



EXETER SUMMER

UPPER SCHOOL

(STUDENTS CURRENTLY IN GRADES 9 – 12)

2019 COURSE CATALOG

PHILLIPS

EXETER

ACADEMY

Exeter Summer

2019 UPPER SCHOOL COURSE CATALOG

TABLE OF CONTENTS

DESIGNING YOUR OWN CURRICULUM	3
COURSE AND FORMAT SELECTION	3
PREREQUISITES AND GRADE LEVELS	4
DAILY SCHEDULE SAMPLE	4
COURSE LISTING BY FORMAT	5
COURSE DESCRIPTIONS	6
THE ARTS: DANCE, FILM, THEATER, MUSIC, AND VISUAL ART	6
Dance	6
Film	6
Theater	7
Music	7
Visual Art	8
COMPUTER SCIENCE	10
ENGLISH AND WRITING SKILLS	11
ENGLISH FOR NON-NATIVE SPEAKERS	13
HEALTH & HUMAN DEVELOPMENT	14
HISTORY AND SOCIAL SCIENCES	15
History	15
Humanities	16
Psychology	17
Social Sciences	18
LANGUAGES AND CULTURE	20
MATHEMATICS	22
SCIENCE	25
THE CHARLES J. HAMM '55 LEADERSHIP PROGRAM	28
THE PROCESS OF CREATIVITY	30
THE PENN PROGRAM: COMMUNITY ENGAGEMENT	31
SAT PREPARATION WITH ACADEMIC APPROACH®	32
PHYSICAL EDUCATION CLASSES	33
EXETER CREW CLUB	35
EXETER ELITE VOLLEYBALL CLUB	36
EXETER ELITE SOCCER CLUB	37
EXTRACURRICULAR ACTIVITIES	38

UPPER SCHOOL

UPPER SCHOOL boarding students are **required to take three courses**. Day students may take one, two or three courses. For an additional \$995 fee, students may also sign up for the optional SAT Preparation course. The SAT Prep course **does not count towards the three-course load requirement** for UPPER SCHOOL boarders. **UPPER SCHOOL day students enrolling in the SAT Prep course must also enroll in at least one other academic course.**

DESIGNING YOUR OWN CURRICULUM

As an UPPER SCHOOL student, you have the freedom to design your own academic curriculum. You may enroll in any three of the more than 100 courses offered by Exeter Summer. Most students take courses in three separate disciplines; we strongly encourage you to include at least one course that emphasizes Harkness (our word for seminar) discussion.

Exeter Summer regularly reviews and revises course offerings to meet the changing interests and needs of our students. Course offerings give students a wide range of academic choices. You should give careful thought to selecting courses and alternates as it is difficult to make changes once the program has begun. Please review the course descriptions and levels of proficiency required. Make sure the courses you select are appropriate. On the application, select your courses in order of preference, along with three alternate choices.

IMPORTANT: *Since Exeter Summer must reserve the right to cancel courses for which there is insufficient enrollment and to limit the size of classes where necessary, it is essential that you list alternate courses (**not different formats of the same course**) as requested. If a class must be cancelled due to insufficient enrollment, students will be reassigned to their alternate choices and notified of these changes.*

UPPER SCHOOL alternate options are to enroll in one of the following:

The Charles J. Hamm '55 Leadership Program – this program consists of two courses: *Leadership & Society* and *The Practical Leadership Seminar*. You may choose your third course from any other subject in the “C” or “D” format.

The Process of Creativity – this program consists of two courses: *The Creative Experience* and *Visual Thinking*. You may choose your third course from any other subject in the “C” or “D” format.

The Penn Program: Community Engagement – this program consists of three courses: *Ecologies of Exeter*; *Principles of Design Thinking, Leadership, and Community Organizing* and *The Penn Project Practicum*. The Penn Program fulfills the three-course requirement for boarding students.

COURSE AND FORMAT SELECTION

In order to avoid conflicts, please pay attention to the format(s) in which a course is offered, indicated after the course title. The format indicates the meeting times for a given course. Students may not sign up for two courses that meet during the same format.

When selecting courses, be aware that there are two types of courses:

1. Single Period Course: Most classes are single-period courses that meet five times per week. (i.e., A, B, C, or D formats.)
2. Extended Period Course: A few classes are extended period courses that meet three times per week in two double periods and one 90-minute session. (i.e., A/B MWF or C/D TTS.)

IMPORTANT: **Choose your alternate courses in the order of preference paying close attention to the format(s). These courses should not be courses that you have chosen as your preferred courses.**

PREREQUISITES AND GRADE LEVELS

Prerequisites are listed in the course description to enable students to place themselves as accurately as possible in the appropriate level. Each course lists the grade level(s) which the student should be entering, in order to enroll in the course. In the final assigning of students to courses, however, proficiency rather than standing by class is the essential consideration. Adjustments may be made during the first few days of classes.

COURSE CHANGES

After your courses are confirmed, we expect to keep changes to a minimum. Requests for course changes before the session must be emailed to Exeter Summer before April 15 by a parent/guardian. **The Exeter Summer Office will not accept requests for course changes by phone.** Requests for course changes after the session has begun must receive the approval of the Director and students must furnish compelling reasons in order to receive approval. No course changes will be made after the first Wednesday of the session.

DAILY SCHEDULE SAMPLE FOR UPPER SCHOOL

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Brunch 9:00 - 12:30	Breakfast 6:45 - 8:45	Breakfast 6:45 - 8:45	Breakfast 6:45 - 8:45	Breakfast 6:45 - 8:45	Breakfast 6:45 - 8:45	Breakfast 6:45 - 8:45
	A-Format 8:30 - 9:20	A-Format 8:30 - 9:20	A-Format 8:30 - 10:00	A-Format 8:30 - 9:20	A-Format 8:30 - 9:20	B-Format 8:30 - 10:00
	B-Format 9:25 - 10:15	B-Format 9:25 - 10:15		B-Format 9:25 - 10:15	B-Format 9:25 - 10:15	
	Assembly/ Meetings 10:20 - 11:05	Snack Time 10:20 - 11:05	C-Format 10:05 - 11:35	Snack Time 10:20 - 11:05	Assembly/ Meetings 10:20 - 11:05	D-Format 10:05 - 11:35
	C-Format 11:10 - 12:00	C-Format 11:10 - 12:00		C-Format 11:10 - 12:00	C-Format 11:10 - 12:00	
	D-Format 12:05 - 12:55	D-Format 12:05 - 12:55	Lunch	D-Format 12:05 - 12:55	D-Format 12:05 - 12:55	Lunch
	PE 2:00 - 4:00	PE 2:00 - 4:00		PE 2:00 - 4:00	PE 2:00 - 4:00	
Dinner 5:00 - 7:00	Dinner 5:00 - 7:00	Dinner 5:00 - 7:00	Dinner 5:00 - 7:00	Dinner 5:00 - 7:00	Dinner 5:00 - 7:00	Dinner times may vary
Dorm Check-in 9:00	Dorm Check-in 9:00	Dorm Check-in 9:00	Dorm Check-in 9:00	Dorm Check-in 9:00	Dorm Check-in 9:00	Dorm Check-in 11:00

Lunch is served Monday – Friday from 11:30 am – 2:00 pm

Course Listing by Format

FORMAT A

THE ARTS

Theater

Acting: Confidence Through Creativity

Music

Songwriting and Music Recording

Visual Art

Clothing Design & Construction
Digital Photography
Draw, Paint and Create (A/B TTS)
Oil Painting (A/B TTS)
Printmaking (A/B MWF)
3D Computer Design

COMPUTER SCIENCE

Game Programming

ENGLISH & WRITING SKILLS

Creative Writing
Debate & Argumentation
Grasping Grammar
Great Books/Great Reading
Journalism
Writing the College Admissions Essay

ENGLISH FOR NON-NATIVE SPEAKERS

Becoming a Confident Writer
Creative Writing for Non-Native Speakers
USA: Exploring American Culture

HEALTH AND HUMAN DEVELOPMENT

The Science of Happiness

HISTORY AND SOCIAL SCIENCES

History

Freedom and Justice for all?
U.S. History

Humanities

Philosophy and Everyday Life
The Moral Life

Psychology

His/Her/Self
Introduction to Psychology

Social Sciences

Economics and Business Principles
Global Economics

LANGUAGES AND CULTURE

Beginning French
Beginning Spanish
Dipping into 5 Modern Languages
Myths in the Movies

MATHEMATICS

Algebra Techniques Workshop
Problem-Solving in Algebra
Problem-Solving in Intermediate Precalculus
Introductory Problem-Solving in Matrix Algebra

SCIENCE

Introduction to Physics
Advanced Chemistry
Environmental Science
Genetic Engineering
Marine Biology
Relativity & Quantum Physics

FORMAT B

THE ARTS

Film

Video Production

Theater

Invitation to the Theater

Visual Art

Digital Photography
Draw, Paint and Create (A/B TTS)
Oil Painting (A/B TTS)
Printmaking (A/B MWF)
3D Computer Design

COMPUTER SCIENCE

Game Programming

ENGLISH & WRITING SKILLS

The Craft of the Essay
Creative Writing
Journalism
Writing the College Admissions Essay
Writing Process Workshop

ENGLISH FOR NON-NATIVE SPEAKERS

Becoming a Confident Writer
Grasping Grammar for Non-Native Speakers
USA: Exploring American Culture

HISTORY AND SOCIAL SCIENCES

History

Global Security

Humanities

The Media and Society
Faith and Doubt

Psychology

Introduction to Psychology
The Journey Inward

Social Sciences

Basic Principles of Criminal Justice
Economics & Business Principles
Politics: Power & Responsibility

LANGUAGES AND CULTURE

Intermediate Conversational French
Introduction to Latin

MATHEMATICS

Problem-Solving in Geometry
Cryptography
Statistics Through Simulation
Adventures in Problem-Solving
Problem-Solving in Intermediate Precalculus

SCIENCE

Introduction to Biology
Introduction to Chemistry
Human Physiology & Anatomy
Observational Astronomy
Sports Science

FORMAT C

THE ARTS

Film

Introduction to Film/Media Studies

Theater

Speechmaking

Music

Jazz Improvisation
Songwriting and Music Recording

Visual Art

Architecture (C/D MWF:TTS)
Ceramics (C/D MWF)
Clothing Design & Construction
Computer Animation
Drawing: Learning to Look

COMPUTER SCIENCE

Introduction to Computer Science

ENGLISH & WRITING SKILLS

Creative Writing
Debate & Argumentation
Great Books/Great Reading
Summer in Love
Writing Process Workshop

ENGLISH FOR NON-NATIVE SPEAKERS

Becoming a Confident Writer
Creative Writing for Non-Native Speakers
USA: Exploring American Culture

HEALTH AND HUMAN DEVELOPMENT

Euphoria: The Human Pursuit

HISTORY AND SOCIAL SCIENCES

Humanities

Global Justice
The Museum Experience: Become a Curator and Educator

Psychology

Introduction to Psychology
Social Psychology

Social Sciences

Economics & Business Principles
Global Economics
Leadership and Society
Leadership in Athletics
Social Ethics

LANGUAGES AND CULTURE

Beginning Arabic
Beginning Chinese
Beginning German
Beginning Italian
Spanish Grammar & Composition

MATHEMATICS

Algebra Techniques Workshop
Problem-Solving in Algebra
Introductory Problem-Solving Trigonometry
Advanced Problem-Solving in Trigonometry
Introduction to Discrete Math
Problem-Solving in Intermediate Precalculus

SCIENCE

Introduction to Physics
Advanced Biology
Genetic Engineering
Human Physiology & Anatomy
Modern Astrophysics

FORMAT D

THE ARTS

Dance

Dance Workshop

Film

Screenwriting
Video Production

Theater

Invitation to the Theater

Music

Chamber Music

Visual Art

Architecture (C/D MWF:TTS)
Ceramics (C/D MWF)

COMPUTER SCIENCE

Game Programming

ENGLISH & WRITING SKILLS

AP Level Preparation
The Craft of the Essay
Creative Writing
Writing Process Workshop

ENGLISH FOR NON-NATIVE SPEAKERS

Becoming a Confident Writer
Grasping Grammar for Non-Native Speakers

HISTORY AND SOCIAL SCIENCES

History

Modern Europe (1945-Present)
Understanding War and Peace

Humanities

The Art of Being Human
The Media and Society
Philosophy and Everyday Life
Understanding Arguments

Psychology

Introduction to Psychology
Neuropsychology

Social Sciences

Basic Principles of Criminal Justice
Leadership for a Better World
The United Nations: Global Community

LANGUAGES AND CULTURE

Beginning French
Intermediate Conversational Chinese
Intermediate Conversational Spanish

MATHEMATICS

Problem-Solving in Geometry
Problem-Solving: Fun with Probability
Problem-Solving in Intermediate Precalculus
Problem-Solving in Advanced Precalculus
Problem-Solving in Calculus
Problem-Solving in Advanced Calculus

SCIENCE

Introduction to Biology
Introduction to Chemistry
Introduction to Electronics
Sports Science
Exploring Careers in Animal Science
Molecular Biology to Construct Transgenic Animals

The Arts: Dance, Film, Theater, Music, and Visual Art

The Arts Department offers a range of artistic experiences in the studio, classroom, and rehearsal space designed to challenge students and open a new world of creative possibilities. Arts Week, the final week of the program, features students enrolled in the arts through exhibitions, stage and assembly performances.

■ Dance

Dance Workshop

SDD-DAN Format D | *All Grades* (Two levels: Introduction and Intermediate/Advanced)

Through daily technique classes and rehearsals, students will learn movement vocabulary and explore several American dance genres: modern, jazz, musical theater and hip-hop. Instructors pair technique classes with dance history. The Exeter Summer Dance Company prepares for a culminating mixed-repertoire performance in Exeter's new [Goel Center for Theater and Dance](#) during the final week of the session. Students will perform original dance pieces choreographed by instructors, and will have the opportunity to dance in their own and/or peer choreography. Through this course, students develop a deeper appreciation for dance and gain confidence both on and off stage. Students of all experience levels are welcome and will be placed in either an introductory or intermediate/advanced class by the teachers on the first day. Both classes will perform together in the dance company performance at the end of the session. **Due to the required practice and rehearsal time, students enrolled in this class will have dance rehearsal as their afternoon sport.**

■ Film

Introduction to Film/Media Studies

FIL-IFM Format C | *All Grades*

In this course, students will enter the world of cinema through theory, criticism, and analysis. A survey of the films that shaped (and continue to shape) generations, genres, and

national histories, this class will introduce students to the different techniques of cinematography, editing, lighting, and sound that have been used as well as their artistic significance and influence. Simultaneously, this class will investigate the diverse critical approaches for interpreting film and provide close examinations of directors, cinematographers, screenwriters, and production companies. Students will learn to use film to develop their writing and argumentation skills, prose, and critical thinking abilities.

Screenwriting

FIL-SCN Format D | *All Grades*

Have you ever wondered how a movie gets its start? Screenplays form the foundation of any film and are the first step in the process of filmmaking. This course will introduce the process of story development and creation of a screenplay that is ready to be made into a film. Students will learn about exposition, character development, dialogue, and visual storytelling through the process of writing several screenplays. These screenplays will cover several different genre: documentary, silent film, and fiction. Students will also work on storyboarding their screenplays as they explore how to tell their story visually.

Video Production

FIL-VID Format B and D | *All Grades*

Are you curious about what it takes to make a Documentary film? In this introductory class you will learn the fundamentals of innovative video making. You and your classmates will produce a short creative video exploring the campus and your fellow students in Exeter Summer. Some of the skills learned will include using a video camera, shot composition, recording sound, and editing. Students will shoot the activities of their fellow students in class, leisure time, assemblies, field trips, and athletics. The final product will be an entirely student-produced overview of the summer program in documentary format. Students of all experience levels are welcome, although it is an introductory level course.

■ Theater

Acting: Confidence Through Creativity

SDD-ACC Format A | *All Grades*

In this course, students will experience a creative introduction to the acting process. Students will engage in both collaborative and individual exercises in concentration, breath-release, improvisation and mask-work. Teamwork, projecting the voice and building on-stage confidence are of particular focus in the course. Classwork will build on out-of-class assignments including: written play analysis, monologue memorization, and scene rehearsals. Under the instructor's direction, a final in-class scene performance will bring the wide range of acting elements into synthesis. **NOTE: For an acting class that includes a public performance, see *Invitation to the Theater*.**

Invitation to the Theater

SDD-THE Format B and D | *All Grades*

This course combines fundamental elements of acting and stage-craft. As a member of this class, you will be part of the ensemble company of actors and techies who will produce an UPPER SCHOOL drama production entitled "A Night of One-Act Plays and Monologues." In exploring the world of the actor, you will learn the techniques of scene study as well as physical and vocal expression. You will also engage in a hands-on introduction to stagecraft which will take you into the principles of set design and construction, lighting, sound, and costuming. Students in this course develop confidence on stage and strong public speaking skills. Each student also leaves with a well-rehearsed monologue suitable for college or professional theater auditions. **NOTE: For an acting class that does NOT include a public performance, see *Acting: Confidence through Creativity*.**

Speechmaking

SDD-SPE Format C | *All Grades*

Do you want to learn how to prepare and deliver speeches in formal and informal environments? This class will give you plenty of experience in both. We will stress the mastery of such basics as poise, use of gestures, vocal emphasis, appropriate volume, adequate eye contact, and ongoing awareness of audience response. We will focus on writing techniques that appeal to logic, emotion, and our credibility as speakers. Using text and video, we will analyze a wide range of speeches for effective writing and delivery strategies, and we will respond with constructive criticism to each other's work throughout our ongoing process of revision and reflection.

■ Music

The Music Department invites every Exeter Summer student, from advanced performer to absolute beginner, to study an instrument, sing in a chorus,

play chamber music, and learn jazz improvisation or theory. Whatever your level, we have a place for you. Come join us! *Note: UPPER SCHOOL boarding students have the option of adding any music course listed below as a fourth course.*

Chamber Music

SMU-CMB Format D | *All Grades*

This is a class devoted to the practice and performance of instrumental chamber music from the Baroque era to the twenty-first century. Through coached participation in small ensembles and work with improvisational techniques you will enhance your skills as a chamber musician, develop creative interpretation of a variety of musical styles and perform in a public concert. Chamber Music is recommended for the intermediate to advanced instrumentalist.

Jazz Improvisation

SMU-JAZ Format C | *All Grades*

This course, for intermediate or advanced players, includes the study of the literature, history, and theory of jazz. You must have a minimum of three years playing experience and be able to play major scales in eighth notes in at least 6 different keys (C, F, Bb, G, D, A) to participate. Students will discover how to practice and develop improvisational skills, build a repertoire for concerts and jam sessions, participate in collaborative projects with other performing groups, and perform in a final assembly. Related activities might include workshops or short field trips to jam sessions and concerts with professional jazz musicians from the area. Students need not play an instrument normally found in a jazz band (i.e., harmonica, violin, or flute).

Songwriting and Music Recording

SMU-SMR Format A and C | *All Grades*

Do the songs you listen to tell the stories that you want to tell? If you sing, play an instrument and/or enjoy creative writing, this course will introduce you to the craft and techniques of songwriting and music production. Students in this course will listen to and analyze traditional and contemporary songs from the traditions of folk, blues, jazz, rock and pop. They will then, individually or in collaboration with a classmate (or two), begin to create songs of their own. As these creations take shape, students will learn how to record them using GarageBand® or Apple Logic Pro. They will learn about the proper use of microphones as well as EQ and filters for the mixing process. The course will conclude with a listening session that will allow students to share their creations with an audience.

Private Music Lessons

Students may take private music lessons on a variety of instruments and in voice for an additional fee (\$375 for five 50-minute lessons; \$225 for five 25-minute lessons). Students planning on taking lessons should indicate so on the application and must apply by April 15, 2019.

■ Visual Art

It is our mission to create an experience that focuses on the process, excitement, and hard work of making art. Students pursuing an art portfolio suitable for college submission are encouraged to enroll in the department course offerings, as important fundamentals are taught in each studio. All students enrolled in studio courses will exhibit their work in the annual Student Art Exhibit in the Frederick R. Mayer Art Center during the final week of the session.

Architecture

SAR-RCH Format C/D MWF and C/D TTS | *All Grades*

This course will offer you an introduction to architectural model building. Projects will require you to research, design, and produce a poster of a well-known architect, understand and draw the lay-out of your dorm room, and make plans and a model for a proposed dream house. Serious architecture students are also encouraged to take 3D Computer Design which features Google SketchUp®.

Ceramics

SAR-CER Format C/D MWF | *All Grades*

Do you like the idea of being able to have your morning tea or coffee in a mug you made? Want to eat your ice cream from a bowl you made? Try your hand at the potter's wheel (and other methods) in this class and you will go home with a variety of cups, bowls and "who-knows-what" made of oven-, microwave-, and dishwasher- safe ceramic ware. While you're at it, you just might learn a thing or two about making art by hand—like proportion, symmetry, emphasis, texture, contrast, the fine art of moisture control with clay, proper body mechanics on the potter's wheel, and how to glaze your finished work. No prior experience is necessary.

Clothing Design and Construction

SAR-CLO Format A and C | *All Grades*

In this course, you will learn how to conceptualize, design, and build your very own garment! No previous experience is required, just an open mind and love for fashion. You will learn the elements of design and how to work with multiple mediums. You will get to know fashion design terminology and the design process by hearing from experts in the worlds of fashion and theater. From there, you will produce your own original rendering, learning the basics of machine sewing and hand stitching along the way. At the end of the course, you will have an overall understanding of design, how to communicate that design, and how to make it a reality!

Limit: 8 students.

Computer Animation

SAR-CAN Format C | *All Grades*

Animation plays an increasingly large role in digital media, advertising, filmmaking, and web design. This course explores animation both as a creative art and as a commercial medium using software such as Adobe® After Effects® and Autodesk Maya®. It will expose students to a wide range of digital content creation including small web and mobile-based animations and fully rendered 3D characters. Students will learn about developing concepts, creating media content, editing, and using animations to convey an idea or story. The class will also discuss the role that this type of media plays in society and how it impacts the fields of art, design, performance, architecture, and advertising.

Digital Photography: The Creative Experience

SAR-DPH Format A and B | *All Grades*

Students who are interested in learning how to use their digital camera or smartphone camera will find this a very informative course. This introduction to photography stresses the photographic image as a significant visual statement. Through the work done on various assignments, students learn how to make effective compositions that are expressive and meaningful. Along with the photographic assignments, we will learn about the basic elements of composition, such as color theory, shape, form and texture, as well as elements of the history of photography. **Students are required to bring a digital camera or smartphone. However, a digital camera is strongly recommended for a more complete experience.**

Draw, Paint, and Create

SAR-DPC Format A/B TTS | *All Grades*

This course allows both beginners and experienced artists to study a variety of artistic techniques as you pursue your own passion projects. You will have the chance to experiment with a wide variety of materials as we explore two-dimensional composition as a class. We will discuss the steps necessary to transition from assignment-based art projects to realizing your own artistic vision. We will take inspiration from work across genres and discuss each other's works in progress. As we do, we will consider topics such as line, shape, value, balance, texture, perspective, depth, and color. This is the perfect class for anyone who is looking to expand their artistic portfolio. From realistic to abstract, classical to comic book, you decide what direction your art will take you this summer!

Drawing: Learning to Look

SAR-DRW Format C | *All Grades*

If you want to learn how to draw or develop the skills that you already have, then this is the perfect class for you. In this observational drawing course, students have the opportunity to develop a thoughtful understanding of design, form, proportion, light and shadow, perspective, and space through a series of drawings from observation. Students will learn how

to render and shade objects ranging from basic shapes (such as cubes and cylinders) to more complex objects. Finally, the class will turn to drawing portraits and all the concepts that encompass them, including anatomy, mood and form. This course includes using different mediums, including pencil and black and white charcoal.

Oil Painting

SAR-OIL Format A/B TTS | *All Grades*

This course is a stress-free introduction to water-based oil painting. Students will explore the paint through basic forms, color mixing, painting techniques and composition. They will rework a master painting and explore their own choices whether it is portraits, landscapes, or still life. We will also look at past and present artists for insight, and we will bring multiple perspectives to our paintings through group critiques. While no prior experience is necessary, more advanced students can develop their technique and get personalized lesson plans.

Printmaking from Pop to the Street

SAR-PPS Format A/B MWF | *All Grades*

In the state-of-the-art printmaking studio, this course is a dynamic, wide-ranging workshop that encourages students to experiment with a variety of printing techniques such as: found object printing, stenciling, monotype printing, linoleum block printing, and screen-printing. Students will create a portfolio that explores such concepts as image reversal, multiplicity, color theory, and graphic design. Inspirations for projects include objects, photographs, media advertising, and art historical references including Pop artist Andy Warhol and contemporary artist Shepard Fairey. Students will use the studio's printing press for the production of multiples and embossing prints. Inventive approaches, including the use of photocopies, Pop art techniques, Adobe Photoshop®, and t-shirt printing will be explored. This course uses only non-toxic materials and mediums. All levels of expertise are welcome.

3D Computer Design

SAR-TDC Format A and B | *All Grades*

SketchUp® is an easy-to-learn yet extraordinary artistic tool for developing 3D designs. You will create three projects: designing a dining room set, a chess set, and a project of your own choosing. The class will also include an introduction to 3D printing. No experience is necessary. Serious architecture students should consider this course in conjunction with the Architecture course. ***Please note students are required to bring their own laptop computer that is capable of downloading software and has a USB port. Chromebooks, tablets and iPads cannot be used in this course.***

Computer Science

The Exeter Summer Computer Science Department is committed to the belief that through a combination of group activities and individual exploration students acquire problem-solving skills. Our objective is for every student to become comfortable using a computer, either in the area of information technology (applications) or in computer programming. For all courses, you will be required to use a microcomputer on a local area network. You will be challenged to express yourself using current technology available through Exeter's extensive technological resources. Each course stresses cooperative work, problem-solving techniques, structured use of applications, and ethical uses of the computer within a community.

Introduction to Computer Science

CMP-ICS Format C | *Prerequisite: one year of algebra*

How do we write a simple program? How do we talk to the computer? While we learn the technical skills necessary to write a program, we will also begin to understand how to think about problems to be solved—algorithmic development. Much time will be spent on honing your logical thinking skills. Each day will begin with a new puzzle to be solved. What do you already know? What do we need to find out? What is the desired outcome? By working as a group we can solve the problem employing particular problem-solving strategies. The next step is to get the computer to solve the problem for us. The strategies applied in this course are easily transferred across many disciplines. You will learn to parse the data and apply clearheaded thinking to the problem of the day. By the end of this course, you will be confident of your new computer science skills. You will come away knowing how to approach a problem from a programmer's point of view, and be ready to take a full year of computer science at your high school.

Game Programming

CMP-GAM Format A, B, and D | *All Grades*

Think about those online games that you play. Have you wondered how software engineers write these programs? Is it difficult? It is not too difficult, but it does take time to learn how to write a program using animation. What a perfect summertime experience! This course will introduce you to the basic concepts of game programming. No previous experience is needed. You will have the opportunity to understand basic animations, movements, and collision detection, using graphics and sound while learning the elemental principles of creating a dynamic game. You will leave with an appreciation of the technical skills of a game designer and write a few of your own games to play with your friends.

English and Writing Skills

The Exeter Summer English Department believes that students learn best when they are actively engaged with each other as well as with the material. Student-generated and centered discussions about literature, student writing, and themes of social and moral significance are at the heart of each classroom. Attentive and responsible preparation and participation is required from each member of the class. The English Department also believes that written expression is an integral part of learning, communicating, and thinking. You can expect to engage in the process of writing and to develop the skills of peer-editing and revision in both literature and writing courses. All courses are designed to enhance speaking, listening, reading, writing, and thinking skills.

AP Level Preparation

EWS-APP Format D | *Grades 11-12*

This course will prepare students to confidently meet the challenges posed by the AP Literature & Composition curriculum. In addition to refining their close reading, analytical writing, and critical thinking skills, students will learn and implement strategies to help them successfully navigate the AP Literature exam. To this end, students will have ample opportunity to complete multiple choice assignments and write in-class essays under strict time conditions that accurately simulate the exam and its unique demands. As we proceed as a class, we will also pursue the greater aim of deepening our appreciation of great works of literature, new and old alike. In Harkness discussions, students will meaningfully articulate their thoughts as they read complex works by authors such as Bronte, Borges, Woolf, Wilde, Conrad, Calvino, and Kundera. The reading list changes yearly.

The Craft of the Essay

EWS-CRE Format B and D | *All Grades*

This writing-intensive course focuses on the formal essay required in high schools and colleges across the range of academic disciplines. Students will work on developing strong, viable theses and supporting them effectively with

persuasive evidence and specific details. Moving beyond the traditional five-paragraph essay, students will read, discuss, and analyze classic and contemporary works by essayists such as Orwell, Bacon, Swift, E. B. White, Hurston, Didion, Sedaris, and others. Harkness discussions, peer editing, and writing assignments will emphasize strategies for critical analysis and effective rhetorical techniques. Students will also examine the personal essay, which is the basis of a successful college application essay.

Creative Writing

EWS-CRW Format A, B, C, and D | *All Grades*

This course is for students who have previous experience with and investment in creative writing. Designed to help young writers discover and develop their own personal and artistic voice, the course is conducted as a workshop which provides a forum for discussion of published works as well as the students' own pieces. Students may expect to write in several genres, often in class, and to be willing to share their writing. They will learn how to participate in writing workshops and to critique each other's work. The course encourages openness to experimentation and revision.

Debate & Argumentation

EWS-DAA Format A and C | *All Grades*

In this course, you will be given an introduction to the fundamentals of debate and will have many opportunities to practice these fundamentals in the classroom. We will focus on the research and development of constructive and negative speeches through library research. You will learn to make presentations that include a traditional debate format with cross-examination. We will analyze and evaluate a variety of forms of rhetoric. No previous debate experience is required to take the course.

Grasping Grammar

EWS-GGR Format A | *All Grades*

This course focuses on the fundamentals of English grammar: verb forms, pronoun cases, agreement, parallel structure, idioms, transitions, syntax, and diction. Students will read and discuss short fiction, poetry, and non-fiction essays as models of effective writing essential to academic success. Students will also study vocabulary and work at strengthening their own writing skills through assignments that emphasize logical development of theses and supporting arguments. While not designed as a course to prepare students for specific exams, *Grasping Grammar* may help students feel better prepared for the SAT II Writing Test and the AP Language and Composition Exam.

Great Books/Great Reading

EWS-GBR Format A and C | *All Grades*

As Holden Caulfield thinks to himself in *The Catcher and the Rye*, “What really knocks me out is a book that, when you’re all done reading it, you wish the author that wrote it was a terrific friend of yours and you could call him up on the phone whenever you felt like it. That doesn’t happen much, though.” It’s true, it doesn’t happen much, but when we’re able to find a knockout text and have a great discussion about it with each other around the Harkness table, it’s magical. In this course, we will aspire to this goal, and it will appeal to students who, like Holden, love to read (or are still learning to love to read) and who are seeking exposure to novels and short stories that are diverse, dynamic, and compelling. More specifically, we’ll busy ourselves with complex, challenging page turners by such writers as Fitzgerald, Hemingway, Hurston, Baldwin, McCullers, O’Connor, DeLillo and Vonnegut, depending on the year. In addition to reading critically, students will be asked to write analytically in an effort to deepen their relationship with the material.

Journalism

EWS-JRN Format A and B | *All Grades*

Like to see your name immortalized? Want to leave your imprint on the world? Interested in how the news gets reported, edited and written? This course will teach you the basics of journalism in today’s exciting social media culture. Whatever your career interests, communicating at the top of your game will set you ahead. With your classmates, and using Twitter®, Facebook®, blogging and video, you will write, edit and produce a weekly online newspaper, chronicling the doings of your fellow students in Exeter Summer with breaking news stories, features, commentaries, editorials, and photos, www.peasummertimes.com. You will have the opportunity to hone your skills in researching, interviewing, thinking, speaking and writing clearly, while meeting deadlines. You will learn how InDesign® is used in news layout. And you will study current events to engage in spirited discussions about how journalists cover news around the world.

Summer in Love

EWS-SUM Format C | *All Grades*

Love has been called “a many-splendored thing” and a “burning ring of fire.” It is a word that everyone comprehends, but whose precise definition nobody quite knows. Perhaps, more than anything else, love is an emotion, a delightful debilitation – analogous to fever or sickness – that routs the brain, stirs the blood, and weakens the knees. In this course, we will examine how humankind’s conception of love in the West has changed dramatically over millennia, ranging widely from Greek and Roman antiquity to present

day neuroscience. Along the way, we’ll ask many questions pertaining to the very nature of love (and, incidentally, resolve very few of them), including: is love some cosmic, ethereal emotion? a historical, cultural product? an evolutionarily advantageous, biochemical process? or merely the godhead of threadbare platitudes? Strange and wonderful, love governs our lives, which is all the more reason to think about it philosophically.

Writing the College Admissions Essay

EWS-CAE Format A and B | *All Grades*

Akin to a modern day rite of passage, writing the college admissions essay can be an arduous, mystifying, stressful experience. It’s a type of essay that requires an approach and style of writing with which many students are unfamiliar and unpracticed. The good news is that this approach and style can be learned and that everyone has the capacity to write an effective college admissions essay that contributes considerably to the overall strength of their college applications. In this course, we’ll focus on how to best craft a reflective essay that draws on personal experience, responds to a handful of the Common or Coalition application prompts, and conforms to the stringent length constraints these applications require. To this end, we’ll discuss audience and purpose, idea generation, pre-writing techniques, organization, and the narrative and reflective techniques that are the hallmarks of all powerful, memorable writing. Each student will have the opportunity to read exemplary student models and engage in a workshop format along the way, emerging with several viable pieces of writing suitable for submission. Students will also have the opportunity to listen and learn from visiting college admission professionals who will draw on their experience in the field to dispel common misconceptions, describe how essays are evaluated, and discuss how they factor into the admissions process.

Writing Process Workshop

EWS-WPW Format B, C, and D | *Grades 10 - 11*

The Writing Process Workshop offers students an in-depth examination of the elements of the writing process. Students will learn to generate compelling topics, organize their ideas, use effective transitions, and write with style and precision. Assignments will help writers become aware of audience and purpose even as they discover strategies for sustaining longer pieces of prose. All essay assignments will be drawn from personal experience and will not address the traditional five-paragraph form. As a student in this course, you will become part of a community of writers engaged in collaborative analysis and discussion. Classroom workshops will facilitate open-discussion critique, peer-editing, and revision. Reading will complement the writing assignments and offer models for your prose.

English for Non-Native Speakers

Exeter Summer provides a language immersion experience for non-native English speakers in: dormitory assignments, extracurricular activities, assemblies, and the bulk of academic work. The following courses are offered to help students gain confidence in their immersion and to support non-native speaking students who are still honing their skills in spoken English, English grammar, vocabulary, reading, and conversation. Student-generated and centered discussions are at the heart of each classroom and require attentive and responsible participation from each member of the class. We recommend that non-native speakers of English enroll in *USA: Exploring American Culture* and in no more than one of the other three courses listed below.

Becoming a Confident Writer for Non-Native Speakers

EFL-BCW Format A, B, C, and D | *All Grades*

In this introductory writing workshop, we will proceed in the belief that the act of writing can help produce confidence in reading, writing, and thinking skills. You will complete daily writing exercises that stress observation, description, detail, and development of voice. We will build confidence in skills through frequent short pieces of writing from experience and consistent reinforcement of “showing” rather than “telling.” Students will be led through the process of drafting, editing, and evaluating their own writing. Prose assignments may include personal narratives, personal essays, and expository writing. Harkness discussions will examine works of non-fiction prose and will provide a forum for discussing drafts of students’ papers. If you enroll in this course, you will become a member of a small community of writers eager to help one another through thoughtful discussion and literary analysis. **Note: students interested in writing poetry or short fiction should sign up for the *Creative Writing for Non-Native Speakers* (EFL-CRW) course rather than this course.**

Creative Writing for Non-Native Speakers

EFL-CRW Format A and C | *All Grades*

Do you love to write? Do you have a story to tell? This introductory workshop will help students improve their writing and develop a love of language by offering significant writing practice. Students will explore narrative, fiction, and poetry while practicing the fundamentals of grammar and punctuation. They will be asked to write often, both in and out of class, producing a portfolio of short creative pieces. Additionally, students will develop listening and speaking skills essential to a writing workshop. Short readings--primarily stories and poems--will provide models for student work.

Grasping Grammar for Non-Native Speakers

EFL-GGR Format B and D | *All Grades*

In this course, students will become better speakers and writers of English. Students will compose a number of short pieces that will be used to identify weaknesses in their writing so they can focus their attention on the areas of greatest need. This diagnostic approach will provide individualized attention to each student and afford them the opportunity to refine their command of English. In addition, students will undertake a formal study of parts of speech, noun clauses, adjective clauses, gerunds, and infinitives.

USA: Exploring American Culture

EFL-USA Format A, B, and C | *All Grades*

This course is for non-native English speakers who want to develop their writing and discussion skills. Through challenging and enjoyable activities, you will discover a lot about American culture that is especially useful if you plan to attend high school or college in the United States. You will read, discuss and write about essays, poems, magazine and newspaper articles. You will see American films, and study American education, history, art, customs, people, and food. Our international Harkness Table discussions will expand your English vocabulary and help meet your needs as a foreign student visiting a new country.

Health and Human Development

The Health and Human Development's mission is to prepare and empower students to value and engage in healthy lifestyles by honoring diversity, fostering leadership, and encouraging students to reach their highest potential as productive, responsible citizens at the Academy and beyond. Our courses challenge students to stretch their understandings of health issues in trusting and respectful environments. In order to facilitate positive health choices today and in the future, students are provided opportunities to examine their values and attitudes, as well as develop critical thinking, decision-making, self-advocacy, and interpersonal skills.

Euphoria: The Human Pursuit

HHD-EUP Format C | *All Grades*

This course will explore the use of mind-altering practices and substances throughout history, across cultures and within subcultures around the world. From a biochemical, sociological, political, and psychological standpoint we will probe the reasons why people seek to alter their state of being, whether through the use of drugs or through natural means. Students will also learn about drug policy and legal issues, as well as gain an understanding of how race, class, and social standing influence outcomes and behaviors.

The Science of Happiness

HHD-HAP Format A | *All Grades*

This course explores the roots of a happy and meaningful life. Students will engage with some of the most provocative and practical lessons from science, discovering how cutting-edge research can be applied to their own lives. Exploring core findings from positive psychology, students will discover how happiness is inextricably linked to strong social ties and how it contributes to something bigger than oneself. Students will learn about the varied research supporting this view and gain practical, research-based strategies for nurturing their own happiness. The purpose of the course is to not only learn what psychological research says about what makes us happy but also to put those strategies into practice.

Introduction to Mindfulness

Extracurricular Evening Class | *All Grades*

Based on the KORU Mindfulness Program, out of Duke University, this 4-week class will introduce you to the practice of mindfulness. Several very useful skills, including meditation, that can help with stress management and living a more open and full life, will be taught. Research has shown that practicing mindfulness over time can help with improved sleep, enhanced learning, resiliency and maximizing one's potential. This hour-long class is highly structured and requires a commitment to attend all four weeks. It involves keeping a daily log and committing to a mindful practice of your choice for 10 minutes a day. Fun, interactive and very useful to our busy lives, this class is a wonderful way to strengthen your ability to focus and to gain perspective on the stresses of everyday life. All experience levels welcomed.

This is a free class that meets on Thursday evenings from 5:30 to 6:30 pm. Students who want to sign-up must do so by email to summer@exeter.edu by May 1, 2019. Space is limited.

History and Social Sciences

The Exeter Summer Department of History and Social Sciences offers a diverse program of study for motivated students who want an experience that may not be available to them during the academic year. We strive to offer a curriculum that emphasizes a broad understanding of the human experience. Courses include studies in American and world history as well as the social sciences. In order to provide a deeper understanding of human thought and behavior, we offer selections in economics, humanities, media studies, psychology, and philosophy. In all areas of study, you will have the opportunity to explore ideas, question concepts, and conduct research while developing essential skills in analytical reading, writing, and collaborative work.

■ History

Freedom and Justice for all? Exploring the Experience of African Americans

HSS-FJA Format A | *All Grades*

Black people are incarcerated at five times the rate of whites in a prison system that has ballooned from 200,000 inmates in 1970 to over 2 million today. African Americans, as compared to white Americans, are also disproportionately victims of police shootings. How can this be the case today after the Civil Rights movement brought us so far from “whites only” water fountains and bus seats? By studying the culture and history of the U.S. with a focus on the experiences of many African Americans, we will witness how this struggle for freedom and justice for all has unfolded. We will study black music, art, and literature to hear the voices of people like Kendrick Lamar, Langston Hughes, Malcolm X, James Baldwin, Maya Angelou, and Angela Davis as each gives voice to her or his experience. From the Harlem Renaissance

to Hip Hop music, from Dr. Martin Luther King Jr.’s active non-violent resistance and the “Black Power” movement, to “#BlackLivesMatter”, we will reveal a rich context for the unfolding of a great American drama with our eyes toward a future where we may all actually be free at last.

Global Security

HSS-GLO Format B | *All Grades*

This course will examine contemporary security challenges that have global dimensions, such as the proliferation of international terrorism, climate change, nuclear weapons, mass migration, and world health crises. In the face of these transnational problems, governments have struggled to provide effective solutions. We will evaluate the importance of the nation-state in providing solutions to security threats that cross borders as well as international organizations like the United Nations and the work of non-governmental organizations like Climate Action Network or Doctors Without Borders. What can be done to improve our collective security today and where do we see progress toward greater justice and world peace? What approach should be favored as a way forward?

Modern Europe (1945-Present)

HSS-MEU Format D | *All Grades*

In this course, you will study contemporary Europe as it emerged from wars and fascism and as it moves towards greater integration and international responsibility. We will study forms of economic and political cooperation among European nation states and the evolution of the European Community and its continued expansion. We will review problems such as the renewed East-West détente, the North-South conflict, and Europe’s responses to other world or area issues. You will specialize in the recent history of one European country as the focus of your course project. We will use films, debates, and interviews with students on campus in the course of our study.

Understanding War and Peace

HSS-UWP Format D | *All Grades*

Are humans naturally violent? How do societies avoid violence and garner peace? What role does technology play in shaping violent behavior? This course introduces students to three interrelated yet analytically distinct phenomena:

violence, war, and peace. We will explore the history of these subjects in a global context, focusing on both ancient and modern understandings about the reasons for violence, war, and the possibilities of peace. Students are introduced to the concept of *just war theory* which is critical for framing ideas about justice and the use of war. Readings will be augmented by occasional film studies throughout the course.

U.S. History

HSS-HIS Format A | *All Grades*

This course serves as an introduction to major themes in American history. We will think carefully about how American values and institutions have been created and changed over time. In particular, we will explore the concept of freedom as an ongoing contested definition between liberty and equality. We will study topics, such as independence and Revolution, Civil War and Reconstruction, the Gilded Age and progressivism, the Great Depression and the New Deal, and the struggle for racial and gender equality. Along the way, we will learn about seminal political leaders such as Thomas Jefferson, Abraham Lincoln, Frederick Douglass, Franklin Roosevelt, Eleanor Roosevelt, Martin Luther King, Malcolm X, Betty Friedan, and Gloria Steinem. We will ask how these political actors sought to modify the meaning of freedom in the American imagination. This class will prepare you to write analytical essays, conduct library research, and enhance your performance on exams like the AP and the IB – in short, a foundation for college-level work. Any student – American or international – who would like to (re)discover the American past is welcome!

■ Humanities

The Art of Being Human

HUM-ABH Format D | *All Grades*

Is our humanity something that can be cultivated? If so, which capacities are relevant and what standards of excellence should we employ? Literature, art, psychology, philosophy, and sociology are among the divergent lenses used to investigate what human beings can create, pursue, and become. This course explores insights into human experience provided by the humanities and social sciences. We consider whether there is such a thing as objective goods for humans. Wealth, wisdom, virtue, health, accomplishment, celebrity, leisure, pleasure, happiness, and love are among the various ends that have been posited as contributing to a fulfilling life. To what extent are any of these necessary or sufficient goods? What does our pursuit of these goals reveal about our humanity? We will critically analyze historical and cultural assumptions, including our own, in order to better appreciate what it means to be human.

Global Justice

HUM-JUS Format C | *All Grades*

Media has granted us a front-row seat to the great issues afflicting all corners of the world; oppression and human trafficking, genocide and war, tribalism and dictatorships, poverty, slum life, and orphans and street children. The digital age now challenges our current generation to new levels of understanding and action. Oscar award winning films display in HD global suffering and international conspiracy. Best-sellers reveal the success and failure of those leading us to action. Rising up is a generation of activists searching for truth and restoration. This course will investigate those connections that relate persons to one another and the structures that facilitate and inhibit our ability to work for justice on their behalf. We will consider the work of non-governmental organizations (NGOs) and ideas about sustainability, empowerment, and community development. We will examine current foreign aid distribution policies and the growing dependency on first world nations. Finally, we will look at the role the media plays in focusing the world's attention on these issues.

The Museum Experience: Become a Curator and Educator

HUM-MUS Format C | *All Grades*

Have you ever seen part of a museum that has captivated your attention? Can you identify why it did? Discover the inner workings of museums, their designs, famous artifacts, and education programming. Understand how museums engage visitors and even find a new appreciation for the place that you are living this summer. In this course, we will examine various art and history museums, their layouts, collections, and activities designed for visitors. Learn how to develop an exhibit, assess artifacts, piece together stories, and create museum programming. Visits to museums will include those in the nearby New Hampshire and Boston areas, such as the Old State House and Strawberry Banke. Even develop your own exhibit as a final group project!

The Media and Society

HUM-TMS Format B and D | *All Grades*

How does the media affect society? Through the study of newspapers, magazines, television, radio, film, advertising, the Internet and social media you will explore the influence of the media on various aspects of American society, including politics, business, and consumer and fashion trends.

International students with a strong command of English are encouraged to enroll in this course.

Faith and Doubt

HUM-FAD Format B | *All Grades*

What roles do suspicion and trust play, both in our efforts to make sense of our lives individually and in our attempts to live well together? This course invites students to explore the complexity of meaning-making in its many forms from traditional religious belief through radical skepticism. The texts we will read together include religious and philosophical classics ranging from Buddha and Augustine to Marx and Nietzsche. Our shared inquiry will also consider contemporary cultural selections such as *Life of Pi*, *Until We Have Faces*, *The Reluctant Fundamentalist*, *To Pimp a Butterfly*, and *Silence*. With the help of Emily Dickinson, Fyodor Dostoevsky, Haruki Murakami, Flannery O'Connor, Alfred Hitchcock and others, we will improve our ability to recognize where belief and doubt function in our lives.

Philosophy & Everyday Life

HUM-PHI Format A and D | *All Grades*

Most human beings take the world we sense, the world we see, hear, and feel for granted. But how do we know if “the world outside” is real? What if we all live within “the Matrix?” How can we tell if we are simply dreaming or plugged into some giant computer? We also seem to make choices every day; what to wear, to study or watch a movie, to go out with this person or that person. But are we really “free” to choose or do social and psychological forces, genetics, and instincts determine our life? Is freedom an illusion? What about God? Does God exist or is the idea of “God” a human creation? What about right and wrong? Are “good” and “evil” words reflecting personal feelings and cultural norms or something more universal? These are some of the profound questions that we will grapple with throughout this course, guided by the insights of mentors, both classical and contemporary, from Aristotle to Žižek.

The Moral Life

HUM-TML Format A | *All Grades*

Some lives exemplify an extraordinary human capacity for love and justice, sacrifice and solidarity. Mother Teresa, Malcolm X, Gandhi, Dorothy Day, Martin Luther King, Thích Nhất Hạnh, Dietrich Bonhoeffer, Angela Davis, Lee Jong-rak, and Desmond Tutu are among figures who have been held up as models of a moral life. What role do moral exemplars play in inspiring and sustaining our own moral imaginations? How should we understand the moral and political victories achieved by these figures, as well as their struggles and failures? Do their lives provide an example for, or even place a moral demand upon, the rest of us? Or are such lives truly extraordinary, lived on a plane far removed from ordinary human desires, interests and activities? This course provides an opportunity for students to consider the lives of several moral exemplars and to reflect on essential questions of meaning and purpose in their own contexts.

Understanding Arguments

HUM-ARG Format D | *All Grades*

How might one argue for the right to an abortion or the injustice of the death penalty? In this course we will attempt to answer such questions by exploring the structure of persuasive argument. We will cover the concepts of validity, truth, fallacy, and inductive vs. deductive reasoning, and use these concepts to analyze and evaluate specific arguments. Special emphasis will be placed on legal and moral reasoning, including a study of the affirmative action and abortion issues. This course is designed to improve both written and oral communication skills.

■ Psychology

His/Her/Self

SPS-SEL Format A | *All Grades*

What does it mean to be male or female? To answer this question, we might examine the ways in which media, (movies, video games, TV, music and advertising) are able to influence ideas about masculinity and femininity. In an attempt to decipher what makes us who we are, we examine the part that both our brains and our bodies play in this search. Using the prism of religious influences and global diversity as well as the role of heroes, past and present, we may find some clues to this puzzle. More importantly; we will discuss both valid assumptions and misconceptions about our roles and look for tools that will help us negotiate the challenges of life in the 21st century.

Introduction to Psychology

SPS-INP Format A, B, C, and D | *All Grades*

In this course we explore the science of human behavior and cognition. We begin by looking at methodology (experiments and case studies), and then discuss learning and memory (eyewitness testimony), problem-solving, intelligence (the en vogue concept of multiple intelligences), and language. After focusing on cognition we turn to social behavior, discussing techniques of persuasion and the effects of groups on individuals' behavior (mob psychology and bystander intervention). Finally, we study psychopathology—specifically, the symptoms and treatment of mental illnesses such as depression, schizophrenia, and autism. Students are graded on class participation, opinion papers, and group projects.

The Journey Inward

SPS-TJI Format B | *All Grades*

Have you ever thought deeply about the journey of your life? Where you have come from and where you are going? This course will focus on finding answers to the questions of personal growth and self-understanding by exploring psychological theories, literature and film. We will start by

exploring developmental theory through the likes of Freud, Kohlberg, Erikson and various (in)famous psychological experiments, before applying those theories to characters from classic works of fiction. We will then turn that theoretical lens upon ourselves and, through journal keeping, explore dreams, fantasies, early life experiences, group dynamics, the nature of evil and the importance of love. If you want to better understand what it means to live and grow, it might be time to take a journey inward.

Neuropsychology

SPS-NEU Format D | *All Grades*

This course is designed to introduce you to the biological underpinnings of the brain's influence on behavior. We will delve into topics such as neuroanatomy, brain development and plasticity, learning and memory, sensation and perception, and neurodegenerative disorders. We will use the findings from current research to evaluate some of the major questions in the field of neuroscience. Can the brain recover from severe trauma? Why do we sleep? Do gender differences exist at the neural level? In addition, we will uncover how perception of the world around us impacts behavior and how we respond to everyday experiences. Increasing your understanding of the brain's involvement in every thought, emotion and action you experience, this course will explore behavior at the level of the synapse up through the mysteries of neural networks.

Social Psychology

SPS-SOC Format C | *Grades 11-12*

This course will introduce you to social psychology, the scientific study of social life. As humans are inherently social beings, the range of topics we will consider is quite broad: decision-making, behavior in groups, cooperation and helping, persuasion, stereotyping and prejudice, aggression and conflict, and the influence of subtle and automatic stimuli on our behavior. Relating these topics to everyday experience and current events is an important component of the course.

■ Social Sciences

Basic Principles of Criminal Justice

SSC-CRJ Formats B and D | *Grades 11-12*

Is America's criminal justice system sufficient for today? How does discrimination play a role in the system? The focus of this course is to consider problems such as racial profiling, search and seizure, rights of privacy, cruel and unusual punishment, speedy trial and appeal, and mass incarceration. We will make use of various sources, including recent cases, current events, and *The New Jim Crow* by Michelle Alexander to debate these larger questions surrounding justice. In addition, we will take advantage of the Harkness table to

discuss other controversial issues, including police brutality, #BlackLivesMatter, the death penalty, and sexual assault on college campuses, among others.

Economics and Business Principles

SSC-ECO Format A, B, and C | *Grades 11-12*

Current economic issues and business operations will be our focus in this course. This is NOT a course in economic theory, although you will learn the essential facts and theories about investment, productivity, inflation, recession, monetary and fiscal policy, and the stock and bond markets. In addition, we will examine some basic business financial methods. **Only students with a thorough mastery of English should enroll in this course.**

Global Economics

SSC-GEC Format A and C *Grades 11-12*

Why are some countries more developed than others? What responsibilities do the wealthy nations have towards the poor nations? Is democracy necessary for countries to develop economically? Could child labor be beneficial to poor countries' economies? These are just some of the questions we will discuss. This course introduces students to the principles of international and development economics. We will study a wide range of international issues including inequality and poverty in less developed countries, the lives of the poor, foreign aid and debt relief, microlending, global financial crises, the role that geography plays in development, and the role that organizations such as the World Bank might have. **Only students with a thorough mastery of English should enroll in this course.**

Leadership and Society

SSC-LEA Format C | *All Grades*

In this course you will be introduced to several types of leaders who have significantly affected society. We will study concepts from various disciplines such as anthropology, history, mythology, psychology, and philosophy in order to gain a greater understanding of the interaction of leaders in their respective societies. Mohandas Gandhi, Martin Luther King, Jr., Albert Einstein, Mao Zedong, Franklin D. Roosevelt, Adolf Hitler, Eleanor Roosevelt, Frederick Douglass, Harriet Tubman, and others may be among the leaders we examine. We will emphasize the critical thinking skills you will need to be successful in college.

Leadership for a Better World

SSC-LBW Format D | *All Grades*

How do I change the world? Not alone! In this course, students will examine the ideals of civic engagement and social justice by exploring modes for leadership in the global community through politics, service, community development and activism. Research shows that we have become increasingly disconnected from family, friends,

neighbors, and our democratic structures. Students will look at ways to reconnect with each other and their communities, and discover how they can lead others to make a difference.

Leadership in Athletics

SSC-LIA Format C | *All Grades*

The world of sports is rife with examples of great leaders and challenges that can allow us to explore the complexity of leadership. This course will explore how leadership manifests itself on the field from the perspective of players such as Michael Jordan and Peyton Manning, as well as from the sidelines through coaches such as John Wooden and Joe Torre. We will be examining current events that reflect leadership challenges for coaches, athletes, and fans such as steroid usage, the off-field behavior of professional athletes and coaches, or the more recent scandal at Penn State. Topics to explore will include skills and characteristics of sports leaders, the relationship between leaders and followers, coaches as leaders, team captains as leaders, conflict resolution and team dynamics, and the role of gender in sports leadership.

Politics: Power and Responsibility

SSC-PPR Format B | *All Grades*

Politics, it has been said, is the art of striving to maintain, share, transfer, and influence the distribution of power. This course will examine how power—the ability to achieve desired ends and, when necessary, influence the behavior of others to bring about these ends—and responsibility mesh in political life. We will consider the pressures of balancing money and influence; the difference between enemies and adversaries; the difficulty negotiating through competing loyalties—loyalty to one’s party, to one’s constituency, and to one’s own ideals; of knowing when to fight passionately and knowing when to compromise. We will also consider the “soft” and “hard” tools of power and their relative strengths and weaknesses. Readings include both classic and contemporary authors: Aristotle, Thomas Hobbes, Niccolo Machiavelli, Max Weber, Vaclav Havel, Joseph Nye, Fareed Zakaria, and Michael Ignatieff.

Social Ethics

SSC-ETP Format C | *Grades 11-12*

This course introduces students to a variety of debates concerning contemporary ethical issues. Through reading and Harkness discussions, you will consider some of the most compelling moral topics of our time: capital punishment, cloning, stem cell research, euthanasia, free speech, the treatment of war prisoners, conservation and the environment. The course will provide you with the analytical tools necessary for examining and critiquing these issues, while also helping you to define and support your own positions.

The United Nations: Global Community

SSC-UNN Format D | *All Grades*

How much do you know about the UN? Since the end of World War II, this international organization has grown from 51 to 193 member nations. Like any family, it has experienced both achievements and setbacks. It has celebrated the end of the Cold War and the independence of post-colonial nations but it has also faced genocides, terrorism and natural disasters. Its current challenge is to adapt to increasing demands for justice, fairness, and the rule of law in a world of diminished resources. Through weekly Model UN sessions, simulations, and engagement with guest speakers this class will examine the UN’s efforts to find solutions to the many challenges we face in the 21st century. Examining UN campaigns to end human trafficking, violence against women, and environmental degradation will prepare students to become discerning and responsible citizens within the global community.

Languages and Culture

In a world where globalization is a rapidly growing reality, learning two, three or even four foreign languages is a highly valued skill. Students taking a modern language will find themselves immersed in the language for five hours a week, with a variety of homework exercises to reinforce the essential skills of listening, speaking, reading, and writing. The Harkness class encourages active learning and fosters participation. Whether you are looking to strengthen your skills in a language you are already studying, eager to try something new before college, or hoping to gain basic fluency for more pleasurable travel, these introductory courses will suit your needs. Instruction in the introductory classes assumes no prior knowledge of the language. **Note: Courses will run based on enrollment.**

Beginning Arabic

LNG-BAR Format C | *All Grades*

Politically and economically significant, Arabic is the fastest growing foreign language taught at US colleges and universities. This five-week course is not only an introduction to the basics of the Arabic language, but it is also a solid foundation for your future Arabic classes. From the beginning, you will learn a detailed account of the Arabic alphabet, and a quick overview of grammar and general rules. With interactive dialogues, students will learn essential conversational expressions and will be immersed in the sights and sounds of the Arabic culture.

Beginning Chinese

LNG-BCH Format C | *All Grades*

This course will introduce you to basic grammatical elements of the Chinese language by using simple situational vocabulary that reflects everyday activities. While you will learn to read and write the language, emphasis will be placed on communication skills. You will be introduced to Chinese writing in simplified Chinese characters. This course will be further enriched by Chinese calligraphy practice and cultural video presentations.

Beginning French

LNG-BFR Formats A and D | *All Grades*

Spoken as a native language on five continents, French

remains an important international language for diplomacy, business, and art. With emphasis on communication, you will practice the language through experience and multimedia simulations: introductions, lodging, transportation, grocery shopping, recipes, music, video clips, and a variety of other cultural activities. Whether you are interested in pursuing formal study of the language or simply want to function effectively in a francophone country, you can enjoy France from a multimedia classroom with your instructor as a tour guide.

Beginning German

LNG-BGR Format C | *All Grades*

This five-week course will offer you a simple survival guide for your first time in a German-speaking country or in a future German class. You will be able to talk about yourself, find your way through a train station, engage in a basic conversation, order a meal from the menu that you actually want, and pay for it without surrendering your wallet to the waiter. You will become familiar with a few basic geographical, political, and cultural aspects of Austria, Germany, and Switzerland. Or, if you are only interested in finding out what German is all about, exploring the very flexible sentence structure, the seemingly endless phrases and nouns, this class will give you a great sense of just that.

Beginning Italian

LNG-BIT Format C | *All Grades*

This course will immerse you in the sights and sounds of Italy. Through dialogues and presentations, you will become familiar with the vocabulary and structures. Common themes include food, family, leisure, sports, and lodging. Present tense, articles, pronouns, numbers, colors, and activities will be mastered. We include films, magazine articles, poetry, music, and food tasting in our curriculum. This is a great course for those who would like to explore a new language.

Beginning Spanish

LNG-BSP Format A | *All Grades*

The Spanish language continues to rise worldwide and here in the United States there are approximately 45 million Spanish-speaking people and this number is growing. In this beginning course you will gain a basic knowledge of Spanish conversation, Spanish grammar, and Spanish-speaking cultures through readings, music and film clips. Upon completion of the five-week session, you will have an elementary level of abilities in the four main skills: speaking, listening, reading and writing. *This course is for the beginning student with no previous experience in learning Spanish.*

Dipping into 5 Modern Languages

LNG-DIP Format A | *All Grades*

Konnichiwa! Bonjour! Guten Tag! Marhaban! Privet! In this course, you will have the opportunity to sample five modern languages: Japanese, French, German, Arabic, and Russian. Teachers will provide you with a basic introduction to the various languages and cultures. Through conversation and hands-on activities, you will learn greetings and simple dialogues dealing with everyday situations. You will also learn about the traditions of people who speak the languages, their music, dance, food, etc.

Given the multicultural realities of the United States in the twenty-first century and the current globalization of ideas and economies, language study is indispensable. Sampling five of the world's many languages will be both challenging and fun, an experience that may help you make informed decisions about language study.

Intermediate Conversational Chinese

LNG-ICC Format D | *Prerequisite: one to two years of high school Chinese*

Whether you already have a basic knowledge of Chinese and would like to strengthen and enhance all of your language skills or do not have many opportunities to speak Chinese, this is the course for you. This class will focus on your interests to further improve your comprehension of spoken and written Chinese. You will continue to learn either traditional or simplified Chinese characters, and you will build confidence in your speaking ability. You will also write essays about your favorite subjects as a basis for oral presentations. In this course, you will have an opportunity to practice Chinese calligraphy, watch Chinese movies, and enjoy a cooking class.

Intermediate Conversational French

LNG-ICF Format B | *Prerequisite: one to two years of high school French*

If you are no longer a beginning language student but are not yet comfortable with your oral skills, this is the course for you. Come ready to make the leap into French culture as you will be immersed in the language through dialogues and real life situations like going to the market, finding a hotel, wandering through town, cooking traditional food, and discovering holidays and cultural customs. This class is for students with one to two years of French who want to build confidence in conversation and develop more extensive vocabulary.

Intermediate Conversational Spanish

LNG-ICS Format D | *Prerequisite: one to two years of high school Spanish*

Still need help understanding the differences between ser vs. estar, preterite vs. imperfect, por vs. para, indicative vs. subjunctive? Then this course is for you. This course offers

students the polish and confidence they want when they return to their Spanish class in the fall. By retelling stories both orally and in written form students gain a firmer grasp of the grammar and increase their fluency at the same time. Readings may include magazine and newspaper articles, as well as short stories. Review grammar exercises will also increase mastery of specific structures and offer a focus for the reading and writing.

Introduction to Latin

LNG-ITL Format B | *All Grades*

At its height, the Roman Empire stretched from the British Isles to Northern Africa and from the Atlantic shores of Spain deep into the heart of the Middle East. This course enables you to learn the fundamentals of the language that helped unite millions of diverse peoples and whose extensive influence can still be seen in many modern languages, including English. Enroll in *Introduction to Latin* if you wish to explore the history and culture of Ancient Rome and also to learn the fundamentals of the Latin language through reading and writing. Those who already know some Latin may pursue this course as a review of fundamentals. The main focus, however, will be to teach you how to read with facility in a foreign language.

Myth in the Movies

LNG-MYT Format A | *All Grades*

This course will explore depictions of ancient Greek and Roman mythology in cinema. Students will view a variety of films inspired by Classical literature and compare them to the original stories on which they are based. Students will become familiar with major characters and themes from Classical mythology, as well as the different ways in which this material has been altered and adapted to fit popular culture and modern audiences. Authors may include Homer, Vergil, Hesiod, and Ovid. Films may include *Percy Jackson & the Olympians*, *Clash of the Titans*, *Troy*, and Disney's *Hercules*.

Spanish Grammar and Composition

LNG-SGC Format C | *Prerequisite: one to three years of high school Spanish*

Still need help understanding the differences between ser vs. estar, preterite vs. imperfect, por vs. para, indicative vs. subjunctive? Then this course is for you. This course offers students the polish and confidence they want when they return to their Spanish class in the fall. By retelling stories both orally and in written form students gain a firmer grasp of the grammar and increase their fluency at the same time. Readings may include magazine and newspaper articles, as well as short stories. Review grammar exercises will also increase mastery of specific structures and offer a focus for the reading and writing.

Mathematics

Our mathematics curriculum is designed around the central tenet that mathematics is best learned by solving problems. In most of our courses, we replace the standard textbook with collections of problems authored by teachers at Phillips Exeter Academy. These problem sets feature the presentation of new material within the content of actual problems posed to the students. While you will certainly learn subject-specific concepts and techniques, the focus will be on gaining the problem-solving skills that will enable you to respond to new material in any future mathematics course. As with other Harkness classes at the Academy, students will be expected to participate actively and to persevere if their first efforts do not yield immediate success. Through active participation, you will gain an enhanced ability to ask effective questions, answer fellow students' inquiries, and critically assess and present work. Our ultimate goal is to see the student, not the teacher or textbook, become the source of mathematical knowledge.

Students are required to have either a scientific or a graphing calculator for these classes. Students should also bring their calculator manuals.

Algebra Techniques Workshop

MPS-TEC Format A and C | *Prerequisite: one year of algebra*
This course is designed for students who have studied algebra and would benefit from additional practice in solving equations and manipulating algebraic expressions. The course will focus on skills typically covered in an algebra course including linear equations, equations and inequalities with radicals and absolute value, quadratic equations, systems of equations, algebraic fractions and polynomial expressions. **Some of the work will require a graphing calculator or graphing software.**

Problem-Solving in Algebra

MPS-FAL Format A and C | *Prerequisite: one year of algebra*
This class assumes that students have successfully mastered the algebraic tools typically explored in a first-year algebra course. Through problem solving you will deepen your understanding of concepts and develop new algebraic tools. This course is not intended to cover the material of a full term's course at the student's regular school. **Any calculator is sufficient for this course.**

Problem-Solving in Geometry

MPS-BGE Format B and D | *Prerequisite: one year algebra that includes the study of systems of equations and quadratic equations*

This class offers an investigative approach to geometry for students who have not had a formal geometry course. We will integrate algebraic concepts covered in previous study with new geometrical ideas. Explorations may take place using a calculator or computer software as well as traditional manipulatives. As with all of our offerings, the focus will be on problem solving, rather than on memorization of theorems presented to the students. This course is not intended to cover the material of a full term's course at the student's regular school. **Any calculator is sufficient for this course.**

Cryptography

MPS-CRY Format B | *All Grades*

In this course you will learn about the historical development of codes and of ways to share information securely between two people. You will compare the effectiveness of various types of codes and encryption keys and understand how their weaknesses might be exploited. To understand mathematical underpinnings of both historical codes and modern public key encryption, you will explore some topics in statistics and more extensively – topics in number theory including divisibility, prime numbers, and modular arithmetic. **Any calculator is sufficient for this course.**

Problem-Solving: Fun with Probability

MPS-PRO Format D | *Prerequisite: one year of algebra and one year of geometry*

This course provides an elementary introduction to probability with discrete variables through problem-solving for students who like to be challenged in mathematics. We will start with entry-level problems to study/review combinations and permutations before moving on to more challenging problems. Topics will include combinatorial analysis used in computing probabilities, the basic principles of probability, conditional probability, and geometric probability. Many interesting exercises will be presented for practice in class. This course is not intended to cover the material of a full term's course at the student's regular school, but rather to open a window to inspire students' mathematical curiosity and imagination. **Any calculator is sufficient for this course.**

Introductory Problem-Solving in Trigonometry

MPS-PST Format C | *Prerequisite: minimum one year of algebra and one year of geometry*

Students will derive the concepts and identities of trigonometry by solving practical problems and by applying working knowledge of algebra and geometry. The class will explore such topics as the right triangle and circular definitions of trigonometric function, the Law of Sines, the Law of Cosines, and graphs of trigonometric functions. This course is not intended to cover the material of a full term's course at the student's regular school. **Some of the work will require a graphing calculator or graphing software.**

Advanced Problem-Solving in Trigonometry

MPS-ADV Format C | *Prerequisite: minimum one year of algebra and one year of geometry*

Students will derive the concepts and identities of trigonometry by solving practical problems and by applying working knowledge of algebra and geometry. This course focuses on analytic trigonometry, graphs of trigonometric functions in the coordinate plane, and more sophisticated applications of triangle trigonometry. Understanding of concepts is developed through problem solving. The course assumes students are comfortable with principles of right triangle trigonometry, and additionally have had some exposure to the Laws of Sines and Cosines. This course is not intended to cover the material of a full term's course at the student's regular school. **Some of the work will require a graphing calculator or graphing software.**

Statistics Through Simulation

MPS-STC Format B | *Prerequisite: two years of algebra*

Students will discuss where data comes from, such as polls, surveys and experiments; they will study how to organize data and infer relationships between variables. Students will study enough probability to be able to discuss the role of chance and randomness in outcomes. Through simulation, they will decide how closely the results of polls actually mirror reality and how far the results of experiments can be extrapolated to the wider world. There will be many activities in class, and students will use computers and calculators to display and analyze data. This course is not intended to cover the material of a full term's course at the student's regular school. **Some of the work will require a graphing calculator or graphing software.**

Adventures in Problem-Solving

MPS-APS Format B | *Prerequisite: two years of algebra and one year of geometry*

This is intended to be a challenging course for students who like mathematics, who have had at least two years of algebra and one year of geometry, and who have found most of the problems presented to them in their regular math

courses rather easy to solve. You will encounter a wide variety of unusual mathematics problems and will develop a fuller understanding of the various patterns and methods used in mathematical problem solving. To succeed in this course, students need to participate actively and be willing to persevere if their first attempts do not succeed. This course is not intended to cover the material of a full term's course at the student's regular school. **Some of the work will require a graphing calculator or graphing software.**

Introduction to Discrete Math

MPS-MIDM Format C | *Prerequisite: two years of algebra and one year of geometry*

By solving problems, playing games, and engaging in class discussion, students in this course will encounter and explore some basic but fundamental ideas and techniques of discrete mathematics. We will begin with an introduction to formal logic and methods of proof before turning to our main objects of study—sets, relations, functions, and graphs. Additional topics may include counting techniques, elementary number theory, recursion, Turing Machines, and applications of our results to the sciences. This course is not intended to cover the material of a full term's course at the student's regular school. **Any calculator is sufficient for this course.**

Problem-Solving in Intermediate Precalculus

MPS-IPS Format A, B, C, and D | *Prerequisite: two years of algebra, one year of geometry, including the study of trigonometry*

This course is appropriate for students who have completed the equivalent of two full years of algebra and one year of geometry (including right triangle trigonometry). We will focus on extended topics that typically appear in a Precalculus or Functions course. Topics studied may include circular trigonometry, vectors, sequences and series, parametric equations, matrices, and logarithms. This course is not intended to cover the material of a full term's course at the student's regular school. **Some of the work will require a graphing calculator or graphing software.**

Problem-Solving in Advanced Precalculus

MPS-PRE Format D | *Prerequisite: precalculus or elementary functions including the study of analytic trigonometry*

This class is intended for students who have completed a precalculus course. You will be presented with challenging problems that will deepen your understanding of what you have already studied and will introduce additional topics often not explored in a typical pre-calculus course. Examples might include complex numbers, sequences and limits, combinatorics and probability and properties of functions. The course will enable students to discover new strategies for solving problems. This course is not intended to cover the material of a full term's course at the student's regular school. **Some of the work will require a graphing calculator or graphing software.**

Problem-Solving in Calculus

MPS-CAL Format D | *Prerequisite: precalculus including analytic trigonometry*

This course is intended for students who have successfully completed a Precalculus course including Trigonometry. We will use an inductive approach—students will solve problems designed to foster a knowledge and understanding of the principles and applications of calculus. Depending on progress, some problems involving differential equations and/or integration may also be discussed. Topics might include: differentiation, implicit differentiation, related rates, optimization, anti-differentiation, accumulation of change (approximate and exact), and differential equations, including geometric and other applications. This course is not intended to cover the material of a full term's course at the student's regular school. **Some of the work will require a graphing calculator or graphing software.**

Problem-Solving in Advanced Calculus

MPS-PAC Format D | *Prerequisite: elementary single-variable calculus, including limits, differentiation and integration*

This course will address concepts typically found during a second semester college calculus course. Specific topics will depend to some extent upon progress and student aptitude, but might include a selection from parametric equations, polar coordinates, sequences and series, further integration techniques and differential equations. These are topics in the College Board's AP BC syllabus. This course is not intended to cover the material of a full term's course at the student's regular school. **Some of the work will require a graphing calculator or graphing software.**

Introductory Problem-Solving in Matrix Algebra and its Applications

MPS-MAX Format A | *Prerequisite: a full and rigorous precalculus course, or higher, and strong algebra and geometry skills*

This course is an introduction to the theory of linear algebra, the study of systems of linear equations and their solutions. The interplay between algebra and geometry affords powerful and quite different insights into both. Topics might include Gaussian elimination, matrices and geometric application, elementary matrices, linear transformations of eigenvalues/eigenvectors/diagonalization. This course is not intended to cover the material of a full term's course at the student's regular school. **Some of the work will require a graphing calculator or graphing software.**

Science

Our goal in the Exeter Summer Science Department is to provide students with an experience that will motivate them to continue their studies in science and create a foundation of knowledge and skills for future coursework. All science courses emphasize the development of scientific concepts and problem-solving skills. Teachers encourage and expect extensive student participation. Each course includes comprehensive laboratory work that develops skills such as analytical thinking, data analysis, and scientific writing. Our course offerings can be classified as introductory courses and enrichment courses. The introductory biology, chemistry, and physics courses provide you with important concepts and skills that will help prepare you for future coursework.

Introduction to Biology

SCI-ITB Format B and D | *All Grades*

This course is designed for a student who has never taken a biology class before, but is planning on taking one in the future. Topics covered include cell biology, microscopy, Mendelian genetics, molecular genetics, and unicellular organisms. Readings, Harkness discussions, and cooperative laboratory exercises will focus on developing the student's ability to integrate and apply what is learned in the classroom.

Introduction to Chemistry

SCI-CHE Format B and D | *Prerequisite: one year each of algebra and physical science*

This course is designed for students who are interested in chemistry and wish to study the subject through laboratories and class discussions. Students need to have completed one year of algebra and a physical science course prior to taking this class, but no prior experience in chemistry is required. The course emphasizes the development of scientific thinking and collaborative problem-solving skills through an empirical exploration of topics commonly taught in most first-term chemistry classes. These topics include classifying matter, measurement, modern atomic theory, the periodic table, atomic structure, bonding, chemical formulae, balancing equations, mole conversions, and stoichiometry. This course will prepare students to study chemistry at a college-preparatory level.

Introduction to Electronics

SCI-ELE Format D | *Prerequisite: one secondary level high school science course*

This introduction to electronics is a hands-on, project-oriented course. You will build several circuits including timers, alarm systems, amplifiers, and light-wave communication systems.

Introduction to Physics

SCI-IPH Format A and C | *Prerequisite: Algebra II and basic trigonometry*

In this course, you will be exposed to a sampling of introductory physics topics. Strong laboratory and mathematical components will help you learn how to observe and analyze physical phenomenon. The hands-on component of this course is designed to encourage student interest in physics and to give you a conceptual understanding of some fundamental physics topics. Possible topics of discussion and lab activities include: motion in one- dimension, motion in two-dimensions, conservation of energy, electricity, magnetism, and properties of light and sound waves.

Advanced Biology

SCI-ABI Format C | *Prerequisite: one year of biology*

This course is designed for students who have completed a full year of introductory biology at the high school level and plan to take a year-long advanced biology course in the future. Through lab work and class discussions, we will emphasize a hands-on, collaborative approach to learning biology. Topics may include cell structure, Mendelian genetics, mitosis, meiosis, molecular genetics, cellular respiration, and ecology.

Advanced Chemistry

SCI-ACH Format A | *Prerequisite: one year of chemistry*

This course is designed for students with a strong interest in the physical sciences who are considering a career in science, engineering, or a medical related field. Prior to enrollment, students should possess an understanding of stoichiometry from a previous chemistry course. Over the five weeks, students explore a variety of advanced topics chosen by the instructor and based upon student input. Students will study topics ranging from analytical chemistry and thermodynamics to kinetics and organic chemistry, depending on student interest. This class will employ laboratory exercises and class discussions in order to investigate chemical phenomena and develop scientific thinking skills.

Environmental Science

SCI-ENV Format A | *Prerequisite: one science course at the high school level*

This course will provide students with some skills needed to more completely understand the impacts of human actions on the natural world and the importance of fostering a sustainable future. The curriculum will focus primarily on the interrelationships between the environment, natural resources, ecological systems and human society through close examination of current environmental issues. Students will explore the underlying science as well as the controversies surrounding these issues. Due to the nature of the curriculum, students will be exposed to aspects of biology, chemistry, oceanography, and geology that will likely show up and aid them in future academic experiences. Topics that will be examined include: the use and availability of water, sustainable food systems, climate change, energy resources, and population growth. Students will explore practical problems that affect our planet and possible solutions through case studies, discussions, field work, and laboratory activities.

Genetic Engineering

SCI-GMB Format A and C | *Prerequisite: one year of high school biology and a strong interest in laboratory work required, one year of chemistry also recommended*

This course provides hands-on experience with some of the recombinant DNA techniques that have revolutionized biology and medicine. You will study the history of genetic engineering in both plants and animals and perform laboratory investigations to highlight this process. You will analyze DNA using gel electrophoresis, engineer bacteria to glow under UV light and purify proteins using similar techniques to those used in the biotechnology industry. The class will discuss the ethical issues that are relevant in this new and changing field at the Harkness table.

Human Physiology and Anatomy

SCI-HPA Format B and C | *Prerequisite: one year of biology at the secondary level*

This course will examine the structure and function of the human body. We will study the complexity of and interactions among major organ systems in order to gain a complete understanding of human physiological systems. Systems of study include the digestive, cardiovascular, respiratory, and nervous. Laboratory investigations will include several dissections.

Marine Biology

SCI-MBI Format A | *Prerequisite: one year of biology at the secondary level*

This course is intended to help you gain an understanding of the seas and discover how the work of the marine biologist

is done. You will be introduced to concepts of the physical characteristics of the oceans and then conduct a detailed survey of the specific organisms (from sponges to whales) of the New England coastline. The ecology of intertidal, coral reefs, salt marshes/estuaries, deep sea and hydrothermal vent communities is also introduced. Close proximity to the New Hampshire seacoast area provide opportunities for field trips to various ecosystems such as salt marshes, rocky coast tidal pools, and mudflats. Hands-on labs and the availability of the marine “touch tank” will supplement our study of marine protists, invertebrates, vertebrates, and mammals.

Modern Astrophysics

SCI-MAS Format C | *Prerequisite: one year each of physics, algebra, and geometry*

This is a rigorous science course for students who have had a year of physics as well as algebra and geometry. We will focus on the phenomena of the heavens and how we understand them. Throughout the course, our explorations will emphasize the thread of unity of the cosmos. We will begin with the creation of the universe as we think of it in the Big Bang and proceed to consider the origin of galaxies, stars, our solar system, and, finally, life itself. Lab work and observing from the Grainger Observatory are an integral part of the course.

Observational Astronomy

SCI-AST Format B | *All Grades*

This is a course for students without a strong science background. We will focus on observational astronomy, that is, what we have observed in the heavens and the methods we use for observation. You will be introduced to concepts of chemistry and physics, but the course does not require prior experience in these subjects. We will cover topics that include the solar system and the sun, stars, galaxies, and cosmology. Lab work and observing are an integral part of the course. Students will have the opportunity to observe the heavens from the Grainger Observatory.

Relativity and Quantum Physics

SCI-RQP Format A | *Prerequisite: at least one year of physics and mathematics through Algebra II*

In the late nineteenth century, bright students were discouraged from studying physics because there was nothing left to discover! Beginning in 1899, that attitude changed with the development of quantum theory and relativity, showing us that the world is a much stranger, more complex place than we had ever imagined. In this course, you will explore the world of quantum and relativistic physics, along with even more modern ideas of string theory and particle physics. Topics may include wave/particle gravitation, black holes, and nuclear and particle physics.

Sports Science

SCI-SPO Format B and D | *All Grades*

This course is for students interested in developing a more solid understanding of the science behind performance enhancement. It draws from many disciplines including physics, anatomy, physiology, biomechanics, and kinesiology as it explores the relationships among science, exercise, and sports activities. Through the study of the musculoskeletal and cardiovascular systems and evaluations of those systems as they relate to exercise and activity, students will be able to safely assess, design, prescribe and update exercise programs. The goal of the course is to have students understand and produce a scientifically based training and fitness plan to help themselves and others more effectively prepare for the sport or activity of their choice. Lab-based, the course requires students to perform and measure simple activities. Students signing up for this course should have a keen interest in sports and/or physical activity.

Exploring Careers in Animal Science

SCI-CAS Format D | *All Grades*

This course is designed for students who love animals and are considering a profession working with them. In this hands-on class students will explore the care and behavior of all types of animals from household pets (dogs and cats), to exotics (reptiles and birds), to large animals (cows and horses), to wildlife. Students will explore a type of animal and then perform a detailed analysis of careers that work with this type of animal. Careers explored will include veterinarian, animal behaviorist, and wildlife biologist.

Molecular Biology to Construct Transgenic Animals

SCI-MOL Format D | *Prerequisite: one year of high school biology and strong interest in experimental lab work required*

This course explores the subjects of genetics, molecular biology, and bioinformatics analysis through hands on activities and student research projects. You will partner with scientists from Stanford University to create transgenic fruit flies. You will perform genetic experiments to test how targeted loss of gene function affects organ development in fruit flies. The goal of this course is for students to generate one or more new fruit fly strains. New fly strains will be eventually maintained in national fly strain repositories and may become durable, useful tools for further research by scientists around the world.

The Charles J. Hamm '55 Leadership Program at Phillips Exeter Academy

Now in its eleventh year, this is a special UPPER SCHOOL program open to rising 10th, 11th, and 12th graders. Admission to the program is limited and selective. In the *Leadership Program* you will be immersed in a learning environment designed to foster opportunities to reflect upon the characteristics and contexts that enable effective leadership. Towards this end, the program will incorporate traditional academic coursework as well as workshops, speakers, case studies, and group projects that will encourage you to discover and cultivate your own leadership potential both on the Exeter campus and within the surrounding communities.

As part of the *Leadership Program*, you will be required to take two classes: *Leadership & Society* and *The Practical Leadership Seminar*. In addition, you will enroll in one other class of your choice in the “C” or “D” format. This class will enable you to tailor the program to fit your own interests and leadership goals. You should expect to spend additional time outside the classroom with workshops, films, outside speakers, group projects, and excursions. Key aspects of leadership that this program seeks to develop include: personal confidence, successful oral and written communication, awareness of context, ethics, decision-making, conflict resolution, problem-solving, group dynamics, the relationship between leaders and followers, and an understanding of various leadership theories and models. Although what happens in the classroom around the Harkness table is crucial to each student’s understanding of what leadership means, the *Leadership Program* offers opportunities for further self-development within the context of hands-on activities such as capstone projects, excursions, and the Public

Speaking Workshop. **Because of the rigorous nature of this program, non-native speakers of English will be required to submit a TOEFL (with a score of 100 for the iBT test) in order to be considered for the Leadership Program.**

Capstone Projects

Each leadership student will become a member of a capstone team tasked with impacting the Exeter Summer community in a meaningful way. In previous summers, groups have coordinated Environmental Awareness campaigns, held concerts in the student center, organized a “Speed Friending” event, and made a video memorializing the Exeter Summer experience. These projects are intended to be cooperative efforts where each team member is equally involved in accomplishing an overarching goal. Through this process students will learn to develop a variety of skills including: setting a goal, forming an agenda, time management skills, conflict resolution, resource allocation, and coordinating teamwork.

Excursions and Workshops

As part of the Leadership Program students will be taken on excursions to places such as a ropes course, where students will challenge their critical thinking and team building skills, and a trip to visit a collegiate program at institutions like Dartmouth College or Harvard University. Students also travel to Boston to the the John F. Kennedy Library or Edward M. Kennedy Institute for the Senate, which helps bring to life topics students will study in the classroom. Additional activities such as the *Public Speaking Workshop* will focus on specific skills that play a central part of successful leadership.

Leadership & Society

In this course you will begin to explore the variety of views about what leadership is and what leaders do. We read selections from leadership scholars as well as the leaders they study, including Machiavelli, Martin Luther King Jr., and Winston Churchill. We will discuss varied leadership topics including leadership traits, power and influence, followership, situational leadership, ethics, and “bad” leadership. The class will also take a look at issues

of inclusiveness in leadership, including the influences of both culture and gender. You will conclude the summer by developing your own leadership philosophy and a long-term plan for your continued leadership development.

The Practical Leadership Seminar

This seminar is designed to help bolster personal leadership skills. Through workshops, guest speakers, case studies, and field work you will reflect upon your own potential strengths and weaknesses as leaders, explore how to best operate in an organizational setting, and develop strategies to cultivate your potential for leadership and for active following. By providing a framework for exploring the contexts and skills necessary to practice successful leadership, this seminar will allow you to develop your capacity for public speaking, critical thinking, conflict resolution, decision making, community building, and teamwork. Ultimately, the seminar intends to create a supportive and reflective environment within which you can enhance your capacity for leadership.

Electives

In addition to the two core classes, the *Leadership Program* also recommends the following electives. Although students are not required to select their third class from one of these electives, these classes are suggested because their topics complement the themes and issues of the core Leadership Program classes.

- Global Justice HUM-JUS (C format)
- Debate & Argumentation EWS-DAA (C format)
- Social Psychology SPS-SOC (C format)
- Leadership for a Better World SSC-LBW (D format)
- Leadership in Athletics SSC-LIA (C format)
- United Nations: Global Community SSC-UNN (D format)

Phillips Exeter Academy's The Process of Creativity

Creativity does not just happen – it comes from hard work based on process and revolutionary thinking. It is the experience of making something that did not exist before and was unknowable at the start. Creativity is open-ended yet bound by history, nature, and practice. It can change the world in a moment, or so incrementally it is barely noticed. Creativity is also considered one of the most essential and imperative skills to have in the 21st Century.

Your course of study will explore creativity in two distinct but overlapping modes: design and experience. Each course will have readings, discussions and hands-on projects. This is a wonderful opportunity for students to engage Exeter's Harkness method and Stanford's interdisciplinary approach to learning and problem solving through playful experimentation.

Though there are two courses, the overall approach to the cluster is one of a collaborative studio practice and the sharing of ideas across sections. To further emphasize the idea of "practice", course time will be augmented by a mandatory facilitated open studio time (Maker Lab) for homework and exploration. This studio time will be modeled after Stanford's Product Realization Lab (PRL), <https://vimeo.com/66198276> or <https://vimeo.com/97360300>

As part of *The Process of Creativity Cluster*, students will be required to work in the Maker Lab and take the following two classes:

The Creative Experience

What makes creativity truly original? Where do big ideas come from? How can you cultivate your own personal creativity in more innovative ways? This class will look to groundbreaking inventions, avant-garde expressions, and

creative masters through-out history as our guides. Through large-scale building, experimental making, readings, and communal and personal reflection, students will experience the transformational power of creativity and emerge with a deeper sense of self-expression and creative confidence.

Visual Thinking

Visual Thinking is an introduction to the unique design and creative philosophy of the Design Division at Stanford University. The course will focus on finding creative outcomes using all the problem-solving parts of the brain, with special emphasis on developing visual, spatial, kinesthetic, and intuitive intelligences. Through readings, in-class exercises, and design projects, students will be introduced to the foundational skills of "design thinking." Drawing, prototyping, iteration and testing, and teamwork will all be engaged as ways to awaken and enliven student's creativity.

Maker Lab

Almost all of the Creativity Cluster's homework projects, as well as many in class activities, involve hands-on work. Students will be introduced to the lab through safety trainings, equipment tutorials and engaging assignments aimed at building confidence and understanding. The Maker Lab offers a spacious, supervised setting for students to make and experiment, building a culture of play and a community of creativity.

Electives

In addition to the two core classes, *The Process of Creativity* also recommends the following electives. Although students are not required to select their third class from one of these electives, these classes are suggested because their topics complement *The Process of Creativity* classes. You may choose your third class from any of the C and D offerings in the catalog.

- Architecture SAR-RCH (C/D MWF or C/D TTS format)
- Drawing: Learning to Look SAR-DRW (C format)

The Penn Program: Community Engagement

Author William Penn, in pondering his responsibilities to humankind, wrote, “I expect to pass through this world but once. If there be any kindness I can show, or any good thing I can do for any fellow being, let me do it now, for I shall not pass this way again.”

The Penn Program takes its cue from these words, creating space for students to do good work in the community during their brief time in Exeter. The Penn is a co-taught, interdisciplinary cluster experience blending elements of social innovation and design thinking. It provides students the opportunity to identify, research, and engage in a community issue of their choosing. Project ideas are limited only by student imagination and have included the following: advocacy for local water quality; the design and implementation of a sustainable pizza box; the development of mindfulness practices in school curricula; the creation of a school thrift store; the recovery and documentation of indigenous narratives in the Seacoast; collaborations with senior citizens; community building through free public events. In the end, students will harness their collective energies and skills to propose and attempt to execute a solution to the issue they choose; whatever their project, it will include real, meaningful work done in collaboration with people who care deeply about the topic at hand.

Note: Penn students should enjoy hands-on, project-based learning; they should demonstrate tolerance for uncertainty and a willingness to be flexible as their project evolves. For more information, please visit www.afersch.com/thepenn

Ecologies of Exeter: the People, the Places, the Community

In order to affect change on a greater scale, a fundamental understanding of one’s community in a historical and contemporary context is necessary. This course will provide students with a myriad of opportunities for them to connect with the people and places of Exeter. Following an interdisciplinary approach to Exeter’s history, geography, cultural narratives, contemporary systems (energy, water, food, and waste streams), political ecologies, demographics—all of which will inform and shape student projects. Course content will be customized, intersecting student projects to be as useful to project teams as possible.

Principles of Design Thinking, Leadership, and Community Organizing

Large scale community issues require creative solutions. This course will provide students foundational theory and instruction in approaches to Design Thinking, Leadership, and Community Organizing, thus promoting highly-functioning project teams. Design Thinking content will prompt students to consider the conditions that promote innovation and progress. Explicit leadership training will help students understand the leadership role that comes most naturally to them and will help them recognize other potential roles they can fill to meet the needs of their group. Community Organizing will teach students how to build relationships of mutual respect and trust in the community; it will refine their communication skills in writing and speech so they are able to communicate effectively with peers and adults involved in their projects. They will learn the executive functioning skills involved in managing a long-term project and build the confidence and independence required to carry their plans to fruition.

The Penn Project Practicum

In true Harkness fashion, this course will provide students the space to do the actual work of their projects. Students will work under the guidance of their instructor, collaborating to drive their projects toward completion. Progress will be documented in a project journal, and students will be asked to reflect along the way about their learning. This course will culminate in a formal Demonstration of Learning to their classmates, members of the PEA community, and members of the broader community as they share both the work of their project and articulate what they have learned through the experience.

SAT Preparation with Academic Approach[®]

The Academic Approach[®] SAT Test Preparation Course

At Academic Approach, we see SAT preparation as an opportunity to engage students in real learning. We, as teachers, are warm, supportive professionals who know how to make a classroom experience effective in raising scores, academically enriching, and, just as importantly, enjoyable for the students. Academic Approach classroom courses are uniquely effective and efficient because of the high level of customized teaching we provide. As expert tutors, we know that one size does not fit all, so we differentiate each class, customizing each study plan to the class's specific strengths and weaknesses. **Please note that this supplementary course requires an additional fee.**

The SAT course does not fulfill the three-course load requirement for UPPER SCHOOL residential students. UPPER SCHOOL day students must enroll in at least one other course before signing up for this class.

SAT Preparation

ECC-SAT Formats A, B, C, and D | All Grades

We begin the 24-hour, five-week SAT courses with a diagnostic test; we then analyze the results of these diagnostics, giving us an in-depth understanding of each class's most common and immediate learning needs. Our extensive curriculum supports students with a comprehensive review of every rule and strategy necessary for test-taking success. In order to measure individual score improvements and to realign their course of study, students take a second diagnostic test in week four of the course. The results of the diagnostic become the basis for an individual analysis of the student's strengths and weaknesses. Families are welcome to contact Academic Approach at www.academicapproach.com or 212.348.4172 before and after the course for a complimentary consultation.

Academic Approach

Please note: we recommend that each student bring a calculator for the math portion of the instruction and for the diagnostic tests. Any four-function, scientific, or graphing calculator is acceptable for the SAT.

Extracurricular course fee: \$995*

*Fees are NOT refundable once the Exeter Summer program has started.

Chicago • Boston • New York City

www.academicapproach.com

UPPER SCHOOL Physical Education Classes

Physical Education, an important component of Exeter Summer, promotes fitness, cooperation, sportsmanship, and the learning of new skills. The offerings are designed to introduce fundamental rules and skills, provide some competition and recreation, and stimulate long term participation in athletics. All UPPER SCHOOL boarding students participate in this program four afternoons per week, (Monday, Tuesday, Thursday, and Friday) for at least one hour each day between 2:00 and 4:00 pm. **Note: Physical Education is optional for UPPER SCHOOL Day students.** Sports are split into two, 2-½ week sessions and you select your sports choices during the application process. The first session is July 2 through July 16 and the second session is July 18 through August 1. It may not be possible for all students to get their first choice for both sessions; however, we will make every attempt to enroll students in a preferred activity in one of the sessions.

Equipment will be supplied for some activities, but students should bring their own athletic equipment. **Refer to the individual class descriptions for special equipment and/or attire requirements.**

The Director of Athletics supervises the program and classes are taught by professional Physical Education instructors. We strongly encourage students to explore new sports activities during Exeter Summer.

Basketball

This class will provide experiences intended to improve students' skills and understanding of the game of basketball. They will participate in drills and exercises that will lead to competitive play.

Competitive Basketball

Students will be organized into teams that will play a competitive game each day and will play a round robin tournament with a game each day. Physical Education Instructors will officiate and direct the competition so that students will have the opportunity to improve their skills in a competitive, recreational environment.

Cross Country Running

Students will improve their cardiovascular fitness and their physical strength through daily runs on the fields, in the woods and throughout the campus and town of Exeter. The class is structured for both the novice runner as well as the serious, competitive runner. A stretching warm-up and cool down activity will also be included. **Proper footwear is required.**

Introduction to Crew

Students will learn the fundamental movements and strokes required in Crew. They will learn to work independently and cooperatively to propel the barge that is used for novice rowers. **This class is offered only during the second session of PE classes and is limited to 12 students.**

Introduction to Dance

In this fun introduction to dance class, students will have the opportunity to learn different dance techniques including modern jazz, hip-hop, musical theater, video dance and more! No prior dance experience is necessary!

Lacrosse

The fundamentals of the game of lacrosse are taught through drills, exercises and small team recreational play. The class is intended for students with little or no previous experience as well as those that desire to improve their fundamental skills. The class is non-contact and coeducational. **Lacrosse sticks will be provided.**

Soccer

This class is designed for students who would like to learn or improve their skills in a competitive, recreational environment. Students will be organized into teams and will play a round robin tournament with a game each day. A Physical Education Instructor will officiate and direct play in order to help each student improve during the session.

Squash

The squash class is structured to teach beginners, as well as those with some experience, the basic strokes and tactics of the game. Students will progress to the point where they will be able to play a competitive match. Racquets, balls and eye-protection will be supplied but **non-marking, non-black soled shoes are required.**

Ultimate Frisbee

In this class students will compete daily in a team structured situation where they will be required to be physically active, play cooperatively and compete in a non-traditional team game. Students will be active in a recreational environment that challenges them physically and mentally.

Volleyball

This class is structured to provide experiences for beginning, intermediate and experienced players who are looking to improve their skills in the game of volleyball. Drills and exercises daily in the fundamentals and proper techniques will lead to competitive play as the class progresses. ***Students may sign up for only one 2-½ week session.***

Walking

This class will provide daily fitness exercise in a non-competitive setting. Excursions each day will venture around the fields, through the woods, beside the river and through the community of Exeter. ***Proper footwear is required.***

Weight Training

This fitness program will introduce students to our fitness facility and the fundamental principles of cardiovascular and resistance training. Instruction is given regarding the basic mechanics of movement, physiology of exercise, the role of stretching and the use of heart rate/target zones for training. Daily activities are based on individual student goals, emphasizing the development of life-long fitness habits.

Yoga

This class is structured to provide a gentle series of exercises and stretching that will involve warm-ups, strengthening of abdominal muscles, back and core, standing postures and relaxation and recovery. The maneuvers will be set to popular music as well as classic yoga relaxing music and will emphasize “breath to movement” theme.

Learn to Swim

This class is designed for students who are non-swimmers and want to learn to swim. They will be taught basic lessons in floating and fundamental swimming strokes to increase their comfort level in the water. ***Proper swimwear required.***

Fitness Swimming

This class is structured to provide a program that will improve a student’s fitness and overall well-being through swimming. The goal will be to achieve cardiovascular fitness through stroke development and participation in a variety of swimming workout methods. ***Proper swimwear required.***

Competitive Swimming

This class is intended for the student who is a serious swimmer and who desires to train daily for competitive swimming competitions. The class will be structured to assist the students in personalizing their programs in order to maintain or improve their performance during the summer. ***Proper swimwear required.***

Beginner Tennis

This class is designed for students who have either very limited experience or no knowledge in the game of tennis. Students will learn and practice the basic racquet skills and strokes. Students will also learn the basic rules so they can progress to playing both singles and doubles matches. ***Proper footwear and exercise clothing are required.***

Intermediate Tennis

This class is designed for students who have already learned the basic skills and rules of tennis. Students will be evaluated at the onset and placed in smaller groups based on ability and experience. After evaluation and limited instruction, students will progress to singles and doubles competitive matches. ***Proper footwear and exercise clothing are required.***

Competitive Tennis

This class is for students who have experience playing tennis and who wish to play competitive matches each day. Students must have the skill, knowledge and experience to play competitively against players of a similar ability. ***Proper footwear, exercise clothing and a racquet are required.***

Advanced Competitive Tennis

This class is for top-level tennis players who have the skill and knowledge to play a high level of tennis. Students will play a singles or doubles match each day and a competitive ladder will be established. ***Proper footwear, exercise clothing and a racquet are required.***

NOTE: UPPER SCHOOL students may elect, for a fee, to enroll in Exeter Crew Club, Exeter Elite Volleyball Club, or Exeter Elite Soccer Club as their sports option for the entire five weeks of Exeter Summer. If you want to participate in one of these programs, make sure to select your option from the sports dropdown.

Exeter Crew Club

Crew at Phillips Exeter Academy enjoys a long and prestigious history. Exonians have rowed for national championships, high school and collegiate teams and have represented the United States in the Olympics and in other international competitions.

Exeter Summer offers Crew as a special intensive program that students can choose in place of the regular sports program. The Crew students meet four times a week on Mondays, Tuesdays, Thursdays and Fridays from 2:00 to 4:00pm for the entire 5 weeks of the summer program. UPPER SCHOOL students will train with experienced coaching staff in Saltonstall Boathouse and on the tidal Squamscott River.

We offer two levels:

Beginner/Novice – This option will allow students who have never rowed before to participate in crew. The five-week program will be dedicated to teaching the finer aspects of the rowing stroke as well as general fitness.

Experienced Skills Program – This option offers a more intensive program for experienced rowers. Students will be given highly detailed technical coaching as well as a more rigorous training plan to prepare high school rowers to return to their home teams a better oarsperson. In addition, there will be racing opportunities for the top rowers within the program.

Extracurricular course fee: \$995 which includes an Exeter Crew shirt and baseball cap. This special program takes the place of the regular Physical Education classes. If you want to participate in this program, select *Exeter Crew Club* in the sports dropdown.

Exeter Elite Volleyball Club

The Exeter volleyball program is one of the strongest in New England and has won five girls and boys New England Championships in the last three years.

Exeter Summer offers Exeter Elite Volleyball as a special intensive program that students can choose in place of the regular sports program. The Exeter Elite Volleyball Club meets four times a week on Mondays, Tuesdays, Thursdays and Fridays from 4:00 to 5:30pm for the entire 5 weeks of the summer program. The UPPER SCHOOL students will train with the Phillips Exeter Academy Varsity Head Coach in the Love Gym.

The program is designed to increase the ability and skill of all participants. All levels are welcome. The focus is on the fundamentals and perfecting technique. Skills learned will include the pass, set, hit, block, and serve. We will cover float serving, top spin serve, jump float, and jump spin serving. The proper technique in forearm passing, overhead passing, and overlap rules of the game will be taught. We will go over blocking systems and footwork that is commonly used in the collegiate and professional game. We will learn a 3-step approach and work on hitting a variety of setting tempos. Players will increase their volleyball IQ and ball control through drills, games, and play.

Players should bring proper athletic clothing and shoes; kneepads are optional.

Extracurricular course fee: \$850 which includes an Exeter Volleyball shirt and ball.

This special program takes the place of the regular Physical Education classes. If you want to participate in this program, select *Exeter Elite Volleyball Club* in the sports dropdown.

Exeter Elite Soccer Club

Soccer at Phillips Exeter Academy has a long, storied history. Both girls' and boys' programs successfully compete in the highly competitive New England Prep School League. Players from each program go on to play collegiately at the Division 1 and Division 3 levels – including two players who have won the Division 3 National Championship in recent years.

Exeter Summer offers Exeter Elite Soccer Club as a special intensive program that students can choose in place of the regular sports program. Students will train with a Phillips Exeter Academy Varsity Coach four times a week on Mondays, Tuesdays, Thursdays and Fridays from 4:00 to 5:30pm for the entire five weeks of the summer program.

The program is designed to improve a player's skill, ability, and tactical understanding of soccer. Through an assortment of drills and games, students will develop in a variety of ways including their passing range and accuracy, first touch, dribbling skills, 1v1 defending, crossing and finishing abilities, team attacking, and team defending.

A pair of cleats – no metal bottoms, are required. Turf shoes are optional.

Extracurricular course fee: \$850 which includes an Exeter Soccer shirt. This special program takes the place of the regular Physical Education classes. If you want to participate in this program, select *Exeter Elite Soccer Club* in the sports dropdown.

Extracurricular Activities

Extracurricular music activities are organized for students who wish to employ their talents and pursue their interests outside of the formal musical performance classes. We encourage students to bring their musical instruments and to join one or more of the vocal or instrumental groups.

You can sign-up for these free extracurricular music programs when you arrive on campus.

Jazz Jam - Open to the entire Summer community who have previous experience playing jazz. This group provides an opportunity to sharpen improvisation skills with other musicians who have similar interests in the blues and other standard tunes. Novices are welcome to attend to listen, support the players, and participate when they feel comfortable. Participants are welcome to “sit in” on a final session and concert the last week of classes. ***Meets on Wednesday evenings from 6:30 to 7:30 pm***

Evening Ensembles - All interested students are encouraged to participate, particularly those not enrolled in the *Chamber Music* class. This group provides coaching and accompaniment of solos. Auditions for forming chamber groups will be held during the first week of the session. ***Meets on Monday and Wednesday evenings from 6:30 to 7:30 pm***

Glee Club - Open to the entire Summer community, this group sings and performs music from a wide range of traditional and contemporary music. ***Meets on Tuesday and Thursday evenings from 6:30 to 7:30 pm***

Private Music Lessons

The Academy offers lessons in voice and on a variety of instruments. ***Students who want to take music lessons should fill out the appropriate information on the application and must apply by April 15, 2019.***

\$375 for five 50-minute lessons

\$225 for five 25-minute lessons

Free Extracurricular Course Offerings

Students who want to sign-up for one of the free courses below must do so by email to summer@exeter.edu by May 1, 2019. Space is limited and students may only sign-up for one of these classes.

Introduction to Mindfulness

Based on the KORU Mindfulness Program, out of Duke University, this 4-week class will introduce you to the practice of mindfulness. Several very useful skills, including meditation, that can help with stress management and living a more open and full life, will be taught. Research has shown that practicing mindfulness over time can help with improved sleep, enhanced learning, resiliency and maximizing one’s potential. This hour-long class is highly structured and requires a commitment to attend all four weeks. It involves keeping a daily log and committing to a mindful practice of your choice for 10 minutes a day. Fun, interactive and very useful to our busy lives, this class is a wonderful way to strengthen your ability to focus and to gain perspective on the stresses of everyday life. All experience levels welcomed. ***Meets on Monday evenings from 5:30 to 6:30 pm***

Bridging Cultures Tool Kit

In this class, we will learn and practice techniques to increase our cultural intelligence—that is, our ability to move between different cultural contexts with ease. Each week, we will add a strategy to our repertoire for communicating effectively and respectfully with people whose assumptions or upbringings might be different from our own. At the end of the summer, you will have a stronger understanding of your own identity, and a toolbox for talking to other people about their backgrounds and identities. Everyone is welcome. ***Meets on Tuesday evenings from 5:30 to 6:30 pm***

Student Activities

The Student Activities Office provides students with a variety of educational and leisure outings particular to New England. Trips are scheduled on weekends and Wednesday afternoons. Exeter Summer charges a user fee, rather than a blanket charge included in the tuition. The user fees are based on cost of admission (where applicable), the cost of transportation, and administrative expenses. We also offer a number of no cost on-campus activities throughout the summer. We will continue to enhance these activities in response to students' ideas.

Examples of possible trips and estimated fees:

Blueberry Picking	\$6
Boston Common	\$35
Burlington Mall	\$20
Cambridge	\$25
Canobie Lake Amusement Park	\$50
Currier Museum	\$25
Downtown Portsmouth	\$15
Fox Run Mall	\$15
Hampton Beach	\$15
Mall of NH	\$15
Merrimack Outlets	\$15
Mini Golf	\$15
Mt. Major Hike	\$20
Museum of Science	\$40
Neon Bowling	\$20
O'Neil Cinema Trip	\$20
Rockingham Mall	\$15
Target Trip	\$5
Water Country	\$45

On-campus free events have included:

- Dances
- Dodgeball Tournament
- Exeter's Got Talent
- Karaoke
- Magician
- Movies
- Welcome Carnival
- Zumba

EXETER SUMMER

exeter.edu/summer