# Brooklyn Friends School 

## International Baccalaureate Guide

Students and parents,
We are extremely proud to offer the International Baccalaureate program at Brooklyn Friends School. Our IB program is a challenging $11^{\text {th }}$ and $12^{\text {th }}$ program that helps to ensure that we offer the best possible education - in and out of the classroom - for our students.

Central to the design of our IB program is student choice: Students can opt to take individual IB courses as part of their total course load, or students can choose to be part of the full Diploma Program, where all of their courses are IB. Students in the Diploma Program aim to earn an IB diploma in addition to their Brooklyn Friends diploma. IB offers fantastic preparation for the future, a core emphasis on deep understanding and critical thinking, great exposure to an international community, and tangible collegerelated benefits.

This guide has multiple purposes: It is designed to both provide information for students and families who would like learn more about our IB program, and serve as a reference for families already involved in IB. Primarily, though, it is designed for $10^{\text {th }}$ grade students and their families as they decide what level of involvement in our IB program is right for them.

These decisions happen in the spring semester of the $10^{\text {th }}$ grade year. After our first informational meeting in December, families should begin thinking about options in earnest. In the spring, all families will have the opportunity to come to school for an individual conference regarding IB options and course selections.

This guide begins with some background about IB, followed by descriptions of our individual IB courses, information about the full Diploma Program requirements, and supplemental sections on colleges' view of IB and the current levels of participation in our various program options. We hope this information will be of help.

Thank you for you interest! Please do not hesitate to ask questions.

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## International Baccalaureate History and Philosophy

As described on their website, the International Baccalaureate (IB) non-profit educational foundation was first established in 1968, out of a desire to create a rigorous curriculum easily transferable to different countries - for use in international schools. IB has been extremely attractive, growing quickly over the past four decades, and now offers four separate programs for over a million students of various ages in over 4,000 schools across over 140 countries. Their stated goal is to help students "develop the intellectual, personal, emotional and social skills to live, learn and work in a rapidly globalizing world." ${ }^{1}$

The Diploma Program, IB's first and largest program, is what we offer at Brooklyn Friends School. Designed for the final two years of high school, the Diploma Program is held in very high regard by colleges and universities. As an introduction, three key aspects of IB to note are its:

- focus on critical thinking instead of memorization,
- appreciation for the development of the whole student,
- challenging assessment program.

The first two are seamless matches with Brooklyn Friends School and Quaker philosophy, and reinforce our goal to educate and draw out each student's inner light, thinking skills, and unique voice. As such, IB has been a natural fit in our school. The third piece - the assessment program - has helped to put these more abstract goals into practice, and has helped raise standards as we seek to ensure that a BFS education is equal to that provided by any school, locally and internationally.

IB's focus on critical thinking is a distinction versus other advanced academic programs (such as AP). IB prioritizes learning to think rather than memorization of content. IB describes their comprehensive goals for learning in their IB Learner Profile ${ }^{2}$, a description of the type of students they hope to develop:

- Inquirers

They develop their natural curiosity. They acquire the skills necessary to conduct inquiry and research and show independence in learning. They actively enjoy learning and this love of learning will be sustained throughout their lives.

- Knowledgeable

They explore concepts, ideas and issues that have local and global significance. In so doing, they acquire in-depth knowledge and develop understanding across a broad and balanced range of disciplines.

- Thinkers

They exercise initiative in applying thinking skills critically and creatively to recognize and approach complex problems, and make reasoned, ethical decisions.

[^0]- Communicators

They understand and express ideas and information confidently and creatively in more than one language and in a variety of modes of communication. They work effectively and willingly in collaboration with others.

- Principled

They act with integrity and honesty, with a strong sense of fairness, justice and respect for the dignity of the individual, groups and communities. They take responsibility for their own actions and the consequences that accompany them.

- Open-minded

They understand and appreciate their own cultures and personal histories, and are open to the perspectives, values and traditions of other individuals and communities. They are accustomed to seeking and evaluating a range of points of view, and are willing to grow from the experience.

- Caring

They show empathy, compassion and respect towards the needs and feelings of others. They have a personal commitment to service, and act to make a positive difference to the lives of others and to the environment.

- Risk-takers

They approach unfamiliar situations and uncertainty with courage and forethought, and have the independence of spirit to explore new roles, ideas and strategies. They are brave and articulate in defending their beliefs.

- Balanced

They understand the importance of intellectual, physical and emotional balance to achieve personal well-being for themselves and others.

- Reflective

They give thoughtful consideration to their own learning and experience. They are able to assess and understand their strengths and limitations in order to support their learning and personal development.

The learning goals expressed in this Learner Profile are far beyond memorization of content, and are what make the IB program exciting and valuable. As you read further, and learn more about the details of the program and classes, you will read much about the other two key aspects of IB: their whole-student focus and comprehensive assessment model. Note how these connect and reinforce these larger learning goals, forming a wellconceived and coherent program for our students.

## IB Courses

The following is a graphical representation of the IB Diploma Program. The core areas of the program will be discussed on pg. 30. Here we focus on the academic courses. IB divides courses into six groups, covering a wide-ranging and challenging curriculum, listed around the darker circle, second from the outer edge of the graphic (e.g. Sciences, The Arts, etc.).


We offer courses in each group. Chosen in response to our larger Brooklyn Friends program, in accord with our graduation requirements, we offer:

Studies in Language and Literature (primary language): English Literature Language Acquisition (secondary languages): Spanish, French, Mandarin, and Latin Individuals and Societies: $11^{\text {th }}$ - History of the Americas, $12^{\text {th }}-20^{\text {th }}$ Cent. World History Sciences: Biology, Physics, and Environmental Systems and Societies Mathematics: Mathematics and Mathematical Studies
The Arts: Visual Art, Theater, Dance, and Music

IB courses are typically two years in length, running for both junior and senior years.
Many courses contain options so that students can tailor their individual academic programs. An important option is that most courses are offered at two levels of difficulty - in IB terminology, Higher Level (HL) or Standard Level (SL). HL courses are more challenging and rigorous, more like college courses.

Students can choose to take individual courses as part of their full schedule, or they can choose to be part of the full Diploma Program (explained in detail in the section following the individual course descriptions). Many of our departments now only offer IB options. Before moving into the details of each course, here is more background information that applies to all IB courses.

## IB and BFS Grades

In all classes, students receive an IB score on a scale from 1 to 7 (lowest to highest) from IB. These scores are given in addition to regular, internal BFS grades (A-F scale); to be clear, students still receive normal quarter and semester grade reports, and our BFS grades are the basis for college applications. IB issues their scores at the very end of the two-year course, and they arrive in July, after graduation. Our IB Coordinator will notify families by phone and/or by letter, and the official, certified documentation arrives from IB at the end of the summer. IB also sends results automatically to the college of each graduate.

## IB Assessment

In each IB course, students take a variety of official IB assessments across the two years, each a factor in overall IB scores. In IB English, for instance, students have five IB assessments: two oral presentations, one long-term written paper, and two essay-based final exams. Five assessments provide a detailed and comprehensive view of students' skills, much more thorough than in AP courses, for example, where scores are generally based on a single test.

This wide assessment approach also expands each academic discipline beyond the typically narrow definition presented to high school students. The inclusion of oral assessments in the English course, for example, has helped us to better develop students' expressive skills in other formats beyond writing.

The range of assessments also allows the process of how students develop knowledge to be of direct focus, rather than just assessment of students' final answers or products. As an example, in IB Visual Arts, students' finished works are assessed, but so are pages of their workbooks, revealing students' long-term development of ideas. In Biology, students' lab work is assessed. Each course includes such process-oriented assessments. Assessing and valuing students’ process of learning helps to encourage learning beyond short-term cramming or rushed memorization.

Each IB course utilizes a mix of internally graded assessments (graded by the teacher) and externally graded assessments (graded by experts from across the world). The final exams that students take in most classes are the primary external assessments. Most courses have at least two exams that test students on a range of skills and content knowledge. This rigorous exam period occurs in May of the senior year and is an appropriate culmination of students' upper school experience. The internal assessments are spread throughout the two years.

In the following course descriptions, the IB assessment details are included for each class, as well as information about course content, teaching approaches, course options, and relationship to other department offerings.

## IB English A: Literature

The two-year English course will prepare students to discuss, compare, contrast, and write with sensitivity and sophistication about a global variety of literary works and genres. Focusing primarily on the themes of desire, power, alienation and transgression, and in reading works from different cultures, periods, and styles, students study the rhetorical strategies and effects that distinguish and connect the works, their themes, and their historical and geographic contexts. Authors studied represent a diverse range of voices, cultures, time periods, and styles, including works in translation. The following authors may be featured: Albert Camus; Richard Wright; Mary Shelley; Franz Kafka; Gabriel Garcia-Marquez; Jean Rhys; John Keats; William Wordsworth; Percy Shelley; Samuel Taylor Coleridge; John Milton; Toni Morrison; Chinua Achebe; Joseph Conrad; William Shakespeare; E.B. White; Oscar Wilde; Tayeb Salih; Mary Oliver; and Sophocles.

This course emphasizes close textual reading, independent work, seminar discussion, frequent analytical writing, and oral commentary and presentation that hone the students' critical thinking skills, including the ability to appreciate diverse points of view, to write persuasively, to speak articulately, and to listen respectfully in order to be more informed, globally-aware citizens and leaders. Additionally, students will be encouraged to pursue an array of independent enrichment reading from different lenses of literary criticism, field experience (e.g. local lectures, performances, exhibits), and other multidisciplinary approaches (e.g. the rendering of a theme in a work of art) to enhance their appreciation of the artistic and historical distinctiveness of each work. This course, as can be seen in the following assessments, emphasizes the process of analyzing works and expressing one's own thinking and interpretation - in writing and orally - as well as learning about others' analyses of works.

## IB Assessments

- Written Exams: Students take two exams at the end of this two-year course. One exam is a comparative thematic essay based on works studied during the course, assessing their knowledge and writing skills; this exam is worth $25 \%$ of a student's overall IB English score. In the other exam, students demonstrate critical interpretive skills as they analyze and write a detailed commentary on an "unseen" poem or passage from a work not studied in the course; this assessment is worth $20 \%$ of a student's IB English score. Both exams are taken at the end of the senior year and are graded externally.
- Written Assignment: Students write a paper on one of the translated works studied during the course. Along with their final paper, students submit a portfolio of journals and drafts to document their writing process. This project is worth $25 \%$ of students' IB scores. Graded externally.
- Oral Presentation: In this open-ended assessment, students explore a topic of personal interest related to the works studied in class, and present to their peers. This assessment is worth $15 \%$ overall. This assessment is graded internally by the student's teacher and externally moderated.
- Oral Commentary and Discussion: Each student receives a poem and 20 minutes to compose an oral commentary that he/she performs for the teacher. After the student's 8-10 minute commentary, the assessment shifts to a 10 -minute, teacherled discussion of other works studied in the course. This entire assessment is audio
recorded, graded by the teacher and externally moderated, and is worth $15 \%$ of the overall IB grade.


## Course Options

We offer only IB courses within the English department for juniors and seniors. IB English A: Literature is offered at two levels - Higher Level (HL) and Standard Level (SL). The "A" designates that it is a course suitable for native speakers, a level above the language "B" courses we offer in Spanish, French, and Latin.

SL and HL English students are mixed together in the same classes, and since most assignments are identical, the majority of students take HL. While students can have some choice of level, the English department is involved in making sure placements are appropriate based on students' skills.

Students can choose to take the courses for official IB credit or not. Regardless, the courses will be identical; the only difference is that students will receive an official IB score in addition to their BFS grades if choosing to register with IB. Since the work is the same, most students do opt for IB.

Map of English Dept choices:
$10^{\text {th }}$ grade $11^{\text {th }}$ grade $12^{\text {th }}$ grade


## IB French and Spanish B

Prerequisite: French or Spanish III
Literature forms the foundation of these two-year courses. Students study authentic materials - news articles, letters, songs, poems, plays, and works of both fiction and nonfiction - gaining in-depth exposure to Spanish or French language and culture. Students learn to analyze and interpret texts using linguistic skills, and learn to write their own interpretations and reflections of works as well. Additionally, students create original compositions of varying styles and lengths. Class discussions, written essays, and oral presentations are based on a wide-ranging study of Spanish or French-speaking themes. Culture and tradition are compared, contrasted and analyzed further through film, video, and field trips. Students also review in depth all the grammar that they have learned thus far. Importantly, this course is conducted exclusively in the target language.

In this international program, the acquisition of a second language is valued. All Diploma students across the world must be proficient in a second language. As described above, the language itself is only part of the course; the culture of the Spanish or Frenchspeaking world and the connections between language and culture are also critical. Expanding students' understanding of our international community is an important goal.

## IB Assessments

- Exams: Students take two exams at the end of this two-year course. One exam focuses on students' ability to read texts and answer related questions. The other assesses students' writing and communications skills, and students write a short composition for this exam. Each of these exams is worth $25 \%$ of students' overall IB scores. Both exams are graded externally by IB graders.
- Written task: For this assessment, students compose a written piece, based on a teacher-given source material, over the course of 3-4 hours. It is an opportunity for students to create a well-written composition over a longer time than a typical exam period affords. Worth $20 \%$ of students' IB scores, this piece is assessed externally.
- Interactive Oral: This is a series of three oral activities held during class in which students' listening and speaking skills are assessed. Worth $10 \%$ overall, this assessment is graded internally by the student's teacher.
- Individual Oral: Students are shown a photograph and have 15 minutes to compose a short oral presentation that they perform (individually) for their teacher. The teacher then asks follow-up questions for further discussion (roughly 10 minutes for presentation and discussion). This assessment is audio recorded and graded by the teacher. It is worth $20 \%$ of students' IB scores.


## Course Options/Relationship to other department offerings

These courses are entitled Spanish or French "B" in IB terminology, signifying that it is a language of less fluency than their primary language, or "A" language. Students must have completed through level III in their target language as a prerequisite for taking these courses. We offer Spanish and French B at both Standard and Higher Levels (SL and HL ). The key differences are: HL assessments tend to be even more thorough - longer word count expectations, for instance - and more challenging; the HL course has a greater focus on literature; and HL students will meet more often, particularly in the second year of the course. As students consider the HL option, teacher consultation will be important.

In contrast to the Language " $B$ " courses, we also offer "ab initio" courses in Spanish and French for students who have only completed through level II in previous years or who have finished level III but might require more foundational work (see the following course description). $10^{\text {th }}$ graders in level II who desire a Language B course must take a summer program to accelerate; upon return, students will meet with the appropriate teacher to demonstrate that they are ready for level IV material.

For a visual map of the World Language program, see pg. 12.

## IB French/Spanish/Mandarin ab initio

Prerequisite: French, Spanish, or Mandarin II
Our French and Spanish "ab initio" courses are primarily designed for students with limited experience in the target language (students finishing level II in $10^{\text {th }}$ grade), but might be appropriate for students who have finished level III but need more practice. These two-year courses develop students' functional literacy in the language as well as their appreciation of the everyday life and culture of the target language countries. In more detail, the language ab initio courses aim to develop the four primary language skills (listening, speaking, reading and writing) and provide a solid framework in terms of grammar and vocabulary. In Mandarin, this requires learning how to read and write in a new writing system, and some assessments are fully in Chinese characters. These courses are organized into a number of cultural and thematic topics in which grammatical structures and vocabulary can be practiced. Students learn to communicate and interact appropriately in a range of everyday situations, for example, reading the newspaper and other texts, conducting telephone conversations, and writing emails. The study of particular features of the culture is not an end in itself but a means by which the students learn about a different way of life, and consequently develop their language skills.

In this international program, the acquisition of a second language is valued. All Diploma students across the world must be proficient in a second language. As described above, the language itself is only part of the course; culture and the connections between language and culture are also critical. Expanding students' understanding of our international community is an important goal.

## IB Assessments

- Exams: Students take two exams at the end of this two-year course. One exam focuses on students' ability to read texts and answer related questions. The other assesses students' writing skills, and students complete two short writing exercises for this exam. The first exam is worth $30 \%$ of students' overall IB scores, and the second is worth $25 \%$. Both exams are graded externally by IB graders.
- Written task: For this assessment, students first research a topic outside of class and then write about it, in-class, for 2 hours. An aspect of the piece is discussing cultural similarities and differences between American culture and the culture be studied. Worth $20 \%$ of students' IB scores, this piece is assessed externally.
- Individual Oral: Students are given a picture and have 15 minutes to compose a short oral presentation that they perform (individually) for their teacher, followed by a few questions from the teacher. Teacher and student then have a conversation about other topics in the target language. This 10 -minute presentation and discussion is audio recorded and graded by the teacher. It is worth $25 \%$ of students’ IB scores.


## Course Options/Relationship to other department offerings

"Ab initio," in IB terminology, signifies that these are beginner-level courses. Ab initio courses are the natural progression for students completing Spanish, French, or Mandarin II in $10^{\text {th }}$ grade. At least Level II knowledge is a prerequisite. These courses might also be the correct course for some students finishing Spanish or French III in $10^{\text {th }}$ grade who need additional practice with foundational skills. The World Language department will assist in making placement decisions. Ab initio courses are only offered at SL.

In contrast, we also offer more advanced IB French and Spanish "B" courses that are the equivalent to finishing level $V$ in the senior year. To be eligible for Language $B$, students must completed level III in $10^{\text {th }}$ grade. $10^{\text {th }}$ graders in level II who desire a Language B course must take a summer program to accelerate; upon return, students will meet with the appropriate teacher to demonstrate that they are ready for level IV material.
However, the more natural path for $10^{\text {th }}$ graders in level II is to take our ab initio courses.

For a visual map of the World Language program, see pg. 12.

## IB Latin

Prerequisite: Latin III
This course is a two-year intensive course in which students explore the languages, literatures and culture of ancient Rome through a close reading of selected works of Late Republican, Augustan "Golden" and early Imperial "Silver" writers. The readings include selections from Ovid's Metamorphoses, Catullan elegy and polymetrics, Horace's Odes (Latin lyric and amatory poetry), Vergil's Aeneid (epic), and Cicero's speeches.

This course is multi-faceted: Students practice the arts of translation, literary analysis, and informed critical response. Students also contemplate the influence of these works well beyond their own time. Works are also read with regard for poetic meter, rhetorical strategies, and figures of thought and word-arrangement as well as correct pronunciation and oral delivery. Translation, critical writing, and oral interpretation skills are assessed. Across all of these different activities, students are encouraged to think broadly, considering the full picture of ancient literature, its historic context, and its personal relevance to students in the modern era.

## IB Assessments

- Exams: Students take two exams at the end of this two-year course. The first requires students to translate at sight, with a dictionary, a passage from a prescribed author, i.e. Ovid's Metamorphoses or Cicero's speeches. This exam is worth $35 \%$ of students' overall IB scores. The second exam requires students to answer questions and write an essay about the readings they have studied throughout the course. This exam is worth $45 \%$ of students' overall IB scores. Both exams are graded externally by IB graders.
- Project: The remaining $20 \%$ of the IB score comes from a project where students are given three options: write an original Latin composition; prepare an annotated text and perform a reading of a passage from Latin literature; or create a research dossier on a topic of their choosing. This assessment is graded internally by the teacher.


## Course Options

The choice of different projects described above is a key course option. Additionally, Latin can be taken at both Standard and Higher Levels (SL and HL). The key differences are: HL assessments tend to be even more thorough - longer word count expectations, for instance - and more challenging; and the HL course has expanded reading requirements. As students consider the HL option, teacher consultation will be important.

## Relationship to other department offerings

Where possible, we also offer non-IB Latin IV and V, distinct from the IB courses. This is dependent on student interest. In these non-IB courses, students study a similar syllabus, but generally at a less intense pace. Another distinction is that IB Latin meets more often than other Latin courses. In IB Latin, there is a significant increase in rigor and expectations.

## Additional note

IB Latin is scheduled either when other languages are offered or when art courses are offered. As such, Latin can serve to replace French or Spanish as students' second
language, or can be taken in addition to either, as a third language (replacing art). This scheduling decision, as much as possible, is based on the needs and interests of the particular students each year.

Map of World Language Dept choices:

| 10th Grade | $11^{\text {th }}$ Grade | $12^{\text {th }}$ Grade |  |
| :---: | :---: | :---: | :---: |
| Sp/Fr III | IB Sp/Fr B | IB Sp/Fr B | (SL or HL) |
|  | With summer and dept app |  |  |
| Sp/Fr II | IB Sp/Fr ab initio | IB Sp/Fr ab initio | (SL) |

Note: All of the above IB languages, with the exception of Latin at times, are scheduled as students' primary world language. It is not possible to study two of these courses simultaneously. Latin is the exception. As explained in more detail in the Latin description, we schedule Latin either in the language or art block depending on student interest that year. So, in some years this might allow students to study Latin in addition to another world language, although art would no longer be possible.

## IB History of the Americas ( $11^{\text {th }}$ grade) <br> IB $20^{\text {th }}$ Century World History ( $12^{\text {th }}$ grade)

This is a two-year sequence of IB history courses. The junior year course, IB History of the Americas (HOTA), begins with a brief study of how the United States was "conceived in liberty" but also steeped in slavery, a situation historian Edmund Morgan calls the "central paradox" of its founding. Students then focus on three major topics of study: the causes and effects of the American Civil War and Reconstruction; the development of the Civil Rights Movement; and the origins and legacies of the Cold War. When possible, this course examines the interplay between events in the U.S. and its neighbors to the South.

The senior year course, IB $20^{\text {th }} \mathrm{C}$. World History, includes the following major topics: The Arab-Israeli conflict, 1945-1979, an exploration of the political, economic, and social issues behind the dispute; Origins and development of authoritarian and singleparty states, an in-depth study of the totalitarian models of Hitler's Germany and Stalin's Soviet Union (with post-1945 case studies from the regimes of Mao, Castro, Pinochet, Julius Nyerere, Idi Amin, and Saddam Hussein); and the Cold War, an examination of the impact of East-West relations from 1945 on global affairs.

Both IB courses prioritize depth of understanding rather than breadth; the goal is expertise rather than familiarity. We teach history as an active process of analysis rather than as a set of knowledge to be passively memorized and regurgitated. Students learn and practice the skills of historians.

## IB Assessments

- Exams: Students take three exams at the end of this two-year course. The first exam, worth $20 \%$, gives students primary and secondary documents on the ArabIsrael conflict to evaluate, and students must weave their knowledge with the source material to answer questions. The second exam, worth $25 \%$, tests students' knowledge of topics studied in the senior year. The third exam, worth $35 \%$, tests students' knowledge of the HOTA topics of the junior year. All are graded externally by IB.
- Historical Investigation: This assessment is a research project conducted by students during their junior year, resulting in a written paper. This assessment helps students practice the key skills of historical research, including evaluation of sources, analysis of other historians' points of view, and written synthesis of arguments to support a thesis. Worth $20 \%$ of students' IB scores, this assessment is graded by the teacher.


## Course Options/Relationship to other department offerings

All juniors take HOTA and all seniors take $20^{\text {th }}$ C. World History. While these courses are required, students can choose to take them for IB credit or not. IB and non-IB students are mixed in the same sections and the courses are identical. The only difference is that IB students take the official IB exams at the end of the two-year sequence. This arrangement permits flexibility, and students can switch to official IB status partway through the course as desired. Since the work is the same, almost all students do opt for IB.

Students who want IB credit can choose between HL or SL routes. The difference is that SL students do not take the third IB exam - the one on HOTA topics from the junior year - and are only assessed over the senior year curriculum. HL students are assessed over both years of material, requiring longer-term retention. Since all of our students take HOTA in their junior year regardless, most students who desire IB credit will aim for HL. Note: For SL students, the relative values for the IB assessments are different since they do not take the third exam: Exam 1 would be 30\%, Exam 2 45\%, and the Research Investigation $25 \%$ of the overall IB score.

Map of History Dept program:


## IB Biology

This two-year course provides students with the conceptual framework and analytical skills necessary to critically deal with the changing science of biology. It is similar to an introductory college course for biology majors. The major topics explored include: Cells, Chemistry of Life, Genetics, Evolution, Ecology, Anatomy and Physiology. Additional time is dedicated to Nucleic Acids, Proteins, Cell Respiration, Photosynthesis, Neurobiology, Infectious Diseases, Muscles and Movement, Excretion, and Plant Science.

Despite the wide-ranging list of topics above, this course is not just focused on content. This course emphasizes the process of learning in science, and students learn and practice how scientists think and solve problems. Lab work is a critical element, and learning through experimentation is emphasized throughout the course. Students are involved in the design of their own labs as well.

## IB Assessments

- Exams: Students take three IB exams at the end of this two-year course. The first exam is a multiple-choice exam covering the core content of the course. In the second exam, students answer longer questions on these topics; this is the most important exam. The last exam covers additional topics we select from a range of options. All three exams are graded externally and are cumulatively worth $80 \%$.
- Investigation: Throughout the course, students undertake lab experiments. In this particular assessment, students create, execute, and document their own experiment. Worth $20 \%$, this investigation is graded by the teacher.
- Group 4 Project: All students taking science courses participate in this collaborative experience. Typically, we organize a fun experiment where students work together to invent a machine.


## Course Options

We offer IB Biology at both Standard and Higher Levels (SL and HL). The HL IB assessments are longer and more thorough than for SL, and students have to learn more topics. Depending on course enrollment, SL and HL students might be in separate sections or mixed together with adjusted assignments.

## Relationship to other department offerings

Since there are many options within the Science Department, please see the comprehensive discussion on pg. 18 for further information about how IB Biology relates to our other courses.

## IB Environmental Systems and Societies

ESS is a two-year course that explores the concepts and skills needed to understand our natural world and the effect that human societies place upon it. Unlike a pure science class, the class will explore the pressures and effects of human population growth on the Earth's fragile ecosystems and ways to assess and quantify that impact. Specific topics studied are: systems and models of the ecosystem, biomes, human populations, carrying capacity and resource use, conservation and biodiversity, pollution management, global warming, and alternative energy solutions.

Students will also explore the history of the environmental movement as it relates to today's challenges. The philosophy of 19th century economic laws will be explored through 21 st century realities. Lab work is a critical element, and learning through experimentation is emphasized throughout the course. Students will do original research on a wild environment and assess the changes throughout the course.

## IB Assessments

- Exams: Students take two IB exams at the end of the course. The first exam is composed of short-answer questions and is worth $30 \%$ of students' IB scores. In the second exam, students analyze data from a case study and answer two essay questions; this longer exam is worth $50 \%$. Both exams are graded externally.
- Practical work: Throughout the course, students are involved in practical and fieldwork activities. Students' work is evaluated on a number of criteria, such as planning, data collection and processing, and conclusions and discussion. This is the area where students' process of learning is directly assessed. Worth $20 \%$, practical work is graded by the teacher.


## Course Options

IB Environmental Science and Societies is only available as an SL course.

## Relationship to other department offerings

As ecology and biology are related fields, IB ESS contains biological topics, and we have also added units on cell theory and genetics. All of our students explore some biology in upper grades so they graduate with a solid foundation in science. Regarding other science course, there are many options within the Science Department; please see the comprehensive discussion on pg. 18 for further information about how IB ESS relates to our other offerings.

## IB Physics

This two-year course is designed to further the students' understanding of the physical world while also helping the students advance their problem-solving strategies. This class, as with all IB science courses, is geared to install a lifelong quest for knowledge and an inquisitiveness about how and why things happen. Our aim is to develop in each student a "need to know" that will lead to questioning and, ultimately, understanding of the whys and hows of physical phenomena. This course emphasizes the process of learning in science, and students learn and practice how scientists think and solve problems. Lab work is a critical element; learning through experimentation is emphasized. Students are involved in the design of their own labs as well.

In terms of content, students will learn how the world was examined and described by the early philosophers and will refine that understanding as we progress from the Macroworld to the Microworld, from observable experiments to thought experiments. Specific topics explored are: Mechanics, Thermal Physics, Oscillations and Waves, Electric Currents, Fields and Forces (Gravitation, Electric and Magnetic), Atomic and Nuclear Physics, Energy, Power and Climate Change, Astrophysics, Sight and Wave Phenomena.

## IB Assessments

- Exams: Students take three IB exams at the end of this two-year course. The first exam is a multiple-choice exam covering the core content of the course. In the second exam, students answer longer questions on these topics; this is the most important exam. The last exam covers additional topics we select from a range of options. All three exams are graded externally and are cumulatively worth $80 \%$.
- Investigation: Throughout the course, students undertake lab experiments. In this particular assessment, students create, execute, and document their own experiment. Worth $20 \%$, this investigation is graded by the teacher.
- Group 4 Project: All students taking science courses participate in a collaborative experience. Typically, we organize a fun design experiment where students work together to invent a machine.


## Course Options

We offer IB Physics at the Standard Level (SL) only.

## Relationship to other department offerings

Since there are many options within the Science Department, please see the comprehensive discussion on pg. 18 for further information about how IB Physics relates to our other courses.
$10^{\text {th }}$ grade $11^{\text {th }}$ grade $12^{\text {th }}$ grade


If desired, you could also take IB Physics or Adv Physics as an additional science (replacing art):


## Overview

We offer two IB science courses as primary options; students can choose either IB Biology or IB Environmental Science and Societies, the top two paths in the diagram above. IB Biology is generally viewed as a more rigorous experimental science course. IB ESS is a newer offering at BFS that incorporates a social/historical perspective with scientific analysis. Students not desiring an IB course must take one-year, regular Biology as juniors, and, as seniors, can choose from our various science electives.

IB Physics functions as a second science for students that they can take in addition to IB Biology, regular Biology, or IB ESS. It is scheduled at the same time as art courses, so students choosing to take IB Physics cannot take art. Students desiring to learn some physics, but not wanting to take the full two-year IB course, can choose to take half of the IB course as a one-year elective, entitled Advanced Physics. Advanced Physics can be taken in either the junior or senior year, allowing an art course in the opposite year.

## IB Mathematics

Prerequisite: Math 10
This two-year course covers a broad range of mathematical topics, both abstract and applied in nature that could be taken at the collegiate level. The focus is to introduce important mathematical concepts through the development of mathematical techniques and understanding. Students begin by reviewing certain algebra topics and exploring Precalculus topics in depth for much of the first year, including sequences and series, laws of exponents and logarithms, the binomial theorem, Pascal's triangle, linear, quadratic, exponential and logarithmic functions and equations, circular functions and trigonometry, vectors in the plane and in three dimensions, and matrices. Then, students move on to study descriptive statistics, probabilities, laws of probability and discrete random variables. Finally, most of the second year is spent studying calculus, including limits, differentiation, anti-differentiation, integration, kinematic problems, and the study of graphical behavior of functions.

IB mathematics courses prioritize understanding content, instead of memorizing information. The goal is to produce students capable of mathematical thinking themselves, not students who simply know others' mathematics. As they solve problems, students learn to create logical arguments and explanations for their thinking. The emphasis on process is key. Students learn to apply mathematics to real-world problems throughout the course, learn appropriate uses of technology in mathematics, and learn to choose amongst many available techniques as they pursue solutions.

## IB Assessments

- Mathematical Exploration: Students individually investigate areas of mathematics and write reports detailing their mathematical work. This assessment is an excellent opportunity to engage in mathematical discovery beyond the typical time constraints of an exam. Worth $20 \%$ of their IB scores, the mathematical exploration is graded by the teacher.
- Exams: Students take two final exams at the end of the two-year course, and, equally weighted, these exams comprise the remaining $80 \%$ of students' IB scores. Students can use a graphing calculator on one exam; on the other it is not allowed. See below in Course Options for the difference in exams for HL students.


## Course Options

This course can be taken at Standard or Higher Level (SL or HL). Students in HL meet more additional periods than a typical course. Aside from studying SL topics in greater depth, HL students explore an additional advanced topic, such as group theory or discrete math. This topic is assessed in an additional, third IB exam. HL students' IB scores are weighed $30 \%$ for Exam 1, $30 \%$ for Exam 2, 20\% for Exam 3, and 20\% for the mathematical exploration.

Students can choose to take this course for official IB credit or not. Regardless, the course will be identical; the only difference is that students will receive an official IB score in addition to their BFS grades if choosing to register with IB. Since the work is the same, most students do opt for IB.

## Relationship to other department offerings

All students take either Mathematics SL or HL in the junior year. Motivated students can consider the extra challenge of Mathematics HL, but placement is dependent on excellent work in $9^{\text {th }}$ and $10^{\text {th }}$ grade. Mathematics HL is typically a small group of students who are interested in math-related fields in college, such as physics, engineering, and math; Mathematics SL is already a very challenging course!

After the junior year, students in Mathematics SL can either continue in Mathematics SL for the senior year, or can switch to Mathematical Studies SL. Mathematical Studies SL satisfies all IB requirements, but is designed for students in need of a less abstract math course; these students typically are not interested in math-related fields of study in college. See the next page for a description of this course.

For a visual map of the Mathematics Dept program, see pg. 22.

## IB Mathematical Studies

Prerequisite: 1 year of IB Mathematics SL
This senior-year course covers a wide range of topics to help students build abstract mathematical skill and gain an understanding of the many uses of mathematics in our world. After the junior year in Mathematics SL, students are well-grounded in linear, quadratic, rational, exponential, and radical equations and functions, and move on to explore introductory differential calculus in this course. Mathematical Studies students also learn about probability, sets and Venn diagrams, and statistics (both descriptive and two-variable), financial mathematics, sequences and series, logic, two and threedimensional geometry, and right and non-right triangle trigonometry.

IB mathematics courses prioritize understanding content, instead of memorizing information. The goal is to produce students capable of mathematical thinking themselves, not students who simply know others' mathematics. As they solve problems, students learn to create logical arguments and explanations for their thinking. The emphasis on process is key. Students learn to apply mathematics to real-world problems throughout the course, learn appropriate uses of technology in mathematics, and learn to choose amongst many available techniques as they pursue solutions.

## IB Assessments

- Research Project: In a large independent project, students use their growing knowledge of statistics to explore real-world topics of their choosing. Students collect and analyze data, and write a report detailing their work and conclusions. These reports are graded internally, and are $20 \%$ of students' official IB scores.
- Exams: Students take two final exams at the end of the senior year, and, equally weighted, these exams comprise the remaining $80 \%$ of students' IB scores. One exam focuses on students' broad knowledge of the curriculum. The other examines knowledge in a more in-depth fashion, as students answer six detailed questions; this exam prioritizes how students come to their answers.


## Course Options

Mathematical Studies is a Standard Level (SL) course only.

## Relationship to other department offerings

The math department only offers IB courses in $11^{\text {th }}$ and $12^{\text {th }}$ grades. We offer different IB math courses at varying degrees of abstractness. All students take either Mathematics SL or HL in the junior year. Students in Mathematics SL, after their junior year, can either continue in Mathematics SL for the senior year, or can switch to Mathematical Studies SL (a one-year senior course). Mathematical Studies SL satisfies all IB requirements, but is designed for students in need of a less abstract math course; these students typically will not pursue math-related fields of study in college.

Map of Mathematics Dept program:
$10^{\text {th }}$ grade
$11^{\text {th }}$ grade
$12^{\text {th }}$ grade


## IB Theatre

IB Theatre is a two-year exploration of theatre from around the world. Students take on the many and varied roles available to theatre artists, such as actor, director, dramaturge, designer, and technician to actively engage the theatre style or tradition they are studying. Much of the course is built around student investigations into theatre practices, drawn from across many cultures. Recent explorations have included Epic theatre, Kabuki, South African political theatre, Theatre of the Absurd, Kathakali Dance Theatre, and Naturalism; this course prioritizes a global outlook. Additionally, the topics explored are not dictated by IB, and instead are guided by student interest, BFS productions, and the theatre opportunities presented by NYC.

IB Theatre is notable in its mix of academic and performance-based work; as students investigate topics, they practice the performance techniques specific to the topics and study (and write about) their historical and social contexts. Additionally, students are required to participate actively in 2-3 BFS productions outside of the classroom to support and enhance the work they do in class. The official IB assessments, described below, highlight the integrated nature of this course.

## IB Assessments

- Research Investigation: This assessment is a short formal research paper on a theatre style or tradition that was previously unfamiliar to the student. It is worth $25 \%$ of a student's IB grade, and is graded externally by IB.
- Practical Performance Proposal: Students write a short "pitch" for an idea for a complete performance based on a stimuli provided by IB (generally a poem, song, story, or image). Worth $25 \%$ of a student's IB grade, IB grades this assessment.
- Independent Project Portfolio: Students explore the theatrical job of their choice, and document and reflect on their experience in a portfolio. Assessed by the teacher. Worth $25 \%$.
- Theatre Performance and Production Presentation: In this assessment, students orally explore, evaluate, and reflect on their in and out of class theatrical experiences. Assessed by the teacher, and worth $25 \%$ as well.


## Course Options

Students can choose to take IB Theatre at either Higher Level or Standard Level (HL or SL). The differences are: HL requires participation in three school performances and SL requires two; HL also requires longer word counts for written assessments.

## Relationship to other department offerings

IB Theatre is the only theatre offering in 11th and 12th grade, but students who desire a one-year theatre course may take the first year of the course only, either during their junior or senior year. This course is entitled Theatre 2.

In contrast to theatre classes in previous grades, as described above, IB Theatre is a course that incorporates both academic and performance work; previous theatre classes focus on acting. This course also meets more times per cycle than previous theatre courses, meeting the same amount as other academic courses. These two differences create a more intense theatre experience.

## IB Dance

IB Dance integrates three strands of dance: technique/performance, choreography, and cultural/historical analysis of dance forms. Students explore dance traditions through a mix of physical practice, observation, research, and written investigation. Students develop themselves as sophisticated movers/performers in several techniques, and become strong dance analysts, able to conduct discourse on the cultural context of dance traditions and pieces of choreography. Students explore and clarify their artistic voice and vision through choreographing solos and duets; written reflection on their artistic and choreographic process is also an emphasis.

A central goal of this course is for students to explore a wide range of dance techniques and traditions from around the world. Recently, students have explored Cuban and Haitian dance, Flamenco, Pilates and Yoga, and the modern dance techniques of Limon, Graham, Bartenieff, Contact Improvisation, and Partnering. Each year, students work with a guest artist who choreographs a dance that is performed in our school's annual Dance Concert.

## IB Assessments

- Dance Investigation: This assessment is a short formal research paper in which student analyze two dance styles drawn from different cultures or traditions. It is worth $20 \%$ of a student's IB score, and is graded externally by IB.
- Dance Performance: Student perform one or two dances and are assessed for skills and expressive abilities. This assessment is video recorded, assessed by the teacher, and worth $40 \%$ of a student's IB score.
- Composition and Analysis: Students compose two dances, which are video recorded. Students also compose a statement in which they analyze their work and reflect upon their process. This two-part assessment is worth $40 \%$ of students' scores, and is assessed externally by IB.


## Course Options

Students can choose to take IB Dance at either Higher Level or Standard Level (HL or SL). The differences are: HL requires student to perform more dances, choreograph more dances, and write longer pieces for the written assessments.

## Relationship to other department offerings

IB Dance is the only dance offering in 11th and 12th grade, but students who desire a one-year dance course may take the first year of the course only, either during their junior or senior year. This course is entitled Dance 2.

In contrast to dance classes in previous grades, as described above, IB Dance is a course that incorporates more rigorous written and choreographic work alongside the performance aspects of the class. This course also meets more times per cycle than previous dance courses, meeting the same amount as other academic courses. These two differences create a more intense dance experience.

## IB Music

IB Music integrates performance, music theory, and history, helping students to gain a multi-faceted understanding of music. For some class periods, students meet in separate sections to hone their performance skills. Students can focus on Chamber Music, Chorus, or Jazz, guided by teachers with expertise in these particular areas. For the second component of the course, all students meet together for classes that explore history and theory. Much of this course is built around investigations into the varied musical cultures of the world, and students learn about composers and their surrounding historical and cultural contexts. Students develop their analytical skills through work with scores and through listening exercises.

IB Music is notable in its mix of academic and performance-based work. The official IB assessments, described below, highlight the integrated nature of this course. Students will perform in school music shows as part of this course.

## IB Assessments

- Musical Links Investigation: This assessment is a written piece in which students investigate musical connections between different cultures. It is worth $20 \%$ of a student's IB score, and is graded externally by IB.
- Performance: Students' public performances are recorded as they work in groups or individually. Their performance skills are assessed by the teacher, and are worth $50 \%$ of a student's IB score.
- Exam (Listening Paper): At the end of the senior year, students take an exam that tests their musical perception skills. Students listen to recordings, read scores, and answer questions about different musical styles. This exam is worth $30 \%$ of a student's IB score, and is assessed externally by IB.


## Course Options

Our IB Music course is designed as an SL course, and this is our normal option. If a student desires HL, he or she must be able to work independently and will need to meet additional periods to cover more material. HL requires solo performance as well.

## Relationship to other department offerings

As discussed above, IB Music is a wide-ranging course, involving history, theory, and performance. Students desiring a narrower, performance-focused course can choose Chamber Music, Chorus, or Jazz as non-IB course options. Those courses are one-year electives in contrast to two-year IB Music. While IB students and non-IB students are mixed in the performance subsections, the IB students meet separately for the additional class periods that focus on history and theory. Non-IB students do not have these additional periods and do not have the non-performance assessments, such as the Musical Links Investigation or the Listening Paper.

In contrast to music classes in previous grades, as described above, IB Music is a course that incorporates rigorous written work alongside performance. This course also meets more times per cycle than previous music courses, meeting the same amount as other academic courses. These two differences create a more intense music experience.

## IB Visual Arts

The focus of this two-year course will be to develop a serious body of work that is meaningful to the individual student. Students will integrate the techniques and processes of art, the visual elements, the principles of design, and the continued acquisition of knowledge of artists and art movements as they work on evolving connections and themes in their own art. They will explore and study the art of other cultures and follow threads that bring out the similarities and differences among the art of other traditions.

Class time will include work in a variety of media and forms including drawing and painting, printmaking, sculpture and installation; however, this course is not focused solely on art production. Much class time is devoted to lessons and lectures on art history, art criticism, and aesthetics. Students learn to analyze and respond to past and current art, and make connections to their own work. Highlighting this integrated approach, students keep a Journal, a continuing, essential means to initiate ideas, research, reflect, expand knowledge, discover and acknowledge connections. The Journal requires both visual and written work.

## IB Assessments

- Exhibition ( $40 \%$ Internal): At the end of the two-year course, students submit for assessment a selection of resolved artworks for their exhibition. Students show evidence of technical accomplishment and an understanding of the use of materials, ideal and practices to realize their intentions. Additionally students create curatorial labels and an artist statement for an audience, which evidence the selection of this connected and cohesive body of work.
- Process Portfolio (40\% External): Students submit carefully selected materials which demonstrate their experimentation, exploration, manipulation and refinement of a variety of visual arts activities during the two-year course.
- Comparative Study (20\% External): Students submit an independent critical and contextual investigation that explores artworks, objects and artifacts from differing cultural contexts.


## Course Options

We offer this course at both Standard Level (SL) and Higher Level (HL), although all students are in the same class. The critical differences are that, at HL, students are required to have more finished pieces for the exhibition, more pieces for the process portfolio and a more extensive investigation for the comparative study; consequently the grading criteria are more challenging.

## Relationship to other Department Offerings

The Visual Arts department offers some non-IB electives in the junior and senior years. The IB course is unique in ways that are important to understand as one plots course choices. Typically, the non-IB courses are focused on individual media (i.e. an entire year on photography), and students focus on making art. In contrast, in the IB course, students can choose to work in various media, but they do more than make art; students also learn art history, criticism, and aesthetics. As described previously, there is substantial written work in this IB course, and more homework (including required museum/gallery visits). Also, students' skills are assessed more thoroughly in the IB
course, while effort is a larger factor in non-IB courses. The IB course also meets as often as other academic courses, unlike other Visual Arts electives. As such, it is a more intense and academic course, and is recognized as such by colleges.

Map of Arts programs:
$10^{\text {th }}$ grade $\quad 11^{\text {th }}$ grade $\quad 12^{\text {th }}$ grade


OR, take one-year courses in junior and/or senior year:


Advanced Photo (prerequisite: Darkroom Photo)
Concepts in Clay
Theatre 2 (same as first year of IB Theatre)
Dance 2 (same as first-year of IB Dance)
Chorus (a subgroup of IB Music)
Jazz Band (a subgroup of IB Music)
Chamber Music (a subgroup of IB Music)

## Theory of Knowledge

Theory of Knowledge (TOK) is a central part of our IB Diploma Program and is intended to stimulate critical reflection upon the knowledge and experience gained inside and outside the classroom. It is a mandatory three-semester course for all full diploma students, and enrollment is limited to these students. TOK challenges students to question the bases of knowledge, to be aware of subjective and ideological biases, to consider the different cognitive tools humanity has developed to comprehend the world, and to consider and question the foundations on which their academic subjects rest.

TOK activities and discussions aim to help students discover and express their views on knowledge issues, and encourage them to share ideas with others and to listen to and learn from what others think. In this process, students' thinking and their understanding of knowledge as a human construction are shaped, enriched, and deepened. Connections may be made between knowledge encountered in different IB subjects, in CAS experience or in Extended Essay research, and distinctions between different kinds of knowledge may be clarified.

## IB Assessments

- Essay: Students choose a topic from a list proscribed by IB, and write a $1200-$ 1600 word essay outside of class. This assessment in graded externally by IB, and is worth $67 \%$ of students' IB grade.
- Oral presentation: Students present to their peers about a "real life" example of the knowledge issues explored in the course, choosing their own topic of interest. This assessment is graded by the teacher and is worth the remaining $33 \%$ of students' IB grade.


## Course Options/Relationship to other department offerings

As noted above, this course is only available to diploma students, and for them, it is required. Juniors who are not diploma students are required to take a different department offering, a Philosophy course.

## The Diploma Program

Students can choose to take individual IB classes or opt for the full Diploma Program. Students in the Diploma Program take only IB courses and must meet additional core requirements as well. If they do well enough, they can earn a diploma from IB in addition to their regular BFS diploma. This is a very challenging academic program, and will satisfy all BFS graduation requirements. There is an application process to be in BFS' Diploma Program, although our main goal is to ascertain students' dedication.

## Building Your Diploma Program: Course Requirements and Options

The first requirement is that students take IB courses in each of the six course areas (refer back to the diagram on page 3). From IB's inception, this requirement was included to develop well-rounded individuals. Of note, all students must take a second language, reinforcing IB's global perspective. The one exception is that students are not required to take an art course by IB; they may instead substitute a second course from another area. At our school, this means students could opt for Physics or Latin (schedule-dependent) instead of taking an art.

The second Diploma Program requirement is that students must take at least three of their six courses at Higher Level (HL) and the remaining at Standard Level (SL). This should usually be three HL and three SL, although there are occasions where four HL courses might make sense. With the SL and HL arrangement, students develop in-depth knowledge in certain areas while still gaining experience in a wide range of disciplines.

In practice, these two sources of choice - course selection as well as course difficulty permit much flexibility in students' paths through the Diploma Program. After students are accepted to the Diploma Program in the spring of their sophomore year, we will counsel students on course selection. A few sample curricula:

Humanities-focused:
English HL
Spanish HL
History HL
Biology SL
Math SL
Dance SL

Math/Science-focused:
English HL
Spanish ab initio SL
History SL
Biology HL
Math HL
Physics SL

Language-focused:
English HL
French HL
History HL
Biology SL
Math SL
Latin SL

Art-focused:
English HL
Latin SL
History SL
Biology HL
Math SL
Visual Art HL

## Core Requirements

At the center of IB are three key parts of the Diploma Program: a special course entitled Theory of Knowledge, the CAS program (Creativity, Activity, Service), and the Extended Essay.

- Theory of Knowledge (TOK) provides Diploma Program students with opportunity to reflect upon knowledge issues within their academic studies and critically interact with the assumptions, often unidentified, upon which disciplines form their conclusions. From two official IB assessments, an essay and an oral presentation, students earn TOK grades from IB on a scale of A-E. For more detail about this special Diploma Program course, please see the full course descriptions earlier in this guide.
- The Extended Essay is an original and extended piece of research and writing by Diploma Program students on topics of their choosing. This is a great opportunity for each student to focus on a particular interest and explore on a level usually only encouraged in college or graduate school. The Extended Essay is intended to be largely student led, providing an invaluable learning experience regarding independent work. Each student is paired with a BFS teacher for support and the IB Coordinator provides overall guidance.

Students' final essays are around 4,000 words in length (15-17 pages): sizeable, but not overwhelming, if students are responsible and manage their work appropriately. IB recommends a total of about 40 hours of work. To prevent difficult overlap with senior year college applications, we guide students to complete most of this work over the junior year and the summer between junior and senior years. Students' essays are assessed by external readers, and given an IB grade on an A-E scale.

- CAS (Creativity, Activity, Service) requires students to engage in activities outside of the classroom in order to foster the education of the whole student. As a natural fit with Brooklyn Friends' goals, CAS is a requirement for all upper school students. A main emphasis of CAS is stretching students beyond their comfort level, and students are encouraged to explore their own interests, gifts, and challenges. Brooklyn Friends School's arts, athletics, and service programs connect well to CAS requirements. A critical part of their work must be the development of a project that the student leads.


## Earning the IB Diploma

The regulations for earning the IB Diploma can be complex; what follows are the main points:

1. Students must satisfying all core requirements, which means fulfilling all CAS requirements and earning IB grades of at least D on the Extended Essay and in the TOK course. TOK and Extended Essay grades are combined, and are worth from zero to three bonus points towards the following requirement:
2. Students must:

- Earn at least 24 points from their six classes, TOK, and Extended Essay,
- Earn at least 12 points from their three HL classes and at least 9 points from their 3 SL classes,
- Have no scores of 1 in any class.

Note that the requirements are based on point totals, instead of individual class scores, recognizing that students are not equally strong in all areas. One can have strengths and weaknesses and still earn the IB Diploma. This flexibility is an important part of the Diploma Program.

At times, the HL point rule can be the most challenging requirement; these classes are the most difficult in which to earn scores of 4 or greater. Students do need to consider their strengths and weaknesses as they select HL courses.

## IB and Colleges

We receive many parent and student questions regarding colleges and IB. To begin, the IB program is very highly regarded by colleges and universities, both in the U.S. and internationally. It signifies academic challenge and excellent preparation, and colleges greatly prefer the IB focus on thinking and understanding to other programs that emphasize memorization. The specific college-related benefits are:

## Preparation

The first year of college can be challenging, as the level of academic difficulty increases and students must independently manage their lives and workload. Students taking IB classes, especially if they are taking the full Diploma Program, will have already experienced much of this increased challenge and independence during their last two years of high school, and are thus extremely well prepared for the transition to college. Graduates report that the writing preparation gained through IB classes has been particularly helpful in college.

## College admission

The rigor of the curriculum that a student has chosen in high school is a major factor in how colleges evaluate a student's academic record during the admission process.
Selective colleges want students who are willing to take intellectual risks and challenge themselves. From extensive discussions with college admission officers, it is evident that being in the full Diploma Program puts applicants in the highest category regarding curricular strength. Taking a number of IB courses, and not the full Diploma Program, is helpful as well; generally, the more IB courses one takes, the stronger one's application will be. Colleges' high regard for the IB program directly impacts admissions decisions. If your goal is admission to the most selective colleges and universities, you should be in our full Diploma Program.

It is not the case that taking IB classes or even being in the full Diploma Program ensures admission to every school to which a student applies. College admission is a complex and competitive process involving many variables, and there are different ways to be an attractive applicant. Still, our IB program is an excellent way to demonstrate intellectual curiosity and a desire to challenge oneself, and those are qualities that colleges are looking for in their applicants.

## IB grades vs. BFS grades

It is important to understand, also, that colleges are not considering students' official IB grades during the admissions process. College applications are submitted in the winter of the senior year, while IB grades are not known until the summer following graduation, well after students have been admitted to college. Colleges' admissions decisions are based on the grades students earn in their classes at BFS each semester (the grades you see on the report card), evaluated in the context of the rigor of the course load the student has chosen. (For some international universities, this is not the case; these schools may offer conditional admission contingent on students' IB exam scores, with a final decision available only in mid-summer).

Parents and students often ask about the potential decrease in grades for students taking these challenging courses or the full Diploma Program. Based on our experience from
previous years, this has not been a concern. Most students maintain their previous level of grades in these courses. Also, colleges do understand, as they are examining students' transcripts, that IB classes are more challenging.

## Possibility of college credit

Excellent scores on IB exams can help students earn college credit or satisfy college course requirements. Each college has a different standard for what they will award for different IB grades and classes; students can easily research their particular college's policy as graduation nears.

Some of the most selective schools award credit just for top grades of 7, and only in HL courses, while other schools may award credit for scores of 4 or higher in all courses and give additional credits for earning the IB Diploma. In general, American colleges are tending to award less credit for advanced high school classes than they did in past decades. (A more common scenario is that IB exam scores can help students 'place out' of an introductory level class and go directly into an intermediate level course in the same subject.)

Because colleges' policies vary tremendously, college credit should be considered the least relevant of the college-related benefits of taking IB courses. Also, our highestscoring students generally go to very selective colleges - the ones that award the least credit or advanced standing for high school courses. Think of the occasional course credit one might earn as a bonus on top of the more important preparation and admissions benefits discussed above.

## Participation Trends in our IB Program

Over the course of the years we have offered IB, participation has grown dramatically and has shifted in nature.

In our early years, students evenly split between the full Diploma Program and no involvement in IB (or involvement in only one IB class). This division has largely disappeared now. IB courses are the majority of our junior and senior offerings, and all juniors and seniors are involved. Our current seniors take an average of over 5 IB courses/student and all take four or more IB classes. IB participation has steadily grown as more students select our IB options and because some departments, such as Mathematics, History, English, and World Languages have moved to offering only IB courses.

The number of students choosing the full Diploma Program shifts from year to year. Generally, it has been around $50 \%$, although this has been growing recently with around $75 \%$ of our current juniors choosing this option. We are encouraged by this recent jump, but we anticipate that it will continue to be quite common for students to opt for 5 or 6 courses and choose not do the extra Diploma requirements. Either way, heavy IB involvement is the norm. The key is that there are many good paths within our IB program, and our goal is to help families make the best possible personal choices. See pg. 36 for a full discussion of the choice between taking the full Diploma Program or individual IB courses.

## Additional Information: Fees, Learning Differences

## Fees

There are no fees for families from taking IB courses now. While we did charge fees in early years, passing on IB's test fees to you, we have moved to covering these fees with tuition funds. As IB has truly become our junior and senior program, this change made sense.

## Learning Differences

If a student has a documented learning difference, IB does offer provisions such as extended time and the use of a word processor for the course-ending exams. The school applies to IB on the student's behalf, sending appropriate documentation. Generally, if a student is internally allowed such accommodations, IB will grant them as well, although the international norm for extended time tends to be $25 \%$ extra rather than the American standard of $50 \%$. Because of the design of the IB exams, this difference has not proven to be a problem.

## The Choice: Diploma Program or Individual Classes?

For $10^{\text {th }}$ graders and their families, the key decision is what level of IB involvement is right for you - the full Diploma Program or taking individual classes. Throughout this guide, many reasons to choose the full Diploma Program have been discussed:

Reasons to choose the full Diploma Program are:

- More exposure to the philosophy and challenge of IB courses;
- Excellent preparation for the future;
- Advantage in college admission (particularly important for the most selective colleges);
- Access to the core experiences of the Theory of Knowledge course and Extended Essay;
- Greater international perspective.

As discussed in the Participation Trends section, not all students choose the full Diploma Program. What are the reasons to consider taking individual courses instead of the Diploma Program?

- Workload Intensity and Your Organizational Skills

The Diploma Program is intense and requires consistent effort. While the work is manageable, there are definitely times when the workload will be heavy and challenging. Diploma student have more to juggle. With the Extended Essay and the extra periods dedicated to TOK, Diploma students have less free time in their schedules and more responsibilities on top of regular classes. There are a few times where work will be more challenging for Diploma Program students: The first semester of the senior year - a stressful time for all students as they write college applications - is more difficult for Diploma Program students who have more responsibilities to manage; Diploma students typically write their extended essays over the summer between junior and senior year; and Diploma students' examination period at the end of senior year is more intense.

Overall, managing six main courses, plus the core requirements, requires organization. Diploma Program students need to manage time well to keep in balance. How difficult the Diploma Program feels is directly connected to students' ability to organize their work. It is completely fine to choose not to be full Diploma for less intensity and to focus on certain courses.

- Extracurricular Activities

A common question is: "Can I still play sports or do other extracurricular activities if I do the full program?" Yes, you can. The more you do, however, the more organized and focused you will need to be. Depending on how well you manage your academic work, being in the Diploma Program might require you to prioritize certain extracurriculars and not try to do everything.

- Desire for non-IB courses that we offer

We offer many exciting courses as BFS. The two-year length of IB courses does impact your flexibility in choosing courses. In areas such as the arts or science, choosing the IB course means you cannot take a different one-year elective
offered in that area. Particularly in art, when you choose an IB course, that is your choice for the next two years. You cannot, for instance, take Visual Arts one year and then take Dance the next. There are benefits and drawbacks to such specialization that each student must consider.

- Diploma Program Requirements

For some students, the requirements of the Diploma Program are not appropriate. For example, if a student has a language waiver and does not take a second language, then it is not possible to take the full Diploma Program. We hope that our ab initio language courses will allow students to pursue IB even if language acquisition is a personal challenge.

Obviously, this is an important and multi-faceted decision for $10^{\text {th }}$ grade students and families. To us, either choice has merit and our goal is to help students and families make the best possible individual choice.

In the spring, each $10^{\text {th }}$ grade family can meet with Trefor Davies, IB Coordinator, to help reflect on progress to this point and help plan for the future; decisions regarding IB will be an important part of that meeting. We look forward to helping you make the best possible decision for your $11^{\text {th }}$ and $12^{\text {th }}$ grade years!


[^0]:    ${ }^{1}$ IBO website, http://www.ibo.org/general/who.cfm
    ${ }^{2}$ IB Learner Profile Booklet, p.5, http://www.ibo.org/programmes/profile/

