



Beacon Academy

Course Catalog

2023-2024

INTRODUCTION

This course catalog details the courses offered at Beacon Academy. Our curriculum offers a broad base of knowledge and skills while providing guidance to students as they take initiative to design and build their own education. All our courses are designed to prepare students for the academic rigors of college. More importantly, Beacon Academy students learn to navigate information and the world with a sense of purpose, supported by relationships with engaged faculty and opportunities to forge their own path.

Not all courses listed will run during the 2023-2024 school year; our schedule will be determined by student interest and faculty availability. It is Beacon's policy to allow students to choose their best-fit educational path, with the guidance and support of teachers, and they are not restricted from taking any course for which they meet the prerequisites. Each student will rank their top three course choices for each discipline as part of the course registration process. Any course must have at least 10 students enrolled to be run.

Unless otherwise designated, all courses are yearlong. IB courses taken for the diploma are two-year courses. However, at the discretion of the department and the Academic Office, Year 1 or Year 1 and Year 2 of these courses may be taken by students not seeking an external IB certificate or diploma for Beacon Academy transcript credit without IB designation. Please consult the Academic Office for further information.

GRADUATION REQUIREMENTS

- 4 Credits of [English](#)
- 3 Credits of [Mathematics](#) through Mathematics 3 (4 Credits of Mathematics are strongly encouraged)
- 3 Credits of [Social Sciences](#) including American History
- 3 Credits of [Sciences](#) (2 credits must be earned in laboratory-based Science courses)
- 2 Credits of [World Languages](#) (students must reach a third year of a World Language proficiency to satisfy the requirement)
- 2 Credits of [Fine and/or Performing Arts](#)
- 5 Additional Credits

While it is possible for transfer students to transfer some credits to satisfy these requirements, currently enrolled students must attempt all remaining requirements through Beacon Academy.

INTERDISCIPLINARY MULTI-CREDIT COURSEWORK

Ekphrasis: Adventures in Art & Literature

Ekphrasis is the friendship between word and image—in this class, you'll rarely find one without the other. Students will interpret, discuss, and write about works of literature and visual art, learning to identify the meaningful interactions across the two mediums. They will also hone their artistic skills through drawing, painting, sculpture, photography, performance, presentation, and creative writing. Co-taught by an English teacher and an art teacher across two class periods, this hands-on course provides the time, space, and material for students to wonder and create. Be advised: this ekphrastic adventure is not for the faint of 'art! On any given day, you can expect to sketch, scribble, and make sawdust. You'll read works by Tracy Chevalier, Lynn Nottage, Tommy Orange, Shakespeare, and James James, you'll study artists like Vermeer, Basquiat, Butler, Dzama and Lange, and you'll learn to make more of the visual languages that are right in front of you. **(Primarily 10th Grade, but Open to 11th & 12th Grade) (Please note that because this course will be a double period (i.e., back-to-back), it will count for a student's Art credit and English credit.)**

Experiential Program

Experiential Program (XP) is a two-year interdisciplinary program earning students both an English and Social Science credit each year. In Year 1, students who commit to this unique and distinguishing program will have exposure to various historical movements and post-secondary career connections. The Year 2 curriculum will be a more personalized approach where each student will identify their purpose and passion, learn about systems and societies and their role within them, and culminate their experience with a long-term internship and service project. Please contact Ms. Witt with any questions about this program. **(11th-12th Grade Two-Year Program) (Prerequisite: Application Approval)**

XP English Year 1

In connection with the topics and historical movements that form the focus of XP Social Science, in XP English students will read a range of texts that deal with the issues of work and social change. Through novels like *In Dubious Battle* and *They Shoot Horses, Don't They*, students will examine the way that the challenges of the Great Depression produced their own literary vernacular. We'll read texts from the Harlem Renaissance such as Nella Larsen's *Passing* in order to investigate the question of how art can function both as means of self-expression and as a social critique, and we'll explore the ways in which literature of the 1960s and 70s produced by writers like Joan Didion and Richard Brautigan captures the spirit of movements striving for change. Writing for this course will include literary analysis as well as editorial pieces, creative nonfiction, and personal reflection.

XP Social Science Year 1

This course will explore various historical movements such as the feminist movement, labor movements, and the technological revolution and how they have shaped our workplaces and society. Additionally, based on the Montessori themes of "Hands, Head, and Heart", students will learn about a variety of post-secondary pathways and will have the opportunity to hone their interviewing and writing skills by developing a compilation of oral histories influenced by Studs Terkel's *Working*. The class will visit various workplaces and exhibits and will also have guest speakers in order to experience real-life both inside and outside of the classroom.

XP English Year 2

While XP English Y1 examines issues of labor and purpose primarily through the lens of art, Y2 returns the focus of the course to the students and their goals. During this year of the course, students will focus on developing and refining a range of writing skills including, but not limited to: personal reflections, cover letters, resumes, editorial pieces, and memoirs. Students will reflect on their goals and purpose through writing; they will also consider issues related to educational, political, and economic systems by examining various memoirs.

XP Social Science Year 2

This course offers students the opportunity to explore their purpose and possible future while developing high-level research, negotiation, and project management skills. Exploration of self, ideology, and educational, political, and business systems will provide a diverse landscape of organizations and how they function. Students will consider the role that systems play in our complex world and the ways that they can contribute. A personalized long-term internship will be an integral part of this course; following their internship, students will give back to the community through a service project related to their learning. There will be extensive research-based writing, organizational skill development, and reflection components in this project-based course that blends sociology, political science, and business-related topics.

ARTS

Film 1

Film is a medium rooted in storytelling. It tells stories we know and stories we should know, begging the question – what makes a compelling story? How do camera placement, mise-en-scène, lighting, and other elements influence meaning? In what ways does editing alter and add to a viewer's understanding of a film? What does a script need in order to tell a complete story? This class aims to analyze, discuss, and answer these questions fostering a greater understanding and appreciation of film and therefore storytelling through film. **(Prerequisite: None)**

Music Studio 1

This course provides a comprehensive introduction to modern music production and songwriting. Emphasis is placed on understanding fundamental DAW tools and concepts, DIY recording basics, and powerfully simple music theory and composition techniques. Student work - both finished and unfinished - will be reviewed and critiqued during class time. **(Prerequisite: None)**

Music Studio 2

Music Studio 2 is a continuation of what was learned in Music Studio. Emphasis is placed on collaboration and the deeper exploration of music theory and computer music production. In addition to this, musical instrument performance skills are introduced in order to provide a more tactile, real-time means for students to compose and express their ideas. **(Prerequisite: Music Studio 1 or permission from instructor) (Note: Previous instrumental performance experience is a plus, but not mandatory.)**

Theatre 1

Theatre 1 explores the basics of storytelling. Through ensemble building activities, improvisation, and scene study, students will try their hand at performing. Students will also examine how dialogue and elements of design can enhance storytelling by exploring scenic design, costume design, and/or playwriting, depending on student interest. Additionally, students will participate in field trips to see professional productions in Chicago. This class is a hands-on experience in which all students try out onstage and offstage skills; no experience necessary. **(Prerequisite: None)**

Theatre 2

Theatre 2 builds on the fundamentals and centers the creative process around text. Students will hone collaboration and text analysis skills. They will dive deeper into acting and ensemble techniques and also explore advanced work such as directing, playwriting, and design. This course will follow the specific interests of the students enrolled. Additionally, students will participate in field trips to see professional productions in Chicago. This class is a hands-on experience in which all students further develop onstage and offstage skills. **(Prerequisite: Theatre 1 or permission from instructor)**

IB Theatre Higher Level & Standard Level (HL & SL)

IB Theatre is an intensive and exciting project-based course open to juniors and seniors. Over the course of two years, Standard Level (SL) students complete three (3) projects and Higher Level (HL) students complete four (4) projects. Overall, the course fosters a deeper understanding of theatrical devising, design, directing, and performance, as well as analyzing theatre as a spectator. Units include collaborative creation of a group performance, directing skills, text analysis, design process, world theatre history, and theatre theory. Projects will involve group collaboration as well as individual research and writing, and throughout the course, students will keep a theatre journal to record their growth as artists. You do not need to consider yourself a performer to complete this course or to receive IB credit, but all students do need to have an open mind about participating in all projects. This course is designed to include lessons from guest teaching artists who are working professionally in Chicagoland, as well as at least three (3) field trips to see live theatre and to visit local college theatre program facilities. **(Prerequisite: One previous Theatre course at Beacon Academy or permission from the instructor) (11th-12th Grade Two-Year Course)**

Visual Art 1

Visual Art 1 will establish a foundation in art making and thinking. Students can expect to learn; line, perspective, shading, color, portraiture, figurative, still life and landscape drawing and painting. Additionally, students will be introduced to printmaking, sculptural work, and modern photography. **(Prerequisite: None)**

Visual Art 2

Visual Art 2 is a theme/prompt based studio art course. Students will be exposed to artists, techniques, and materials when presented with a new prompt. Students will then choose to use the information provided or they will use other materials and techniques that best suit the students' ideas/artworks. Through research, experimentation, and reflection students will create artwork that expresses how they see and how they feel. As the course progresses, students will have the opportunity to engage in self-directed art-making. **(Prerequisite: Visual Art 1 or permission from the instructor)**

Making Art History

Is this an art history class? Yes. Is it also a studio art class? You bet. Let's make art history! Much like in a typical Art History course, students will study a diverse selection of movements, including but not limited to Impressionism, Cubism, Pop, and Contemporary Art. Students can expect to develop their art vocabulary and a balance of lecture, discussion-based, and hands-on classes. In Making Art History, students will deepen their understanding by creating original artwork in direct response to artists and artwork studied in class. **(Prerequisite: Visual Art 1 and Visual Art 2 or permission from the instructor.)**

IB Visual Art Higher Level & Standard Level (HL & SL)

IB Visual Art revolves around three main aspects of art practice: theoretical practice, art-making practice and curatorial practice. As an IB Visual Arts student, you are all of these: a critic, a maker and a curator. Using investigative strategies, critical thinking, comparative analysis and reflection, students will examine various art forms and artists from different times, places and cultures. We will investigate different techniques and processes, enquiring into their contextual evolution. We will explore ways of communicating knowledge in both visual and written forms. Through exploration and experimentation students will discover and apply a variety of artistic techniques. Students will develop their own concepts throughout this explorative process and, with reflection and self-evaluation, produce a cohesive body of work. We will consider the relationship between artist and audience and what it means to exhibit work; learn to select and present work effectively; and articulate intentions and the connections between artworks. **(Prerequisite: Permission from the instructor) (11th-12th Grade Two-Year Course)**

For additional Arts coursework, please see Interdisciplinary Multi-Credit Coursework found on Page 2

ENGLISH

Critical Literacy

In Critical Literacy, we will be studying and defining a genre of literature. Previous genre studies of this course have included: Banned Books, with texts including and not limited to, *The Great Gatsby* by F. Scott Fitzgerald, *A Lesson Before Dying* by Ernest J. Gaines, *The Handmaid's Tale* by Margaret Atwood, and *The Perks of Being a Wallflower* by Stephen Chbosky and Magical Realism, with texts including and not limited to, *Like Water for Chocolate* by Laura Esquivel, *Exit West* by Mohsin Hamid, *Sing, Unburied, Sing* by Jesmyn Ward, *The Water Dancer* by Ta-Nehisi Coates, and *Antelope Woman* by Louise Erdrich. As a class, we will define for ourselves what it means for a text to fall within a given genre. In this course, you will be assessed on your writing (including short answer responses, analytical essays), creative projects, and presentations. These assignments will be designed to assess your understanding of the texts we are reading in class and the concepts and skills you will be working on. By the end of the course, you will improve your understanding of a genre of literature as well as improve your written and verbal communication with your peers and with the teacher. **(Compulsory 9th Grade Course)**

Frisson: The Power of Literature & Performance

Have you ever gotten the chills when reading the final line of a novel; after the build and subsequent silence of a song; while staring at a beautiful piece of art or up at the universe unfolding around you; during the final moments of a play; witnessing something ineffable? It's an experience we all know – frisson. Aesthetic chills. Gooseflesh. Awe. But what does *that* mean? And why is it that certain texts, songs, or moments wash over us, captivate us in that way? That's what we'll ask in this class, but more importantly we will seek out those experiences. In this class you'll be expected to read, attend, analyze and discuss these frisson-inducing texts and experiences. Additionally, you'll write various reflections, comparative essays of different performances and texts, as well as analytical papers discussing authorial choices. Our exploration may include, but is not limited to, works like Sam Shepard's *Buried Child*; Louise Erdrich's *The Roundhouse*; the works of Whitman and Emerson; and music ranging from Alabama Shakes to Mozart to Chance the Rapper. Additionally, we'll go on a variety of excursions: plays, dance performances, concerts, improv shows, walks in nature, all in an attempt to understand what makes something awe-inspiring and bring on gooseflesh. At the end of the course we'll write and perform a collection of our own two-minute, frisson-inducing 'plays' which will hopefully bring on those aesthetic chills for our audience. **(Primarily 10th Grade, but Open to 11th & 12th Grade)**

Vérité: An Exploration of Literature & Cinéma

Cinéma Vérité is a French word meaning "true cinema" and is a filmmaking style dedicated to capturing "real life." While this class will not focus on watching films from that movement, the principle of vérité, or truth, will guide the work of this course in two ways. First, both literature and film set out to portray real life, and in doing so explore the boundaries between reality and fiction, but is it even possible to truly show real life? Second, we'll think about what makes a true adaptation and how one goes about conveying all of these *words* into pictures. In class we will read, watch, analyze, and discuss in order to further explore these questions. We'll also create our own work that attempts to capture real life. Ultimately, this is a writing-intensive course in which we will examine literature and film in the same vein, exploring the ways in which choices are made by directors and authors in order to develop themes and create truthful adaptations. Our exploration may include, but is not limited to, works like James Baldwin's *If Beale Street Could Talk* and Barry Jenkins adaptation, *Sir Gawain and the Green Knight* and David Lowry's adaptation, Stephen Karam's play *The Humans* and subsequent adaptation, and Sarah Rafael Garcia's collection of short stories *Santana's Fairy Tales* and Spike Lee's *Do The Right Thing*. Ultimately, our goal is to uncover the truth in capturing "real life." (Note: This class may meet before or after school or during lunch in order to watch films in one sitting.) **(Primarily 10th Grade, but Open to 11th & 12th Grade)**

Crime Fiction

Do you have a morbid fascination with crime? This course will explore crime stories in a variety of forms, including prose fiction, film, podcasts, and investigative journalism. We will consider the ways in which stories about crime influence our interaction with narrative at its most basic, structural level. As we discover the conventions of the genre, we will also explore the permeability of the line between truth and fiction in crime narratives and consider the meaning of our cultural obsession with stories about crime in the modern day. Along the way, we will hone our skills of observation, description and argumentation by engaging in both analytical and journalistic writing. Texts under consideration include (but are not limited to): writings by Chandler, Conan Doyle, Christie and Ware, films such as *The Staircase* and *See How They Run*, and podcasts such as *Serial* and *Bone Valley*. **(11th & 12th Grade Only)**

Latin American Literature

The countries that make up Central and South America remain some of the most misunderstood and understudied regions in the world. Yet Latin American literature and its authors have had a profound effect on global arts and culture, especially in the United States. This class will take a deep dive into the many ways Latin American literature has revolutionized the way the world thinks about the power of language and images. Possible texts include Jorge Luis Borges's *Ficciones*, Gabriel Garcia Marquez's *Love in the Time of Cholera*, the stories and essays of Clarice Lispector, the poetry of Sandra Cisneros and Pablo Neruda, and Guillermo del Toro's early film *Chronos*. Students will be asked to demonstrate their understanding of these texts through formal literary analysis papers, exploratory research into cultural contexts, and creative projects that introduce these texts to a new generation of readers. This class may be taken as a supplement to the Latin American course offering in global history or on its own for a richer appreciation of the artistic innovations that continue to shape our tastes and communities. All texts will be read in English translation and no prior knowledge of Spanish or Portuguese is required. **(11th & 12th Grade Only)**

Literary Laughter

Why does it seem like all English teachers only assign the most depressing, traumatizing texts to have ever been written? Why can't great literature be fun? Or, better yet, funny? Thankfully, there's no shortage of comedic literature out there for us to explore, and this class aims to dive into these texts and study what makes them so entertaining. What is the role of comedy in literature and pop culture? Is it purely escapism? Or does this laughter seek to undermine those with social and political power and bring about social change? Special attention will be given to texts that leave us rolling in our chairs while changing the way we experience the world in which we live. Texts under consideration include Oscar Wilde's *The Importance of Being Earnest*, Kurt Vonnegut's *Slaughterhouse-Five*, Paul Beatty's *The Sellout*, essays by David Sedaris and Samantha Irby, and films such as the Daniels' *Everything Everywhere All at Once* and Chaplin's *The Great Dictator*. Students will write essays analyzing how these texts use comedic elements to critique structures of power and knowledge, and there will be opportunities to apply these techniques through the writing of personal essays and a final creative final project. **(11th & 12th Grade Only)**

IB English Literature Higher Level (HL)

This course is about learning to appreciate the artistry of literature and develop an ability to reflect critically on your reading. The course is built on the assumption that literature is concerned with our conceptions, interpretations, and experiences of the world. As such, the course focuses on different approaches to reading literary works. It encourages close analysis of language, as well as an understanding of the different perspectives presented through literature and the ways in which these are informed by, and interact with, your own culture(s). Therefore, we will study works in their literary and cultural contexts through close study of individual texts and passages and by considering a range of critical approaches. While this course meets the demands of IB English Literature, its primary goal is to build a collaborative space where students can encounter challenging texts together. Open, student-led discussion drives the course, so careful reading and preparation for class are essential. A successful IB English Literature course operates like a team, where students voice uncertainty, listen actively, and respond thoughtfully. The text, not the teacher, is the authority. Students will engage in analytical writing and revision, learning to develop original interpretations using the tools of close reading. The texts we read - a mix of novels, plays, and poetry - will reflect a broad range of literary style and human experience, and each year's texts orbit unifying themes (ex. "Place, Property, & Power" and "Theories of Time & Space"). **(11th-12th Grade Two-Year Course)**

For additional English coursework, please see *Interdisciplinary Multi-Credit Coursework* found on Page 2

MATHEMATICS

Mathematics 1

Primary course topics include the study of linear, quadratic, and exponential functions; congruent and similar triangles; the geometric concepts of polygons and circles; the right triangle trigonometric ratios; and probability and statistics. Students utilize their experience to create models and solve contextual problems.

Mathematics 2

Primary course topics include further exploration into quadratic functions; formally defining higher degree polynomial, square root, absolute value, and rational functions with applications; coordinate graphing and transformations of geometric figures; general triangle trigonometry; further work with circles (arcs and sectors); and statistics and probability. Students utilize their experience to create models and solve contextual problems.

Mathematics 3

This course focuses on developing an interconnected, conceptual understanding of the skills, techniques, and habits of mind necessary for mathematical problem-solving. Students will grow in their ability to recognize patterns, communicate about math both verbally and in writing, and apply course content to solve multi-step problems. The course is structured around one of the most essential concepts in mathematics – the mathematical function. In particular, students will explore polynomial, rational, trigonometric, logarithmic and exponential functions. Approximately 40% of the course will be spent on trigonometry and trigonometric functions. To help prepare students for IB math, students will also get to research and write a short paper about a math topic of their choosing.

Mathematics 4

This course is intended as a problem-solving seminar that spans several mathematical content areas and makes connections among different concepts and topics. Topics will be chosen according to student readiness and interest and will combine familiar content from previous mathematics courses (i.e. algebra, geometry, trigonometry) with the exploration of less familiar areas of mathematics. Students begin this course with a deep dive into polar coordinates, analytic geometry, and vectors. Moving through matrices and their connection to systems of equations, students finish the first semester of Mathematics 4 with sequences, series, and counting principles. In the second semester, students gain a strong understanding of limits and continuity, differentiation, and integration before finishing the course examining real-world applications of these topics and their relation to and use with trigonometric functions. Students will engage in the creative process of problem-solving by collaborating with peers and presenting and analyzing different solution methods. Special attention will be given to developing both verbal and written communication skills. **(10th Grade Only)**

IB Mathematics: Applications and Interpretations Standard Level (SL)

This course is designed for students who enjoy describing the real world and solving practical problems using mathematics, those who are interested in harnessing the power of technology alongside exploring mathematical models and enjoy the more practical aspects of mathematics. This course develops problem-solving skills and techniques through topics in numerical and functional algebra, geometry and trigonometry, statistics and probability, and calculus. **(11th-12th Grade Two-Year Course)**

IB Mathematics: Analysis and Approaches Standard Level (SL)

Analysis and Approaches Standard Level course is designed for students who wish to study mathematics as a subject in its own right or to pursue their interests in areas related to mathematics. It will appeal to students who are interested in exploring real and abstract applications of mathematical concepts. They will enjoy problem solving and generalization. This course has a strong emphasis on calculus and on algebraic, graphical and numerical approaches. In this course, students will develop strong skills in mathematical thinking and become fluent in the construction of mathematical arguments. **(11th-12th Grade Two-Year Course)**

IB Mathematics: Analysis and Approaches Higher Level (HL)

This course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content. IB Mathematics: Analysis and Approaches HL is for students who enjoy developing mathematical arguments, problem-solving and exploring real and abstract applications, with and without technology. This course develops a deepened understanding of problem-solving skills and techniques through topics in numerical and functional algebra, geometry and trigonometry, statistics and probability, and calculus. **(11th-12th Grade Two-Year Course)**

Discrete Mathematics

In this course, students will take their understanding of mathematics outside of the typical classroom scenarios. They will study how math is prevalent in the world around them: in language, politics, sports, philosophy, science and even entertainment. Students will use logic, algorithms and data analysis to evaluate and solve problems in the world around them but also look at the societal implications of these problems. Mathematics involved will include modelling with functions, algebraic manipulation, trigonometry and statistics. Due to the nature of the course, there will be plenty of project-based opportunities that will allow students choice and depth in their learning.

Beacon Academy Mathematics faculty will be working with all current 9th & 10th Grade students to ensure they are placed in the course that best fits each student's needs, skills, and content knowledge.

SCIENCES

Integrated Science

This course is an integrated study of the sciences that covers core topics in chemistry, biology, physics and environmental science over two years. It focuses on lab work and the lives of important scientists. Lectures, seminars, group work, lab experiences, calculations and fieldwork combine to create a cross-disciplinary grounding in the sciences. Communication, reading, writing, and current events in science are also an important aspect of this science class. Further, this course will cover planning scientific investigations, evaluating results, and making real world connections. Cycle A and Cycle B are taught in alternating years, in mixed 9th and 10th grade cohorts. **(Compulsory 9th & 10th Grade Two-Year Course)**

Integrated Science Cycle A

In Cycle A, physics topics include energy (kinetic, potential, gravitational, thermal), the electromagnetic spectrum, electromagnetism, gravitational and magnetic fields and the study of light and waves. Chemistry topics include chemical and physical properties of matter, energy changes and calorimetry, atomic theory and structure, chemical reactions, bonding, polarity, periodic trends, and stoichiometry. The environmental science theme is the Great Lakes with topics focused on the water cycle, hydrology, and the environmental and social impacts of water usage. Students design and execute multi-day experiments with a formal lab report each semester.

Integrated Science Cycle B

In Cycle B, biology topics include membrane structure and transport, cellular respiration (Glycolysis, Krebs cycle and the ETC), photosynthesis (LDR, Calvin Cycle), nutrition and diabetes, homeostasis, adaptation, and thermoregulation. Physics topics include scalars and vectors, vector addition, displacement, velocity and acceleration, and projectile motion. The environmental science theme is Global Warming, the Carbon Cycle, and the environmental and social impacts of the industrial era. Students design and execute multi-day experiments with a formal lab report each semester.

Coding 1

This course is an introduction to Computer Science and programming. Students will learn the fundamentals of coding in JavaScript and create interactive applications, games, and websites. Problem-solving, analytical thinking, and collaboration will be emphasized. Using introductory software Code Studio, students will learn about fundamental concepts like IDEs, data types, variables, conditional statements, loops, and more. By the end of the year, students will have developed a software project of one's own choosing. Applied math skills are strongly recommended. Students who are serious about studying Computer Science or do well in this course can move on to Coding 2.

Coding 2

Coding 2 is a continuation of what was learned in Coding 1. This highly projects-based course will introduce computing concepts such as object-oriented programming, data structures, and version control, and will explore strongly typed languages such as Java and C#. Iterative problem solving will be emphasized within several different contexts including web development, and game development in Unity. Students will not only deepen their knowledge of computer programming techniques, but explore the ways software development teams work in the real world. **(Prerequisite: Coding 1 or permission from the instructor)**

Forensics

Forensic Science is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. Specifically, forensic science deals with the analysis of evidence. This course uses the areas of biology, chemistry, physics and geology to determine the evidential value of crime-scene and related evidence. Specific topics include fingerprints, toxins, hair and fibers, ballistics and DNA. Lab activities accompany each topic and noteworthy cases are discussed throughout the course.

Epidemiology & Public Health

Health Sciences offers students the opportunity to examine the molecular and cellular components of human health. This course explores concepts of immunology, physiology, pharmacology, and molecular/cellular biology to understand the biological basis of human health. With a focus in epidemiology and health science communication, students will be able to better understand the various societal/cultural perspectives of global health management. Depending on student interest and availability, students will engage in real-world projects where students address public health initiatives as volunteers in health-related practices. Ideally, students will walk away from this course with a better understanding of the “practical” implications of human health biological sciences including an idea of what types of careers and opportunities exist in the health sciences field. **(Prerequisite: Integrated Science Cycle A & Integrated Science Cycle B)**

IB Biology*

In line with the IB Diploma Program, this class is a two-year college-level survey course in Biological Sciences. The topics covered over the two years include cell biology, molecular biology, cellular metabolism, nucleic acids, genetics and evolution, ecology, evolution and biodiversity, plant biology, human anatomy, and physiology. After learning how the basics of Biology work, students will then integrate this knowledge to observe how systems – cell-to-cell; tissue-to-tissue; organism-to-organism – cross and interact through continued learning, labs, activities, and primary paperwork. Through both the Nature of Science and Theory of Knowledge, students will enhance and expand understanding, applications, and skills in all topics, as well as engage in the constraints, disciplines, methodologies, and controversies of modern science. **(11th-12th Grade Two-Year Course)**

IB Chemistry*

Chemistry is an experimental science that combines academic study with the acquisition of practical and investigational skills. It is often called the central science, as chemical principles underpin both the physical environment in which we live and all biological systems. Apart from being a subject worthy of study in its own right, chemistry is a prerequisite for many other courses in higher education, such as medicine, biological science, and environmental science. Beacon Academy students will examine how the nature of science plays a role in chemistry through studying the development of theories, performing laboratory investigations, and discovering the many interdisciplinary connections of chemistry. **(11th-12th Grade Two-Year Course)**

IB Environmental Systems and Societies Standard Level (SL)

Through studying environmental systems and societies (ESS) students will be provided with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. As a result of studying this course, students will become equipped with the ability to recognize and evaluate the impact of our complex system of societies on the natural world. **(This course is also cross-listed as a Social Science course.) (11th-12th Grade Two-Year Course)**

IB Physics*

Physics is an experimental science as it seeks to explain and understand the universe itself from the very smallest particles to the vast distances between galaxies. Despite the continued exciting and extraordinary development of ideas throughout the history of physics, observations remain essential to the very core of the subject. Models are developed to try to understand observations, and these themselves can become theories that attempt to explain the observations. Topics range from classical mechanics and electricity and magnetism to nuclear environmental applications and the impact of physics on society, the moral and ethical dilemmas, and the social, economic and environmental implications of the work of physicists. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the subject. Students will have opportunities to develop manipulative skills, design investigations, collect data, analyze results, and evaluate and communicate their findings. **(11th-12th Grade Two-Year Course)**

Science Capstone: Forensics Focus

Science Capstone: Forensics Focus is offered to students who have completed the first year of Forensics. This class will allow students to explore Forensics topics that were not covered in Year 1, such as fingerprinting, forensic botany, soil examination, forensic anthropology, glass evidence, casts and impressions or tool marks. Lab activities accompany each topic and noteworthy cases are discussed throughout the course. In addition, this course will set students up for several independent research projects. First, students will dive deep into one true crime case of their choosing, they will research the crime, motive, victim(s), suspect(s), and outcome and will present their case and findings to the rest of the class. Second, students will have the option to design an experiment along with significant outside research to accompany it or to complete a significant research project focusing on an area of science of interest outside of the Forensic lens. They will present their research to the class and wider Beacon community.

**Offered as a Standard Level (SL) course or Higher Level (HL) course based on student demand*

SOCIAL SCIENCES

American History

In American History, students will investigate significant figures, events, developments, and processes in sequential historical periods from when humans first arrived in the Americas to the present-day United States. Through a chronological approach to the study of American History, students will have the opportunity to analyze changes and continuities over time. Significant themes that will be explored include the development of American democracy, the diversity of American society, and America's evolving relationship with the world. Students will use and develop the following historical skills and methods: thinking, reading, listening, speaking, and writing historically; identifying and analyzing primary and secondary sources; crafting historical arguments; considering diverse points of view; conducting independent research; and articulating, and responding to, well-reasoned and evidence-based historical interpretations. In this course, history involves taking action — students will be engaged participants in the process of doing history. **(Compulsory 9th Grade Course)**

Civics & Government

Civics is devoted to studying the U.S. political structures, their impact, and the role that citizens can and do play to create change. The class will follow daily news events on the local, national, and international level, and students will be expected to understand social, political, and economic issues. Students will evaluate the issues from a variety of perspectives, form their own opinions, and will then propose and implement solutions. There will also be an expectation to engage in service learning outside of the classroom as part of this course's emphasis on creating change. Reading assignments will include articles from journals, texts, magazines, and newspapers. A variety of assessments will be provided including journal entries, debates, quizzes/tests, projects, presentations, reflections, and research papers to continue skill development and to give students a variety of opportunities to demonstrate their knowledge. Upon completion of the course, students will be aware of the importance of being an informed and a contributing citizen as they take their place in the panorama of history. **(Primarily 10th Grade, but Open to 11th & 12th Grade)**

Global History: Modern Latin America

This course will investigate the history of modern Latin America, from the end of the eighteenth century to the present-day, and the interactions between Latin American communities and the world over time. Students of history will examine the diverse and multiethnic societies by studying the roots and interactions of Native American, African, and European peoples; the legacy of Spanish and Portuguese colonialism; the role of Christianity, the Catholic Church, and religion; the underlying and proximate causes of decolonization and independence movements; and the emergence of nation-states across the continent. Historians will research the trajectory of the political landscape of various regimes, the impact of uneven economic development throughout the region, the evolving relationship between people and their environments, and contemporary migration patterns within the context of the Western Hemisphere. In order to compare and analyze change over time between complex Latin American societies, countries of particular interest will be Mexico, Brazil, and Argentina. Students will be expected to read historical documents, analyze primary and secondary sources, contribute to class discussions and debates, conduct independent research, write research papers, and present original historical arguments and interpretations. **(10th - 12th Grade)**

IB Environmental Systems and Societies Standard Level (SL)

Through studying environmental systems and societies (ESS) students will be provided with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. As a result of studying this course, students will become equipped with the ability to recognize and evaluate the impact of our complex system of societies on the natural world. **(This course is also cross-listed as a Science course.) (11th-12th Grade Two-Year Course)**

IB Philosophy Higher Level (HL)

The primary emphasis of this course is on actively engaging students in philosophical activity as well as on exposing them to some of the classic problems in the field. The course stimulates students' intellectual curiosity and encourages them to examine both their own perspectives and those of others. Throughout the two years of study, students will be challenged to develop their own philosophical voices and to grow into independent thinkers. In the first year, the course explores issues relevant to the fundamental question of what it means to be human. This exploration takes place through a discussion of key concepts such as identity, freedom, and human nature, and through a consideration of questions such as what sets humans apart from other species, where the boundaries of humanity lie, and whether animals or machines could be considered persons. At the end of their first year, students can choose from a range of specific areas of concentration for study in Year 2, including ethics, aesthetics, philosophy of science, and philosophy of religion. **(11th-12th Grade Two-Year Course)**

IB World History Higher Level (HL)

IB World History explores the history of the Middle East and Africa after 1914, as well as conflicts and intervention, authoritarian states, and independence movements in the modern world. In this class students will work on the following historical skills: respecting the humanity of all those who have lived through trying to understand their world on their terms; accepting the vast number of historical narratives that can and do exist while rejecting that there is one "truth" of history; at the same time trying to make sense of how and why changes (big and small) have happened over time; being comfortable with not knowing; being resilient in the face of setback; asking historical questions (how and why does change happen over time?); finding and identifying varied sources to help answer those questions; close-reading and analyzing those sources; combining multiple sources to answer a question; articulating those answers as arguments in verbal, written, and other formats; and understanding what other historians have said about question/topics like students' questions and articulating how students' arguments relate to/expand on/contradict those historians' arguments. **(11th-12th Grade Two-Year Course)**

For additional Social Science coursework, please see Interdisciplinary Multi-Credit Coursework found on Page 2

WORLD LANGUAGES

Arabic 1

This course is intended for both the beginning French student and students with some prior knowledge. Arabic is a communication-focused course in which students will be introduced to the Arabic language and diverse cultures of the Arab world. The year will begin with a conversational approach that will give students practical tools to interact in the language and develop an understanding of dialects, while beginning to learn the alphabet. Throughout the course, students will gain vocabulary that can be used in the context of friends, family, and their interests. By the end of the year, students will be able to interact with native speakers at a conversational level and read and write short texts in Arabic. The class will also include authentic texts, photos, and videos designed to deepen students' knowledge of the Middle East and North Africa region and scope of the Arabic language, native to over 300 million people in 26 countries.

French 1

This course is intended for both the beginning French student and students with some prior knowledge. Using immersion-based classroom techniques, songs, and games, we will focus on the four major areas of language acquisition: listening, speaking, reading, and writing. There will be an emphasis on interactive communication skills, and students will be encouraged to focus on how they can use the language in practical contexts. We will also cover cultural topics and authentic texts from the Francophone world, such as short stories, poems, current events, music videos, short films, and social media. Possible areas of focus include French-speaking countries in Europe, Africa, Asia, North America, and the Caribbean.

Spanish 1

This course is intended for both the beginning Spanish students and students with some prior knowledge. Using immersion-based classroom techniques, songs, and games, students take the first steps towards fluency by learning proper pronunciation, accumulating a vocabulary of up to 650 words, and learning the present tense. There is a focus on interactive communication skills related to language in a practical context. Students are also introduced to geography and Latino culture through authentic texts i.e. music, literature and the news in Spanish. By the end of the year, students will have read their first novel in Spanish, and they will be comfortable having basic conversation and describing who they are, their family and friends, and what they observe about the people and the world around them.

Arabic 2

Arabic 2 will increase exposure to written Modern Standard Arabic, build students' vocabulary, and introduce the past and future tenses. The course will continue to focus on oral communication, preparing students to discuss everyday topics such as personal interests, food, daily life, and local culture. Students will apply their classroom learning through several writing and video exchanges with native Arabic speakers. Through their interaction with authentic media from across the Arab world, students will deepen their understanding of the wide scope of the language. By the end of this course, students should feel confident in their foundation of communication skills designed to prepare them to travel in the Arab World.

French 2

Building upon students' previous knowledge of the French language, this course will focus on extending skills and acquiring a deeper understanding of the language. Instruction will be designed to meet students' individual needs, with the knowledge that there may be a variety of levels within the classroom. We will work together on more complex grammatical structures and developing skills in listening, speaking, reading and writing. As in French I, there will be an emphasis on interactive communication skills, and students will be encouraged to focus on how they can use the language in practical contexts. This course will also cover cultural topics and authentic texts from the Francophone world, such as short stories, poems, current events, music videos, short films, and social media. Possible areas of focus include French-speaking countries in Europe, Africa, Asia, North America, and the Caribbean.

Spanish 2

This is an intermediate-level course where students review and expand on basic grammar concepts and conversation previously learned. Students will review the present and present progressive tenses and will learn the past tense, reflexive verbs, and commands. Students continue to apply and learn vocabulary relevant to their high school experience and the city of Chicago, and they will now begin to apply what they know to a global context. As in Spanish I, there will be an emphasis on interactive communication skills, and students will be encouraged to focus on how they can use the language in practical contexts. By the end of the year, they will have read a beginner/intermediate Spanish novel and will be writing and able to engage in Spanish conversation using complex sentences.

Arabic 3

This course is designed to develop both students' written and oral communication skills. In Arabic 3, students will transition to more speaking and writing in Modern Standard Arabic (MSA) and encounter more complex grammar topics with a focus on verb forms and roots. Students will continue to improve their oral communication on daily topics, especially through our ongoing writing and video exchanges with native Arabic speakers. Additionally, students will interact with more advanced authentic texts that address current issues within the Middle East and North Africa region. By the end of this course, students will be able to write paragraph-length texts in MSA and discuss a wide variety of daily topics in colloquial Arabic.

French 3

Designed for the student who is extending their knowledge of French, this course puts an emphasis on more in-depth communication and critical thinking skills. The course will include more advanced grammar topics such as the conditional and pluperfect tenses. They will concentrate on writing lengthier compositions and interacting with more advanced authentic materials from the francophone world. Topics include identity, cultural attitudes toward food, tourism and study abroad, and social media. Students will have opportunities for independent work so that content drives their acquisition of new grammar. By the end of this course, students will be able to write and speak in more depth about current issues throughout the francophone world.

Spanish 3

In this advanced course, the focus is on learning content and using the target language as a tool to have discussions, read, and write about culturally relevant topics. Students engage with authentic materials such as articles, films, videos, music, etc. to expand their knowledge of the Spanish speaking world while honing their language skills. Topics include childhood and folktales from the Spanish speaking world and their relevance today, a study of Picasso's iconic painting Guernica, interpretation of a Spanish song and study of the film, *Diarios de Motocicleta*. Students will be able to write in-depth responses to open-ended questions and become better verbal communicators of their ideas and thoughts.

IB Arabic *Ab Initio* Standard Level (SL)

This two-year course focuses more on Modern Standard Arabic (MSA) and moves at a faster pace than Arabic 3. Students will transition to more writing and speaking in MSA and encounter more complex grammar topics such as the 10 verb forms, the Arabic root system, and narrating in all tenses. They will interact with more advanced authentic texts that address current issues within the Middle East and North Africa (MENA) region. At the same time, students will continue to improve their oral communication on daily topics, especially through our ongoing writing and video exchanges with Arabic students around the US and native Arabic speakers in Morocco. By the end of this course, students will be able to write paragraph-length texts in MSA and discuss a wide variety of daily topics in colloquial Arabic.

IB French *Ab Initio* Standard Level (SL)

The purpose of this course is to foster language acquisition, intercultural understanding, and global citizenship. The course is organized into thematic units that put the French language into context and encourage development of the IB learner profile. By exploring thematic content, students will expand their skills in listening, speaking, reading, and writing. Students will be able to use the language effectively and respond spontaneously according to the cultural context of a situation. They will also be able to analyze and respond critically in the target language to the topics developed in class. Students will also develop an appreciation of the different views of people from other cultures and their cultural legacy.

IB Spanish *Ab Initio* Standard Level (SL)

The purpose of IB Spanish *Ab Initio* is to foster the language acquisition process necessary for students to become proficient in Spanish by improving the four language skills: listening, speaking, reading, and writing. Students will be able to use Spanish effectively and respond spontaneously according to the cultural context of a situation. They will also be able to analyze and respond critically to the topics developed in class. Students will also develop an appreciation of the different views of people from other cultures and their cultural legacy.

IB French Standard Level (SL)

The purpose of this two-year IB course is to foster language acquisition, intercultural understanding, and global citizenship. The course is organized into thematic units that put the French language and the Francophone world into context. These themes include Identities, Experiences, Human Ingenuity, Social Organization, and Sharing the Planet. By exploring content, students will expand their skills in listening, speaking, reading, and writing. Students will be able to use the language effectively and respond spontaneously according to the cultural context of a situation. They will also be able to analyze and respond critically in the target language to the topics developed in class. Students will develop an objective appreciation of the different views of people from other cultures and their cultural legacy.

IB Spanish Standard Level (SL)

The purpose of this course is to foster language acquisition, intercultural understanding, and global citizenship. The course is organized into thematic units that put the Spanish language into context and encourages the development of the IB learner profile. By exploring thematic content, students will expand their skills in listening, speaking, reading and writing. Students will be able to use the language effectively and respond spontaneously according to the cultural context of a situation. They will also be able to analyze and respond critically in the target language to the topics developed in class. Students will also develop an appreciation of the diverse views of people from other cultures.

IB French Higher Level (HL)

This two-year advanced IB course shares the aims of the SL curriculum, as well as the themes of Identities, Experiences, Human Ingenuity, Social Organization, and Sharing the Planet. At the higher level, however, students will also integrate a study of literature from the Francophone world, including at least two works which may include novels, poems, plays, short stories, folk tales. By exploring content, students will expand their skills in listening, speaking, reading, and writing. Students will be able to use the language effectively and respond spontaneously according to the cultural context of a situation. They will also be able to analyze and respond critically in the target language to the topics developed in class. Students will develop an objective appreciation of the different views of people from other cultures and their cultural legacy.

IB Spanish Higher Level (HL)

The purpose of IB Spanish is to foster the language acquisition process necessary for students to become proficient in Spanish by improving the four language skills: listening, speaking, reading, and writing. Students will be able to use Spanish effectively and respond spontaneously according to the cultural context of a situation. They will also be able to analyze and respond critically to the topics developed in class. Students will also develop an objective appreciation of the different views of people from other cultures and their cultural legacy.

Beacon Academy World Languages faculty will be working with all current 9th & 10th Grade students to ensure they are placed in the course that best fits each student's needs, skills, and content knowledge.

OTHER

IB Theory of Knowledge (TOK)

TOK is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge: we will examine how we know what we claim to know. We will do this by analyzing knowledge claims and exploring knowledge questions. A knowledge claim is an assertion that “I/we know X” or “I/we know how to Y,” or a statement about knowledge; a knowledge question is an open question about knowledge. The task of TOK is to emphasize connections between areas of knowledge and link them to the knower in such a way that the knower can become aware of his or her own perspectives and those of the various groups whose knowledge he or she shares. **(11th-12th Grade Two-Year Course limited to IB Diploma Candidates)**