

# INTERNATIONAL BACCALAUREATE COURSE DESCRIPTIONS

## Standard and Higher Level

IB courses are offered at both the Standard and Higher Levels. **Standard Level** courses may be one or two years in length requiring 150 hours of study. **Higher Level** courses are two years in length requiring 240 hours of study. The breadth, depth, and level of understanding expected at the higher level are greater as reflected in the course requirements and assessments.

## Evaluation.

IB courses are evaluated through a combination of internal and external assessments. The internal assessment(s) is administered and scored by the classroom teacher and takes place sometime in the duration of the course. The external assessment is administered and scored by IB and takes place in May of the final year of the course as scheduled by IB. Both the internal and external assessments become part of the student's overall score for the course. This score may earn a student college credit dependent upon their score and the policy of the college or university.

\*Some of the language used in these course descriptions was taken from the official guide for those courses published by the International Baccalaureate Organization.

## **Diploma Candidates Only**

### Theory of Knowledge

As part of the core of the Diploma Program, TOK explores critical thinking and inquiring into how we know what we do and provides coherence to the IB Program. The course will span the two years of the program by being taught during the spring semester of the student's junior year and the fall semester of the student's senior year. Students will be encouraged to analyze statements about knowledge and open questions about knowledge. These will be distinguished between shared knowledge and personal knowledge. Additionally, the course will study eight ways of knowing and eight areas of knowledge. The goal is for students to become aware of their own perspectives and those of the groups with whom they share knowledge. In short, this is a course in knowing about knowing.

## **Group1 (English)**

### Language and Literature HL – 2 Years

The aim of this course is to develop “critical literacy” in students and is composed of four parts: two of which focus on language and two on literature. Important to the study of both are the contexts in which the texts are constructed; time, place, purpose, etc. Students are encouraged to question the meaning of language and text, both literary and non-literary, through textual analysis. This analysis will consider the texts as they stand alone, as well as, in relation to the culture from which they come. English language skills will be developed by examining how formal elements of language are utilized to create meaning both by the author and the reader, as well as, to construct argument and rhetoric. A wide range of texts will be examined including social media, texting, news reporting, political campaigns, graffiti, video games, and works of literature both American and works in translation. Some of the authors to be studied are Henrik Ibsen, William Shakespeare, Toni Morrison, and F. Scott Fitzgerald in addition to shorter works of fiction and non-fiction.

IB English Language and Literature requires a variety of internal and external written and oral assessments which will begin in the junior year and conclude during the senior year. Students will be required to take the New York State English Comprehensive Regents at the end of junior year. A student may opt to take the AP Language and Composition exam at the end of junior year as well. The IB exam in Language and Literature will take place at the end of senior year. The IB or AP exams may earn a student college credit dependent upon their score and the policy of the college or university.

## **Group 2 (World Language)**

### IB Language Acquisition: French, Italian, Spanish SL/HL – 2 Years

The continuing development of more sophisticated language skills and acquisition will be the focus of these courses. Skills will emphasize comprehension and communication of language in oral and written form. Interactions will have an expectation of appropriate register and consideration of audience and purpose with fluency. Material for study will be chosen from a range of written and spoken exercises including everyday conversations, authentic literary texts, social media, and pop culture. Students at both the SL and HL levels will be expected to develop their intercultural understanding, comprehend and use the language in various contexts and for varying purposes, acquire an appreciation of the perspectives of people from other cultures, and have the ability to recognize the relationship between the language and the culture from which it comes. Students who study at the HL level will engage with two full works of literature in the language of study.

IB French, Italian, and Spanish require a variety of internal and external written and oral assessments which will begin in the junior year and conclude during the senior year. Students will be required to take IB exam in their language of study at the end of senior year. At the end of senior year, a student may opt to take the AP exam in their language of study as well. The IB or AP exams may earn a student college credit dependent upon their score and the policy of the college or university.

**Prerequisite:** French, Italian, Spanish 3 and successful completion of the Foreign Language Association of Chairpersons and Supervisors (FLACS) Checkpoint B examination.

### Language Acquisition: Classical Language - Latin SL/HL – 2 Years

As a classical language, Latin is embedded in many modern languages including English. Not only a language course, students will explore the historical significance of ancient Rome and the way in which it has influenced cultures of today. A goal of the course is to utilize the study of Latin to develop critical thinking, memory, and the ability to closely analyze text for the appreciation of language and its strength. Students will continue to learn to translate Latin with accuracy through work with various classical texts and the historical, political, and cultural contexts in which they were written. Among the authors and texts to be studied are Catullus' lyric poetry, Propertius' elegies, Ovid's Metamorphoses, and Cicero's speeches. Students at both the SL and HL level will be expected to use their comprehension of the language for the purpose of translation, understanding, research, and relevance to our time. Distinction between SL and HL is found in the breadth of study and expectation for the level of knowledge and skill. Students at the HL level will also be required to independently research additional sources.

IB Latin requires a variety of internal and external written and oral assessments which will begin in the junior year and conclude during the senior year. Students will be required to take the IB exam in Latin at the end of senior year. . At the end of senior year, a student may opt to take the AP exam in their language of study as well. The IB or AP exams may earn a student college credit dependent upon their score and the policy of the college or university.

**Prerequisite:** Latin 3 and successful completion of the Classical Association of Western New York Exam.

### **Group 3 (Social Sciences)**

#### **IB History of the Americas (HOTA) HL – 2 Years**

Students in this course will explore the past and construct meaning through the use of primary and secondary source documents and critical evaluation of data. They will develop a sense of historiography and an appreciation for the way in which perception of history changes with the emergence of new evidence and perspectives. The first year of the course will focus on the History of the Americas with its main emphasis on United States history. In depth study will take place on several key periods since our nation's birth. The second year of the course will hone in on the 20<sup>th</sup> century and the events that have shaped our world today, again, with special emphasis placed on key topics. It is a goal of the course that students emerge with the understanding that we can only comprehend and successfully navigate the time we live in by reflecting upon the past.

IB History of the Americas requires a variety of internal and external written assessments which will begin in the junior year and conclude during the senior year. Students will be required to take the New York State Regents Examination in United States History at the end of junior year and may opt to take the AP Exam in United States History. Students are required to take the IB exam at the end of senior year. The IB or AP exams may earn a student college credit dependent upon their score and the policy of the college or university.

**Prerequisite:** Global History or AP World History with successful completion of the New York State Regents in Global History and Geography.

#### **IB Social and Cultural Anthropology SL – 1 Year**

This course is built upon the comparative study of culture and human societies. Students will find themselves questioning the assumptions made about culture. Modern issues associated with local, regional, and global societies will be explored. Social scientists commonly use the tool of participant observation and field notes as will be the case with this course. Topics include social change, kinship, symbolism, exchange, belief systems, ethnicity, and power relationships. Anthropology is key to understanding contemporary issues such as war and conflict and human rights. Materials for this course will include various readings, films, field trips, and in-house field trips exposing students to numerous cultures and sub-cultures from around the world.

IB Social and Cultural Anthropology requires a variety of internal and external written and oral assessments throughout the year. Students will be required to take the IB exam at the end of the course. The IB exam may earn a student college credit dependent upon their score and the policy of the college or university.

## **Group 4 (Experimental Sciences)**

### IB Biology HL - 2 Years

This course will attempt to understand the living world from its smallest scale at the molecular level to the functioning of ecosystems. Students will engage with an experiment based, inquiry approach including labs and practical activities. An integrated project involving the other experimental sciences of Chemistry and Physics and an independent investigation will be part of the learning process as well. Topics of study at both the SL and HL levels will include molecular biology, cell biology, genetics, human physiology, evolution and biodiversity, and ecology. Additional topics to be studied at the HL level will include ecology and conservation, plant biology, and animal physiology.

IB Biology requires a variety of internal and external assessments throughout the two years. Students may opt to take the AP Biology exam at the end of the first year. Students will be required to take the IB exam at the end of the second year. The IB or AP exams may earn a student college credit dependent upon their score and the policy of the college or university.

**Prerequisites:** Biology and Chemistry and having passed the Living Environment and Chemistry Regents exams.

### IB Physics HL – 2 Years

This course will explore the dynamic world of physics through theory and experimentation. Students will develop practical skills and techniques and increase their use of math to further their understanding of the technological world that is used to make changes to the material world for the purpose human needs. This raises the issue of the impact of physics on society. Students will engage with an experiment based, inquiry approach including labs and practical activities. An integrated project involving the other experimental sciences of Chemistry and Biology and an independent investigation will be part of the learning process as well. Topics at both the SL and HL levels will include measurements and uncertainties, mechanics, thermal physics, waves, electricity and magnetism, circular motion and gravitation, atomic, nuclear and particle physics, and energy production. Additional topics at the Higher Level will be wave phenomena, fields, electromagnetic induction, and quantum and nuclear physics.

IB Physics requires a variety of internal and external assessments throughout the two years. Students will take the New York State Regents exam in Physics at the end of the first year. Students will be required to take the IB exam at the end of the second year and may opt to take an AP exam in Physics. The IB or AP exams may earn a student college credit dependent upon their score and the policy of the college or university.

**Prerequisites:** Algebra and having passed at least one Science Regents examination

## IB Chemistry SL – 1 Year

This course explores the relationship between theory and experimentation with which students will engage in this course. It is the foundation for both the physical environment and biological systems. Students will develop practical skills and techniques and increase their use of math to engage with an experiment based, inquiry approach including labs and practical activities. An integrated project involving the other experimental sciences of Physics and Biology and an independent investigation will be part of the learning process as well. Topics for study include Stoichiometric relationships, atomic structure, periodicity, chemical bonding and structure, energetics/thermochemistry, chemical kinetics, equilibrium, acids and bases, redox processes, organic chemistry, and measurement and data processing.

IB Chemistry requires a variety of internal and external assessments throughout the year. Students will be required to take the IB exam at the end of the year and may opt to take the AP Exam in Chemistry as well. The IB or AP exams may earn a student college credit dependent upon their score and the policy of the college or university.

**Prerequisites:** Biology and Chemistry and having passed the Living Environment and Chemistry Regents exams.

## IB Environmental Systems and Societies SL – 1 Year

Students in this course will discover the interrelationship between the environments in which they live and how those environments are impacted by the societies that call them home. These discoveries will include an awareness of how the choices and decisions they make as individuals are significant. Through practical activities, students will learn about systems and models, ecosystems, human population, carrying capacity and resource use, conservation and biodiversity, pollution management, global warming, and environmental value systems through practical activities.

IB Environmental Systems and Societies requires a variety of internal and external assessments throughout the year. Students will be required to take the IB exam at the end of the year and may opt to take the AP Exam in Environmental Science as well. The IB exam may earn a student college credit dependent upon their score and the policy of the college or university.

## **Group 5 (Math)**

### IB Mathematics SL – 1 Year

In this course, students will learn to apply mathematical knowledge to solve realistic problems as they occur in context. Independence in mathematical learning will occur through the “exploration” component in which students will investigate an area of mathematics. Topics to be covered include Algebra, Functions and equations, circular functions and trigonometry, vectors, statistics and probability, and calculus.

IB Mathematics requires a variety of internal and external assessments throughout the year. Students will be required to take the IB exam at the end of the year. The IB exam may earn a student college credit dependent upon their score and the policy of the college or university.

**Prerequisite:** Algebra 2 and Trigonometry H and a passing grade on Algebra 2 and Trigonometry Regents Exam.

### IB Mathematical Studies SL – 1 Year

This course is structured to emphasize fundamental concepts, mathematical reasoning and solving problems. Independence in mathematical learning will occur through the project component in which students will work with information and measurements. Topics to be covered include number and algebra, descriptive statistics, logic, sets and probability, statistical applications, geometry and trigonometry, mathematical models, and introduction to differential calculus.

IB Mathematical Studies requires a variety of internal and external assessments throughout the year. Students will be required to take the IB exam at the end of the year. The IB exam may earn a student college credit dependent upon their score and the policy of the college or university.

**Prerequisite:** Algebra 2 and Trigonometry and a passing grade on Algebra 2 and Trigonometry Regents Exam.

## **Group 6 (The Arts)**

### IB Visual Arts SL/HL – 2 Years

In this course, students will look at the visual arts from different perspectives and contexts. They will experiment with and reflect on a variety of visual processes and mediums. Students will come to understand how their own work is impacted by three core components of IB-Visual Art, which are communication, context and methods of viewing and producing art. Additionally, students will explore the theoretical, creative and curatorial functions of art making. Students will keep ongoing visual art journals; they will create a variety of art forms and conduct independent comparative analysis of contrasting works of art created by different artists.

IB Visual Arts requires a variety of internal and external assessments throughout the two years. Students will be required to submit various aspects of their work including evidence of process and the finished products arranged in exhibition style. The IB assessments may earn a student college credit dependent upon their score and the policy of the college or university.

**Prerequisite:** Two credits of art - Studio Art plus one additional art class (Drawing and Painting, Sculpture or Photography)

### IB Theater SL – 1 Year

In the study of this course in theater making, students will create theater from the perspective of creator, designer, director, spectator, and performer. This will be done as individuals and as a member of an ensemble. Students will experience contrasting art perspectives and learn to apply research and theory. The course is built upon a three core areas of presenting theater, theater in context, and theater processes. Students will be expected to understand the relationship between them and how their work is impacted by them. The three core areas will be explored through activities such as working with play texts, examining world theater traditions, collaboratively creating original theater.

IB Theater requires a variety of internal and external assessments throughout the year. Students will be required to submit various aspects of their work including a director's notebook, research presentation, and collaborative project. The IB assessments may earn a student college credit dependent upon their score and the policy of the college or university.

### IB Music SL – 2 Years

In this course, students will learn to hear the relationships of pitch in sound, pattern in rhythm and unfolding sonic structures. Musical perception is required as an area of study and will investigate musical links. Students will choose to exhibit their learning through the creation of music, solo performance, or group performance. Music that is familiar and unfamiliar from a range of times, places, and cultures will also be part of the course.

IB Music requires a variety of internal and external assessments throughout the year. Students will be required to complete a written assessment as well as creating and performance component. The IB assessments may earn a student college credit dependent upon their score and the policy of the college or university.



