

INTRODUCTION

This course catalogue details the range of courses offered at Beacon Academy. Most courses are yearlong; non-IB arts electives, however, are semester-long.

ENGLISH

American Literature A (Year One)

American Literature B (Year Two)

This course will be run seminar style in which students engage each other as they read challenging, thought-provoking literature. The course will follow a workshop approach that emphasizes writing as a process by attending to strategies for generating interpretive ideas for essays, writing effective and authoritative essays, and revising and rewriting essays to sharpen both acuity and expression. Assignments will include informal response papers, in-class critical analyses, longer essays, and class presentations. Students will also be responsible for keeping a reading journal throughout the two years. Authors we will read include: Ralph Waldo Emerson, Emily Dickinson, Flannery O'Connor, Richard Wright, F. Scott Fitzgerald, Tim O'Brien, Mark Twain, Edgar Allan Poe, Walt Whitman, Langston Hughes, Alice Walker, Toni Morrison, William Faulkner, Ernest Hemingway, Zora Neale Hurston, Cormac McCarthy, Billy Collins, Jhumpa Lahiri, and Audre Lorde.

Exploring Literary Genres (11th-12th grade elective)

Genre, derived from the French for "kind" or "type," helps us interpret literature by offering a classificatory system to organize our responses, playing a significant role in shaping interpretation all the way from setting expectations to determining ultimate satisfaction. In this class we will explore literary genres in depth, considering essential major examples as well as provocative attempts to readjust or defy guiding principles. We will track the development of certain genres over time, as well as investigate some important artistic and critical interventions. Above all, we will think together about how genre amplifies and enriches our reading experiences. Works that we read may include *The Odyssey*, *Romeo and Juliet*, *Edgar Allan Poe: Complete Tales and Poems*, and *The Making of a Poem: A Norton Anthology of Poetic Forms*.

IB English (Language A)

The Literature 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. The Literature 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. The course provides opportunities and encourages you to think independently, originally, and critically. It also promotes a perceptive and analytical approach to the understanding of literary works. The course encourages you to engage in knowledge inquiry, critical thinking, and reflection. The response to the study of literature is through oral and written communication, thus enabling you to develop and refine your command of language. In relation to the international nature of the IB and its commitment to intercultural understanding, the study of works in translation is especially important in exploring other cultural perspectives. Through the study of these diverse works we can gain a deeper understanding of how works of literature are an important part of their cultural contexts and how they reflect or describe experiences and values. Assigned texts will include the poetry of Thomas Hardy, *The Dubliners*, *The Remains of the Day*, *Atonement*, among others.

SCIENCE

Integrated Science A (Year One)

Integrated Science B (Year Two)

This course is an integrated study of the sciences. It focuses on lab work and the lives of scientists. Lectures, seminars, group work, lab experiences, 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. In Year One, specific emphasis will be given to atomic structure and the periodic table and how these atoms and molecules combine to make up the world around us. In Year Two, specific emphasis will be given to the local ecology and the study of native flora and fauna to better orient students to their place in the world. In addition to this integrated approach,

this course raises questions about the ethics of science, including environmental issues, research ethics, genetic engineering, and health care ethics.

IB Biology

Through studying biology, students should become aware of how scientists work and communicate with each other. 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 IB Biology.

The aims enable students, through the overarching theme of the Nature of science, to:

- Appreciate scientific study and creativity within a global context through stimulating and challenging opportunities;
- Acquire a body of knowledge, methods, and techniques that characterize science and technology;
- Develop an ability to analyze, evaluate, and synthesize scientific information;
- Develop a critical awareness of the need for, and the value of, effective collaboration and communication during scientific activities;
- Develop experimental and investigative scientific skills, including the use of current technologies;
- Develop and apply 21st century communication skills in the study of science;
- Become critically aware, as global citizens, of the ethical implications of using science and technology;
- Develop an appreciation of the possibilities and limitations of science and technology; and
- Develop an understanding of the relationships between scientific disciplines and their influence on other areas of knowledge.

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.

IB Physics

Physics is the most fundamental of the experimental sciences as it seeks to explain the universe itself, from the very smallest particles to the vast distances between galaxies. Despite the 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. Besides helping us better understand the natural world, physics gives us the ability to alter our environments. This raises the issue of the impact of physics on society, the moral and ethical dilemmas, and the social, economic and environmental implications of the work of physicists.

By studying physics students should become aware of how scientists work and communicate with each other. 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.

IB Environmental Systems and Societies (*This course is also cross-listed as a history course.*)

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.

HISTORY

American History A (Year One)

American History B (Year Two)

American History A and B is a mixed-cohort, two-year cycle that asks students to become historians. Students ask why and how historical change happens over time and learn how to find sources that answer these questions, evaluate those sources (in both their content and their bias), construct an argument that is rooted in the evidence they find, and articulate their argument through verbal and written critical analysis. While these stronger academic skills are one goal the course also embraces a Montessori-based practice to encourage work with the heart, hands, and head while building empathy for those people who lived before us.

Throughout the course, students investigate a number of central themes: political, social, and technological revolutions, rights movements, the movement of peoples, and war and foreign policy. As they master themes and concepts, students also gain a strong grasp of timelines and historical turning points, which in turn shines a light on the nature of cause and effect in historical events. Students are assessed by a number of methods; special attention is given to developing strong academic writing skills, along with the sophisticated reading comprehension skills necessary to work with primary texts.

IB World History

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.

Contemporary Issues in a Global Society (11th-12th grade elective)

Contemporary Issues In A Global Society is devoted to studying the historical origins and development of domestic and foreign political and social issues that confront contemporary humanity. 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. While course topics will be chosen in alignment with student interest, categorical subjects will also be addressed. Some of those subjects will be as follows: Technological Implications on Society, Human Rights and the Justice System, Foreign Policy and National Security, and Politics and its Impact. Students will evaluate the issues from a variety of perspectives, form their own opinions, and will then propose and implement solutions. 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.

WORLD LANGUAGES

Spanish 1

In Level I Spanish students take the first steps towards fluency by learning proper pronunciation, accumulating a vocabulary of up to 650 words, and learning the present, present progressive, direct object pronouns, and the beginnings of the preterite tense. Each week students making use of that vocabulary through grammatically correct conversation relevant to the student's high school experience. Year 1 is about learning the language that can be used in the context of friends, family, and in the city of Chicago. Throughout the course of the year Instagram images, music, and videos are viewed and analyzed on a basic level. By the end of the year students will have read their first novel in Spanish, and they will be comfortable having basic conversation revolving around who they are, what they like, and what they observe about the people and the world around them. Starting in the second semester, the class is taught solely in Spanish.

Spanish 2

Level II Spanish reviews and expands upon basic grammar concepts and conversation previously learned. Students will review the present and present progressive tense and will learn the preterite tense, preterite imperfect, reflexive verbs, and commands. They are introduced to 450+ words added to the vocabulary they learned the year prior. 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. Instagram images, music, news articles, and videos are watched and analyzed on a more complex level. Lessons will be taught mostly in Spanish, and students are expected to engage with their peers and teacher solely in Spanish. 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.

Spanish 3

Level III Spanish introduces advanced grammar, such as the future tense, conditional tenses, and the subjunctive. The year begins with a review of previously learned tenses and the addition of specialized vocabulary lists relevant to national and global contexts. Instagram images, music, news articles, and videos are watched and analyzed in a way that will engage students in critical thinking conversations in Spanish. All lessons will be taught in Spanish and students are expected to engage with their peers and teacher solely in Spanish. A portion of Level III Spanish will take the students into Spanish speaking neighborhoods of Chicago to engage with the community in the Spanish language. By the end of the year students will be writing essay pieces in Spanish, have read an Intermediate level Spanish novel, and they will be eloquent conversational Spanish speakers.

Advanced Topics in Spanish

Designed for very advanced 9th-10th grade students, this course focuses on particular aspects of Spanish (e.g. culture, civilization, literature, linguistics, film) by examining a varied selection of works. Assignments include readings, discussion, and papers in Spanish.

IB Spanish

The purpose of IB Spanish is to foster the language acquisition process necessary for students to become proficient in Spanish by improving the four languages 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.

French 1

This course is intended for the beginning French student; no previous knowledge of the language is necessary. 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.

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.

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. Students will have the opportunity to devote class time to their own individual interests so that content drives their acquisition of new, more complicated grammatical structures. They will concentrate on writing lengthier compositions and reading more advanced articles from the francophone world. The course will also integrate a more advanced comparison of cultural contexts between francophone countries and the students' own cultures.

IB French

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 objective appreciation of the different views of people from other cultures and their cultural legacy.

MATHEMATICS

Math 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.

Math 2

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

Math 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 and model patterns, communicate about math both verbally and in writing, and apply course content to solve non-routine problems. The first part of the course addresses one of the most essential concepts in mathematics – the function – including its applications for modeling and problem solving. Students will explore more deeply the quadratic, polynomial, and exponential families, as well as gain exposure to logarithmic and trigonometric functions. The content for the latter portion of the year will be developed according to the needs and interests of the class, and may include analytic geometry, polar and parametric functions, matrix theory, probability, or other advanced topics.

Math 4

This course is intended as a problem-solving seminar that spans several math 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 math courses (i.e. algebra, geometry, trigonometry) with the exploration of less familiar areas of math. 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.

Advanced Algebra (*11th-12th grade course*)

Advanced Algebra is designed to deepen the algebraic skills discovered in Beacon's integrated math curriculum and develop the creative and critical thinking skills required for higher-level mathematics. The course content is composed of an integration of algebra, geometry, trigonometry, number theory, discrete mathematics, and math reasoning. The course will also prepare students for the math content on the ACT and SAT exams.

IB Mathematics | Standard Level

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 and model patterns, communicate about math both verbally and in writing, and apply course content to solve non-routine problems. Content will come primarily from the six core areas of mathematics established by the IB curriculum: algebra, functions, trigonometry, vectors, probability and statistics, and calculus. In addition to the external written assessment, students will have the opportunity to engage in a project in which they deeply explore and write about an area of mathematics of personal interest. Where appropriate, students will also learn effective use of mathematical technology, including graphing calculators and Excel. The standard level course is intended for students with a strong interest in math who are looking for a challenging, conceptual treatment of the material.

IB Mathematics | Higher Level

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 and model patterns, communicate about math both verbally and in writing, and apply course content to solve non-routine problems. Special emphasis will be placed on the development of formal mathematical language and notation, as well as rigorous justification and proof of results. Content will come primarily from the six core areas of mathematics established by the IB curriculum – algebra, functions, trigonometry, vectors, probability and statistics, and calculus – as well as the in-depth treatment of an optional topic to be chosen as a class. In addition to the external written assessment, students will have the opportunity to engage in a project in which they deeply explore and write about an area of mathematics of personal interest. Where appropriate, students will also learn effective use of mathematical technology, including graphing calculators and Excel. The higher level course is intended for students with a strong interest in and aptitude for math who are looking for a challenging, rigorous treatment of the material.

THEORY OF KNOWLEDGE (*IB Diploma students only*)

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 the 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.

The raw material of TOK is knowledge itself. We will think about and explore how knowledge is arrived at in the various disciplines, what the disciplines have in common, and the differences between them. The fundamental question of TOK is: "*how do we know that?*" The answer might depend on the discipline and the purpose to which the knowledge is situated or applied. We will explore methods of inquiry and work to establish what it is about these methods that makes them effective as knowledge tools. In this sense TOK is concerned with *knowing about knowing*.

ARTS ELECTIVES (*All arts courses are semester courses with the exception of IB courses.*)

Music Studio

Collaborating with a contemporary recording artist, students will use digital programs to write songs and music. They will also have the opportunity to record the artist in the studio and produce a CD. This class is open to students of all levels of experience.

IB Music *(Two-year course)*

This course is designed for music students with varied backgrounds in music performance. The aim of the IB music program is to give music students the opportunity to explore and enjoy the diversity of music throughout the world by enabling them to creatively develop their knowledge, abilities and understanding of music through a variety of experiences including research, performance and composition. Students will be expected to demonstrate their understanding of music by using appropriate musical language and terminology in analyzing musical works from many varied cultures and periods, and by exploring music through music theory, aural skills, composition, and music history.

Introduction to Theatre: Ensemble Adaptation

Offered in partnership with Piven Theatre, students deepen their understanding of the Piven Technique through theatre games and improvisation in an ensemble-based environment. This class teaches critical thinking and analytical skills while building vital skills, such as the art of improvisation, ensemble building, active listening, and responding to the energy of others in the space. Students also learn to apply Piven's core improvisational technique to the art of literary adaptation, exploring subject matter that supports humanities curricula by creating and performing stories through focusing on close readings of source material, text exploration, and cultural/historical context.

Advanced Theatre

Offered in partnership with Piven Theatre, returning students have the opportunity to apply the techniques they have learned throughout their courses with Piven to advanced scenes selected by their instructor. Students continue to build these skills while using improvisation and theatre games to unlock spontaneity and take their scene work to the next level.

IB Theatre *(Two-year course)*

The IB Diploma Programme Theatre course is a multifaceted theatre-making course of study. It gives students the opportunity to make theatre as creators, designers, directors, and performers. It emphasizes the importance of working both individually and collaboratively as part of an ensemble. It offers the opportunity to engage actively in the creative process, transforming ideas into action as inquisitive and productive artists. Students experience the course from contrasting artistic perspectives. They learn to apply research and theory to inform and to contextualize their work. The theatre course encourages students to appreciate that through the processes of researching, creating, preparing, presenting, and critically reflecting on theatre— as participants and audience members—they gain a richer understanding of themselves, their community, and the world. Through the study of theatre, students become aware of their own personal and cultural perspectives, developing an appreciation of the diversity of theatre practices, their processes, and their modes of presentation. It enables students to discover and engage with different forms of theatre across time, place, and culture and promotes international-mindedness.

Dance

Join in this fun class where students will create and choreograph a dance show! Students will also be involved in setting choreography, dancing, curating music, themes, and costumes. The course will be led by talented and fun instructors from Foster Dance Studios. No dance background necessary!

Computer Programming and Coding

This course is an introduction to computer science and programming. Students will explore modern programming systems and languages to create interactive applications. By collaborating in a hands-on environment, students will learn problem solving, software design, debugging strategies, and the foundations of computer science (data structures, procedures, and algorithms). Students will work on web-oriented projects using tools such as HTML5, CSS, and Javascript. In addition, based on student interest, the class might explore: graphics and games, animation and art, and data acquisition and control using software tools such as Scratch, Arduino, Processing, and Python.

Practical Life

This class aims to develop and strengthen independence. It's a hands-on course that is both demanding and engaging. The work may be as simple as learning to sew on a button, or as complex as understanding a mortgage application, but it's all intended to give older students confidence and experience in dealing with some of the basic tasks and challenges of the adult world. The term "practical life" is a phrase coined by Dr. Maria Montessori and is used intentionally. In a strict sense it applies to young children, but the basic idea -- that independence, gained through genuine engagement with the environment, is an essential goal of education -- is true of older children as well. Beacon students will soon enter an adult world where they must cope with all kinds of new challenges. For this reason, learning how to negotiate a laundromat is a valid, perhaps even urgent, educational experience.

Studio Art I

Studio Art 1 is student-centered and places student exploration at the heart of a holistic learning experience. Studio Art students will explore a variety of art media, tools, and techniques while being challenged by thought provoking projects. Students will develop a body of artwork through the process of observation, investigation, critical thinking, experimentation, and reflection. They will be encouraged to explore personal, cultural, political, and social justice topics, while forming themes and ideas for their artwork.

Studio Art II

Studio Art 2 is for the more advanced art students. In most cases, taking Studio 1 is a prerequisite. Students will have more freedom to explore the materials and techniques of their choice, while they develop personal intentions. They will examine and compare works of art from

different cultures and periods of time. These works will inspire and influence artistic decisions that students make. The Studio 2 class will also prepare students for the Visual Arts IB Program. Project ideas will be available for those students who would still prefer some guidelines.

IB Visual Arts (*Two-year course*)

The IB Visual Arts course takes place over two consecutive years. Like Studio Art, it is student-centered and places student exploration at the heart of a holistic learning experience. Students have a free choice to identify, select, and explore artists, artworks, cultural contexts, and media and forms for study that interest and excite them. They also have freedom to present their studies in a variety of creative ways, including presentations, demonstrations, and exhibitions. Organization, self-management, and independent study skills are emphasized, as well as higher-order thinking skills, such as analysis and synthesis. Students will also learn to make decisions about what is relevant and useful for their own investigations and how to put their knowledge and understanding into practice, transforming ideas into action.

Students will explore the following three core areas:

- Theoretical Practice – Students will examine and compare works of arts from different cultures and periods of time, investigate different processes and techniques, and explore ways to communicate their ideas through art making and the written word.
- Art-making Practice – Students will develop a body of artwork through the process of investigation, thinking critically, and experimentation with different processes and techniques. Reflection and assessing will be an important part of this process.
- Curatorial Practice – Students will formulate personal intentions for creating and displaying their work. They will assess and reflect whether their work communicates meaning and purpose.