LINCOLN SCHOOL

PROVIDENCE

Upper School Course Descriptions

2023-24

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Note on the 2023-24 Course Catalog

These pages include descriptions of the full selection of courses offered for the 2023–24 school year. Some courses listed may not be offered, depending on enrollment. Please contact the Upper School Director with any questions about course offerings. Lincoln School reserves the right to amend the 2023–24 Course Catalog at any time.

Letter from the Upper School Director

Dear Lincoln Students,

This course catalog represents all courses and programs offered by Lincoln School for the 2023–24 school year. I encourage you to read through the catalog in its entirety and to consider the wealth of opportunities that are available to you in Upper School. Here at Lincoln, we believe that a strong academic program is both rigorous and balanced. Through the course selection process, you should strive to build an individualized course of study that fuels your intellectual curiosity, hones your analytical and creative thinking skills, and allows you to view challenging topics from a myriad of perspectives. As you delve into this process, consider your whole Lincoln experience, inside and outside of the classroom. Think about how you can share your passions and stretch beyond your strengths within the context of an academic and extracurricular program that allows you the space and time to be your best self at every turn.

Lincoln students welcome challenges and seek out opportunities to contribute to the vibrant educational environment that is the hallmark of our school. When considering the excellent courses laid out in this catalog, please keep in mind the following:

- Your Upper School experience is four years long. Acquaint yourself with Lincoln's graduation requirements and keep them in mind as you plan your elective choices.
- Pursue your passions but do not feel the need to specialize in any given discipline. High school is a time to try out a variety of subjects and to learn about yourself as a learner and a thinker.
- When planning both your academic and extracurricular schedules, make sure to leave time for important non-school related activities. Balance in school and life is critical.
- Be adventurous. Don't worry about being perfect and make choices that will infuse your day-to-day with joy.

You are attending Lincoln School at a very exciting time in the school's history. Take advantage of the new course offerings available to you and offer up your talents and great potential to the whole Lincoln community. If you have never tried out for a role in a school play, give it a shot. If you know nothing about computer science or figure sculpture or world religions, do not let that keep you from taking a smart risk and enrolling in a course you never imagined taking. Your years at Lincoln are a time of exploration and self-discovery, and our faculty and staff are here to support you through this process every step of the way!

Peter Brooks, Upper School Director

Letter From the Director of College Counseling

Thoughtful course selection leads to a more engaging and rewarding high school experience, as well as a more successful college admission process down the road. Admission officers consider both the rigor of the courses selected and the grades earned when reviewing an applicant's academic record. Oftentimes they encourage students to take the most rigorous program available in high school—what they leave out is the key phrase…*that is appropriate for you*. The importance of maintaining balance in your life needs to be considered when selecting classes. Sometimes it can be tricky to gauge just how many advanced level courses are right for you; therefore, it is helpful to seek the counsel of your teachers and/or your advisor when building your academic program.

Co-curricular activities also play a big role in your experience at Lincoln. High school is a good time to try something new, whether it's the arts, athletics, student government, or a club, and then to focus on the activities that you find most engaging. By pursuing the things that you genuinely enjoy doing, you will end up leading a more healthy and balanced life. Plus, you will be a stronger applicant in the college process, as admission officers universally value authentic engagement over a laundry list approach to activities.

You will learn a great deal about yourself during your time at Lincoln. It is certainly appropriate to consider college admission as you plan your schedule, but don't let the college process overshadow your high school experience. Instead, enjoy the richness of what you are learning today and let your interests guide you. Be sure to ask for assistance from teachers, your advisor, and other members of the community when you need help, and to take ownership over your decisions as you plan your academic and co-curricular schedule.

Please feel free to be in touch if you have any questions about your academic planning.

Beth Ellis
Director of College Counseling

Graduation Requirements/Student Course Load

The Board of Trustees confers the Lincoln School diploma by the recommendation of the Head of School and Upper School faculty. The recommendation is based upon the evaluation of the student's successful fulfillment of graduation requirements, completion of each year's work, and her support of the school's tenets.

Each year, students must be enrolled in a minimum of five core academic courses, as well as required arts and co-curricular courses. In addition, students may choose to enroll in elective courses from any department, pending the fulfillment of prerequisite requirements. Six academic courses is considered a strong and robust program. Only in rare cases will students be permitted to enroll in a seventh. Students who wish to do so must submit a formal, written request to the Upper School Director.

The process for course selection begins at the start of April. Advisors meet with students in Grades 9–11 to discuss each student's four-year plan and to discuss course offerings for the 2023–24 school year. We encourage the students to review course descriptions with parents and have a sense of course direction for the upcoming year. Department heads and advisors are available to help the students make course choices based on interest, course sequence, and prerequisites. Course registration will happen online. Students will receive a printout of their selections to share with their parents, who must sign and return the form.

See below for a complete list of required courses.

Department	Graduation Requirements
Arts: Performing and Visual *(Five semesters)*	**Grade 9** Studio Art Vocal Ensemble, Handbells or Theater workshop I **Grades 9, 10, 11, or 12** One additional Visual Art elective One additional Performing Arts elective One additional elective from either discipline
English *(Four years)*	English 9: The Self, the World, and the Word English 10: Bridges and Walls: What Divides and Connects Us English 11: The American Experience English 12: Senior Seminar elective
History *(Three years)*	Grade 9 - Topics in Early World History Grade 11 - The American Experience One additional year of History study made up of two semester electives or Grade 10 Shaping of the Modern World
Mathematics *(Three years; four years recommended)*	Algebra 1 Algebra 2 Geometry Pre-calculus (recommended)
Science *(three years; four years recommended)*	Physics (Grade 9) Chemistry (Grade 10) Biology (Grade 11)
World Language *(three consecutive years in a single language; four years recommended)*	Arabic French Latin Spanish
STEAMx	3D Modeling and Fabrication (Grade 9)
Co-curricular Courses	**Grades Taken**

Grade 9 Seminar	Grade 9
Ethical Global Citizenship Sophomore Speaker Series	Grade 10
College Counseling Seminar	Grade 11
Health	Grades 9–11
Physical Education/Sports	Grades 9–12
Senior Community Action Project	Grade 12

Departmental requirements comprise 16-and-a-half required academic credits. A good secondary school education includes additional courses in areas of interest to provide depth as well as breadth in the program of study. Other courses may be selected from the Arts (Visual or Performing) or from an elective course in English, World Languages, History, Technology, Mathematics, or Science. Final decision on course availability will be subject to course enrollment.

Honors and Advanced Level Course Recommendations

Students will be recommended for honors and advanced level courses on a yearly basis. These decisions are based upon a student's previous academic performance in a given discipline. In addition, the school takes into account a student's work habits, motivation, ability to work independently, and capacity as a self-advocate. All recommendations are approved by department heads and the Upper School Director before they are shared with students.

Lincoln School strives to place students in courses where they can find the appropriate level of challenge while not becoming overwhelmed with the workload or the level of the content covered. Lincoln School does not make these recommendations lightly and we ask that all students pay serious consideration to their placement.

In rare circumstances, a student may submit a request to be placed in an honors or advanced level course for which she has not been recommended. In such an instance, the student will be required to fill out an *Honors and Advanced Level Course Recommendation Waiver Request Form and submit* the request directly to the Upper School Director. These forms can be found at lincolnschool.org/courseforms, and must be submitted by the regular course sign-up deadline. Upon receipt of the request, the Upper School Director will take the student's request into consideration and will consult with the department head and the recommending teacher. The final decision on all recommendation waiver requests will be made by the Upper School Director.

2023–24 Course Registration Timeline

All course-related forms can be found in your student portal in Veracross

Month of March	Grade 8 Upper School course sign-ups; students will create four-year plan with advisor and Upper School Director
March 29, 2023	Assembly on Upper School course offering changes
March 30 & April 3, 2023	Course sign-ups
April 14, 2023	Deadline- Course sign up parents approval
April 2023	New student placement testing (Grades 6–12)

2023–24 Semester Dates

Semester 1: Sept. 5–Jan. 19
Semester 2: Jan. 22–June 11

Adding and Dropping Courses

Students may add a course during the first two weeks of the semester by filling out an *Add/Drop Request Form* and collecting all required signatures.

Students may drop a course during the first five weeks of the semester by filling out an *Add/Drop Request Form* and collecting all required signatures.

Add/Drop Request Forms can be found on the course forms page at lincolnschool.org/courseforms.

2023–24 Fall Add & Drop Dates:

Add : September 05—September 22

Drop: September 05—*October 06

2023–24 Spring Add & Drop Dates:

Add: January 22—February 02

Drop: January 22—*February 23

All classes dropped before the end of the drop period will be removed from the student's transcript.

****Please note:** *All classes dropped after the end of the drop period will remain on the transcript and receive a grade of W (withdrawal) with a Pass/Fail designation. This includes students who change course levels-e.g. honors to regular or vice versa.*

All students must remain in their originally scheduled classes until they receive their new schedule confirming that the schedule change has been approved.

Procedure for Adding or Dropping a Class

An *Add/Drop Request Form* must be completed and signed by the student, advisor, parent, and department chair, and returned to the Upper School office before the designated add/drop date. Upon approval, the student will receive an updated schedule.

Arts: Performing and Visual
Please note: *Many art classes meet half-time each semester. Exceptions will be noted in course descriptions below.*

Performing Arts

Robb Barnard, US Department Head

The Performing Arts Department offers courses in music and theater. Our curriculum encourages students to both learn to communicate together through performance and to develop their own creative voices. Our courses also focus on the theory and history of music and performance traditions. We believe that actively studying the arts enriches the lives of our students in and out of the classroom as well as enhances their learning in other disciplines.

Each year the department produces a number of theater performances and concerts. Recent theater offerings have included *Urinetown*, *RENT, Men on Boats, She Kills Monsters, Little Shop of Horrors, Into The Woods,* and *A Midsummer Night's Dream,* as well as a student-produced 10-Minute Play Festival. Music performances include the annual Harvest, Winter, and Spring Concerts.

Music

Lambrequins

Fall Semester/Spring Semester —Open to Grades 9–12

The Lambrequins is open to all Upper School students. Experienced and new singers will discover and develop their voices through breathing and vocalizing techniques. The group performs a wide variety of music including classical repertoire, jazz standards, and pop music from all periods in music history. Students will have an opportunity to perform at Lincoln concerts and at events outside of Lincoln. This course is a performance-based ensemble and, as such, participation in all school concerts (Fall, Winter, and Spring) is mandatory.

Music Theory

Fall Semester/Spring Semester—Open to Grades 9–12

Often looked at as the vocabulary of musical notation, music theory combines the understanding of written music with the aural skills needed to hear and decipher what is being played/heard. In this class students will learn to read and write musical notation, recognize and "spell" all major and minor scales, key signatures, intervals and triads, learn to play individual notes on a piano keyboard, and learn to take aural dictation of simple rhythms and diatonic melodic phrases.
Prerequisite: None.

Beginning Handbells
Fall Semester/Spring Semester –Open to Grades 9—12

This course in English handbell ringing combines classroom learning with some homework-based study of handbell history, practice, and technique. While not a performance-based ensemble, this class may perform in concerts during the school year. This is a course for experienced musicians and novices alike - those who do not read music will learn that theory and notation are easy to understand with a team of bell ringers at their side!
Prerequisite: None.

Advanced Handbells
Fall Semester/Spring Semester—Open to Grades 9–12

This course is a performance-based ensemble, and, as such, participation in all school concerts (Fall, Winter, and Spring) as well as Lumina is mandatory. The ensemble may perform outside of school as schedule and repertoire allow. Music is significantly more complex in this course, and selections will come from multiple periods of music history (including some modern pieces). Significant outside-of-class time will be needed to master the music; students should expect extra rehearsal time in order to fully engage in this class.
Prerequisite: Successful completion of Beginning Handbells and/or the approval of the department.

Chamber Ensemble
Fall Semester/Spring Semester—Open to Grades 9–12

This course will challenge students to learn to listen to themselves and others, develop their own individual sense of musical expression, and collaborate to produce challenging works. Chamber Ensemble is open to strings, brass, and woodwind instruments (with exceptions made in certain circumstances). Students will have an immersive musical experience in a collegial ensemble setting. Performance and ensemble techniques will be taught. Students will refine their sight-reading skills as they learn to perform works ranging from Mozart to the Beatles. Students will have an opportunity to perform at Lincoln concerts and at events and competitions outside of Lincoln.
Prerequisite: At least one semester of private study on an instrument (concurrent private study is highly recommended) and/or the approval of the department.

Rock Band
Fall Semester/Spring Semester—Open to Grades 9–12

This course uses keyboards, electric and acoustic guitar, bass, and drums to explore the vast world of music in an interactive learning environment. Students will play one or more instruments over the course of the semester. Students will also have opportunities to present their work in performance. Chord theory, applied instrument skills, group performance, and rehearsal techniques are all covered over the semester.
Prerequisite: None.

Advanced Rock Band
Fall Semester/Spring Semester—Open to Grades 9–12

Offered based on interest/enrollment.
Prerequisite: Approval of the department.

Theater

Technical Theater **(Levels I-IV)**
Fall Semester/Spring Semester—Open to Grades 9–12

This course will focus on the elements of production needed to mount a performance other than performing and direction.

Students will learn the basic concepts of set design and gain hands-on experience building new sets and altering existing sets, learning stage crew skills, and putting those skills to work over the course of the semester on projects happening at Lincoln. Students will also learn the basics of sound design and how to operate a soundboard. Students will gain hands-on experience working on a lighting board, and designing lights for productions. Students will also learn the basics of costume design for the stage and may have the opportunity to design costumes for productions at Lincoln.
Prerequisite: None for Level I. Each subsequent level indicates an additional semester of study.

Theater Workshop
Fall Semester/Spring Semester—Open to Grades 9–12

Victor Turner, an anthropologist who focused on ritual, once crafted a powerful definition of performance. To him, it was "the proper finale of an experience." In theater, we strive to embody and perform stories that speak to human experience, to the inner core of who we are. This course will explore all aspects of performing theater, particularly focusing on building character from a voice and movement-based perspective, before advancing to other areas of study. Introductory theatre history will also be considered.
Prerequisite: None

Theater Workshop II - IV
Fall Semester/Spring Semester—Open to Grades 9–12

This theater workshop continues the approach to character-building from a voice and movement perspective. Additional topics will also include scene study and text engagement, ensemble work, monologue work, and the continued exploration of theater history. Students will work with a range of classical and contemporary material. This course is repeatable and will cover topics on a rotating basis.
Prerequisite: Successful completion of Theater Workshop I and/or the approval of the department

Musical Theater Workshop
Spring Semester—Open to Grades 9–12

This course continues the approach to character-building from a voice and movement perspective, working within the canon of American Musical Theatre. Students will learn vocal techniques within a range of material, culminating in a group number, with the possibility of working on solos or duets dependent on student interest. This course is repeatable and will cover topics on a rotating basis.
Prerequisite: Successful completion of Theater Workshop I and/or the approval of the department

Advanced Theater: Theory and Practice
Yearlong - Open to Grades 11 and 12

This course is designed for students who have a proven passion for the performing arts and a commitment to independently developing the skills, knowledge and personal

vision required of working artists today. Students will read and engage with theory and theatrical texts, sharing high-level critical dialogue. Students will also collaborate on in-class performance projects that engage with the topics in question, regardless of the different disciplines and strengths brought to the class by students who enroll.

During the second semester, students will develop and pursue capstone projects that build off of the discussions and work done in the first semester of the course. Students will be assessed on their progress towards their goals, their ability to present clear artistic visions for their projects, and their final project presentations. The course will culminate in students sharing their projects in a public arena suitable for their needs. Students will have the option to work on their capstone in a non-performative role (ie a design project, a final paper/presentation, a Pecha Kucha presentation, etc). *Please note that this course is not an independent study and that a minimum enrollment of three is necessary. This course is repeatable and will cover topics on a rotating basis.*
Prerequisite: Successful completion of at least one semester of Theater Workshop or Technical Theater and the approval of the department.

Visual Arts

Anita Thompson, Department Head

The Visual Arts department provides a wide selection of required and elective courses through which students are exposed to ever-expanding visual arts vocabulary along with the tools of visual communication and personal expression. Aesthetic awareness, art history, art appreciation, and media exploration are experienced through ceramics, drawing, photography, sculpture, and painting. Assessment is largely portfolio-based. Seniors often submit a portfolio as either a supplement or in the case of art or architecture applicants, a requirement to their college applications. The learning environment encourages problem-solving, critical thinking, and technical skill building while providing the freedom to pursue a personal vision.

The Art of Assemblage: Found Object Sculpture

Fall Semester—Open to Grades 10–12

The Art of Assemblage is a course that explores how found objects can be repurposed and combined into sculptures that challenge and expand upon the form, function and meaning of everyday objects. Students will have the opportunity to produce both abstract and representational works of art that draw much of their emotional and conceptual power from the materials and combination of materials with which the students choose to work. Ready made objects, object fragments, natural materials, trash, and/or personal belongings are just a few examples of the materials that students will experiment with and assemble during the course. Special emphasis will be placed on examining the history of the Assemblage genre and how recycling, rethinking and recontextualizing the objects of our world allow visual artists to speak directly to the complex relationship between the material world and the human experience. The course is designed to also reinforce the students' technical art making skills and their proficiency with the elements and principles of three dimensional design.
Prerequisite: Studio Art

Note: Students in this course may elect to focus on an alternate course of study in assemblage sculpture that is directed towards sculptural fashion design that entails the students developing wearable garments from alternative materials. Students who elect this tract of the course will have additional assignments and will be required to prepare for and take part in Styleweek New England after the semester concludes.

Studio Art
Fall Semester/Spring Semester—Required in Grade 9

This intensive course introduces students to a wide range of media such as collage, sculpture, multiple drawing materials, clay, and digital imaging. Students are encouraged to be as experimental as possible. During the course, students will have the opportunity to view and analyze art from a wide range of contemporary and historical artists representing a variety of cultures and time periods. Students will develop a working understanding of the elements and principles of visual art and will apply this learning in their day to day studio work. In class, students will analyze their own work and critique the work of their classmates.
Prerequisite: none

Ceramics I
Fall Semester/Spring Semester—Open to Grades 9–12

In this class, students will learn the three methods of handbuilding: pinch pot, slab construction, and coil construction. Students will create a number of ceramic projects using each different method. Some of the projects will include the creation of clay sculpture, different types of vessels, sgraffito, photo transfer, and glass to clay fusion, as well as other experimental clay methodology. During critiques, students are encouraged to evaluate the aesthetic and functional qualities of each object created. Along with learning how to manipulate the clay, a focus will be placed on how the media of Ceramics exists in both art historical and present time periods.
Prerequisite: None

Ceramics (II & up)
Fall Semester/Spring Semester—Open to Grades 9–12

The Advanced Ceramic classes may be taken to build upon the preceding Ceramics course. In this Ceramics class students will further explore advanced topics in Ceramic construction including improved general building skills and a variety of decorative techniques. Students will also be introduced to the process of creating vessels on the potter's wheel. A focus of the class will also be the further study of Ceramic history and cultural connections.
Prerequisite: Studio Art & Ceramics I

Advanced Studio I
Fall Semester/Spring Semester—Open to Grades 9–12

Students are presented with a variety of media, such as various drawing materials, oil and acrylic paint, block printing, and sculptural materials, such as plaster, clay, and wire.

Through different prompt and choice-based assignments, students are encouraged to experiment with materials and develop their own creative solutions to the design challenge at hand. A strong emphasis is placed on the development of drafting and design skills, as well as the students' personal vision. Both present and art historical artists will be covered and analyzed. One-on-one as well as group critiques will be held often to share and examine work. Projects are designed to promote students' creative expression and critical thinking skills.
Prerequisite: Studio Art

Advanced Studio II, III

Fall Semester/Spring Semester—Open to Grades 10 - 12

These sequential classes may be taken to build upon the preceding Advanced Studio course. In Advanced Studio II & III students will explore advanced painting, drawing, and sculptural techniques while strengthening their craftsmanship and skills of communication with visual media. A focus will be placed on strengthening the students personal artistic vision and technical skills.
Prerequisite: Studio Art & Advanced Studio I

Transparent Anatomy: Life Drawing

This is a full-time semester course
Fall Semester/Spring Semester—Open to Grades 10–12

This course provides an in-depth exploration of life and observational drawing techniques for both the novice artist as well as the more advanced drawing student. Part of the class will be dedicated to basic drawing principles such as linear perspective, line weight, and rendering. Students will then apply these principles to their work on detailed still lifes. In the life drawing portion of the course, students will learn how to draw the human form by breaking down the body into small increments. They will explore the internal and external anatomical components of the human body. At least twice a month they will have the opportunity to draw from life when a nude model visits the class. At all times, they will be working on gesture, composition, line quality and tonal control while working with a wide range of art-making different media.
Prerequisite: Studio Art

Transparent Anatomy: Figure Sculpture

This is a full-time semester course
Fall Semester/Spring Semester—Open to Grades 10–12

This course offers the opportunity to explore a wide range of sculptural materials and processes through the lens of figurative sculpture for both the novice artist as well as the more advanced student. Students will learn about the proportions of the human

body and how to render those proportions in an accurate and representational manner in three dimensions. Students will be exposed to traditional as well as more advanced techniques based on the experience of modeling the human form in clay, plaster, wood, and wire. The course will also explore the concept of abstraction and how working in a non-representational fashion can open up doors for further creative expression. The course will culminate in an exploration of contemporary figurative sculpture and the students will be challenged by applying what they have learned to a broad array of contemporary art-making materials and processes.
Prerequisite: Studio Art

Photography I
Fall Semester/Spring Semester—Open to Grades 9–12

This course covers both technical and aesthetic aspects of fine art photography. Students are introduced to both analog and digital photography and learn how to use the camera as a tool for communication and personal expression. Emphasis is placed on the procedures, concepts, and techniques that are employed in controlling the medium. A major part of this course involves learning about the art of photography and the application of visual and compositional principles within the medium. Photo history, critique, and independent writing and research are integrated into the curriculum. Technical camera, darkroom, and Photoshop skills are pursued throughout the course. Owning a camera is recommended, but not required.
Prerequisite: None

Photography (II & up)
Fall Semester/Spring Semester—Open to Grades 9–12

Advanced Photography allows students to build upon the skills developed in Photography I. In Advanced Photography, students will refine technical skills and explore more advanced techniques as they experiment with different types of photography and build upon their knowledge of photographic practice and fine art photographic history. Units on alternative process photography and hybrid processes are integrated into the curriculum. Photo history, critique, and some independent writing and research are also active components of the course. Through their creative work and visual research, students will be able to expand upon their knowledge of photography and in turn develop a better understanding of their own specific photographic interests and unique creative voice as they pursue subject matter and projects that are relevant to their artistic vision. Students may work in either digital or film formats. It is recommended, but not required, that they provide their own camera.
Prerequisite: Studio Art & Photo I

Visual Arts Major/Senior Studio

Yearlong—Open to Grade 11 & 12

This course is designed for students who have a proven passion for the visual arts and a commitment to developing the independent habits of mind and personal vision required of the most sophisticated working artists today. During the first semester of this yearlong, full-credit course, students will be required to develop personally relevant and technically refined solutions to thematic prompts. Engaging in daily research for artistic inspiration, high-level critical dialogue about works in process, and embracing the iterative creative process are expectations of students who enroll.
Junior year Co-requisite: Life Drawing in Semester 1 plus one additional Visual Arts elective in either semester.

During the second year, students will develop and pursue an independent body of work that builds off of the work created in the first year of the course. Students will be assessed on their ability to push their work to the highest level of formal and conceptual refinement and their ability to present their clear artistic vision in weekly critiques. The course will culminate in the students preparing for and hanging the Visual Arts Major Senior Studio Art Exhibition. *Students interested in taking part in the course should submit a portfolio and essay of interest to the Visual Arts department chair by the end of February for consideration for the course.*
Senior year Co-requisite: Full-year Senior Studio class plus one additional Visual Arts elective in either semester.
Prerequisite: Grade 9 Studio Art; one other Visual Arts elective, portfolio presentation

English

Emma Stenberg, Department Head

The English Department aims to encourage a love of language and an appreciation for its power to enrich lives. We offer a wide-ranging program of classic and contemporary texts from different cultures, genres, and historical periods. English classes foster each student's ability to read actively and critically; to write effectively in analytical, creative, and reflective modes; and to speak articulately in discussions and presentations of individual and collaborative work. Thus, over four years, a broad range of readings in both American and global literature helps students to understand themselves and enter into the lives of others with insight and empathy.

English 9—The Self, the World, and the Word

Yearlong–Required in Grade 9

This course serves as an introduction to the study of reading and writing on the high school level. It also considers the importance of these practices in life beyond the classroom. A large part of finding our way in the world involves defining ourselves in relation to family, peers, and society. Students in English 9 therefore examine—through their own reading and writing as well as discussion—how the search for identity and values is portrayed in a wide array of texts and kinds of texts. Frequent writing assignments—mostly analytical, but also reflective and creative—enable the student to develop their own voice and vision while also deepening their appreciation for the voices and visions of others.

English 10—Bridges and Walls: What Divides and Connects Us

Yearlong–Required in Grade 10

In this course, we will read a series of texts that wrestle with core parts of the human experience: the formation of individual identity; living through revolutionary change and divisions within society; and the paths to empathy and healing. Our texts include novels, plays, and comic books by writers of diverse experiences and forms of artistic expression. Students will write essays, personal narratives, short stories, comic books, and plays to shape their writerly voices and step into different experiences of the world.

English 11—The American Experience: Literature

Yearlong—Required in Grade 11

The English component of the American Experience explores and scrutinizes the American Dream. Our readings—essays, short stories, poetry, and novels—examine multiple perspectives across lines of class, gender, race, and other identifiers. Past topics have included the role of wealth and status in *The Great Gatsby*; the idea of art as resistance and catalyst for social change in Harlem Renaissance poetry and feminist writers; experiences of immigration as brought to life in short stories; and the ways in which history affects the individual. Acting as lenses through which to view the national imagination, our varied texts examine how America's collective narrative has shaped and been shaped by individuals and their art. This course works together with the United States History course to make connections, address essential questions, and enrich our understanding of the wide variety of American experiences.

English 12—Senior Seminars

****Students must indicate first, second, and third choice****

Yearlong—Required in Grade 12

Language and Power

Words can break hearts, or provoke hatred, or take a country to war. But words can also help us to make peace, solve problems, discover meaning, and become inspired. This course examines both the language of power and the power of language--in political and social issues, in our relationships with family and friends, and in the search for purpose and ideals. Readings are drawn from a wide range of texts, past and present: memoirs, speeches, essays, imaginative literature, songs, journalism, film, and other sources depending on the class's interests. We will also consider how mass media, digital communication, and even the design of physical spaces are also "texts" that we can read critically and think about creatively. Perhaps most important, we will seek out ways to talk about controversial issues such that diversity and difference can be seen for what they are: benefits rather than burdens. Students will therefore develop a set of reading and writing skills applicable to any college major, as well as a clearer understanding of how they can use words to make ~~a~~ positive difference both in their lives and in the world.

Media and Gender

This course examines how media and gender interact. We will learn the language and theory particular to different forms of media--literature, nonfiction writing, film, journalism, music, and emerging technologies. We will read theory and film by a number of creators, including Laura Mulvey, Gabby Rivera, bell hooks, Patricia Hill Collins, Céline Sciamma, and Jia Tolentino. Students will study how the media has been a vehicle for shaping our modern notions of gender, as well as a persistent battleground for gender rebellion, definition, and discourse. Students will also reflect upon their own roles as media consumers and creators by using the Media Literacy Concepts. This course requires independent research and teamwork.

Literature and Philosophy

This course is both an opportunity for advanced literary analysis and an inquiry into some of the most compelling and essential questions of human existence. How should we treat each other? What can we know for sure? Why are we here in the first place? Where can we turn for wisdom and comfort? People have been asking such questions for all of human history because, simply put, they help us learn how to live. Literature, by using such means as narrative, character, metaphor, and beautiful language, can help us determine what it means to live a meaningful life. Our readings--primarily fiction, poetry and drama--are drawn from a variety of eras, cultures, and styles. We will frame these works with selected writings from areas such as philosophy, literary theory, and creative nonfiction, consistently responding to the literature we read with our own such writing, as well.

English Electives

Creative Writing: Nonfiction

Fall Semester—Open to Grades 10–12

Creative nonfiction is about how we retell true stories. Whether we are telling a story about something that happened over the weekend or describing a place we've visited in the past, we tell stories about our lives every day. Creative nonfiction writing is powerful because it can evoke memories of food, places, events, and much more through the use of descriptive language and detail. In this one-semester creative nonfiction writing course, we will explore a variety of true story structures— memoirs, personal essays, vignettes, podcasts, journalism, etc. We will generate ideas surrounding questions that stump writers: 'How do I start?' and 'Where do I end?' While this course will primarily focus on writing, we will also read and discuss works that highlight strong examples of creative style, structure, and narrative techniques. Readings will include such texts as *100 Essays I Don't Have Time to Write*, by Sarah Ruhl.

Creative Writing: Fiction

Spring Semester—Open to Grades 10–12

Our lives are made up of stories, and we've all experienced the power of a good made-up story. Fiction has the potential to create and/or reinvent imagined characters, places, and events. In this one-semester creative fiction writing course, we will explore a variety of fiction structures—short story, playwriting, poetry, and more. We will experiment with fiction writing techniques like dialogue, sensory detail, character development, and point of view. We will analyze, interpret, and discuss short and longer pieces of fiction from writers like Toni Morrison, Shel Silverstein, Stephen King, Jenny Hann, and others. We will experiment with different genres of fiction, such as romance, comedy, horror, and fantasy. As writers, we will engage in every step of the writing workshop process, as well as read, celebrate, and discuss each other's work.

History

The History Department is committed to helping students develop a set of higher-level skills that are important both in and out of the history classroom. Globalism has fundamentally altered the way we look at history. We are no longer able to study nations in isolation or understand history from a Western perspective. Global history has emerged as a discipline in which the connectedness of the world is its jumping off point. Yearlong courses explore broad themes in American and global history, and four semester-length elective courses are also offered. Students are expected to develop expository writing ability, intellectual curiosity through critical reading and thinking, and discussion and debate skills. Geography, current events, and the responsibilities of a citizen in a democracy are also integrated into history courses.

History 9 — Topics in Early World History

Yearlong—Required in Grade 9

This course will look at topics that fall within the period 1500 - 1850. Using the themes of Empire, Exchange and Revolution, students will encounter various cultures and understand how connections and networks develop interaction and change in politics, economics, societies, and belief systems. A strong emphasis on the meaning of global history will be central to the course and it will go hand-in-hand with developing an appreciation for non-Western narratives. Through close collaboration with the library, students will work individually on the Grade 9 research project developing their skills with primary and secondary sources, evaluating and synthesizing information, determining the reliability of sources, and self-reflecting their process. The final quarter will be devoted to a unit on civics.

History 10 - The Shaping of the Modern World

Yearlong—Open to Grade 10

This course will pick up from where the Grade 9 course ends and cover the period from 1850 to the present. Units will address the themes of Imperialism, War and Resistance and its legacy in the postcolonial world as well as global challenges for the future. As they did in Grade 9 students will work in tandem with the library on reading, writing, and critical thinking while developing skills in analyzing primary sources, researching reliable information, visual literacy, and making oral presentations. The year culminates with individual presentations that tackle current efforts to resist oppression on a global level.

History 11—The American Experience: History
Yearlong—Required in Grade 11

Through thematic units and exercises to develop critical thinking, reading, and writing, this course will trace the history of the United States from the colonial period through the present, as well as examine current events. The themes will work hand in hand with the English department's *The American Experience: Literature* course allowing students to make cross-curricular connections, examine cultural mythology, and identify patterns and trends over time. Interdisciplinary summative assessments and other collaborative activities will connect both English and History courses. Examining the trends and particular moments in American history will be done specifically through the eyes of those for whom unity has been elusive. Their struggles to become "American" will help tackle essential questions such as: "What defines the American Dream and does everyone participate in it?" And "Who is American and who decides?"

History Electives

African Studies
Fall Semester—Open to Grades 11 and 12

Africa has a long history spanning more than 5,000 years and is often misunderstood, over-generalized, and neglected in study. Characterized as the "dark" continent, this course will examine some of the troubled historiography of Africa, common misconceptions and stereotypes, as well as the lack of sources for studying its early history. Students will delve into topics from the precolonial, colonial, and post-colonial periods and analyze Africa through the lens of world history to better understand its influence on the world and the influence of the world on it. Students will use geography and employ cross-disciplinary approaches to various topics, as well as advance their skills with primary sources and explore current events to further their understanding of this diverse continent.

Comparative Democracy
Spring Semester—Open to Grades 11 and 12

Democracy, Winston Churchill famously claimed, is the least bad of all systems. To what extent has democracy emerged and been challenged over time? Why is it facing a series of new crises today? This class will answer those questions. It will consider the history of democracy from Plato's fear that it could descend into ochlocracy or mob rule, to what the assault on the United States Capitol in January 2021 demonstrates about the state of democracy today.

Democracy has evolved over time and witnessed a tumultuous history. Traditionally it has been considered as a desirable legacy of Ancient Greece. However, it has been

shaped by many events over many centuries. These include the English Civil War and the American and French Revolutions in which the challenges we face today were first encountered. The questions posed and solutions offered, however imperfect, tell a story of constant redefinition, exclusion and inclusion. This history will be followed by an examination of authoritarian leadership, populism and representative democracy today when democracy is often caught between a rock and a hard place, prompting new questions about how society can look after all its people fairly and effectively.

Mathematics

Shannon Lambert, Department Head

The Mathematics Department recognizes that we are all mathematicians whether or not we see ourselves that way. When we are figuring out how to adapt a recipe, playing a board game, or judging when to brake for a stop sign we are doing mathematics. The goal of the department is to encourage students to build on this innate capacity in order to deepen their understanding of the world around them. When students are solving linear equations, understanding interconnected spatial relationships in Geometry, solving physics problems in Calculus, or analyzing data in Statistics they are building the concepts and skills needed to move confidently to the next level. The program provides opportunities for students to stretch and challenge themselves through Advanced Calculus and beyond.

Algebra 1

Yearlong—Required

In Algebra 1 students take on the role of explorers, first working collaboratively to actively explore mathematical concepts for themselves before engaging with the formal mathematical definitions and formulas. The curriculum focuses on the concept of "function" and how the many representations and types of functions can reveal important relationships. Students develop the skills needed to graph, solve, and interpret the basic families of functions that describe and are reflected in the world around us.
Prerequisite: none

Algebra 2

Yearlong—Required

This rigorous course thoroughly reviews and extends the concepts of Algebra 1 through the study of quadratic equations and inequalities, complex numbers, roots and radicals, functions, systems of equations, graphing, and advanced problem-solving. Students will be expected to use TI-84 series graphing calculators to confirm solutions and support critical thinking skills. The honors level course moves at a faster pace and requires more independent thinking, and expects students to master certain Algebraic topics on a deeper level.
Prerequisite: Algebra 1; recommendation of the department is necessary for honors

Geometry/Geometry Honors
Yearlong—Required

In this course on Euclidean geometry, students explore properties of figures on the plane as well as area and volume of three-dimensional figures. The underlying foundation is an understanding of relationships that are independent of numerical measurements, although many applications such as trigonometry and coordinate geometry involve computations. Daily coursework is structured around students working in small groups to explore observations and conjectures formulated around guiding questions. Developing the ability to reason clearly, use precise language, and justify that reasoning both informally and formally through proof are important components of the course.
Prerequisite: Algebra 1; *recommendation of the department is necessary for honors*

Advanced Geometry **New for 2023-24**
Fall Semester–Open to Grades 11 and 12

In this inquiry-based advanced-level geometry course we use skills gained in basic Geometry to explore new topics in Euclidean and non-Euclidean geometries. The focus is on developing investigational skills and communicating challenging mathematical content both through formal proof and expository writing. Topics covered are drawn from spherical geometry, dissections of squares and cubes, knot theory, hyperbolic space, and topology, among others, and vary from year to year. Students who are successful in this course are independent learners willing to stretch their comfort zones and explore material more generally encountered at the college level.
Prerequisite: Algebra 2 (required), Geometry (required), ability to work independently and engage in sophisticated logical and abstract reasoning.

College Algebra
Yearlong—Open to Grades 11 and 12

This course focuses on strengthening and expanding intermediate and advanced algebra skills and applications of mathematics. It will familiarize learners with fundamental mathematical concepts such as inequalities, polynomials, linear and quadratic equations, and logarithmic and exponential functions. Upon course completion, students will be able to apply a variety of problem-solving strategies to find solutions to an array of real-life problems. This course also provides the algebraic skills needed to pursue higher level studies in mathematics.
Prerequisite: successful completion of Algebra I, Algebra II, Geometry

Precalculus/Precalculus Honors

Yearlong—Open to Grades 10–12

Our goal for Precalculus is to help students learn the skills and concepts needed to understand Calculus. Precalculus is a combination of elements from Algebra, Trigonometry, and Geometry. This yearlong course includes algebraic, exponential, logarithmic, and trigonometric functions and their graphs as well as an introduction to sequences, summation notation, and analytic geometry. The TI-84 series graphing calculator is required for this course. The honors level course moves at a faster pace and requires more independent thinking, and expects students to master abstract mathematical concepts on a deeper level.
Prerequisite: successful completion of Algebra I, Algebra II, Geometry; *recommendation of the department is necessary for honors*

Calculus

Yearlong—Open to Grades 11 and 12

This yearlong course begins with a review of polynomial curve sketching and properties of exponents. The concept of limit will be introduced from both an intuitive and formal approach. The definition of and techniques for finding the derivative of polynomial functions will lead to curve sketching and practical applications. The concept of integral along with the techniques for finding the integral and its basic application will also be covered. The TI-84 and TI-84CE calculator is used extensively throughout this course.
Prerequisite: successful completion of Precalculus or Precalculus Honors with a strong background in Algebra.

Advanced Calculus 1

Yearlong—Open to Grades 11 and 12

Advanced Calculus is a college-level course that studies how quantities change and accumulate in relation to others. The course is structured with small-group, inquiry-based learning for students to discover concepts independently through a thoughtful sequence of question prompts. This facilitates a discussion that connects students' ideas with academic vocabulary and formal mathematical notation As a result, students take ownership of their learning and gain mastery of rigorous content. Students will actively discover the concepts of limits, continuity, the derivative and integral, along with their many applications in science, engineering and business. Concepts will be expressed and analyzed geometrically, numerically, analytically, and verbally. The TI-84 CE calculator will be a primary tool throughout this course.

Prerequisite: successful completion of Precalculus or Precalculus Honors with a strong background in Algebra along with the recommendation of the department based on demonstrated skills and motivation.

Advanced Calculus 2

Yearlong—Open to Grades 11 and 12

Advanced Calculus II allows students to expand their study of how some quantities change and accumulate in relation to others. Advanced Calculus II teaches students not only how to solve particular problems, but how to think creatively about the skills they are gaining and to express their thinking graphically, analytically, numerically, and verbally.

The course allows motivated students with strong skills the opportunity to build on work done in Precalculus Honors, Advanced Calculus I and learn more calculus techniques and topics as applied to various types of functions, including trigonometric, logarithmic, and exponential functions. The course begins by expanding the concept of limits by proving a limit by the epsilon-delta process. More work with the concept of the derivative, along with its many applications in the real world and in other mathematical topics, is included. More applications and methods of integration are introduced.
Prerequisite: successful completion of PreCalculus Honors or Calculus or Advanced Calculus I, and the recommendation of the department based on demonstrated skills and motivation.

Statistics

Yearlong—Open to Grades 11 and 12

This course is intended for anyone who will ever have to make sense of or interpret data, which is just about everyone. In this yearlong course, students will be actively engaged in five overarching themes: exploring and describing data, planning surveys and experiments, understanding the foundation of probability to recognize patterns, exploring relationships between variables using regression analysis, and statistical inference. The course is structured with small group inquiry-based learning for students to discover concepts independently. This facilitates a discussion that connects students' ideas with academic vocabulary and formal statistical notation. Focus is on the practical application of statistics in our everyday life. A TI-84 series graphing calculator will be required for use in this course.
Prerequisite: completion of Algebra 2

Advanced Statistics
Yearlong—Open to Grades 10, 11 and 12

Advanced Statistics is a college-level class designed to be an interactive, thought-provoking course that will allow you to construct your own understanding of concepts and techniques of an introductory college statistics course. The course is structured with small group inquiry-based learning for students to discover concepts independently. This facilitates a discussion that connects students' ideas with academic vocabulary and formal statistical notation. This course will begin with a focus on descriptive statistics, introducing graphical methods of describing data. You will learn about combinatorial probability and random distributions which serves as the foundation for statistical inference. Inference investigation will focus on both estimation and hypothesis testing. We will also examine the techniques to study the relationship between two or more variables known as regression. By the end of this course, you should gain a sound understanding of what statistics represent, how to use statistics to organize and display data, and how to draw valid inferences based on data by using appropriate statistical tools

A TI-84 series graphing calculator and spreadsheet use will be required for many of the calculations and procedures taught in this course.
Prerequisite: Strong background in Algebra 2 and the recommendation of the department based on demonstrated skills and motivation.

Math Electives

Introduction to Number Theory
Fall semester—Open to Grades 11 and 12
"Mathematics is the queen of the sciences and number theory is the queen of mathematics." Carl Friedrich Gauss

Number theory is one of the oldest branches of mathematical study, tracing its known roots to the Babylonians and ancient Greeks. This still lively and relevant field involves the study of numbers and why they behave the way they do. In this course, which involves college-level content, we will take an inquiry approach, beginning with the inductive search for patterns or relationships within and among integers and confirming (or disproving) our conjectures as we develop and refine our facility with mathematical reasoning and proof. Material covered will be drawn from elementary number theory topics including divisibility, prime factorization and the fundamental theorem of arithmetic, congruence, modular arithmetic, quadratic reciprocity, and Diophantine

equations, Fibonacci numbers and linear recurrences, and cryptography, among others. Topics may vary from year to year.
Prerequisites for this course include a strong foundation in algebra and the mathematical maturity and logical precision to engage in abstract arguments. Calculus is not required.

Please Note: *Running this course is contingent on enrollment - The course may not be run if enrollment is low.*

Ethnomathematics: Where culture and mathematics meet **New for 2023-24**

Spring Semester

Ethnomathematics is a new field of study that explores how various cultures understand and express mathematical ideas. This one-semester course uses an inquiry-style format, beginning with mathematics from the African continent. After students gain experience in shifting their view of mathematics away from a Western perspective they will have the opportunity to choose a culture/mathematical area of interest and develop their own lessons for future students to explore.
Prerequisite: This course is for students who have completed Algebra 1 and Geometry; can be corequisite with Algebra 2.

Please Note: *Running this course is contingent on enrollment - The course may not be run if enrollment is low.*

Multi-disciplinary Electives

Peace, Conflict, and Racial Justice Studies
Fall Semester—Open to Grades 10-12

Peace, conflict, and racial justice studies is an interdisciplinary course allowing students to examine the sources of peace, violence, and conflict resolution. In addressing this area students will develop practical skills in conflict resolution, mediation, and intercultural understanding. Students will have the opportunity to challenge their perspectives while formulating a more thorough understanding of domestic and global social, cultural, and structural conditions. This course aims to form conscientiousness, action orientated, critical global citizens. Topics over the course of the year will include the nature of peace, justice, conflict, international politics, peace building, and humanitarian intervention. Students will look at particular case studies (e.g. Rwanda, Liberia, Northern Ireland, policing) and see how politics, religion, gender, dialogue, and mediation impact these situations.

Introduction to Philosophy
Fall Semester--Open to grades 10-12

Philosophy can be challenging, rewarding, and even a little dangerous, since it shows you how to think for yourself. In a sense, we're all philosophers, since we all ask basic and urgent questions, such as:

- Who am I and what should I do with my life?
- How do I know what's true?
- What should I believe in and why?
- How should we treat each other?
- Are we ever really free?
- What makes justice possible?

This course will help you to address questions like these with precision and imagination, and our discussions will be guided by what's important to you. As we'll see, the study of philosophy has many benefits: sharper critical thinking and more creative problem solving; stronger reading and writing skills; greater appreciation for diversity and dialogue; a heightened sense of empathy; a deepened sense of wonder. Notice that these benefits extend not just to other academic disciplines but also to the full range of human experience. In developing a "love of wisdom" (that's what the word philosophy literally means), we therefore discover how to live more meaningful lives. And there's something else that's especially appropriate to Lincoln: historically, philosophy has been male-dominated. We're changing that.

World Religions

Spring Semester—Open to Grades 10–12

Many people find that religion gives their lives meaning and enables them to do good in the world; for others, religion can provoke misunderstanding, fear, and even violence. No matter who you are–a believer, a skeptic, a seeker, something else altogether–this course will enable you to explore where different forms of faith come from, why they matter now more than ever, and how we can all think more clearly about this vital aspect of human experience. Our studies will cover Western, non-Western, and alternative/emerging spiritualties, with such topics as:

- similarities and differences among Judaism, Christianity and Islam
- the traditions of China, India, and Africa
- indigenous peoples' wisdom and the sacredness of Nature
- feminist and liberation theologies
- music and art as spiritual practices
- Lincoln's evolving relationship with Quakerism

The interaction of religion, culture and politics will be one of our ongoing concerns; others will be based on the interests of class members. Given the global scope of our inquiry, this course will also present opportunities to learn some essential principles of sociology and anthropology.

Introduction to Psychology

Yearlong—Open to Grades 10–12

This full-year elective is an investigation into one of nature's great glories and great mysteries: the human mind. Our main area of inquiry--why we think, feel, and act the way we do--leads naturally to several other key areas: what we can do to foster psychological health and healing; what strengthens our critical reasoning skills and our empathy; and how we can learn more effectively, both in school and beyond. One of the most important lessons of psychology is, "Don't believe everything you think." We'll have many chances to see why that's true, but also to see what we can do to better understand ourselves and each other. Specific topics include: sensation and perception, sleep and dreams, memory, personality types, disorder and therapy, and social dynamics. Because much of what happens in this course takes the form of active investigation and experiment, participation in both seminar-style discussion and small-group work is especially important.

Women in the Global Economy

Fall Semester, Spring Semester—Open to Grades 11 and 12

Planning your financial future is one of the most important things you can do in your life. The main objective of this seminar course is to build competence and confidence in the area of personal finance. Tools for making informed decisions concerning personal finance will be introduced and developed. It is the sincere hope that this course will help students to become lifelong skillful managers of their personal finances. Investigations and activities will be created to help them think critically about this subject, to consider appropriate alternatives, and to make appropriate decisions about money matters.

As we introduce students to the basic concepts and vocabulary of personal economics, they will be better equipped to become wise independent consumers, vigilant savers, smart money managers, responsible givers, and an active part of the global economy. Drawing from research written primarily by leading women entrepreneurs, CEOs, and market analysts, and articles from business journals, this course is designed to give students a deeper understanding of the global economy and to provide them with a better sense of their role in it and how they can engage in it in the future.
Prerequisite: none

Science

Alicia Taylor, Department Head

A graduate of Lincoln School is expected to have a strong background in the major branches of science: Physics, Chemistry, and Biology, as well as the ability to use technology effectively. The courses offered place a special emphasis on hands-on scientific experimentation, logical reasoning, problem-solving and critical thinking, and laboratory competency.

Physics/Physics Honors

Yearlong—Required in Grade 9

The Physics First program helps students build a strong foundation for their scientific career at Lincoln School and beyond. In this course, students examine how matter behaves and interacts with its surroundings, answering such questions as “how do objects move?” and “how does electricity work?” The topics covered in the course are applicable to, and directly evident in, everyday life: motion, energy, momentum, electricity and magnetism, sound, and optics. Students will investigate these topics through units that will include applied problem solving, laboratory experiments, demonstrations, independent design challenges, and interactive computer simulations. Throughout the course, students will enhance their algebra, problem-solving, and scientific reasoning skills. The concepts and skills learned in this course lay the critical groundwork for applications in future science courses. Honors Physics will move at a faster pace and will also have a greater emphasis on the quantitative nature of physics.
Prerequisite: none; recommendation of the department and completion of Algebra 1 is necessary for Honors

Chemistry/Chemistry Honors

Yearlong—Required in Grade 10

The study of chemistry allows us to understand the nature of matter on both observable and atomic levels. This course provides an introduction to major topics in chemistry such as atomic theory, chemical reactions, and chemical bonding. Students engage in labs, lectures, projects, and class discussions exploring the conceptual and mathematical components of atomic interactions. Over the course of the year, students develop their understanding of how atomic interactions lead to observable phenomena while developing their laboratory, critical thinking, and problem-solving skills.
Honors Chemistry will move at a faster pace and cover material in greater depth and with a greater emphasis on the quantitative nature of chemistry.
Prerequisite: successful completion of Physics; recommendation of the department is necessary for Honors

Biology

Yearlong—Required in Grade 11

Understanding Biology unlocks the wonders of life on earth ranging from the delicate intricacies of genetic coding to the enormous powers of environmental interactions. In this course, we will examine cell structure, function and reproduction, biological energy requirements, genetics, the characteristics of life, evolution, and the ecological interactions between living organisms and nonliving factors. As students explore these biological principles, emphasis is placed on the scientific thought process. Topics will be investigated through the use of laboratory experiments, case studies, activities, discussion, and current events.
Prerequisite: successful completion of Physics and Chemistry

Advanced Biology

Yearlong—Open to Grades 11 and 12

This course may be taken as an alternative to Grade 11 Biology, or as an elective second-year biology course. This class offers an advanced, intensive examination of the structures and functions of living organisms, with emphasis on evolution and diversity, biological energetics, biological transmission of information, and interactions of biological systems. Concepts are addressed through laboratory, lecture, reading, problem-based case studies, projects, and discussion. Emphasis is placed on the integration of biological principles with significant independent work and student-directed experimental design. Students taking this course should expect a preparatory summer assignment and should be ready for significant independent work throughout the school year.
Prerequisite: successful completion of Physics and Chemistry, with the recommendation of the department

Advanced Physics: Physical Applications of Calculus

Yearlong—Open to Grades 11 and 12

Physical Applications of Calculus will cover the key topics in college-level mechanics and electricity and magnetism courses with an added emphasis on how calculus can be used to analyze and understand physics. Key topics covered include kinematics, Newton's laws of motion, energy, momentum, gravity, electrostatics, magnetism, electromagnetic induction, and the wave nature of light. Beyond this standard material, the course will review various techniques of calculus such as limits, derivatives, integrals, and early differential equations. Students taking this course should expect a preparatory summer assignment and be ready for significant independent work throughout the school year.

Prerequisite: successful completion of Physics and Calculus with the recommendation of the department

Advanced Chemistry
Yearlong—Open to Grades 11 and 12

Advanced Chemistry covers advanced topics typically covered in second-year high school chemistry, such as thermodynamics, kinetics, reaction and solubility equilibria, and acids and base chemistry. The first part of the year will also include a deeper dive into some topics covered in sophomore chemistry, including stoichiometry, chemical bonding, and molecular structure. Emphasis is placed on learning complex chemical concepts through work in the lab, application, mathematical analysis, hands-on projects, and independent research. Students taking this course should expect a preparatory summer assignment and be ready for significant independent work throughout the school year.
Prerequisite: successful completion of Physics and Chemistry, strong foundation in algebra, with the recommendation of the department

Science Electives

Environmental Science and Sustainability
Yearlong —Open to Grades 10–12

The population of the Earth is nearing its carrying capacity. As the human population increases, the present and future uses of our natural resources have become incredibly important topics. This course provides students with a thorough understanding of ecological principles, biodiversity, human resources and consumption, industrialization and economic development, energy use, conservation, and the ethical questions that surround these topics. Based on the United Nations Sustainable Development Goals (SDG's) created in 2015, topics will be investigated through the scope of world coordination and communication, and with the use of student research, experimentation, case studies, activities, discussion, current events, and engineering new ways of solving real-world problems such as hunger and clean water.
Prerequisite: none

Light and Optics
Fall Semester—Open to Grades 10–12

What is light, where does it come from, and what can it tell us? From topics such as the expansion of the universe, choosing the right lens for composing that perfect shot with a DSLR camera, color vision, and power production with solar panels, the nature and

behavior of light is a critical component in understanding and manipulating our modern world. This course will unpack the nature of waves and light, building where the 9th grade course left off. This course requires a familiarity with algebra, geometry, and trigonometry (but not calculus). At the end of the course students will be able to appreciate the ubiquity of light based phenomena in our lives and will understand how the fundamental properties of waves manifest themselves in our world.
Prerequisite: successful completion of Physics and Algebra 2 (or concurrent enrollment)

Marine Biology
Fall Semester/Spring Semester —Open to Grades 10–12

This semester class provides a comparative examination of the evolution, morphology, physiology, and natural history of biology of the marine environment. The underlying themes of the class are the behavioral and functional adaptations of organisms that allow for survival in marine habitats. Specific topics will include: marine plants, invertebrates, fishes, and marine reptiles, birds, and mammals. Students will also be introduced to the natural and human-induced challenges imposed on these organisms. Topics will be investigated through the use of laboratory experiments, case studies, activities, discussion, and current events.
Prerequisite: none

Physics of Machines
Spring Semester—Open to Grades 10–12

This course is about how things work. We will explore the physics principles that lie behind the workings of devices in modern life. The course will be lab- and activity-based, but will also require solving concrete problems using algebra-based math. Students will engage in both hands-on experiments and discussions about the underlying physics of simple and complex machines. By the end of the course, students should be able to explain how simple machines work, how they can combine into complex machines, and how the underlying physics allows the machines to work in harmony to achieve some desired end goal.
Prerequisite: successful completion of Physics

STEAMx

John Diego Arango, Program Director

The STEAMx department offers courses that provide students the opportunity to develop their computational thinking skills through a wide range of computer science, and engineering and design applications. Whether learning how to program in HTML or Python or designing and troubleshooting the construction of their own designs, students are required to work iteratively and to reason through challenging problems that do not have a single solution. At every turn, Technology department faculty strive to contextualize course content in real-world situations and to explore the many ways in which technology is transforming our world today on a global scale.

These offerings are designed for all students, both those who are excited to learn about the field and expand upon their knowledge base and those who have a proven passion for computer science and engineering.

Lincoln will be offering two Computer Science courses through One Schoolhouse, an online independent school consortium of which Lincoln School is a member. Lincoln School will cover the cost of the One Schoolhouse tuition for Computer Science courses. However, if a student chooses to drop a One Schoolhouse course after the school year begins, families will be required to reimburse Lincoln the full cost of the tuition.

Please Note: *Students considering pursuing Chemistry, Computer Science, Engineering, or Physics at the college level should speak to the chair of the Technology Department and the director of College Counseling about course sequence.*

Introduction to Engineering Design

Fall Semester, Spring Semester-- Open to Grades 9-12

Introduction to Engineering Design is appropriate for 9th, 10th, 11th, or 12th-grade students interested in design and engineering. The focus of the IED course is to expose students to design processes, research, teamwork, communication, engineering standards, global human impacts, and technical documentation. IED allows students to develop skills and understanding of course concepts through activity, projects, and problem-based learning. Using a teaming approach, the students will hone their interpersonal skills, creative abilities, and understanding of the design process. Allowing students to develop strategies to direct their learning is the ultimate goal for their education. The class assumes no previous knowledge, but students' will apply their mathematical and scientific skills. Students will employ engineering and scientific concepts to solve engineering design problems. Students use a state of 3D design software to help students design solutions to solve problems. Students will apply their knowledge of research and design to create solutions to various challenges that

increase in difficulty throughout the course. Students will document their work and communicate their solutions to their peers. The Engineering Design is one of three foundation courses in the STEAMx program. The courses apply science, technology, engineering, art, and mathematics knowledge and skills. The core courses of study include:

- Design Process
- Modeling
- Sketching
- Measurement, Statistics, and Applied Geometry
- Engineering Drawing Standards
- CAD Solid Modeling
- Reverse Engineering
- Consumer Product Design Innovation
- Marketing
- Graphic Design

Prerequisite: none

Robotics I-IV

Yearlong—Open to Grades 9–12

This course explores the principles of engineering, constructing, and programming robots to solve specific real-world problems within discrete spatial and environmental constraints. Students will experience various robots and implement skills and processes by working with the Lego MINDSTORM and VEX Robotics. The students will work individually and in a team-oriented class to design, build, test, and debug their robots. The course encourages group creativity, teamwork, leadership, and passion for problem-solving. The student will advance as leaders in STEAM, becoming familiar with programming, sensors, and automation. They hone critical computational thinking skills needed to succeed in the 21st century's workforce and everyday life.
Prerequisite: none

Modeling & Fabrication

Fall Semester, Spring Semester—Grade 9

This course explores digital modeling and fabrication, a design and production process that combines 3D modeling and computing-aided design with additive and subtractive manufacturing. Students will learn to conceptualize, sketch, digitally model, 3D print, and finish a meaningful work of art or design; research and assess developments in 3D printing, CNC milling, and other emerging fabrication technologies; research and critically analyze the aesthetic and cultural impacts and consequences of expanding digital distribution from 2D to 3D for rapid prototyping.
Students will learn additive manufacturing, also known as 3D printing, while subtractive manufacturing, such as machining and many other technologies, can be exploited to produce and design objects physically. We will use various software packages with digitally fabricated objects using 2D vector drawing and 3D modeling. Types of 3D

models include four models wireframe, solid, surface, and mesh. A design has one or more of these model types.
Prerequisite: none

Introduction to Computer Science- One Schoolhouse online course
Yearlong Course—Open to Grades 9–12

The goal of this course is to introduce students to some of the major areas of computer science as well as develop their programming skills to produce useful solutions and creative artifacts. Throughout the course, students conduct research and investigate current issues and innovations enabled by the application of computer science, such as virtual reality, robotics, cloud computing, cybersecurity, the Internet of Things, and e-commerce. Students learn fundamental computer programming concepts using a simple but powerful block-based programming language to implement methods, functions, parameters, arguments, if-else statements, and loops in a creative and animated environment. Students then explore a Java-like language that incorporates an electronic sketchbook with graphics, animation, and object-oriented programming concepts, while utilizing a more traditional, text-based coding methodology. This course prepares students for all other One Schoolhouse computer science courses.
Please see link below for full course Overview. Lincoln School covers the tuition for this course.

https://www.oneschoolhouse.org/intro-to-cs.html
Prerequisite: Modeling and Fabrication, Introduction to Engineering and Design, Robotics

Artificial Intelligence- One Schoolhouse online course
Fall Semester or Yearlong Course—Open to Grades 10–12

From virtual personal assistants like Siri and Alexa to autonomous vehicles that navigate and drive themselves, Artificial Intelligence (AI) is embedded in all kinds of technology and makes everyday objects act in human-like ways. Beginning with AI's foundation in data science, this course explores the world of AI, its key technologies, and the concerns guiding its use. Students model machine learning algorithms using block-based and Python programming languages, and design intelligent agents to solve real-world problems. Topics include natural language processing, image processing, deep neural networks, data science life cycle, computation thinking, and predictive analytics. Students leave this course having gained an understanding of how AI can help us make better decisions and build "smarter" technology.
Please see the link below for a full course overview. Lincoln School covers the tuition for this course. https://www.oneschoolhouse.org/artificial-intelligence.html
Prerequisite: One year high school Math, Modeling and Fabrication, Introduction to Engineering and Design, Robotics

World Languages

Holly Kindl, Department Head

The World Language Department offers courses ranging from introductory to Advanced in French, Spanish, and Latin and Arabic. The department is committed to meeting the National Standards for Foreign Language Teaching developed by the American Council of Teachers of Foreign Languages (ACTFL).

Modern language courses are conducted in the language of study as much as possible in order to develop proficiency in the four skills of language: listening, speaking, reading, and writing, and to emphasize oral and written communication through collaborative exercises and multimedia activities. In addition, the cultures of Francophone, Hispanic, Roman, and Arabic countries are integrated into the curriculum of each course.

Honors or Advanced courses are available for levels III, IV, V & VI (French and Spanish) and levels IV, V & VI (Latin) for those students who have demonstrated advanced ability, skills, and motivation in the foreign language. Admission to the Honors/Advanced level is based on department recommendation (demonstrated excellence in coursework) and/or in a proficiency exam. Honors/Advanced students' placement is reviewed yearly.

Please Note: *All new students to Lincoln must take a placement test (Arabic, French, Latin & Spanish) and have an oral interview (Arabic, French, or Spanish) prior to enrollment in any course* ***above level 1****.*

Department Requirements
Successful completion of three consecutive years of the same language in Upper School. *The department has a minimum grade requirement: students who receive a grade below "C" may not advance to the next level of study without remedial work. The department head and division director must approve any plan for remediation.*

Arabic I
Yearlong Course

This course is an overview of Arabic geography and culture with a special emphasis on the sounds and scripts of the alphabet. In addition, basic grammar and vocabulary are consistently interwoven with the major cultural themes. Individual and collaborative activities and projects are designed to provide ample opportunity for the students to develop and use the language creatively and personally. Evaluation of student performance is based on participation in the classroom and on frequent oral and written testing throughout the year.
Prerequisite: None

Arabic II
Yearlong Course

This course focuses on Middle Eastern culture and geography and different dialects, which will expand the students' awareness and understanding of Arabic-speaking countries around the world. The students continue to work on building strong oral and aural skills, as well as expanding their reading and writing skills. More advanced grammar and vocabulary are introduced through multimedia textbooks, newspapers, and online resources. Evaluations are based on weekly quizzes and tests.

Prerequisite: Arabic I and/or the entrance exam, and/or the recommendation of the department based on demonstrated skills and motivation

Arabic III
Yearlong Course

This course continues an in-depth exploration of the Arabic speaking world from a cross-cultural perspective. Students will solidify their knowledge of the basic rules of Arabic grammar, expand vocabulary in terms of complexity, and increase the acquisition of words for active use in a wide variety of topics and settings. Evaluations are based on weekly quizzes and tests and students are expected to write long compositions and give oral presentations.
Prerequisite: Arabic II and/or the entrance exam, and/or the recommendation of the department based on demonstrated skills and motivation

Arabic IV
Yearlong Course

In this course, students acquire a deeper understanding of the culture to help gain effective communicative competence. Technology is interwoven into all units and vocabulary and grammar are presented in context as a part of each unit to provide a basis from which to develop language, critical thinking and communication skills. Tests and written and oral activities will be the basis for assessing students' performance.
Prerequisite: Arabic III and/or the entrance exam, and/or the recommendation of the department based on demonstrated skills and motivation

French I
Yearlong Course

The first year of study introduces the student to basic grammar and everyday vocabulary, which is consistently interwoven with major cultural themes. Individual and collaborative activities are designed to provide ample opportunity for the student to develop and use the language creatively and personally. Evaluation of student performance is based on participation in the classroom and on frequent oral and written testing throughout the year.
Prerequisite: none

French II
Yearlong Course

This course helps students to further develop proficiency in listening and speaking through the creation of original dialogues and to improve reading and writing skills with the introduction of more advanced grammar and vocabulary. In addition, students are exposed to a selection of cultural topics and geographic areas to foster a greater understanding of French-speaking countries around the world.
Prerequisite: successful completion of French I and/or the entrance exam, and the recommendation of the department based on demonstrated skills and motivation

French III & III Honors
Yearlong Course

The primary objective of this course is to complete the study of all the major grammatical structures, with an emphasis on a thorough understanding of the forms and functions of verb tenses and moods. This course seeks to integrate the development of the four skills of language with reports and readings. In addition to grammar review and the introduction of new grammar, each unit includes a selection of various primary source materials such as news articles, short stories, and material from the web. By the end of

the course, students are expected to be able to carry on a discussion in French and express themselves clearly in writing.
Prerequisite: successful completion of French II and/or the entrance exam, and/or the recommendation of the department based on demonstrated skills and motivation.
Please Note: *Honors credit is granted with the recommendation of the Department, based on demonstrated skills and motivation, successful completion of French II and/or successful performance on an entrance/proficiency exam.*

French IV/V- Topics in French Language and Francophone Cultures
Yearlong Course

This course sequence explores in-depth the Francophone world from a cross-cultural perspective. Key topics of the past and present are analyzed, discussed, compared and contrasted and researched: geography, history, economy, everyday life, media, music, art, and topical trends. Vocabulary and grammar are presented in context as a part of each unit to provide a basis from which to develop language, critical thinking and communication skills.
Prerequisite: successful completion of French III or the recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam
Please Note*: This course may be taken consecutively as texts and themes vary from year to year.*

French IV Honors
Yearlong Course

This advanced course is an exploration of the issues that have shaped and continue to shape the French-speaking world throughout history. To achieve further understanding of the connections between Francophone cultures, the class reads authentic selections of historical and cultural significance. Throughout the year, the four language skills are fully integrated with grammar review and vocabulary to enhance the student's ability to synthesize and analyze content material in written and oral form, through extensive practice of oral presentations and coherent essays. Original readings, films, music, and computer-accessed materials enhance the core curriculum and provide ample opportunities for the students to sharpen language skills in accordance with ACTFL Standards of Advanced Language Proficiency.
Prerequisite: successful completion of French III Honors, recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam
Please Note*: Based on enrollment, this course may be combined with the Advanced French Literature and Francophone Culture course.*

Advanced Francophone Literature and Cultures I/II
Yearlong Course

Students in this course are expected to interact with and react to authentic content with fluency and spontaneity. This course explores the issues that have shaped and continue to shape the Francophone world. Throughout the year, the students apply critical thinking skills to acquire a deeper understanding of the cultures and the political, economic, and social realities of the French-speaking world. With continued exposure to authentic media sources and an integrative review of grammar concepts, students work to sharpen the four language skills (reading, writing, speaking, listening) to attain an advanced level of written and spoken communication to prepare for future careers and experiences. Literary works and themes alternate by year to provide fresh experiences for students who take the course for two consecutive years.
Prerequisite: successful completion of French III/ IV/V Honors, recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam
Please Note*: This course may be taken consecutively as texts and themes vary from year to year.*

Spanish I
Yearlong Course

The first year of study introduces the student to basic grammar and everyday vocabulary, which is consistently interwoven with major cultural themes. Individual and collaborative activities are designed to provide ample opportunity for the student to develop and use the language creatively and personally. Evaluation of student performance is based on participation in the classroom and on frequent skills testing (listening, speaking, reading comprehension, and writing) throughout the year.
Prerequisite: none

Spanish II
Yearlong Course

This course continues to work on strengthening language skills in a wide variety of cultural contexts and everyday situations. Individual and collaborative activities are designed to provide ample opportunity for the students to develop and use the language creatively and personally. In addition, students are exposed to a selection of cultural topics and geographic areas to foster a greater understanding of Spanish-speaking countries around the world. Evaluation of student performance is based on participation in the classroom and on frequent skills testing (listening, speaking, reading comprehension, and writing) throughout the year.

Prerequisite: successful completion of Spanish I, the recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam

Spanish III
Yearlong Course

This course completes the study of the major grammatical concepts and structure and increases the acquisition of words for active use in a wide variety of topics and settings. The four language skills are strengthened through the presentation of oral interviews and skits, by exposure to literature selections and cultural readings and by writing compositions. Evaluation of student performance is based on participation in the classroom and on frequent oral and written testing throughout the year.
Prerequisite: successful completion of Spanish II, recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam

Spanish III Honors
Yearlong Course

This course is designed to complete the study of the major grammatical concepts and structures in an integrative way, thus providing the student with ample practice to apply the concepts in concurrent, multiple skill areas. Higher-order thinking skills of analysis and synthesis are also practiced, thus preparing the student for Spanish IV Honors and a more sophisticated level of communication and interpretation. In addition, the students continue to explore a variety of cultural themes and samples of Hispanic literature. By the end of the course, students are expected to be able to carry on a discussion in Spanish, to express themselves clearly in composition and to read between the lines.
Prerequisite: successful completion of Spanish II, recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam

Spanish IV
Yearlong Course

This course continues to blend vocabulary and grammar structures with linguistic and cultural concepts in an integrative way. Set in a geographic framework, students explore the practices, products and perspectives of the Spanish speaking world. This, coupled with exposure to a wide range of texts, such as dialogues, informative and literary, provide scenarios for students to build competency with analytical and interpretive skills. Students also build communicative and presentational skills as they develop their own voices by applying what they have learned in both writing and speaking tasks.

Prerequisite: Successful completion of Spanish III, recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam

Spanish IV Honors
Yearlong Course

This advanced course is an exploration of the issues that have shaped and continue to shape the Spanish-speaking world throughout history. To achieve further understanding of the connections between Spanish, Latin American and Hispanic culture in the United States, the class reads authentic selections of historical and cultural significance. Throughout the year, the four language skills are fully integrated with grammar review and vocabulary to enhance the student's ability to synthesize and analyze content material in written and oral form, through extensive practice of oral presentations and coherent essays. Original readings, films, music, and computer-accessed materials enhance the core curriculum and provide ample opportunities for the students to sharpen language skills in accordance with ACTFL Standards of Advanced Language Proficiency.

Prerequisite: successful completion of Spanish III Honors, the recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam.

Spanish V/VI: Topics in Spanish Language and Hispanic Culture
Yearlong Course

This two-year course sequence explores in-depth the Spanish-speaking world from a cross-cultural perspective. Key topics of the past and present are analyzed, discussed, compared and contrasted and researched: geography, history, economy, everyday life, media, music, art, and topical trends. Technology is interwoven into all units and vocabulary and grammar are presented in context as a part of each unit to provide a basis from which to develop language, critical thinking and communication skills.
Prerequisite: successful completion of Spanish IV/V or the recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam
***Please Note**: This course may be taken consecutively as texts and themes vary from year to year.*

Advanced Spanish Literature and Hispanic Culture I/II
Yearlong Course

Students in this course are expected to interact with and react to authentic content with fluency and spontaneity. This course explores the issues that have shaped and continue

to shape the Hispanic world. Throughout the year, the students apply critical thinking skills to acquire a deeper understanding of the cultures and the political, economical, and social realities of the Spanish-speaking world. With continued exposure to authentic media sources and an integrative review of grammar concepts, students work to sharpen the four language skills (reading, writing, speaking, listening) to attain an advanced level of written and spoken communication to prepare for future careers and experiences. Literary works and themes alternate by year to provide fresh experiences for students who take the course for two consecutive years.
Prerequisite: successful completion of Spanish IV Honors, recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam
***Please Note**: This course may be taken consecutively as texts and themes vary from year to year.*

Latin I
Yearlong Course

This course introduces students to the elements of the Latin language. Students in this course learn all six tenses of the verb and all five Latin noun declensions. They also learn hundreds of Latin words and how these words are often the ancestors of words that we use today. In addition to learning to read, Latin students will learn about the origins of the Romans in the early iron age and the role Roman culture has played and continues to play in shaping the modern world.
Prerequisite: None.

Latin II
Yearlong Course

This course introduces students to the more complex patterns and constructions found in Latin. Examples of such points of advanced grammar are verbs in the passive voice, participial phrases, accusative-infinitive statement, and some uses of the verb in the subjunctive mood. In addition to grammar, students will build their vocabulary and study patterns of word formation in Latin. As part of this course, students will also study Roman political culture and Rome's transition from republic to empire in the 1st c. bce.
Prerequisite: successful completion of Latin I, the recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam

Latin III
Yearlong Course

This course is intended to develop the student's ability to read Latin with facility and confidence. Students use genuine Latin texts as primary historical documents through which they gain access to significant events in Roman history. The majority of the work in this course will be the translation from Latin to English, but the course includes a schedule of regular vocabulary assignments as well as written grammar exercises. Students study specialized vocabulary, peculiar grammar, and the historical context for each of the passages presented in the course. Readings include selections from Cicero, Caesar, Eutropius, Petronius, and Pliny.
Prerequisite: successful completion of Latin II, the recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam

Latin IV/V
Yearlong Course

Latin IV/V guides experienced Latin students as they develop their translation and textual interpretation skills at the advanced level. The first unit of study in this course, a set of readings on a mythological theme, is intended to lead students through a review of salient elements of Latin grammar. Students move on to read original selections from Latin literature, including but not limited to, Ovid's *Amores* and *Metamorphoses*, two important works of Latin poetry from the Augustan period; Plautus' comedy, *Menaechmi*, which provides insight to the expansion of Rome's territory and the social classes during the 3rd century B.C.; and other selected works by various authors. Students develop familiarity with advanced literary devices and rhetoric, the poetic meters found in Latin love elegy and epic poetry, and develop their ability to engage in evidence-based discussion of each work's thematic content. Literary works alternate by year to provide fresh experiences for students who take the course for two consecutive years.
Prerequisite: successful completion of Latin III or IV and the recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam
***Please Note**: This course may be taken consecutively as texts and themes vary from year to year.*

Advanced Latin Literature I/II
Yearlong Course

In the Advanced Latin Literature course students work to gain mastery in all areas of the study of Latin. They acquire awareness of the ancient literary & historical context through their study of primary source material. Students develop their capacity to read Latin at sight, present observations & insights to colleagues in well-constructed essays, and

recognize standard literary elements in their original forms. The course material for Advanced Latin Literature rotates through a series of syllabi so that students may enroll in this course more than once.
Prerequisite: successful completion of Latin III or IV, the recommendation of the department based on demonstrated skills and motivation, and/or successful performance on an entrance/proficiency exam ***Please Note****: This course may be taken consecutively as texts and themes vary from year to year.*

Physical Education and Athletics

Cindy Blodgett, Department Head & Athletics Director

Through exposure to a broad variety of activities, each student in the Lincoln School Physical Education program is encouraged to build her physical potential. The goal is to develop each student's competency in basic skills, an interest in physical fitness, an understanding of and appreciation for a variety of team and individual sports, and the confidence and desire to participate in physical activities throughout life.

Department Requirements
All students must take part in physical education class, a Lincoln sport, or an Independent Athletic Program to receive physical education credit on their transcript. Students participating on an after-school athletic team or the Independent Athletic Program are exempt from physical education classes. At the end of each sports season, if a student is not participating in a sport the following season, she must sign up for physical education. Two 60-minute classes per week are offered after school from 3:30-4:30 p.m. and students are required to attend classes each week.

Students participate in a Personal Conditioning and Wellness Program in the Fitness Center consisting of resistance training and cardio training taught by certified strength and conditioning specialists from Performance Physical Therapy of RI.

If a student has been ill or has a medical problem, but is in school and wishes to be excused from her Physical Education class, she must present a note from a parent, doctor, or the school nurse. If her name is not on the absence list and she does not come to class, it is considered an unexcused absence. Long-term medical excuses should be written by the doctor and submitted to the school nurse at the beginning of the trimester.

Independent Athletic Program

Upper School students who participate in an after-school competitive or performance-based sport not offered at Lincoln School may apply to use the Independent Athletic Program, which allows them to waive the physical education class requirement. To take part in this program, a proposal form must be filled out by both a coach/instructor and a parent/guardian and submitted to the Physical Education department head for approval. The student must be in training a minimum of eight hours a week and be supervised by a coach. Each proposal is considered on an individual basis. These students are typically dancers, equestrians, figure skaters, and organized club team participants.

All forms can be found at lincolnschool.org/courseforms.

Athletics

The goal of the athletic program at Lincoln School is to develop student-athletes' physical skills, foster competitive spirit, enhance self-esteem, encourage team and individual accomplishment, and instill sportsmanship and the spirit of fair play. The school feels strongly that healthy competition and cooperation in sports not only benefits a girl's physical development, but influences her academic life by teaching her to set realistic goals, exercise discipline, and develop time management skills.

Co-Curricular Courses

9th Grade Seminar
Required—Grade 9

This class explores issues that fall outside the standard curriculum. It equips students to make a smooth transition to Upper School. Each week, we invite different faculty members, counselors and outside speakers to talk with us about various important topics such as: adjusting to the expectations of Upper School, time management and study skills, diversity and inclusion, character/leadership development and Lincoln's core Quaker values.
Prerequisite: none

Ethical Global Citizenship and Sophomore Speaker Series
Required—Grade 10

In the first quarter of the year students focus on what it means to be an Ethical Global Citizen within the context of the complex world in which we live. Students explore a number of current-day ethical dilemmas from a variety of perspectives and wrestle with the moral, social and political implications that go hand and hand with these issues. The course covers the four paradigms for ethical dilemmas- truth vs. loyalty, individual vs. community, long-term vs. short-term, justice vs. mercy- as well as the ends-based, rule-based and care-based models for making ethical decisions. The course culminates in the students immersing themselves in a collaborative research project on a specific ethical dilemma from our world today.

In the second quarter of the year, students explore the art of oration and the difference between impromptu, extemporaneous, and scripted oral presentations. Students will learn how to develop informative, persuasive, and entertaining speeches while simultaneously choosing a personally relevant topic and developing a well-crafted speech for the Sophomore Speaker Series. The subject matter for these speeches will be informed by the work the students did in the Ethical Global citizenship portion of the course.

During the second half of the school year, all Sophomores will have the opportunity to present a 5–7 minute speech to the Lincoln community.

Ethical Global Citizenship and the Sophomore Speaker Series is a pass/fail course that meets two times a week for a semester.

College Counseling Seminar
Grade 11

In this seminar, students will be provided with a balanced approach to the college search and application process. Some of the topics to be explored are: building a balanced college list, writing in an authentic voice, choosing strong recommendation writers, making the most of college visits, interviewing with confidence, paying for college. By the conclusion of the course, students will have completed a rough draft of the Common Application, learned how to manage their Naviance account, and developed a deeper understanding of how to navigate the college process effectively.

Health and Human Development
Grades 9–11

This trimester-course is a seminar in health and human development that introduces a theoretical framework for health decisions. Specific health issues are addressed through debates, role-playing, videos, and discussion. Topics covered include decision making, pregnancy and birth control, infectious diseases, sexuality, self-defense, and nutrition. Community speakers are invited to the class who have expertise in different fields of community health. The speakers also emphasize good decision-making and empower the students to become positive contributors to society. All students are certified in "hands-only student CPR" through a school partnership with the Red Cross.

Senior Community Action Program (SCAP)
Grade 12

The SCAP is the culmination of Lincoln's CAP philosophy. Every senior is required to connect with a local non-profit organization that focuses on a social justice issue of their choosing. Issues can range from racial justice, criminal justice reform, educational reform, immigration and refugee issues, food justice, environmental justice and climate change, gender equity, health care, social welfare, and political action.

Independent Study

Emma Stenberg, ISP Coordinator

Lincoln's Independent Study Program is designed for motivated learners who are interested in immersing themselves in a self-designed curriculum that reaches beyond Lincoln's core academic program. With guidance from a project advisor, ISP students develop a year-long or semester course (taken for full or half academic credit, on a Pass/Fail basis) that delves deeply into a subject for which they have a proven track record of success.

Although the specifics of any given independent study will vary, all ISP students should be ready to invest themselves in rigorous academic discourse that involves research, reading, experimentation, investigation, reflection, critical dialogue and the production of a final capstone project as the culmination of the course. The student's project advisor will offer guidance, though not direct instruction in the subject.

Students who are interested in participating in the ISP should submit a comprehensive ISP proposal and **online application** by the end of April. Please find the Independent Study Program application guidelines at lincolnschool.org/courseforms. Any questions about the program should be directed to the ISP Coordinator or the director of the Upper School.

Partnership Programs

Brown Introduction to Engineering

Spring Semester—Open to Grades 10–12

Lincoln Students will have the opportunity to enroll in Brown University's **Introduction to Engineering** course. Lincoln School is committed to supporting the growth and development of women in the STEAM fields. (Science, Technology, Engineering, Arts/Architecture, and Mathematics) This 12-week course will focus on the engineering design process. Common to all types of engineering, the design process takes an initial problem and formulates a solution, using theoretical concepts and modeling/building tools in tandem. Scientific concepts covered include static equilibrium and mechanics of materials. Modeling techniques include 3D modeling using Onshape, a free, browser-based CAD program. Students will additionally use 3D printing and laser-cutting and become trained in wood- and metal-working in the Brown Design workshop. The course will include two to three design projects to be completed in groups. Students are encouraged to bring laptops to class.

Students should be prepared to attend every class and both Saturday Engineering Lab sessions. In addition, the students will be required to do approximately four hours of homework on their own per week.

Introduction to Engineering is a credit-bearing, pass/fail course that will be included on students' Lincoln transcripts.

Application information can be found at lincolnschool.org/courseforms.

Steelyard Summer immersion: Introduction to Metalworking and Introduction to Jewelry

The Steelyard Summer immersion is an intensive program during which Lincoln students are exposed to the materials and processes associated with Metalworking and Jewelry design.

Students who enroll in the **Introduction to Metalworking** course will learn how to cut, grind, bend and weld a variety of metals including steel, cast iron, and stainless steel. After the students have built their working knowledge of these processes, they will apply these techniques to the creation of a series of three-dimensional sculptures. Students will be asked to take creative risks and to explore the possibilities of the materials with which they are working. Over the course of the week, students will have the opportunity

to give and receive feedback on their work and that of their classmates. The course is open to students of all experience levels.

Students who enroll in the **Introduction to Jewelry** course will learn the fundamentals of the jewelry-making process. Students work with a wide range of hand-tools applying traditional and modern jewelry making techniques. This course will cover sawing, filing, soldering, scoring/bending, texturing, forming, linkages, wire construction and more. Beyond the technical aspects of the art form, students will explore the relationship between form and function and how these elements affect the visual impact of the final piece. The non-technical side of the class focuses on the essential components of the creative process from idea generation to self-reflection to realizing one's creative vision in a finished piece. No prior metalsmithing skills are necessary. Metal will be provided for practice and exercises, but students must pay for additional metals needed for their independent work.

Steelyard Summer Immersion is a credit-bearing, pass/fail course that will be included on students' Lincoln transcripts.

Application information can be found at lincolnschool.org/courseforms.

One Schoolhouse

Lincoln School is a member of the One Schoolhouse consortium- the first of its kind in the United States. This partnership affords our students the opportunity to take a wide range of classes that Lincoln School does not currently offer. Learning to take an online course is a skill that will become increasingly important in the 21st century and Lincoln is committed to providing our students with this experience.

Lincoln School recognizes and awards credit for all non-Advanced Placement, One Schoolhouse classes taken by Lincoln students. Students interested in taking an One Schoolhouse course for school credit must submit an "OS Course Application Form" (found at www.lincolnschool.org/courseforms) by the end of the course sign up process in the spring. All applications must be approved by the Upper School Director before a student enrolls in an One Schoolhouse course. Students may enroll in One Schoolhouse courses during their Sophomore, Junior and Senior years.

Lincoln School will pay the full tuition and coordinate registration for the following One Schoolhouse course:

- Multivariable Calculus- **Prerequisite:** Advanced Calculus 2
- Introduction to Computer Science- **Prerequisite:** One year high school Math, Modeling and Fabrication, Introductrion to Engineering and Design, Robotics
- Artificial Intelligence- **Prerequisite:** One year high school Math, Modeling and Fabrication, Introductrion to Engineering and Design, Robotics

It is important to note that Lincoln sets a yearly cap on the number of One Schoolhouse tuitions that the school will cover. Preference is given to seniors and juniors if applications exceed Lincoln's cap.

If a student who enrolls in one of the above courses elects to drop the course, she will be responsible for reimbursing Lincoln School for the whole tuition paid.

For all other One Schoolhouse courses, students can enroll directly with One Schoolhouse (at a discounted cost contingent upon their enrollment at Lincoln) **if they choose to pay for the course themselves**. This includes year-long, semester-long, and summer courses.

Please Note: *Students who decide to enroll in an One Schoolhouse course not funded by Lincoln must submit an "One Schoolhouse Course Application Form" which must be approved by the Upper School Director before a student enrolls in the course. Students may enroll in AP courses but Lincoln will not list these courses on the student's transcript.*

It is important to note that One Schoolhouse classes do not replace Lincoln School's graduation requirements. Students taking One Schoolhouse courses need to plan their time accordingly to ensure that they are meeting the expectations of the core Lincoln School curriculum. Approval for OSG courses is reserved for students who are proven independent learners.

Go to www.oneschoolhouse.org to view the course catalog.

Application information can be found at lincolnschool.org/courseforms