them, establish healthy and productive study habits to meet these expectations and demands, create the time necessary to succeed and make responsible choices, which will contribute to a productive, enjoyable experience during the first year of the upper school. Here are a few helpful hints:

- You should get to know your advisor, teachers, the dean, assistant head and head of upper school as soon as possible. These adults will prove to be great advocates.
- Ask questions. If you don't know or understand something or if you need help finding a solution to a problem, ask your advisor or a teacher. Only by asking can you come up with answers to suit your individual needs.
- Seek out your teachers for extra assistance and, if need be, establish a regular meeting time. Getting extra assistance is not a sign of ignorance, but rather signals to the teacher your earnest desire to learn.
- Homework and daily preparation for classes are key to success in the upper school. If you just "do" the homework by completing writing and reading assignments, you may be disappointed. Doing homework means following up on materials covered in class, reviewing class notes, outlining and taking notes on reading, and mapping out strategies for longer term assignments.
- On average, three quarters of an hour's worth of study per school day is normal for each course. Three hours of homework in an evening is appropriate, although some days you might have more or less. Plan to use some time each weekend to study for upcoming tests, write papers and accomplish assignments for the coming week.
- Take time to review the many academic, extracurricular and co-curricular offerings in the upper school and take advantage of at least one activity.
- While being with friends is an important part of the school day, it is also important early in the year to establish good habits about how to use your time. Allow some time to

be with friends and relax, but make sure you use some of your time during the day for school-related work.

- Do not let work pile up. If you find yourself falling behind, seek out your teacher or advisor to develop a strategy for correcting the problem. You should not have to feel overwhelmed.
- There is much that will be new to you here. Don't worry—everything becomes familiar very quickly. Enjoy the newness and the excitement of joining the upper school at North Shore.

# COURSES

*Note: 1 credit = 1 year  1/2 credit = 1 semester*

## Performing Arts

The performing arts department welcomes and encourages the participation of all students in the upper school. Courses are designed to allow students to both build a beginning foundation of skills in music and drama and to continually develop those skills through a wide variety of classroom and performance experiences. There are opportunities for both vocal and instrumental music, and acting and technical theater.

### Music

UPPER SCHOOL CHORUS

Students in chorus work together to create quality performances of vocal and choral music of many styles and genres. The repertoire is chosen from the great works of choral literature and will help singers build musicianship skills and improve vocal technique. All students registered for chorus are required to participate in concerts, special events and the spring musical as scheduled. Though most students enroll for the year, students with a specific schedule conflict may request to enroll for only one semester. *No prerequisite. Open to grades 9-12, and the course may be repeated.* [1 credit]

UPPER SCHOOL INSTRUMENTAL ENSEMBLE

Instrumental ensemble will include all upper school students who are interested and able to play an instrument. The majority of the class time is devoted to rehearsal and perfection of specific pieces for performance. Study of advanced practice techniques and ensemble repertoire will be required. This course will be a challenging and rewarding environment where playing technique and overall musicianship will grow in students. The type of music studied and performed will depend on the instrumentation and the size of the ensemble. Instrumental Ensemble is a year long course, and all students registered for the course are required to participate in concerts and special events as scheduled. In certain circumstances, students may join the course at the beginning of second semester based on instructor approval and review. *Previous experience with an instrument required. Open to grades 9-12.* [1 credit]

MUSIC THEORY: ADVANCED PLACEMENT

This yearlong course is equivalent to a first-year college course in music theory and is highly recommended for all students considering continuing study in any area of music. Students work to develop their skills in analysis, composition, dictation and sight-singing, all with the goal of success on the College Board examination in May. *Prerequisite: one year of participation in an upper school choral or instrumental ensemble, or permission of the instructor. Open to grades 10-12.* [1 credit]

ADVANCED MUSIC STUDIO

This is an individually designed, semester-long course in a specific area of music—performance, composition or theory/history. Before enrolling, the student should submit a proposal for independent work and and receive approval from a member of the music faculty. Students pursuing performance study should also be enrolled in an appropriate ensemble; students pursuing composition study should have completed AP Music Theory. All students will present or perform at the end of each semester. *Prerequisite: proposal and permission of instructor. The course may be repeated.* [½ credit]

### Theater Arts

THEATER ARTS

This is a yearlong course intended to be an introduction to various areas within the theatrical arts and public speaking. The first half of the class will emphasize how to properly approach a script and follow through into a final performance. Specific areas that will be covered are: comedic acting, dramatic acting, basic stage direction, movement, playwriting and acting techniques. The second half of the class will focus on the art of public speaking; this will include presentations using the iPad, interview techniques, and the construction and execution of different styles of speeches. Students will have assignments that will involve in-class performance, public performance, presentations, play reading and written analysis. *No prerequisite. Open to grades 9-12.* [1 credit]

TECHNICAL THEATER

In this course, students will have the opportunity to explore design concepts, practical application of stagecraft, and operation of theatrical sound and light. Curriculum will include scenic construction and painting techniques, and function and design of sound and lighting. Curriculum will also include computer technology, basic special effects and theater history as it pertains to technical theater. In addition to theoretic design work and cumulative skill building, a portion of class time will be devoted to the technical needs of upper school productions. These needs may include costuming, makeup and props as well as the aforementioned areas of concentration. *Some experience in technical theater will be helpful, but not required. Open to grades 9-12.* [1 credit]

ACTING (First Semester)

Acting is a semester course in which students delve further into character exploration, detailed textual analysis and scene work. Areas of concentration include: ensemble building, memorization, observation, advanced improvisation (focusing on inner emotion, characterization), audition techniques, play analysis and objectives. The semester will end with a look at the industry today, what jobs are available and the road to becoming a professional actor. *Prerequisites: Theater Arts or another introductory theater course. Students must complete the application provided by the instructor and receive permission to enroll.* [1/2 credit]

DIRECTING (Second Semester)

Directing is a semester course offered during the second semester only. This course is directing and playwriting intensive and includes analysis of the art of storytelling and the impact on our world today. A majority of the course is dedicated to writing a 10-minute play, holding a staged reading, casting the show and producing the Take 10! 10-minute play festival in April. Students will also focus on theater as an act of service and educational outreach, along with choosing a theater focus of their choice to research and explore as a possible bridge into the Advanced Theater Studio course. *Prerequisites: introductory theater or*

*acting course. Students must submit an application and receive permission from the instructor. Students may not take the course if they are planning to play baseball in the spring. It conflicts with the mandatory after school rehearsals and student directing rehearsals. Open to grades 10-12.* [½ credit]

ADVANCED THEATER STUDIO

Advanced theater studio is a semester-long course for students who have a high level of mastery and interest in the technical-theatrical arts or theatrical arts. The course is individually designed by the student to focus on a theater focus of their choice. Students will work independently on their projects and collaborate with their peers for feedback and other educable opportunities. The semester will end with a performance opportunity and/or a final project presentation. Out of class reading, research and play attendance are required elements of the course as well. *Prerequisites: acting, directing, or technical theater. Students must complete a detailed proposal and receive permission from the instructor.* [½ credit]

## Visual Arts

STUDIO ART FOUNDATIONS

This is a yearlong class for 9th- or 10th-grade students who have had limited exposure to art instruction. The course focuses on investigating various media to develop one's personal creative expression and to implement visual communication. Toward this end, we will look at the intersections of image-making, object-making, marketing, art, information and culture. Students communicate their ideas within project themes using the core principles of art and design and a variety of media. Students use a sketchbook to plan, create and write, amassing words, drawings and images. Additionally, students evaluate each other's work and make use of the school's gallery to learn to critique and to be exposed to current artists and themes. *No prerequisite. Open to grades 9 and 10.* [1 credit]

CERAMICS: SCULPTURAL CLAY FORMS (First Semester)

Hand-building techniques are the primary focus of this semester course, and students will construct clay sculptures. Students learn the properties of clay, surface design, fundamental ceramic terms, glazing techniques, firing and various methods of construction. Students will express the technical as well as the conceptual execution of ideas in three-dimensional clay sculptures. Sketching and research are required, and students should expect to complete studio work as homework for this class. Students in this class must not have respiratory ailments or be allergic to mold as these conditions may be exacerbated by clay or clay particulates. *No prerequisite. Open to grades 10-12.* [½ credit]

CERAMICS: FUNCTIONAL CLAY FORMS (Second Semester)

Basic wheel-throwing and hand-building methods are the primary focus of this semester course. Students will design and implement usable, day-to-day vessels, tableware and functional clay objects. We will explore surface and form design. Glaze development and alternative print processes on clay will be explored. Sketching and research are required, and students should expect to complete studio work as homework for this class. Students in this class must not have respiratory ailments or be allergic to mold as these conditions may be exacerbated by clay or clay particulates. *No prerequisite. Open to grades 10-12.* [½ credit]

MARK MAKING ON PAPER (First Semester)
In this class, students define mark making by exploring how drawing tools and media can be used, created and manipulated. The course is structured based on a series of projects, each of which invites students to experiment with a range of traditional and unconventional drawing materials and surfaces. Students are encouraged to work intuitively in response to the project prompts. Examples of projects include observational drawing from the natural world, drawing installations with ink, drawing in relationship to movement and personal drawing projects. This class also reinforces critical thinking and the elements and principles of art and design to prepare students for higher level visual problem solving. *No prerequisite. Open to grades 10-12.* [½ credit]

SCULPTURE: INTRODUCTION TO SCULPTURAL FORMS (First Semester)
This is an exploration of various three-dimensional media used to design and construct one-of-a-kind objects. Plaster, aluminum, wax, wood or found objects are some examples of materials students might use to develop their voice using 3D sculptures. Themed projects help students apply additive and subtractive construction methods as well as the creative investigation of design elements such as form, rhythm and balance. Readings, research, discussions and critiques inform our sculptural knowledge and development, therefore outside sketching and research are required. Students should expect to complete studio work as homework for this class. *No prerequisite. Open to grades 10-12.* [½ credit]

TEXT AND TIME: MULTI-MEDIA SCULPTURE (Second Semester)
This multi-media sculpture course focuses on designing and constructing three-dimensional works of art and art installations. Themed projects involving writing and text-generated ideas help students investigate the use of time and words in creating art environments and multi-media sculpture. Site-specific and durational installations are some examples of sculpture that students will employ. No specific medium is required, rather students create works based on their reflections by using the materials or media that best contribute to the overall meaning of their pieces. Some understanding of three-dimensional artwork or experience in at least one fine art medium is helpful but is not required. Outside sketching and research are required, and students should expect to complete studio work as homework for this class. *No prerequisite. Open to grades 10-12.* [½ credit]

ADVANCED OPEN STUDIO 3D (First and/or Second Semester)
Advanced Open Studio (AOS) 3D is an individually designed, semester-long course in studio art. AOS students work on independent projects in the studio alongside sculpture or ceramics art students. The medium and area of concentration is designed by the student and supported by the art teacher. Prior to enrolling in AOS, students are required to submit proposals for specific projects and have a strong understanding of artistic media. Those seeking to develop a portfolio of artwork for the college application process should consider enrolling in AOS during their junior year after taking the upper school offerings in their media of choice. As in AP Studio Art, students complete sketchbook entries and readings, conduct research, lead critiques, exhibit artwork and participate in local competitions. Advanced Open Studio does not include the College Board portfolio submission. *Prerequisites: Minimum of two semester courses in the medium of focus, submission of a detailed proposal and permission of instructor.* [1 credit]

DARKROOM PHOTOGRAPHY (First Semester)
Photography is rooted in the worlds of art and science. This class teaches students how to use 35mm and 120mm film cameras, develop black and white film with chemical sequences and convert transparencies into prints using light sensitive paper in a darkroom. The course requires a willingness to photograph a variety of light sources and subjects on and off campus every week. Projects will promote an understanding of photographic techniques and processes, enabling students to create and share personal ideas through a historical lens. *No prerequisite. Open to grades 10-12. Note: Students may use their own 35mm SLR camera or a class camera can be provided.* [½ credit]

PRINTMAKING (Second Semester)
Printmaking is a class that examines art created in series. Students will learn to use a printing press and a variety of printmaking media to design monotypes, textiles, solar plates, linocuts, stencils and silkscreens. The course also highlights how artists and cultures have utilized printmaking to amplify a collective voice through presentations and will include a visit to a traditional printmaking studio in Chicago. The principles of art and design will inform visual decisions, with added emphasis on the expansion of individual ideas within project themes. *No prerequisite. Open to grades 10-12.* [½ credit]

ART AND SOCIETY (First Semester)
This class opens up the discussion about why artists create art and how art impacts society. Students learn to critically examine historical subjects, the role of the artist and how traditional artistic practices inform contemporary trends. As a studio-based class, students respond to topics in art history and contemporary art by producing artworks that incorporate, reject, question or add to these conversations. No specific medium is required, rather students create works based on their reflections by using the materials or media that best contribute to the overall meaning of their pieces. Some understanding of a range of materials and media is helpful, but is not required. Processes can be learned and explored within the class along with historical points of interest. *No prerequisite. Open to grades 10-12.* [½ credit]

DIGITAL DESIGN AND DESIGN THINKING (Second Semester)
This course introduces the Adobe Creative Suite© and is a continuation of digital and 4-D projects introduced in Studio Art Foundations. Students will learn how to create and manipulate digital photographs, understand the visual impact of typography, and translate their own artwork and illustrations into high quality digital and animated images. Students may choose a final project, such as developing a brand identity, designing packaging, assembling an online digital portfolio, creating a series of fashion illustrations, or publishing a series of digital comics. *No prerequisite. Open to grades 10-12.* [½ credit]

ADVANCED OPEN STUDIO—2-D (First and/or Second Semester)
Advanced Open Studio (AOS) is an individually designed, semester-long course in studio art. AOS students work on independent projects in the studio alongside AP art students. The area of concentration, including the medium to be used, is designed by the student and supported by the art teacher. Prior to enrolling in AOS, students are required to submit proposals for specific projects and have a strong understanding of artistic media. Those seeking to develop a portfolio of artwork for the college application process should consider enrolling in AOS during their junior year after taking the upper school offerings in their media of choice. As in AP Studio Art, students complete sketchbook entries and

readings, conduct research, lead critiques, exhibit artwork and participate in local competitions. *Advanced Open Studio does not include the College Board portfolio submission. Prerequisites: Minimum of two semester courses in the medium of focus, submission of a detailed proposal and permission of instructor.* [1 credit]

STUDIO ART: ADVANCED PLACEMENT

This course is designed to prepare students for the AP portfolio process. Students will learn how to approach and understand a work of art, engage independently in the creative process and participate in group critiques. The AP portfolio class offers two options: drawing and 2-D design; however, in specific cases, 3D-Design portfolios can be compiled in the class. All portfolios are submitted to the College Board for scores that may lead to college credit. The College Board requires a digital portfolio of breadth, concentration and quality pieces. Students interested in AP must be willing to create at least two artworks and submit a proposal for a series prior to the start of the school year. As in AOS, students complete sketchbook entries and readings, conduct research, lead critiques, exhibit artwork and participate in local competitions. *Prerequisites: Minimum of four to five semesters of visual art with a minimum two in the medium of focus. Students must apply for the course and receive the permission of the instructor.* [1 credit]

PAINTING PROJECTS (Second Semester)

This is a survey painting course aimed to help students learn about the qualities and techniques of painting. Media include watercolor, gouache, acrylic, oil and encaustic. Each project focuses on understanding a specific medium, so students may choose the content and issues that interest them as subjects for their works. The history of each medium will serve as a segue to familiarize students with traditional and contemporary conversations about painting in a digital age. At the end of the class students will not only have a fluency in a range of media, tools and surfaces, they will also understand color theory and the properties of pigments. *No Prerequisites. Open to grades 10-12.* [½ credit]

## English

The English curriculum helps students to develop their ability to read, write, think and speak clearly, critically, creatively and logically. Reading, writing and conversation are at the heart of our teaching and learning. Reading, we believe, is about exploration, discovery, enjoyment and inspiration. In our English program, students are taught to read in an attentive, critical, imaginative, and active manner. We take care to ensure that students read literature from a range of cultures, time periods, and genres. Alongside their reading, students use writing to respond to texts, wrestle with their questions, process their ideas and become independent thinkers. Students at North Shore engage in many different types of writing, such as analytical essays, poems, narratives, journal entries and research papers. We teach students to see writing as a process. Writing not only helps us generate ideas but also is a tool for organizing and retaining ideas; therefore, we teach students a range of organizational and note-taking strategies. We work with students on mastering the rules of grammar and usage so they can communicate clearly and effectively. Students' reading and writing contribute directly to the discussions that we explore in our classrooms. We work to build classrooms of active, involved learners, where multiple perspectives are explored. Our classrooms provide the opportunity for students to discuss their ideas and responses in thoughtful, respectful environments. North Shore requires students to take four years of English. In the first three years, students enroll in the yearlong courses appropriate to their grade level. In the senior year, students may choose between English 12 and AP English

Literature and Composition. In their junior and senior years, students may enroll in an Independent Study in English and/or Advanced Open Creative Writing, provided they obtain the permission of the instructors of these electives.

### ENGLISH 9

English 9 has two main goals: to explore the idea of what it means to become an adult and to learn the literary language and skills that will be used in high school English. Through this combination of practical academic skills and personal growth, we expect students to be well-prepared for the years ahead. The major texts give students the opportunity to see characters who must wrestle with their responses to moral and personal dilemmas, relationships among family members, gender roles, racial stereotypes, a sense of place, forms of power, independence, freedom, education, and responsibility to family and community; these texts include *Antigone, Go Tell It On the Mountain, Romeo and Juliet, The Catcher in the Rye* and *Persepolis*. In addition, the theme of personal growth is woven through units on short stories and poetry that focus intensively on literary terms and analytical skills and through a research paper focusing on someone who has changed the world for the better. Students write frequently and experiment with many of the forms they are reading. Emphasis is placed on writing as a process and as a tool for exploration and learning. [1 credit]

### ENGLISH 10

The first semester of English 10 focuses on the creation of literature and what compels writers to write. Where do their ideas come from? How does the creation of a text—the shaping of a story—serve a writer personally, as well as affect and influence the story's readers? Why do writers choose to tell certain stories? Why do stories matter? In the second part of the year, we will use stories to explore the question, "What makes a good society?" In trying to answer this question, we examine themes of human responsibility, oppression and freedom from it, the role of the individual in society, heroism, nationalism, racism, the effect of science and technology on society, and gender expectations. We will eventually come to an understanding of the relationship between stories and society as we explore how the stories of individuals shape a society, and how stories can be used to effect change in a society. Major texts in the course are by Aldous Huxley, William Shakespeare, Julia Alvarez and Mary Shelley, and we read poetry, short stories and a memoir by authors from around the world. As in English 9, writing is varied and frequent; while we focus on further developing analytical writing skills, students also engage in creative and personal writing that is thematically derived from, imitative of or otherwise linked to the literature they are reading. Throughout the year, we study vocabulary from word roots. [1 credit]

### ENGLISH 11

At the core of English 11 is a deep belief in the power of reading and writing. The central question of the course is: How do people use reading and writing to shape their lives and their worlds? Consequently, in our study of American literature, students work on developing critical literacy skills in order to read and write the word and the world. Through analyzing the rhetorical strategies in a wide variety of texts, such as speeches, essays, poems, op-eds, narratives, plays and documentaries, students learn to evaluate arguments and to create their own. As we consider the crucial role that education plays in a democracy, we strive to become informed citizens who can effectively engage in the crucial conversations in our world and learn from those of the past. Students develop their critical news, media and visual literacy skills, and focus on the importance of civil discourse and civic engagement. We hope to foster curiosity and passion. In several units,

students choose from a long list of texts, which allows them to engage with the issues that most interest them. Students sharpen close reading skills, as well as an ability to read with an open mind and allow for the possibility that a text might disrupt their thinking. We work to foster a community of readers who encounter writing that captivates, puzzles, awes, intrigues, challenges, and delights them. Our work in this class involves interpretive and evaluative questioning. The essential questions that we explore do not have easy answers and require complex analysis. There is a strong emphasis on argumentative and persuasive writing, including synthesis essays that require students to incorporate multiple sources and points of view into their own arguments. In addition, students compose personal narratives and poetry. Through a broad range of voices and genres, we explore different visions of what it means to live and write as an American. Key themes include: the search for the American Dream; the relationship between the individual and society; writing as social action; voice and identity; attitudes toward nature and the environment; the development of a moral code; civic engagement; rights and responsibilities; the universe of obligation; civil disobedience; race, socio-economic status and gender; the power of community; the importance of story and language; the relationship between past and present; immigration; migration; industrialization; and urbanization. The curriculum includes works by Alexie, Angelou, Arviso Alvord, Bradbury, Cisneros, Coates, Dickinson, Dillard, Douglass, Emerson, Erdrich, Fitzgerald, Frost, Gilliam Fisher, Hong Kingston, Hosseini, Hughes, Hurston, Khaf, King, Krakauer, Lee, Lewis, Miller, Ortiz, Skloot, Tempest Williams, Whitman and Wilson, as well as others. [1 credit]

### ENGLISH 12

English 12 is a study in world literature centered on North Shore's mission statement, which articulates our goal that students become "ethical citizens of the world who embody our motto 'Live and Serve.'" The curriculum introduces texts from a variety of genres, time periods and cultures, and includes both fiction and non-fiction books, articles, essays, films and talks. Students will analyze the literary genre they are reading (novelistic techniques, the demands of reading and writing poetry, and the collaborative nature of play production), as well as explore the function of history, memory and myth in literature; the perception and representation of individual identity and a sense of self through characterization; and the ways in which familial, romantic, linguistic, social, economic and political dynamics reflect cultural, societal and literary traditions. Their reflections on these themes will focus not only on the characters in the literature, but on their own lives as well; students are also asked to make connections with the increasingly globalized world in which they live. The course involves extensive reading and writing activities. Students will write analytical, creative, informal, personal and collaborative responses to what they read. They will be expected to speak extensively in class discussions and to generate themes and topics for those discussions. The course provides a challenge to students in reading, writing, speaking and listening to the English language. [1 credit]

### ENGLISH 12: ADVANCED PLACEMENT

AP English Literature and Composition is a world literature course in which we study authors spanning a wide range of cultures and time periods, from Homer in ancient Greece to modern authors who do not name just one culture as their own. Students read works by authors such as Emily Bronte, Brian Friel, Nadine Gordimer, Seamus Heaney, Homer, John Keats, Gabriel Garcia Marquez, Arundhati Roy, William Shakespeare, Leslie Marmon Silko, Sophocles and Derek Walcott. Essential questions of the course

include: Why read? Why write? What role do stories play in our lives? What is universal in literature and human experience? How do cross-cultural encounters shape and affect stories? How does the past shape our identity as individuals and as citizens of the nation and the world? What is the relationship of language to identity, memory, history and community? What is the relationship between literature and politics? How do texts speak to each other? How does perspective shape the reading and the writing of a text? In our discussions, written work and readings, we focus on developing the ability to: carry out close, critical readings; characterize the stylistic and thematic patterns in an author's work; possess facility in reading nonlinear and/or modernist texts; analyze and imitate prose styles; understand rhetorical devices and strategies; recognize the uses and impact of a range of genres and the effects of a multi-genre piece; construct and evaluate multiple interpretations of a text; explore the impact of narrative structure; and understand the ways in which the meanings of a text are embodied in its form and style. Students write frequently and explore many different types of writing. All students enrolled in AP English are required to take the AP exam in May. *Prerequisite: Students must submit an application and receive permission from the instructor. Open to grade 12.* [1 credit]

ADVANCED OPEN CREATIVE WRITING (First or Second Semester)

Advanced Open Creative Writing offers the opportunity for students interested in writing creative fiction and nonfiction to work intensively on a specific long-form piece (i.e., novel, memoir) or collection (i.e., of poetry or short stories) in a writer's workshop format. While students will complete and share some common writing exercises to strengthen and expand their creative writing skills, the curriculum will largely be determined by students' proposals and specific interests. Students will propose a specific writing project prior to course enrollment and should expect both to work independently and to share their writing with peers in the course on a regular basis. Students requesting to enroll in Advanced Open Creative Writing should have demonstrated interest in and commitment to past creative writing portions of their regular English courses. *Prerequisite: Students must submit a detailed proposal and receive permission from the instructor. This semester course may be repeated one time. Open to grades 11-12.* [½ credit]

INDEPENDENT STUDY IN ENGLISH

The independent study offers the opportunity for advanced students of English to pursue selected topics on an independent basis. Scope of study, goals and specific topic(s) are to be arranged with the instructor. *Prerequisites: permission of department head and the head of upper school.* [½ credit or 1 credit]

## Languages

The language curricula in the upper school continue the sequence begun in junior kindergarten (Spanish) or 6th grade (French and Mandarin). Proficiency in using another language, an understanding of other cultures and their languages, and an enriched understanding of one's own language and culture are the goals of the language department. The department promotes interdepartmental curricular exchanges. There are various opportunities for language immersions, cultural exchanges and field studies, which are highly encouraged. Students must study French, Mandarin or Spanish for at least three years in upper school, with many continuing to advanced levels. The opportunity exists for some students to consider adding a second world language. AP language courses offered are based on the number of students and the proficiency level of those students, and may vary from year-to-year.

## French Program

### FRENCH 1

This course is an introduction to the French language and cultures, the first half of the basic two-year sequence in fundamentals of grammar and vocabulary. Students develop their listening and reading skills using audio sources and videos taken from their "Promenades" course material, as well as by reading authentic materials such as children's books. In-class activities and role plays are designed to help students become proficient at carrying out basic conversations about their daily activities, schedule, family, likes and dislikes. Recitations of poems, songs and mini-skits help develop fluency. Cultural explorations about the Francophone world provide a rich context to these activities. One movie is studied each year. [1 credit]

### FRENCH 2

The French 2 course continues to lay the foundation in all four skills of the language acquisition process: listening, speaking, reading and writing. Exploring the French and Francophone culture provides the contextual backdrop for this work. Students learn to talk about topics related to their daily lives using increasingly complex grammatical concepts such as the past and future tense and the use of pronouns. They develop their reading and writing skills by writing journal entries as well as responses to cultural readings from their "Promenades" book and authentic materials. In class, skits, songs, poems and a wide variety of speaking activities are used to increase proficiency and fluency. At least one French film is studied each year. *Prerequisite: French 1.* [1 credit]

### FRENCH 3

Students in French 3 work to increase their vocabulary and the sophistication of the structures they use. To this end, they do many paired activities in class and engage in class discussions and debates. In preparation of their work with the text "Cyrano de Bergerac," the students research and present several historical figures from France. One to two French films are studied each year. The class is conducted almost exclusively in French. *Prerequisite: French 2.* [1 credit]

### FRENCH 4

Students in French 4 continue to develop their vocabulary and more sophisticated language structures. They participate in discussions and write journal entries based on various readings in their text, "Imaginez," and those taken from other authentic sources. Their textbook is used to launch them into a cultural and historical exploration of the Francophone world. The subjects of the readings are relevant to their daily lives and reflect current events. Students will also read "Le Petit Prince" by Antoine de St. Exupery, teach a chapter themselves and create their own additional characters and write a new chapter. One to two films are studied each year. The class is conducted entirely in French. *Prerequisite: French 3.* [1 credit]

### FRENCH 5

During this year, students work to achieve their maximum proficiency level. They review necessary grammar concepts in order to use them effectively to express their ideas orally and in writing. Film is central to this course and it is enriched by a variety of written material as well. The main themes include, but are not limited to: Paris in film and literature: a sense of place; education in France, Francophone countries and the United States; current topics in science and technology; and "Oscar et la Dame Rose" and other

works by Eric Emmanuel Schmitt. Some years the students also prepare and present a short play in French. This class is conducted entirely in French. *Prerequisites: French 4 and permission of the department head.* [1 credit]

FRENCH LANGUAGE AND CULTURE: ADVANCED PLACEMENT

This course is intended for students who are keenly interested in advanced work in French. The AP course is taught using films, and it is centered around the six large AP themes that are integrated into all of the work done. These are: global challenges; community and family; public and private identities; contemporary life; science and technology; and beauty and esthetics. Students complete four major units of study that build on the work they did in previous years. The first two units explore the history of cinema, from its beginnings to the Nouvelle Vague, and within this framework, our subjects of study are Résistance and collaboration during World War II, and the concept of childhood in French culture. Students are allowed input into the choice of the two remaining units. Past units have included: the civil rights of the 1960's in France; education: the challenges of a national system; literature in songs in "La chanson à textes," women in modern society and as viewed in Molière's theater; and immigration, assimilation and integration. In addition to this, students comprehensively review grammar concepts and work regularly with a podcast that aggregates current news stories that have appeared in the French press, discussing, debating and teaching certain segments. This course is taught exclusively in French. All students enrolled in the course are required to take the AP French Language and Culture exam in May. *Prerequisites: French 4 and permission of the department head.* [1 credit]

SPECIAL TOPICS IN FRENCH

This course is designed to give students who have completed French 5 or AP French an opportunity to continue their French studies, focusing on areas of Francophone culture that are of specific interest to them. The group format is designed to enhance the communicative approach, with students exploring inquiry-based content in clusters. To this end, it will be primarily project-based, with a specific focus on providing an experiential approach to the areas of study. *Prerequisite: French 5 or AP French.* [1 credit]

**Chinese Program**

CHINESE 1

This course is an introduction to Mandarin and Chinese culture. Students will develop a strong foundation in pronunciation, basic sentence structure and grammar, character recognition and writing, as well as Chinese culture. Classroom instruction consists of the introduction of new characters and words, listening and speaking practice, pair/group work, role plays and culture topics. Students will develop all four language skills: listening, speaking, reading and writing through the study of greetings, family, nationalities, dates/time and hobbies. Poems, songs and tongue-twisters are introduced to improve students' pronunciation, speaking proficiency and fluency. Materials on the iPad help to enhance students' learning. Traditional Chinese holidays are studied and celebrated throughout the year. After completing this course, students are expected to be able to carry on simple conversations in Mandarin and comprehend simple dialogues, read and write most commonly used Chinese characters, and also have a better understanding of Chinese culture. *No previous knowledge of Mandarin is required.* [1 credit]

### CHINESE 2

In this course, students will build upon the foundation established in Mandarin 1, advancing in the four language skills: listening, speaking, reading and writing. The topics they will study include visiting friends, making appointments, studying Chinese and school life. Classroom instruction consists of the introduction of new characters and words, text and grammar explanations, pattern drilling, listening and speaking practice, pair/group work, role plays and cultural presentations. Emphasis will be placed on vocabulary building and speaking and listening, as well as writing. Audio and video materials are provided on the iPad to enhance students' learning. Traditional Chinese holidays are studied and celebrated throughout the year. Students finish each chapter with a project that has both writing and speaking components. After completing this course students are expected to expand their abilities to carry out more complex conversations in Chinese and also have an increased understanding of Chinese culture.*Prerequisite: Mandarin 1.* [1 credit]

### CHINESE 3

In this course, students will build upon the foundation established in Mandarin 1 and 2, advancing in the four language skills: listening, speaking, reading and writing. The topics they will study include shopping, transportation, weather and ordering food. Emphasis is placed on oral communication and more advanced reading and writing. Authentic materials and iPad resources are used to enhance students' learning. Students finish each chapter with a comprehensive unit test and a project that has both writing and speaking components. Students will continue to build a rich vocabulary and expand their ability to carry out conversations in Mandarin. Additionally, they will increase their understanding of Chinese customs, traditions, history and cultural differences. *Prerequisite: Mandarin 2 or permission of the department head.* [1 credit]

### CHINESE 4

In this course, students continue to develop their language skills through the study of more complex materials. Emphasis is placed on oral communication and more advanced reading and writing. Students learn more advanced grammar concepts to help expand their abilities to carry out conversations in Mandarin. More authentic materials and current events are introduced to supplement textbook materials. Students work to improve their overall language abilities through a variety of assignements such as skits, dialogues, creative writing and comprehensive projects. Students also increase their understanding of Chinese history, current events and cultural differences. After completing this course, students are well prepared for a more advanced level of study in college. *Prerequisite: Mandarin 3 or permission of the department head.* [1 credit]

### CHINESE 5

In this course, students continue to expand their vocabulary and advance their language skills by studying more sophisticated topics and structures. More authentic materials and current events will be added to increase students' understanding of Chinese language and culture. Traditional lectures will be replaced by individualized learning in this class as students move through the materials in a self-directed manner, at their own pace. Class time is mainly focused on answering questions from the students; pair/group work and collaboration between students; as well as listening and speaking practice or presentations. Students have lots of opportunities to practice their language skills by working on a variety of projects and assignments. Students are expected to work exclusively in Mandarin. *Prerequisite: Mandarin 4 or permission of the department head.* [1 credit]

CHINESE LANGUAGE AND CULTURE: ADVANCED PLACEMENT

This course is designed to offer students opportunities to further develop proficiency in the four language skills (listening, speaking, reading and writing) through the three communicative modes: interpretive, interpersonal and presentational, and the five goal areas: communication, cultures, connections, comparisons and communities, as outlined in the Standards for Foreign Language Learning in the 21st Century. Students will work to achieve at the intermediate level, as articulated in the ACTFL Performance Guidelines for K-12 Learners. Students will be fully immersed in the richness of Chinese language and culture. They will go into more depth in their study of the Chinese language and various aspects of both contemporary and historical Chinese culture. The content and topics include (but are not limited to) family and daily life, education, customs and holidays, economics and careers, China today, geography and population, travel and climate, famous people and current events. Cultural activities will be introduced throughout the course and could include learning calligraphy, paper cutting and food preparation. They will also be introduced to classical music, poetry, art and literature. In addition to the textbooks, other authentic instructional materials, such as articles from Chinese newspapers, magazines and websites, short stories, poetry, literature, public signs, TV news, advertisements, posters, video clips, movies, etc. will be used throughout the course. Students demonstrate their mastery of the language and culture by preparing a variety of activities and assignments. The instructor uses Chinese almost exclusively in class. Students are expected to work exclusively in Mandarin, including out of class communications. *Prerequisites: Mandarin Chinese 5, instructor's recommendation and permission of the department head.* [1 credit]

**Spanish Program**

SPANISH 1

This course is an introduction to the Spanish language and Hispanic cultures, using a variety of materials and methodologies. In this course students will learn fundamental rules of grammar and develop a working vocabulary, skills which are taught throughout a student's Spanish language curriculum. Facility in speaking is a primary aim, along with developing the skills of listening comprehension, reading and writing. Typical foods, movies, music and recitals are part of the experience. This course is designed for students who have no previous experience with Spanish. [1 credit]

SPANISH 2

In this course, students continue to build upon the concepts and vocabulary acquired in Spanish 1 as students improve their speaking, listening, reading and writing skills. The study of theme-based vocabulary continues as the preterite, imperfect, present and past progressive tense are presented. The imperative mood is reviewed and the present subjunctive is introduced as well. In culture units we examine the Hispanic experience in the United States, as well as the history and culture of Mexico City, the Aztecs, Puerto Rico and Spain. *Prerequisite: Spanish 1.* [1 credit]

SPANISH 3

This course expands on the foundation established in Spanish 1 and 2. It emphasizes oral communication and the application of verb tenses in the form of cultural projects, original dialogue writing and presentation, and the creation of a recorded oral portfolio. Students are introduced to short, authentic pieces of literature and are required to

comment on these readings both orally, in short essays and in journal writing. Idioms and current events are studied for better understanding of Hispanic culture. Students will have a comprehensive oral exam at the end of the year. *Prerequisite: Spanish 2.* [1 credit]

### SPANISH 4

The major emphasis of Spanish 4 is to improve oral and written proficiency and to gain confidence and fluidity in using Spanish. Previously learned tenses and grammar concepts will be reviewed and new concepts presented including the perfect tenses and imperfect subjunctive. A good deal of instructional time is given to teaching and improving reading comprehension skills. Students will examine many aspects of Hispanic culture including literature, art and history. *Prerequisite: Spanish 3.* [1 credit]

### SPANISH 5

Readings, current events and popular culture provide the springboard for class discussions and vocabulary theme units as students work to improve their general proficiency in Spanish 5. Students will continue to develop their reading comprehension through the study of short stories, magazine and newspaper articles, and a novel. Frequent oral presentations are given to improve speaking skills and listening comprehension skills. Students will take their working knowledge of Spanish from level 4 and continue to augment their speaking, reading, writing and aural comprehension. Previously learned grammar concepts and verb tenses will also be reviewed. *Prerequisite: Spanish 4.* [1 credit]

### SPANISH LANGUAGE AND CULTURE: ADVANCED PLACEMENT

During the year, the students work to achieve their maximum proficiency level through an extensive grammar review, speaking exercises and the reading of literary texts in order to increase their vocabulary base and strengthen their understanding of grammatical structures. Students will prepare presentations, conduct research on selected authors and topics, write essays on various topics and participate in class discussions. All students enrolled in an AP course are required to take the AP exam (AP Language) in May. *Prerequisites: Spanish 4 or Spanish 5 and permission of the department head.* [1 credit]

### SPANISH LITERATURE: ADVANCED PLACEMENT

The AP Spanish Literature course is designed to provide students with a learning experience equivalent to that of a third-year college course in Peninsular and Latin American literature. The course is designed to introduce students to the formal study of a representative body of Peninsular and Latin American literary texts. The works cover seven centuries of literature and are of literary significance representing various historical periods, literary movements, genres, geographic areas and population groups within the Spanish-speaking world. The objective of the course is to help students interpret and analyze literature in Spanish. The literary periods are divided in three main historical moments:

- Medieval and Golden Age literature
- 19th century literature
- 20th century literature

*Prerequisite: Spanish 5, AP Spanish Language or permission of the department head.* [1 credit]

SPECIAL TOPICS IN SPANISH

Special Topics is a course focused on communication, which was designed to help improve fluency by encouraging conversation in the classroom about topics of high interest for students. The course seeks to develop the student's use of persuasive and argumentative language. Students are encouraged to bring ideas and share their own perspective with the class. The focus is on analyzing and debating current issues pertaining to the Spanish-speaking world. The study units cover topics such as identity and membership, human rights and human behavior, dictatorships in Latin America and female resistance, immigration and emotional intelligence. Students articulate their personal perspectives on these issues and participate in a variety of written, oral, listening, and reading activities. While exploring each individual theme in context, students incorporate new vocabulary, review grammar, and learn new useful expressions for speaking and writing. All the thematic units are designed with a global perspective and can be viewed and studied from many different points of view. Every class becomes an opportunity to share opinions, experiences, agreement and disagreement, plans and dreams. Topics were specifically chosen to generate controversy and to spark students' imagination, demonstrating that they can express themselves most genuinely when they feel strongly about something. As a result, nobody can be indifferent or silent, and everyone is engaged in the class conversation. *Prerequisite: Spanish 5 or AP Spanish and permission of the department head.* [1 credit]

INDEPENDENT STUDY IN LANGUAGES

The independent study offers an opportunity for advanced students of world languages to pursue selected topics on an independent basis. Scope of study, goals and specific topic(s) are to be arranged with the instructor. Please see the guidelines for independent study on pages 4-5. *Prerequisites: permission of department head and the head of upper school. This course may be repeated.* [½ credit]

## Mathematics

The mathematics program is designed to fulfill four primary goals:

1) to provide courses which will give students mastery of the technical skills and understanding of the basic concepts of mathematics that are increasingly important in the world today.

2) to give students a mathematical foundation that is sufficient for all levels of further study,

3) to develop in students an appreciation for the essential character of mathematics as an intellectual discipline and a recognition of mathematics as the "language of science," and

4) to foster development of logical reasoning skills, both inductive and deductive, and the ability to utilize these skills in general problem solving tasks beyond the classroom.

Algebra 1, 2 and geometry teach the methods and procedures of mathematics which all students will need. Advanced courses provide interested students with the chance for further mathematical or scientific study.

## PLACEMENT IN 15-LEVEL MATH COURSES

Students who have demonstrated a strong commitment and aptitude in their current math class may be placed in a 15-level section of a course. 15-level courses are accelerated and delve deeper into the curriculum of a regular course, challenging the student to apply, combine and synthesize concepts and skills at a higher level. Placement in a 15-level course is determined by the math department.

Since technological tools are increasingly useful in our modern world, we include computer and calculator use into the mathematics curriculum at all levels. A TI-84 graphing calculator is required for all math classes at North Shore Country Day School.

### ALGEBRA 1

Algebra 1 is a full-year course building solid foundations for subsequent math courses. Solving first-degree equations in one unknown and a system of two equations in two unknowns are mastered using different techniques focused on different learning styles. We use graphing calculators to visualize equations and inequalities and to draw conclusions about quadratic functions. This allows students to see relationships on a coordinate graph. Solving quadratic equations using the formula and solving them by factoring round out a rigorous year of numbers, number systems and their applications. [1 credit]

### GEOMETRY 10

This course introduces plane Euclidian geometry and also extends into solid geometry. Topics include congruence, perpendicularity, geometric inequalities, parallelism, geometric proportions and similarity, the properties of quadrilaterals and circles, and the surface areas and volumes of solids. The emphasis of this class is terminology, notation, communication, and application, with minimal emphasis on formal proof. The course provides more time for further practice and application of algebraic methods, both to prepare for Algebra 2 and also to solve current geometric problems. *Prerequisite: Algebra 1.* [1 credit]

### GEOMETRY 15

Devoted to plane Euclidian geometry, this course also extends into solid geometry. The subject is treated as a structured system and emphasizes deductive reasoning and mathematical proofs, whereby intuition and proofs are blended. Topics include congruence, perpendicularity, geometric inequalities, parallelism, geometric proportions and similarity, the properties of quadrilaterals and circles, and the surface areas and volumes of solids. Students enrolled in Geometry 15 are expected to enter the class with the ability to apply all of the skills and concepts they learned in Algebra 1. Students are expected to be fluent with fraction manipulation, ratios, radicals, exponents, factoring, and solving both linear and quadratic equations. This course will require a strong algebra foundation. *Prerequisite: Algebra 1 and permission of the algebra instructor.* [1 credit]

### ALGEBRA 2-10

This course begins with a review and extension of Algebra 1 skills such as solving equations in one variable, solving systems of equations and applying those skills to inequalities as well. From there, Algebra 2-10 is a study of functions: linear, quadratic, exponential and logarithmic; and the applications of each. Students become familiar with a set of "toolbox" functions and are expected to recognize and adapt these equations as needed. Hands-on projects and the use of graphing calculators and computers aid students in their understanding of functions. *Prerequisites: Algebra 1 and geometry.* [1 credit]

### ALGEBRA 2-15

Students are expected to begin Algebra 2-15 with a solid foundation of Algebra 1 skills. From this good foundation, students will study all of the families of functions: linear, quadratic, exponential and logarithmic. Students become familiar with a set of "toolbox" functions and are expected to recognize and adapt these equations as needed. Students will gain experience creating mathematical models of phenomena in the real world, selecting a kind of function to fit the situation and then deriving the function. Data and regressions projects and the use of advanced features of graphing calculators aid students in their understanding. *Prerequisites: Algebra 1, geometry and permission of the geometry instructor.* [1 credit]

### ADVANCED FUNCTIONAL ANALYSIS

This course is designed to solidify students' algebraic foundation in preparation for precalculus. Integral to the learning process is the systematic review of earlier concepts learned in Algebra 2 and procedures by which students apply previously learned skills to develop proficiency with more advanced concepts. Topics include an in-depth review of the concepts and skills taught in the first two algebra courses: solving linear, quadratic and basic exponential equations, and analyzing the graphs of these categories of functions. Additional topics include rational expressions and functions, conic sections, advanced exponential and logarithmic functions, systems of equations and inequalities, matrices, sequences and series, and probability. *Prerequisites: Algebra 2-10 or Algebra 2-15.* [1 credit]

### PRECALCULUS 10: PRECALCULUS WITH DATA ANALYSIS

This course briefly reviews the functions studied in Algebra 2 in order to deepen students' comprehension of these functions and their applications. The course thoroughly investigates polynomial and rational functions, trigonometric, logarithmic and exponential functions, as well as power models, with a focus on transformations and graphical analysis. The course places a particular emphasis on symbolic manipulations, function notation and more advanced mathematical communication. A graphing calculator is required. *Prerequisite: Algebra 2 or Advanced Functional Analysis.* [1 credit]

### PRECALCULUS 15: PRECALCULUS WITH ANALYTIC GEOMETRY

Precalculus 15 covers all of the topics of Precalculus 10 in addition to a number of discrete topics. Precalculus 15 is taught with greater rigor and depth than the 10-level class, with an emphasis on combining, applying, and synthesizing the various skills and concepts. Students are taught a variety of techniques to solve problems, and their success in this class requires skill with graphical, numerical, algebraic and verbal approaches. Students are expected to develop an appreciation of all these methods of representation and analysis, to understand how they are connected in a given setting and to choose the most appropriate method(s) to solve a given problem. Precalculus 15 focuses on topics central to students' success in calculus, which include the thorough study of polynomial, rational, trigonometric, logarithmic and exponential functions. The course also explores several additional advanced math topics, such as polar coordinates and functions, parametric functions, vectors, matrices and conic sections. *Prerequisite: Successful completion of Algebra 2-15 or completion of Algebra 2-10 and permission of the Algebra 2 instructor.* [1 credit]

### CALCULUS

This course is an introduction to the fundamental concepts of calculus. The first semester consists of a study of continuity and limits, the study of the derivative, and applications of the derivative. The second semester includes a study of integration, techniques of

integration, and applications of integration. *Prerequisites: Successful completion of Precalculus 15 or completion of Precalculus 10 and permission of the precalculus instructor.* [1 credit]

### CALCULUS AB: ADVANCED PLACEMENT

This yearlong course is for students who excel in mathematics. It emphasizes both the theoretical and practical applications of calculus. Topics covered include properties of analytic geometry, transcendental functions, limits, derivatives, anti-derivatives and definite integrals. All students enrolled in an AP course are required to take the AP exam (Calculus AB) in May. *Prerequisites: precalculus and permission of the department head.* [1 credit]

### CALCULUS BC: ADVANCED PLACEMENT

This yearlong course begins by extending and deepening students' calculus knowledge through a review of AP Calculus AB topics through a more rigorous and theoretical lens. Base skills are assumed to be strong, but this review is intended to improve students' formal notational skills, deepen theoretical connections, and apply skills to more complex and more challenging tasks. Once the AB material has been so addressed, the students will study advanced integration techniques, the calculus of polar and parametric equations, sequences and series, and more rigorous treatments of differential equations and slope fields. Once these topics are covered, students may then independently explore and present advanced topics in mathematics or introductory multivariable calculus. Students are expected to take the Calculus BC AP exam in May. *Prerequisites: Successful completion of AP Calculus AB and permission of the department head.* [1 credit]

### STATISTICS: ADVANCED PLACEMENT

This course introduces students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, planning a study, anticipating patterns and statistical inference. This Advanced Placement course is equivalent to a one-semester, introductory, non-calculus-based, college course in statistics. The AP Statistics course is an excellent option for any student who has successfully completed Algebra 2, regardless of the student's intended college major. Much of the content of an introductory statistics course does not require any symbol manipulations beyond the level of first-year algebra; however, students must also possess mathematical maturity and quantitative reasoning ability to be successful in a beginning statistics course. All students enrolled in the AP course are required to take the AP exam in May. *Prerequisites: Pre-calculus or Algebra 2 and permission of the department head.* [1 credit]

### INDEPENDENT STUDY IN MATHEMATICS

The independent study offers an opportunity for advanced students of mathematics to pursue selected topics on an independent basis. Scope of study, goals and specific topic(s) are to be arranged with the instructor. *Prerequisites: permission of the department head and the head of upper school.* [½ credit or 1 credit]

### INTRODUCTION TO COMPUTER SCIENCE 1 (First or Second Semester)

We all generally know how to use technology. We definitely know that is ubiquitous and often indispensable to modern life. Yet many don't think about or understand the positive and negative implications of that use. Still fewer possess an understanding of how to be creators and designers of technology rather than just consumers. In this

course, students will learn the fundamentals of programming through a study of HTML/CSS and JavaScript/jQuery. Students will also have an opportunity to explore the sometimes contentious discussions swirling globally about creativity, privacy, ethics and policy in our digital age. This course is designed for students with little or no experience in computer science. [½ credit]

INTRODUCTION TO COMPUTER SCIENCE 2 (Second Semester)
Computer Science 2 continues the work of Computer Science 1 with a deeper focus on JavaScript/jQuery and some PHP and MySQL. Students will learn new areas of programming and solidify their previous learning. By the end of this class, students will have been exposed to the main concepts of any programming language and will be ready for deeper work in Javascript/jQuery and web development or have a useful framework for learning a new language (e.g. Python or C#). *Prerequisite: Introduction to Computer Science 1.* [½ credit]

ADVANCED OPEN COMPUTER SCIENCE (First and/or Second Semester)
Advanced Open Computer Science (AOCS) is an individually designed semester or yearlong course in computer science. AOCS students will be able to explore a passion by completing a programming project or conducting an in-depth study of an area of the subject. AOCS students will work alongside other AOCS students as well as Intro to Computer Science students and so must have both technical proficiency and background experience in their project area and comfort with independent work. *Prerequisites: Intro to Computer Science or other computer science experience. Students must submit a detailed proposal and receive permission from the instructor.* [½ credit or 1 credit]

COMPUTER SCIENCE PRINCIPLES: ADVANCED PLACEMENT
AP Computer Science Principles offers a multidisciplinary approach that exposes students to the fundamental and important ideas of computer science. This course focuses on creative problem solving and real-world applications that emphasize the critical role computer science has played in advancing computing to better serve people and society. AP Computer Science Principles gives students the opportunity to use current technologies to create computational artifacts for both self-expression and address real-world problems by building relevant solutions. Through projects and investigations in computer science, students will have the opportunity to investigate both the impact and ethical implications of new technologies in order to methodically and collaboratively design and test computational solutions. *Students must have completed Intro to Computer Science or an equivalent course and be approved through the application process. Open to grades 10-12.* [1 credit]

## Physical Education

Physical education classes are scheduled two times per week. The programs provide unique opportunities for the optimum physical growth and development of each student. Students will have the opportunity through a variety of programs to develop and improve components of physical fitness (strength, endurance and flexibility). The goal of the physical education department is to teach students to develop an appreciation of physical activity and to help them realize the importance of developing and maintaining lifetime fitness. [½ credit]

## Science

The science department strives to nurture a spirit of inquiry as we guide students in the study of the natural and physical sciences. All courses are laboratory and/or field-based, emphasizing the process of science in addition to core content knowledge of the disciplines. The history of science and scientific literature capture the implications of science in society, and science courses thus draw from authentic accounts of scientists' practice. The science program begins with physics in 9th grade. In grades 10 through 12, students are expected to take yearlong courses in chemistry and biology. Students in 11th and 12th grade, with attention to pre- and co-requisites and appropriate approval processes outlined in this document, may elect to enroll in Advanced Placement courses in physics, chemistry or biology or choose to engage in topical science elective courses.

### PHYSICS: A CONCEPTUAL APPROACH

Through guided inquiry, group discussion and hands-on investigations, students will gain a functional understanding of the principles of physics. Students will be expected to design experiments to test their ideas and communicate these ideas to others in efforts to construct knowledge surrounding basic kinematics and mechanics (e.g., constant and accelerated motion, Newton's laws, forces, energy and work); electrostatics; and electricity and magnetism. Data collection and analysis are core components of this introductory course, however, emphasis will be placed on developing concepts and models over quantitative analyses. This course is strategically designed for those students still developing in their basic understanding of algebra. [1 credit]

### PHYSICS: A QUANTITATIVE APPROACH

This lab-oriented course teaches students how to apply the fundamental principles of physics in order to explain phenomena observed in the everyday world. Energy will be a unifying theme. The course will explore the basic concepts of mechanics, including constant and accelerated motion, projectiles, Newton's laws, forces, conservation of energy and work. Also core to the curriculum are experiences with momentum and impulse, mechanical waves and electromagnetic waves, as well as current, electricity and simple circuits. In preparation for chemistry, an exploration of electrostatics will also be included. Quantitative analyses of experimental data—with the use of graphing calculator technology—is emphasized. This course is strategically designed for those students with a demonstrated aptitude in mathematics (in particular, a working knowledge of algebra). *Prerequisite: Solid performance in Algebra 1 with instructor recommendation and/or solid performance on mathematics skills test (as part of admissions process).* [1 credit]

### PHYSICS: ADVANCED PLACEMENT

The AP Physics 1 course is built around knowledge central to classical physics. Course content primarily draws from the following three areas: translational and rotational Newtonian mechanics including motion, forces, energy and momentum; mechanical waves and sound; and simple circuits. Time permitting, light waves and optics will also be covered. A working knowledge of algebra and basic trigonometry is required, especially as data analysis in the laboratory and solution strategies in general rely heavily on indispensable and reliable quantitative abilities. Emphasis is placed on collaborative efforts as well as the development of problem-solving skills. *Prerequisites: physics and Algebra 2 (students concurrently enrolled in Algebra 2-15 may be considered as well), and permission of the teacher.* [1 credit]

### CHEMISTRY 10: PRINCIPLES OF CHEMISTRY

This course is designed to introduce students to the most important principles of chemical reactions present in the physical world. The course has analytical thinking and problem-solving as its foremost goals. Students utilize some mathematical analysis, laboratory experimentation and research literature to solve problems. Major topics include: atomic theory; nomenclature, writing of chemical equations, stoichiometry and states of matter, including the Gas Laws. An extended period each week offers time for experimental investigations that incorporate quantitative analysis as well as extended problem-solving sessions. *Prerequisite: Algebra 1 and physics.* [1 credit]

### CHEMISTRY 15: ANALYTICAL CHEMISTRY

For students with a keen interest in science and strong quantitative and analytical-reasoning skills, this laboratory course explores the principles of inorganic chemistry, including: atomic theory; periodic law; nomenclature; chemical bonding; properties of pure and impure substances (solids, liquids, gases and solutions); chemical reactions; stoichiometry; thermochemistry; and acid-base behavior. Throughout the course, students are involved in an intensive-laboratory curriculum. Through experiments and lab-based projects, students acquire extensive experience developing and implementing experimental processes, which include the collection and presentation of data, and the monitoring and analyses of experimental results. Placement in this course is based on performance in Freshman Physics and teacher recommendations. Students in both conceptual and quantitative Freshman Physics courses are eligible based on performance in physics and teacher recommendation. *Prerequisites: Solid performance in either physics course and teacher recommendation.* [1 credit]

### CHEMISTRY: ADVANCED PLACEMENT

Advanced Placement Chemistry is a rigorous laboratory-based course that is designed to be the equivalent of a general chemistry course at the college undergraduate level. The course focuses on topics such as states and structure of matter, chemical thermodynamics, physical behavior of gases, advanced stoichiometry, chemical kinetics, systems in chemical equilibrium, electrochemistry and the extensive use of reaction prediction as an analytical tool. In this second chemistry course, students engage in the foundations of chemistry from a much deeper mathematical perspective. Completing the experiments recommended by the College Board is an integral part of this course. Laboratory work emphasizes increased competency in solving chemical calculations and problems. *Prerequisites: Solid performances in Algebra 2, Chemistry 15 and teacher permission. As part of the application for AP Chemistry, students must demonstrate strong performance on a skills test (offered the spring prior to enrollment)* [1 credit]

### BIOLOGY 10

This introductory course in biology presents a survey of the fundamental processes of living organisms, with an emphasis on developing scientific literacy and science process skills. The course is designed around real-world application of biological concepts through the use of case studies and group projects. Topics include: biochemistry, infectious disease, structure and function of cells, reproduction, genetics, evolution, energetics and ecology. As this may serve as the final course in the science sequence for some students, students will integrate physical, chemical and biological concepts to address global scientific concerns. *Prerequisites: Completion of physics and chemistry.*
[1 credit]

BIOLOGY 15

This introductory course presents a survey of the fundamental processes of living organisms, with an emphasis on using science process skills to give context to the content. Topics include: biochemistry, structure and function of cells, the cell cycle, reproduction, genetics, protein synthesis, evolution, cellular respiration, photosynthesis and ecology. Students will spend a significant amount of time designing experiments, analyzing data and constructing scientific explanations. As this may serve as the final course in the science sequence for some students, students will integrate physical, chemical and biological concepts to address global scientific concerns. *Prerequisites: Completion of physics and chemistry and with physics and/or chemistry instructor recommendation.* [1 credit]

BIOLOGY: ADVANCED PLACEMENT

This advanced placement biology course investigates the ways chemical and physical laws govern the form and function of living things. During the first semester, students will develop in their understanding of cellular and molecular biology, which includes exploration of topics such as reproduction, the nature of DNA, molecular synthesis, gene theory and inheritance. Students will engage in laboratory studies of gel electrophoresis, chromatography, modern genetics and enzymes, among others. In the second semester, the emphasis shifts to organism biology, including a thorough survey of the anatomy and physiology of all major complex systems. Students also enjoy a close look at evolutionary theory, population biology and ecology. As in the first term, laboratory work complements all major topics. *Prerequisites: Solid performances in Biology 15 and Chemistry 10/15 coupled with prior science teacher recommendations, solid perfomance on a skills test and permission of the AP Biology teacher.* [1 credit]

**Science Electives**

The philosophy of the science department is to include a series of elective offerings that allow students to focus on areas of interest in science. Electives—as in core courses—continue to be laboratory-based; however, students have the opportunity to engage in a topic and/or scientific process in-depth. Each course is one semester in length and is taught by a member of the upper school science faculty. Students may elect to take one or more electives in a given year.

THE CHEMISTRY OF FOOD (Second Semester)

The Chemistry of Food is designed to provide an understanding of the chemical, physical and biological nature of food and the reactions that occur to food during its preparation. Through a variety of labs, lectures and discussions, students will examine the functional properties of carbohydrates, proteins, fats and other chemical compounds and discover the chemical reactions that occur as they are prepared. A portion of the course will also be devoted to the exploration of concepts in molecular gastronomy. At the conclusion of the semester, students have the opportunity to demonstrate their understanding of the principles they studied by creating, analyzing and sharing a recipe that they prepare. The Chemistry of Food allows students the opportunity to apply the chemical concepts learned in Chemistry 10/15 to phenomena in the everyday world. *Prerequisites: Solid performances in physics and Chemistry 10/15. Students should come in with an understanding of bonding, polarity, IMF and heat transfer.* [½ credit]

SCIENCE AND PUBLIC POLICY (First Semester)

There is an increasing need for scientists to communicate their research to the general public so people can weigh in on political, economic and social decisions rooted in science (i.e. technology, medicine, environment). Scientists also draw a lot of curiosity in modern

society. For example, what makes shows like "Mythbusters" accessible and popular? In what ways did Al Gore propel awareness of climate change, perhaps more so than any scientists engaged in the actual work? What makes people "buy in" to certain technologies? Students will perform critical analyses of the way science is communicated via mass and print media to popular culture or within the science-research community. Students will also be engaged in developing criteria for what makes a science explanation "effective" for certain audiences. Culminating projects will involve students researching and developing an experiment or demonstration of a phenomena, and "performing" and explaining it to an outside audience. *Prerequisite: physics, chemistry and biology*. [½ credit]

ENGINEERING BASICS (First Semester)
This introductory engineering course will engage students in both research and design as they delve into content representative of several common engineering disciplines: civil, chemical, electrical/computer, biological and mechanical. Students will collaboratively work in teams to examine problems of relevance and importance to modern society. Topics and projects will resonate with student interest and background, and are likely to cover bridges, plastics, robotics, prosthetics, gear trains and alternative fuels. The curriculum promises to be hands-on. *Prerequisite: physics*. [½ credit]

APPLIED PHYSICS AND ENGINEERING (Second Semester)
In this semester elective, students will investigate a number of engineering-related problems/scenarios through applied math and physics. The investigations will be pulled from the following areas in physics: kinematics, statics, dynamics, energy, momentum, harmonics, acoustics, optics and/or electromagnetism. As much as possible, basic calculus (simple integration and differentiation) will be incorporated during the analysis. By applying their math and physics background to a variety of relevant challenges, students will further develop existing problem-solving skills. Experimental and graphical methods will accompany the assignments whenever appropriate. Topics and projects will be tailored to reflect student interest and ability. *Prerequisite: physics, Co-requisite: calculus*. [½ credit]

FOOD: SCIENCE, SYSTEMS AND SOCIETY (First Semester) *Cross-listed in History*
This course provides students an in-depth study of food production, history and culture, including topics related to agricultural science. A goal of this course is to expand on North Shore's Food Education Program through planting, maintaining and harvesting gardens whose food will be used in North Shore's cafeteria. Through a hands-on, project-based curriculum, students will come to understand many food-related ideas, potentially including topics such as how to grow vegetables and fruits; how factors such as climate, zone and soil affect food production; how to extend the growing season in Chicago's climate; agricultural and industrial food cycles and systems; the history of food mass production and the evolution of the local-food movement; how sustainability connects to food production; and other related topics that students may choose. This course has interdisciplinary links in the humanities as well as other sciences, and requires research and writing skills. *Prerequisite: biology*. [½ credit]

ESSENTIALS OF HUMAN ANATOMY AND PHYSIOLOGY
This is a yearlong course comprised of two stand-alone semester courses highlighting different human body systems. Students can elect to take one or both semesters. Eleven human body systems will be covered over the course of the two semesters and different systems will be emphasized in Essentials of Human Anatomy and Physiology 1 and 2.

ESSENTIALS OF HUMAN ANATOMY AND PHYSIOLOGY 1 is the first of a two-semester sequence including language of anatomy, homeostasis, the study of structure and function of cells, tissues, and the integumentary, skeletal, muscular, and digestive systems. This course introduces common human disease processes. Laboratory component includes anatomical studies using microscopy and dissection and the study of physiological concepts via experimentation. Dissection of a cat or mink may be utilized to enhance student understanding of the muscular, skeletal, and digestive systems. *Prerequisite: chemistry; Corequisite: biology.* [½ credit]

ESSENTIALS OF HUMAN ANATOMY AND PHYSIOLOGY 2 is the second of a two-semester sequence including the study of the nervous, endocrine, cardiovascular, lymphatic/immune, respiratory, urinary, and reproductive systems including common human disease processes. Laboratory component includes anatomical studies using microscopy and dissection and the study of physiological concepts via experimentation. *Prerequisite: chemistry; Corequisite: biology.* [½ credit]

ADVANCED OPEN RESEARCH

In this semester or yearlong course, students are introduced to the demands and satisfaction of authentic, rigorous scientific experimentation that aligns with college-level courses. In partnership with a faculty mentor and, in some cases, local content-area experts, students generate a research question, conduct a literature review, develop a hypothesis, collect and analyze data, and present their original research. This course is designed for second-semester juniors and seniors only. *Prerequisites: physics, chemistry; Corequisites: biology. Students must submit a detailed proposal and receive permission from the instructor.* [½ credit or 1 credit]

INDEPENDENT STUDY IN SCIENCE (Second Semester)

The independent study offers an opportunity for advanced students of science to pursue selected topics on an independent basis. Scope of study, goals and specific topic(s) are to be arranged with the instructor. *Prerequisites: Permission of department head and the head of upper school.* [½ credit or 1 credit]

## Social Studies

The social studies department offers a variety of courses designed to expose students to national and international affairs. The courses strive to give students a greater understanding of the world and their place in it. In all courses attention is given to helping students improve their skills of critical reading, analytical thinking and effective writing.

WORLD HISTORY 1

World History 1 explores the history of humanity from 10,000 BCE to 1500 CE in a student-centered, socially engaging, writing-intensive environment. In each of four historical eras, students will survey a range of prominent themes to gain a "big picture" idea of the varieties of human experience worldwide. To supplement these "panoramas", they will then take a closer look at how one theme in each era plays out inter-regionally and across time. Finally, during each era, students will study at least one topic in depth, examining the continuities within the traditions of a culture, with attention to the development of ideas and institutions. Throughout the course, students will focus upon the following key skills and understandings:

1. Students will understand the major developments of large-scale eras of human society before 1500 CE from multiple perspectives.
2. Students will understand the essentials of effective research and writing in terms of content, structure, wording, mechanics and analysis of sources in expository and document-based essays as well as in research projects.
3. Students will understand how to read different kinds of sources critically and analytically, and be able to communicate clearly the information gleaned from critical analytical reading in a variety of venues.
4. Students will understand the habits, knowledge and personal responsibility necessary to become ethical, engaged global citizens capable of addressing issues with informed decision-making.
5. Students will understand the importance of effective verbal communication and true collaboration with their peers as they seek out creative answers to complex problems.

During the year, students will craft arguments from historical evidence and employ historical thinking skills including chronological reasoning, comparison, contextualization, interpretation and synthesis. Ultimately, students will use the skills and understandings they have built to collaborate on projects including a U.N. simulation and a service learning assignment that ask them to address specific global problems. [1 credit]

### WORLD HISTORY 2

World History 2 is a yearlong thematic survey course which examines changes in the balance of world power from the early modern era to the middle of the 20th century. Students will use the world's major empires—Ming, Mughal, Ottoman, Songhai, Aztec, British, German, Japanese, among others—as their primary lens of study to understand changes and continuity in culture, economics, social arrangements, ideologies and technological innovations. In the fall term, students concentrate initially on areas of power in Eurasia to understand the world around 1400. In so doing, they will begin to challenge the traditional Eurocentric perspective and consider how the West was largely "peripheral" to the world system at the time. In the latter half of the term, students will explore global developments between 1450 and 1650 in an attempt to better understand how Europeans "caught-up" to non-European societies. During the spring term, students will focus on the parity between non-Europeans—China, India, Africa, the Ottoman Empire and the Americas—and Europe's increasing incursion and influence. The Age of Revolution (French and Industrial) will be examined as a major turning point from the "old" world dominated by traditional and sacred values to the "new" modern era of progressive ideas and technological developments. This sets up a study of the major modern institutions of democracy, industrial capitalism, imperialism and nationalism that became the hallmarks of European hegemony in the 19th and early 20th centuries. Finally, students will conclude the year exploring opposition to Western hegemony through modernization in Japan, the emergence of the Cold War as well as the independence movements in China, India, Africa and the Americas. Throughout the course, students will develop and sharpen essential skills in critical reading, thinking and writing through seminar-style discussion, project-based assignments and careful engagement with course material. [1 credit]

UNITED STATES HISTORY

This course introduces students to a range of relevant topics in United States history using a chrono-thematic, inquiry-based approach. U.S. history is a student-centered course that expects participants to take an active role in the teaching and learning process through a variety of methodologies including large group work, small group work, focused task assignments, debates, discussions and creative projects. The course addresses the following essential questions:

- Who makes history? Who writes history? What is their purpose in writing it down?
- What fundamental lessons does United States history have to teach us about opportunity, race, gender and class?
- Is there such a thing as national culture? Can we identify specific unique traits? Are they static or dynamic?
- What role has the geography in general, and the land in particular, played in the history of this country?
- On what model was the grand experiment begun? Does it remain a model today for the rest of the world?
- Is US history the story of progress? Is there such a thing as the American Dream?
- What events, people and stories are worth knowing and understanding?

Students who take this course will build a working knowledge of United States history by exploring cause and effect, the importance of sequence, multiple interpretations of data and the concept of historical parallelism. They will also cultivate a functional understanding of what historians do and what makes the study of history unique. During the year, students will develop close reading, note-taking, test preparation and performance, critical thinking, essay writing, collaboration and information literacy skills. Ultimately, students will take responsibility for their learning by understanding individual strengths and areas for improvement. [1 credit]

UNITED STATES HISTORY: ADVANCED PLACEMENT

AP United States History is a highly challenging course that addresses political, geographic, intellectual, social and cultural developments in the United States from the first European discovery and exploration through post-9/11 events. The course is intensive in its demands, relies on texts common in college classes, and is the equivalent of an introductory level U.S. history college course. Essay writing, especially as related to the document-based questions (DBQs), critical reading and discussion skills are needed for success in this course. Students also complete a formal research paper as part of the course requirements. In this assignment, students refine their abilities to gather and categorize evidence, evaluate sources and draw conclusions, and in doing so, are introduced to the historian's craft. All students sit for the AP United States History exam in May. [1 credit]

**Social Studies Electives**

The social studies department offers a series of seminar elective offerings to juniors and seniors. These elective courses will allow students to build upon what they have learned in the first several years of their social studies education at North Shore and further broaden their view of the world. The senior offerings, including Advanced Placement courses may vary from year to year.

HUMAN GEOGRAPHY: ADVANCED PLACEMENT

This yearlong, college-level survey course introduces students to the systematic study of patterns and processes that have shaped human understanding, use and alteration of the earth. Throughout the course, students will examine human social organization and its environmental consequences through spatial concepts and landscape analysis, with an emphasis on the issues of change and continuity over time. In addition, students will explore the nature and perspectives of several major fields of Human Geography in a student-centered, socially engaging, writing-intensive, multimedia-rich environment. More specifically, during the course, students will learn—at various scales ranging from local to global—about human societies, demographics, migration and refugees, folk and popular culture, gender and sexuality, ethnicity and race, universalizing and ethnic religions, the origins and diffusion of languages, border disputes and international conflicts, global economic development, urbanization, industrialization, agriculture and medical geography to name a few. Students will be asked to seek out the root causes of issues, attempt to understand them, and look around the world and throughout history for ideas that might contribute to their resolution. In short, students will try to answer the "Why of Where." *Open to grade 12.* [1 credit]

FOOD: SCIENCE, SYSTEMS AND SOCIETY (First Semester) *Cross-listed in Science*

This course provides students an in-depth study of food production, history and culture, including topics related to agricultural science. A goal of this course is to expand on North Shore's Food Education Program through planting, maintaining and harvesting gardens whose food will be used in North Shore's cafeteria. Through a hands-on, project-based curriculum, students will come to understand many food-related ideas, potentially including topics such as how to grow vegetables and fruits; how factors such as climate, zone and soil affect food production; how to extend the growing season in Chicago's climate; agricultural and industrial food cycles and systems; the history of food mass production and the evolution of the local-food movement; how sustainability connects to food production; and other related topics that students may choose. This course has interdisciplinary links in the humanities as well as other sciences, and requires research and writing skills. *Prerequisite: biology.* [½ credit]

HOLOCAUST AND HUMAN BEHAVIOR (First Semester)

This class leads students through an examination of the catastrophic period in the 20th century when Nazi Germany murdered 6 million Jews and millions of other civilians, in the midst of the most destructive war in human history. It will also guide students on a parallel journey through an exploration of the universal themes inherent in a study of the Holocaust that raise profound questions about human behavior. By focusing on the choices of individuals who experienced this history as victims, witnesses, collaborators, rescuers and perpetrators, we will come to recognize our shared humanity—which, according to historian Doris Bergen, helps us to see the Holocaust not just as part of European or Jewish history but as "an event in human history ... confirming the relevance of this history in our lives and our world today." As students examine the steps that led to the Holocaust, they discover that history is not inevitable; it is the result of our individual and collective decisions. As theologian Eva Fleischner explains, "The more we come to know about the Holocaust ... the greater the possibility that we will become sensitized to inhumanity and suffering whenever they occur." *Open to grades 11 and 12.* [½ credit]

LATINX STUDIES: HISTORY, CULTURE AND POLITICS OF LATINX PEOPLES IN THE UNITED STATES (First Semester)

This course will introduce students to the experience of Latinx people in the United States from the time of Spanish colonization to the present. While history will be a major focus of the course, contemporary issues will also serve as a window into the modern Latinx experience. Through written and project-based learning, the course will examine historical and contemporary experiences of transit, migration, exile and forced dispossessions of Latinx people. Students will acquire a broad, panoramic perspective on the Latinx collective and individual experience. Concepts such as identity, post-colonialism, borderlands, immigration, labor and gender/sexuality will be unpacked to better understand the ways Latinx people have been positioned, subjugated, survived and have succeeded in the United States. *Open to grades 11 and 12.* [½ credit]

COMPARATIVE GOVERNMENT AND POLITICS: ADVANCED PLACEMENT (Second Semester)

This course is a semester-long, college-level offering that addresses governmental structure and political behavior in six core countries: Great Britain, Mexico, Russia, Nigeria, China and Iran. The course addresses each country in turn, looking in detail at historical context, key institutions, political culture, patterns of interaction and current internal political struggles. Throughout the semester, students will present briefings for core countries, engage in debates and simulations, and collaborate intensively on creative projects and assessments. The course will make use of two college-level comparative government texts and a host of other sources including *The Economist, The New York Times, The Wall Street Journal* and *The Christian Science Monitor. Prerequisites: Students must apply for this course and receive permission from the instructor and department head. Open to grades 11 and 12.* [½ credit]

AFRICAN-AMERICAN STUDIES: HISTORY, CULTURE AND POLITICS OF BLACK AMERICA (Second Semester)

This course serves as an introduction to topics in the experience of black Americans, focusing on African and African-American culture, the slave trade, the lasting impacts of slavery and emancipation in the Americas, Reconstruction, Jim Crow, 20th century social relations, and struggles for civil rights in the 20th and 21st centuries. Students will discuss, write about and develop projects on topics that include privilege and racism, cultural appropriation, the development and cultural significance of African-American vernacular English, historical and contemporary economic implications of racism, mass incarceration and exploring the historical roots of contemporary themes in the black American experience. *Open to grades 11 and 12.* [½ credit]

BUSINESS AND ECONOMICS (Second Semester)

This semester course is for students who want an exposure to the basic principles of economics as well as a working knowledge of how financial markets function. Students will not only study different micro- and macro-economic measures, they will also analyze social issues such as poverty, crime and environmentalism. During the semester, each student will create a basic small business plan for a venture they could successfully initiate as a young person in today's marketplace. [½ credit]

COMPARATIVE WORLD RELIGIONS (Second Semester)

This semester course explores the major beliefs of the world's religions through scripture, spiritual writing and students' own experiences. It is designed to be both a survey of world religious belief and a forum for students to share and explore their own beliefs, whether or

not they consider themselves religious. At its core, this course asks how religion, spirituality and/or sustained attention to existential matters help people navigate life and all its complications. We will consider what different religions and non-religious philosophies believe about such issues as good and evil, life and death, the divine, love, friendship, environmental stewardship, war and violence, and other topics. There is no requirement for students to consider themselves religious to participate, only that they are willing to discuss the core topics of the course openly and sensitively, and listen compassionately to their peers. While the course is focused primarily on discussion, research and informal writing, it also has an experiential component that includes visiting different faith communities. *Open to grade 12.* [1/2 credit]

### INDEPENDENT STUDY IN SOCIAL STUDIES

The independent study offers an opportunity for advanced students of history or social studies to pursue selected topics on an independent basis. Scope of study, goals and specific topic(s) are to be arranged with the instructor. *Prerequisites: permission of the department head and the head of upper school.* [½ credit or 1 credit]

## Other Programs

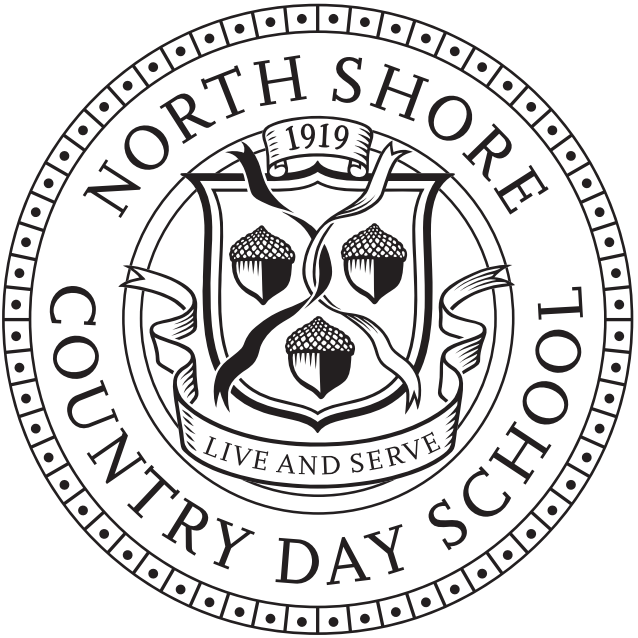
Athletics has been an integral part of the upper school program since the school was started in 1919. Perry Dunlap Smith, the founding headmaster, believed a school should require its students to exercise both mind and body. Therefore North Shore has always had a strong, diverse athletic program. Students play sports every school day throughout the year. Participation in the interscholastic program is required from 9th through 11th grades. Most teams have a "no cut" policy. In golf, however, prospective players are expected to demonstrate proficiency at the beginning of the season to earn a place on the team. In tennis and golf, it is also important that students sign up at the time of course selection. Due to our facility limitations, we do not allow students to switch into tennis or golf at a later date. It is possible to participate in a different sport every season in addition to participating in other extracurricular activities simultaneously. Practices are generally after school, but some teams practice before school when there are facility limitations. *Students in our 9th grade are required to play a team sport in the fall.* Students in 10th and 11th grades fulfill their athletic requirement by choosing a season of athletics each year. The competitive interscholastic sports teams play member schools in the Independent School League, which includes Lake Forest Academy, Latin School, Francis Parker School, Elgin Academy, Morgan Park Academy, Willows Academy, Woodlands Academy and University High, as well as other local private and public schools.

BOYS' INTERSCHOLASTIC SPORTS:

- Cross Country (Fall)
- Golf (Fall)
- Soccer (Fall)
- Basketball (Winter)
- Paddle Tennis (Winter)
- Baseball (Spring)
- Tennis (Spring)
- Track (Winter and Spring)

GIRLS' INTERSCHOLASTIC SPORTS:

- Cross Country (Fall)
- Field Hockey (Fall)
- Golf (Fall)
- Tennis (Fall)
- Volleyball (Fall)
- Basketball (Winter)
- Paddle Tennis (Winter)
- Soccer (Spring)
- Track (Winter and Spring)

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