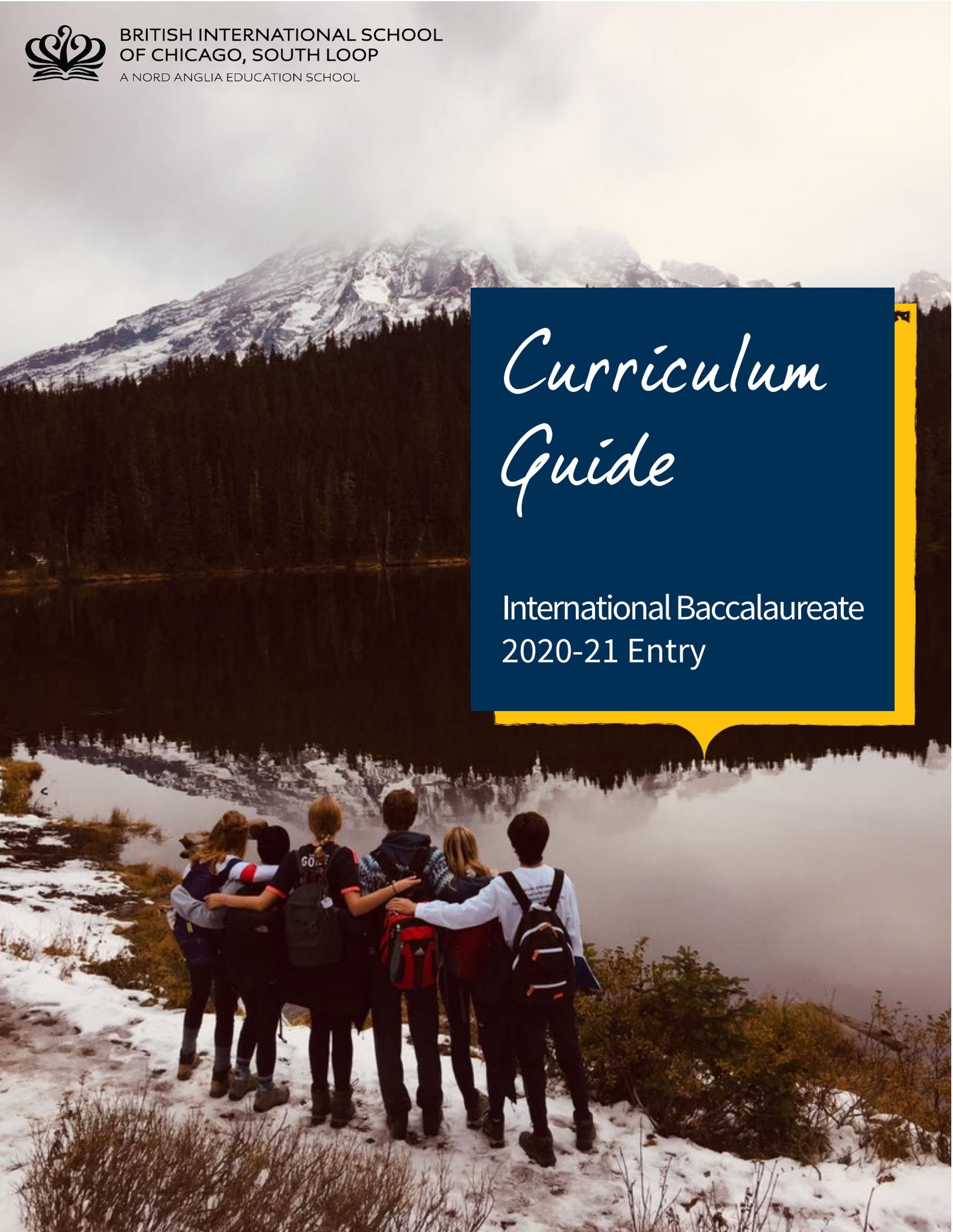




BRITISH INTERNATIONAL SCHOOL
OF CHICAGO, SOUTH LOOP
A NORD ANGLIA EDUCATION SCHOOL

Curriculum Guide

International Baccalaureate
2020-21 Entry





Oh, the Places You'll Go

The last two years of High School present an ambitious and rewarding chapter for students. They are faced with coursework that is rigorous, but also wholly tailored to their unique interests and aspirations for college and beyond.

Studying the International Baccalaureate Diploma Programme, students work towards earning an internationally recognized qualification that is respected throughout the United States and by the world's top colleges and universities. The programme provides a variety of curriculum choices designed to fully prepare students for college studies and help them develop to their full potential.

Students go beyond the collection of facts and learn how to flourish in our interconnected and globalized world. They ask challenging questions, discover what it means to learn, develop a strong sense of identity and culture, as well as the ability to communicate with and understand people different from them.

Time spent with peers during Form Time and C.A.S.E. (Creativity, Action, Service, and Enrichment) continues to spark students' holistic growth through leadership opportunities, collaborative work, and community service. We also see students lending the knowledge they have acquired over the years to younger peers in support sessions and clubs.

In Years 12 and 13, students become especially engaged in the college planning process, attending our annual College Fair as well as trips to local higher education institutions. They continue to meet regularly with our College Counselors, receiving guidance and support with college applications, essays, and transcripts.

On the other side of Year 13 is a new phase for students. Empowered by our personalized instruction and international curriculum, they graduate from BISC, South Loop equipped with the knowledge, skills, and ambition to achieve beyond what they may have thought possible - academically, socially, and personally.

Understanding the Curriculum

Course Routes

Based on their IGCSE course route and prior attainment requirements, students in Years 12 and 13 follow one of three IB course routes.

IB Diploma

Graduating with Double Honors

Students study six IB subjects, three at Standard Level Honors and three at Higher Level Honors. They must also successfully complete the IB Diploma Programme Core Requirements and Physical Education and Kinetic Wellness. Successful completion results in the IB Diploma and High School Double Honors Diploma.

IB Certificates

Graduating with Single Honors

Students study six IB subjects. Up to six subjects can be at Standard Level Honors, with a maximum of two at Higher Level Honors. Any of the six subjects not at Honors Level are at College Prep Level. Students are also required to successfully complete Creativity, Action, Service (CAS) hours and Physical Education and Kinetic Wellness. Students can opt for additional certification in Theory of Knowledge, CAS, and Extended Essay. Successful completion results in IB Certificates and the High School Diploma.

High School Diploma

Students study six subjects, all at College Prep Level. They also complete Creativity, Action, Service hours, Theory of Knowledge (100 hours, essay, and presentation), a project-based piece of research, as well as P.E. & Kinetic Wellness. Successful completion results in the High School Diploma.

Course Options

Students take Physical Education and Kinetic Wellness and one subject in each of Groups 1-6, ensuring breadth of experience in languages, social studies, the experimental sciences, mathematics, and the arts.

In addition, the IB Diploma Programme is comprised of three Core Requirements - Extended Essay, Theory of Knowledge, and Creativity, Action, Service - that aim to broaden students' educational experience and challenge them to apply their knowledge and skills to real-world situations.

**This course is part of another Group, but we offer it in Group 6 to give students more course options.*

***This course is available at Standard Level (SL) only.*



- **Compulsory Courses**
Physical Education & Kinetic Wellness
- **IB Core Requirements**
Extended Essay
Theory of Knowledge
Creativity, Action, Service
- **Group 1: Literature**
English
- **Group 2: Language Acquisition**
French
German
Mandarin
Spanish
Spanish AB**
- **Group 3: Individuals & Societies**
Business Management
Geography
History
Psychology
- **Group 4: Sciences**
Biology
Chemistry
Physics
- **Group 5: Mathematics**
Analysis and Approaches
Applications and Interpretation
- **Group 6: The Arts**
Biology*
Computer Science
Design Technology
Film
Music
Physics*
Spanish (as an additional language)*
Sports, Exercise & Health Science
Visual Arts

PE & Kinetic Wellness

About the Course

Students will undertake two lessons a week, one lesson for Kinetic Wellness and Health and the other Team Block. The following information about the courses is outlined below:

Core Elective 1: Kinetic Wellness

Kinetic Wellness is an integration of physical, mental, and social wellness. Students will elect from the following electives:

resistance training; interval training; training to optimize sports performance; boxercise; spinning; kettle bells; performance rowing; strength and conditioning; HIT training; athletics; plyometrics; power yoga; core and more; and meditation.

The foundation of Kinetic Wellness courses are included in the following essential understandings:

- The connection between mind and body is crucial to personal growth and development
- Participation in a wide variety of activities provides the opportunity for enjoyment, self-expression, and social interaction
- Knowledge, competency and application of movement, fitness and wellness concepts, encourage healthy lifestyle choices
- Self-assessment, self-reflection, and a sense of responsibility toward others contribute to individual growth and to the positive climate of the class

Core Elective 2: Team Block

This year-long course is perfect for the student who wishes to engage in competitive team activities and games. Skills, strategies, rules, and sportsmanship are taught within each unit.

The foundation of Team Block courses are included in the following essential understandings:

- Develop an appreciation of the use of sports as a driver to develop health and fitness
- Develop teamwork and leadership
- Develop problem-solving skills
- Develop self-discovery and personal challenge

Activities offered in the first semester include: invasion sports (basketball, soccer, flag football, and floor hockey), net activities (volleyball and nitro ball), and team building.

Activities offered during the second semester include: racket sports (badminton, pickle ball, short tennis), alternative sports (ultimate Frisbee, softball, spike ball).



Extended Essay

About the Course

The extended essay provides students with a unique opportunity to explore their subject passions under the guidance of a supervisor (teacher in the school). The extended essay develops essential essay writing and critical thinking skills to ensure students are ready for success at college/university and beyond. The final product is a well structured, independently written 4,000 word research paper.

Following are examples of recent essay titles, which demonstrate the diverse range of topics:

- “An analysis of costume as a source for understanding the inner life of the character”
- “A study of malnourished children in Indonesia and the extent of their recovery after a period of supervised improved nutrition”
- “Doing versus being: language and reality in the Mimamsa school of Indian philosophy”
- “The effects of sugar-free chewing gum on the pH of saliva in the mouth after a meal”
- “To what extent has the fall in the exchange rate of the U.S. dollar affected the tourist industry in Carmel, California?”
- “What level of data compression in music files is acceptable to the human ear?”

Theory of Knowledge

About the Course

The Theory of Knowledge (TOK) course encourages students to reflect on themselves as knowers and thinkers, providing opportunity for students to consider their knowledge, beliefs, and opinions. The course has three key themes:

- knowledge and the knower
- two optional areas, such as knowledge and politics
- the study of five areas of knowledge: art, human sciences, natural sciences, history, and mathematics

Students complete two assessment tasks:

- The TOK exhibition - an opportunity for students to show how TOK is an integral part of the world
- The TOK essay - an opportunity for a formal written piece in response to a title prompt which focuses on the areas of knowledge

Creativity, Action, Service

About the Course

Creativity, Activity, and Service (CAS) focuses on the development of student interest and passions outside of the curriculum. It focuses on experiential learning to help students uncover or discover new talents, and further develop skills in current interests. It encourages students to set challenging goals and show both commitment and perseverance to enable those goals to come to fruition. Students complete a CAS portfolio and have three interviews along the course of their programme. Because this course is so beneficial to student development, we have made it a graduating requirement for all of our students.

English

About the Course

IB English is a pre-college course in literature aimed at both students who intend to pursue literature or related studies in college, and students whose formal study of literature will not continue beyond this level. The former normally follow the Higher Level Programme and the latter Standard Level. The College Prep route enables students to gain a firm understanding of literary concepts and how to apply them, and a secure command of language and formal essay-writing skills.

Literature is concerned with our conceptions, interpretations, and experiences of the world. The study of literature can be seen as a study of all the complex pursuits, anxieties, joys, and fears that human beings are exposed to in daily life. It enables exploration of one of the more enduring fields of human creativity and artistic ingenuity, and provides immense opportunities for independent, original, critical, and clear thinking. It also promotes a healthy respect for the imagination and a perceptive approach to the understanding and interpretation of literary works. The discussion of literature is itself an art that requires the clear expression of ideas orally and in writing.

IB English also incorporates the study of world literature, which is important to students because of its global perspective. It can play a strong role in promoting a “world spirit” through unique opportunities to grow appreciation of the ways cultures influence and shape the experiences of life common to all humanity. The World Literature element of the course does not aim to cover the history of literature or the so-called “great works” of humanity; it is envisaged as having the potential to enrich the international awareness of students and help develop attitudes of tolerance, empathy, and a genuine respect for perspectives different from their own.

Recommended Prior Learning

Higher Level Honors

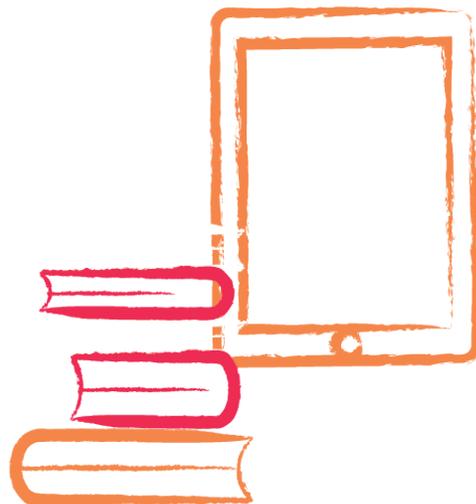
This course is recommended for students who achieved an A grade or higher in English on their Year 11 final report. Students are expected to demonstrate confidence in their approach to independent literary analysis of challenging texts. They should also be eager to expand their wider reading.

Standard Level Honors

This course is recommended for students who achieved a B grade or higher in English on their Year 11 final report. Students should be keen to expand their wider reading and study “classic” literary texts. It is also essential that students have a firm understanding of the components of literary analysis.

College Prep

This course is recommended for students with varied backgrounds and abilities in English. It is designed to build confidence in formal essay writing and literary analysis, encourage appreciation of English, and prepare students for college studies.



English (continued)

Assessment Objectives

All English students must demonstrate a/an:

- Ability to engage in independent literary criticism in a manner that reveals a personal response to literature
- Ability to express ideas with clarity, coherence, conciseness, precision, and fluency in written and oral communication
- Command of the language appropriate for the study of literature and a discriminating appreciation of the need for an effective choice of register and style in written and oral communication
- Sound approach to literature through consideration of the works studied
- Thorough knowledge of the individual works studied and of the relationships between groups of works studied
- Appreciation of the similarities and differences between literary works from different ages/ cultures
- Ability to engage in independent textual commentary on familiar and unfamiliar pieces of writing
- Wide-ranging appreciation of structure, technique, and style as employed by authors, and of their effects on the reader
- Ability to structure ideas and arguments, orally and in writing, in a logical, sustained, and persuasive way, and to support them with precise and relevant examples

Reading List

Prose

- F. Scott Fitzgerald, *The Great Gatsby*
- Truman Capote, *In Cold Blood*
- Angela Carter, *The Bloody Chamber*
- Cormac McCarthy, *The Road*

Poetry

- Carol Ann Duffy, *The World's Wife*

Drama

- William Shakespeare, *Macbeth* or *Othello*
- Henrik Ibsen, *A Doll's House*
- Federico Garcia Lorca, *Blood Wedding* (Higher Level)

Graphic Novel

- Marjane Satrapi, *Persepolis*

A variety of short stories will also be available for study.

These texts may change, depending on the teacher or year of study.



World Languages

About the Courses

Speaking a foreign language is a valuable skill, and the World Languages Department empowers students with skills that they can continually develop throughout their lives. We believe learning a foreign language helps develop awareness of our own languages, cultures, and customs, encouraging students to become more sensitive to others and developing more confident communicators.

Honors

Recommended Prior Learning

Higher Level and Standard Level are for students with background in the target language. Higher Level students should have four to five years of prior learning, while Standard Level requires two to five years.

About the Curriculum

Students study five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. These allow students to communicate about matters of personal, local or national, and global interest.

Students take part in lively debates and discussions, and interact with fluency and spontaneity. They follow a rigorous grammatical program and learn to accurately use the language descriptively and in detail.

Students at Higher Level also read two works of literature, an enjoyable journey into the cultures studied, helping students develop fluent reading skills, promoting interpretative and inferential skills, and contributing to inter-cultural understanding.

Assessment Objectives

- Communicate clearly and effectively in a range of situations, demonstrating linguistic competence and inter-cultural understanding
- Use language appropriate to a range of interpersonal and/or cultural contexts
- Understand and use language to express and respond to a range of ideas with accuracy and fluency
- Organize ideas on a range of topics in a clear, coherent, and convincing manner
- Understand, analyze, and respond to a range of written and spoken texts
- **Higher Level:** Understand and use works of literature written in the target language of study

Ab Initio Honors

Recommended Prior Learning

Students may have little or no prior knowledge of the target language.

About the Curriculum

In addition to language acquisition, developing an inter-cultural understanding is at the heart of the course, and it is expected that students are able to compare and contrast aspects of their own culture with those of countries that speak the target language. Students will understand and produce a variety of spoken, written, and visual materials. The course encourages the use and adaptation of authentic materials wherever possible. It aims to enable students to understand and use the language in a range of contexts and for a variety of purposes. It also aims to provide students with a basis for further study, work, and leisure through the use of an additional language.

Assessment Objectives

- Demonstrate awareness and understanding of the inter-cultural elements of the topics covered
- Communicate clearly and effectively in a range of situations
- Understand and accurately use the basic structures of the language
- Understand and use an appropriate range of vocabulary
- Use a register and format that are appropriate to the situation

College Prep

Recommended Prior Learning

Students may have little or no prior knowledge of the target language.

About the Curriculum

The College Prep course follows similar themes to those studied in Ab Initio Honors. Students are encouraged to develop the key skills of listening, speaking, reading, and writing, and are assessed internally in these four skill areas. Students develop an understanding of basic grammar and key vocabulary that enables them to converse during a visit to a target language country.

Assessment Objectives

- Communicate clearly and effectively in a range of situations
- Understand and accurately use the basic structures of the language
- Understand and use an appropriate range of vocabulary
- Use a register and format that are appropriate to the situation

Business Management

About the Course

IB Business Management is a dynamic course that examines business decision-making processes and how these decisions affect and are affected by internal and external environments. The course is designed to develop students' understanding of business theory and their ability to apply business principles, practices, and skills. The ideals of international cooperation and responsible citizenship are at the heart of the course, and students apply analysis tools and techniques to appreciate complex business activities.

The course considers a range of business organizations and activities, and the cultural and economic context in which business operates. Emphasis is placed on strategic decision-making and the day-to-day business functions of marketing, production, human resource management, and finance. Links between the topics are central to the course, promoting a holistic overview of business activity.

Topics of study include:

- Business environment
- Human resources management
- Finance
- Marketing
- Operations management

All students are also expected to incorporate an understanding of six basic concepts in business that underpin each of the five topics:

- Change
- Culture
- Ethics
- Strategy
- Innovation
- Globalization

Both Standard Level and Higher Level students study all five of the Business Management topics.

Higher Level students will also complete extension sub-topics within each unit of study.

Recommended Prior Learning

There are no subject-specific requirements. However, success in Business Management requires solid skills in Mathematics and English, so the course is recommended for students who achieved a C grade or higher in Mathematics and English on their Year 11 final report.

Assessment Objectives

- Demonstrate knowledge and understanding of business terminology, concepts, principles, and theories
- Make business decisions by identifying the issue(s), selecting and interpreting data, applying appropriate tools and techniques, and recommending suitable solutions
- Analyze and evaluate business decisions using a variety of sources
- Evaluate business strategies and/or practices showing evidence of critical thinking
- Apply skills and knowledge learned in the subject to hypothetical and real business situations
- **Higher & Standard Level:** Communicate business ideas and information effectively and accurately using appropriate formats and tools
- **Higher & Standard Level:** Develop a framework for strategic business decision-making



Geography

About the Course

IB Geography provides students with the opportunity to investigate major issues that face today's global citizens, such as climate change and resource depletion. The study of Geography has never been more relevant, and the careers connected with Geography never more plentiful. Geographers become cartographers, climatologists, geographic information systems specialists, meteorologists, real estate developers, surveyors, and urban planners, to name just a few. Geographers think critically and globally – key skills that today's employers seek.

Higher Level Honors

Recommended Prior Learning

This course is recommended for students who achieved an A- grade or higher in Geography on their Year 11 final report.

Assessment Objectives

- Geographic perspectives - global change
- Population distribution - changing population
- Global climate - vulnerability and resilience
- Global resource consumption and security
- Geographic perspectives - global interactions
- Power, places, and networks
- Human development and diversity
- Global risks and resilience

Standard Level Honors

Recommended Prior Learning

This course is recommended for students who achieved a B grade or higher in Geography on their Year 11 final report.

Assessment Objectives

- Geographic perspectives - global change
- Population distribution - changing population
- Global climate - vulnerability and resilience
- Global resource consumption and security

Higher and Standard Level Honors

also require students to demonstrate understanding of two to three of the following themes:

- Freshwater - drainage basins
- Oceans and coastal margins
- Extreme environments
- Geophysical hazards
- Leisure, tourism, and sport
- Food and health
- Urban environments

College Prep

Recommended Prior Learning

This course is recommended for students who have interest in and enthusiasm for the study of Geography, but are not prepared for the rigors of Standard Level.

Assessment Objectives

- Geographic perspectives - global change
- Population distribution - changing population
- Global climate - vulnerability and resilience
- Global resource consumption and security



History

About the Course

History is a dynamic, contested, evidence-based discipline that involves an exciting engagement with the past. It is a rigorous intellectual discipline, focused around key historical concepts such as change, causation, and significance.

History is an exploratory subject that fosters a sense of inquiry. It is also an interpretive discipline, allowing opportunity for engagement with multiple perspectives and a plurality of opinions. Studying history develops an understanding of the past, which leads to a deeper understanding of the nature of humans and of the world today.

The IB Diploma Programme (DP) history course is a world history course based on a comparative and multi-perspective approach. It involves the study of a variety of types of history, including political, economic, social, and cultural, and provides a balance of structure and flexibility. The course emphasizes the importance of encouraging students to think historically and to develop historical skills as well as gaining factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. In this way, the course involves a challenging and demanding critical exploration of the past.

There are six key concepts that have particular prominence throughout the DP history course; Change, Continuity, Significance, Causation, Consequence, and Perspectives.

Assessment Objectives

1. Knowledge and understanding
 - Demonstrate detailed, relevant, and accurate historical knowledge
 - Demonstrate understanding of historical concepts and context
 - Demonstrate understanding of historical sources
2. Application and analysis
 - Formulate clear and coherent arguments
 - Use relevant historical knowledge to effectively support analysis
 - Analyze and interpret a variety of sources
3. Synthesis and evaluation
 - Integrate evidence and analysis to produce a coherent response
 - Evaluate different perspectives on historical issues and events, and integrate this evaluation effectively into a response
 - Evaluate sources as historical evidence, recognizing their value and limitations
 - Synthesize information from a selection of relevant sources
4. Use and application of appropriate skills
 - Structure and develop focused essays that respond effectively to the demands of a question
 - Reflect on the methods used by, and challenges facing, the historian
 - Formulate an appropriate, focused question to guide a historical inquiry
 - Demonstrate evidence of research skills, organization, referencing, and selection of appropriate sources

Higher Level Honors

- The study of one prescribed subject from a choice of four
- The study of two world history topics from a choice of twelve
- The study of three sections from one HL regional option
- A historical investigation

Standard Level Honors

- The study of one prescribed subject from a choice of four
- The study of two world history topics from a choice of twelve
- A historical investigation

Recommended Prior Learning

Students need not have studied history prior to starting the DP history course. In particular, it is neither expected nor required that specific subjects have been studied for national or international qualifications in preparation for this course. The specific skills and knowledge required are developed throughout the course itself.



Psychology

About the Course

IB Psychology provides students with the opportunity to study the mental processes and behaviors of humans. Students study human behavior from a multidisciplinary approach while developing practical skills as researchers and social scientists. At the core of the programme is an introduction to understanding human behavior from three approaches. Students then study up to two areas of applied psychology.

Throughout their studies, students also develop research skills enabling them to design, implement, analyze, and evaluate their research. This is an incredibly useful subject for any student thinking of pursuing research at university or any student who wishes to understand themselves and the people around them in greater depth.

Higher Level Honors

Recommended Prior Learning

This course is recommended for students who have completed the GCSE programme of study in Psychology and/or have achieved A grades in English, Math, and Biology on their Year 11 final report.

Assessment Objectives

Demonstrate clear understanding of the following core themes:

- Research and ethics
- Biological approach to understanding behavior
- Cognitive approach to understanding behavior
- Sociocultural approach to understanding behavior

Higher Level Honors also requires students to demonstrate understanding of two of the following themes:

- Abnormal psychology
- Developmental psychology
- Health psychology
- Psychology of human relationships

Please note that if a student is thinking of completing an Extended Essay in Psychology, they will need to have opted for the Higher Level course.

Standard Level Honors

Recommended Prior Learning

This course is recommended for students who achieved a B grade or higher in English, Math, and Biology on their Year 11 final report.

Assessment Objectives

Demonstrate clear understanding of the following core themes:

- Research and ethics
- Biological approach to understanding behavior
- Cognitive approach to understanding behavior
- Sociocultural approach to understanding behavior

Standard Level Honors also requires students to demonstrate understanding of one of the following themes:

- Abnormal psychology
- Developmental psychology
- Health psychology
- Psychology of human relationships

College Prep

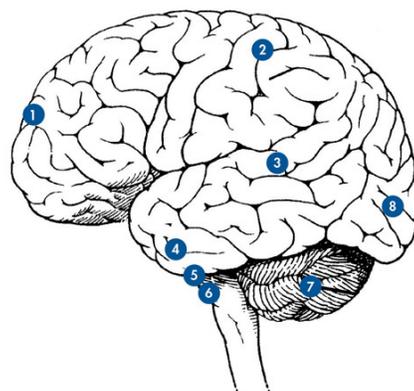
Recommended Prior Learning

This course is recommended for students who have interest in and enthusiasm for the study of Psychology, but are not prepared for the rigors of Standard Level.

Assessment Objectives

Demonstrate clear understanding of the following core themes:

- Research and ethics
- Biological approach to understanding behavior
- Cognitive approach to understanding behavior
- Sociocultural approach to understanding behavior

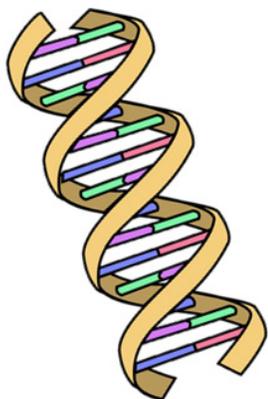


Biology

About the Course

Have you wondered how life began on Earth? How you are an amalgamation of your parents' characteristics? How future technology could cure diseases? IB Biology answers many of these questions, providing an excellent foundation of knowledge and understanding. It has a focus on precision experiments, report writing, scientific practice, and subject content.

The course aims to create not only a good understanding of but also an appreciation for the subject. With many creative laboratory experiments and integrated projects, it builds important key skills including creative and critical thinking, logical reasoning, presenting ideas to an audience, analyzing and interpreting data, and the ability to evaluate your own work.



Higher Level Honors

Recommended Prior Learning

Students should have extensive experience in Biology, have excelled in all assessments, and have achieved an A- grade or higher on their Year 11 final report.

Assessment Objectives

- Statistical analysis, including chi-squared tests, standard deviation, and t-tests
- Cell theory, the functions of organelles, membranes, and cell division
- Biochemistry, structures of biological molecules, and some cell chemistry, including photosynthesis and respiration
- Genetics, including molecular and theoretical genetics, genetic engineering, dihybrid crossing, and polygenic inheritance
- Ecology and classification, population dynamics, ecological surveillance, natural selection, evolution, and speciation
- Human health and physiology, including the immune system, transport, communication, digestion, gas exchange, circulation
- Neurobiology and behavior

Standard Level Honors

Recommended Prior Learning

Students should have good understanding of Biology and have achieved a grade C or higher on their Year 11 final report.

Assessment Objectives

- Cell theory, the functions of organelles, membranes, and cell division
- Biochemistry, structures of biological molecules, and some cell chemistry
- Genetics, including molecular and theoretical genetics, and genetic engineering
- Ecology and classification, population dynamics, ecological surveillance, natural selection, and evolution
- Human health and physiology, including the immune system, transport, communication, digestion, gas exchange, and circulation
- Neurobiology

College Prep

Recommended Prior Learning

Students may have limited background in Biology. Students should have some existing knowledge but may not have taken recent courses.

Assessment Objectives

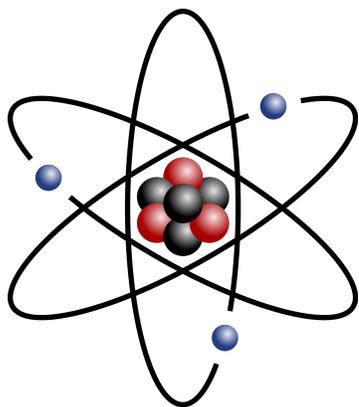
- Cell theory, the functions of organelles, membranes, and cell division
- Biochemistry, some aspects of structures of biological molecules, and some cell chemistry
- Genetics, theoretical genetics, and genetic engineering
- Ecology and classification, ecological surveillance, natural selection, and evolution
- Human health and physiology, including the immune system, transport, communication, digestion, gas exchange, and circulation

Chemistry

About the Course

Chemistry is called the central science, as chemical principles underpin both the physical environment in which we live and all biological systems. IB Chemistry is an experimental science that combines academic study with the acquisition of practical and investigation skills dealing with the real building blocks of life.

Aside from being a subject worthy of study in its own right, Chemistry is a prerequisite for many other courses in higher education, such as medicine, veterinary science, dentistry, biological science, and environmental science. It can open up a range of careers and higher education courses in optometry, physiotherapy, pharmaceutical sciences, forensic science, biomedical sciences, environmental health, and food science.



Higher Level Honors

Recommended Prior Learning

Students should have extensive experience in Chemistry and achieved an A- grade or higher on their Year 11 final report.

Assessment Objectives

- Quantitative chemistry, Avogadro's constant, chemical equations and formulae
- Atomic structures, mass spectrometry, electron arrangement and configuration
- Periodicity, including basic properties and trends and first row d-block elements
- Bonding, including ionic and covalent bonding, hybridization, and delocalization
- Energetics, including endo/exothermic reactions, enthalpy change, Hess's Law, Born-Haber cycles, and spontaneity
- Kinetics, acids and bases, and equilibrium
- Oxidation and reduction including electrolysis
- Organic chemistry, including nucleophilic reactions, elimination reactions, and reaction pathways
- Data processing

Standard Level Honors

Recommended Prior Learning

Students should have good understanding of Chemistry and achieved a grade C or higher on their Year 11 final report.

Assessment Objectives

- Quantitative chemistry, Avogadro's constant, chemical equations, and formulae
- Atomic structures, mass spectrometry, electron arrangement and configuration
- Periodicity, including basic properties and trends
- Bonding, including ionic and covalent bonding
- Energetics, including endo/exothermic reactions, enthalpy change, and Hess's Law
- Kinetics, acids and bases, and equilibrium
- Oxidation and reduction
- Organic chemistry
- Data processing

College Prep

Recommended Prior Learning

Students may have limited background in Chemistry, some existing knowledge, but may not have taken recent courses.

Assessment Objectives

- Quantitative chemistry, Avogadro's constant, chemical equations, and formulae
- Atomic structures and electron arrangement
- Periodicity
- Bonding, including ionic and covalent bonding
- Energetics, including endo/exothermic reactions
- Kinetics, acids and bases, and equilibrium
- Oxidation and reduction
- Organic chemistry

Physics

About the Course

What does Albert Einstein have in common with Angela Merkel, Chancellor of Germany and Brian May, lead guitarist of Queen? The answer is that they all have physics-related degrees! Physics degrees are among the most prized degrees in the world.

IB Physics takes students on a fundamental journey through the fabric of life itself, into the cosmos and through time. You will gain insight into the history and culture of great civilizations as well as creativity and imagination as you learn about mechanics, electricity and magnetism, astrophysics, relativity, the principles of engineering, and the commerce of material science. It will equip you with key skills prized by many around the world. Thinking of studying a different subject at college? Physics offers insights into politics, history, and culture, and many universities and employers actively seek out high-level physics students.

Higher Level Honors

Recommended Prior Learning

Students must have extensive experience in Physics and Mathematics, have excelled in all associated assessments, and have achieved an A- grade or higher on their Year 11 final report.

Assessment Objectives

- Demonstrate knowledge of mechanics forces, electronics, climate science, nuclear and atomic physics, astrophysics, and particle physics
- Demonstrate knowledge of projectiles, force fields, electromagnetic induction, relativity, and medical physics
- Enhance and compliment mathematical skills in algebra, calculus, and statistics
- Develop theory knowledge, exploring ideas behind physics, such as theories, laws, and paradigm shifts, and the economical, philosophical, political, and cultural development of science
- Develop personal and group skills in the interdisciplinary Group 4 project

Standard Level Honors

Recommended Prior Learning

Students should have good understanding of Physics and achieved a grade C or higher on their Year 11 final report.

Assessment Objectives

- Demonstrate knowledge of mechanics forces, electronics, climate science, nuclear and atomic physics, astrophysics, and particle physics
- Utilize understanding of ideas in mathematics, such as algebra
- Develop theory knowledge, exploring ideas behind physics, such as theories, laws, and paradigm shifts, and the economical, philosophical, political, and cultural development of science
- Develop key skills such as debate and scientific writing
- Develop personal and group skills in the interdisciplinary Group 4 project

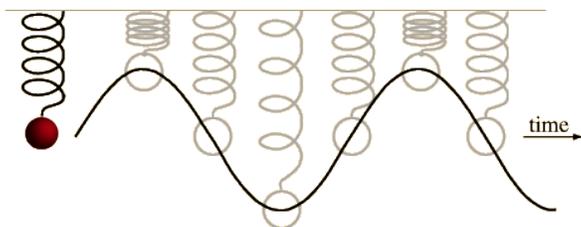
College Prep

Recommended Prior Learning

This course is recommended for students who have a limited background in Physics. Students should have some existing knowledge but may not have taken recent physics courses.

Assessment Objectives

- Demonstrate knowledge of mechanics forces, electronics, climate science, nuclear and atomic physics, astrophysics, and particle physics
- Utilize understanding of ideas in mathematics, such as algebra
- Develop key skills such as debate and scientific writing



Mathematics: Analysis & Approaches

About the Course

This course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content; it is for students who enjoy developing mathematical arguments, problem-solving, and exploring real and abstract applications, with and without technology.

Higher Level Honors

Recommended Prior Learning

Students must possess detailed knowledge of mathematical concepts and the skills needed to correctly apply complex techniques. Students must have achieved a grade of A+ in Mathematics on their Year 11 final report.

Assessment Objectives

Demonstrate knowledge of:

- Arithmetic and geometric sequences and series
- Exponents and logarithms
- Binomial theorem
- Complex numbers
- De Moivre's theorem
- Functions and transformations
- Quadratic equations
- Circular functions
- Trigonometric equations and identities
- Vectors
- Normal distributions
- Probability
- Mean, variance, and standard deviation
- Differential and integral calculus

Standard Level Honors

Recommended Prior Learning

Students must possess detailed knowledge of mathematical concepts and the skills needed to correctly apply complex techniques.

Assessment Objectives

Demonstrate knowledge of:

- Arithmetic and geometric sequences and series
- Exponents and logarithms
- Binomial theorem
- Functions and transformations
- Quadratic equations
- Circular functions
- Trigonometric equations and identities
- Normal distributions
- Probability
- Mean, variance, and standard deviation
- Differential and integral calculus

College Prep

Recommended Prior Learning

This course caters to students with varied backgrounds and abilities in Mathematics. It is designed to build confidence and prepare students for college studies. Students taking this course are assumed to have studied Mathematics in the past, but there are no prior learning requirements.

Assessment Objectives

Demonstrate knowledge of:

- Number and algebra
- Arithmetic and geometric sequences and series
- Financial applications
- Interpreting statistics
- Averages
- Probability
- Triangular trigonometry
- Functions and equations
- Introductory differential calculus

Mathematics: Applications & Interpretation

About the Course

This course is designed for students who enjoy describing the real world and solving practical problems using mathematics, those who are interested in harnessing the power of technology alongside exploring mathematical models and enjoy the more practical side of mathematics.

Higher Level Honors

Recommended Prior Learning

Students must possess knowledge of mathematical concepts and the skills needed to correctly apply complex techniques. Students must have achieved a grade A+ on their Year 11 final report.

Assessment Objectives

Demonstrate knowledge of:

- Logarithms and exponentials
- Complex numbers
- Matrices
- Probability
- Binomial and Poisson hypotheses
- Vectors
- Differential and integral calculus

Standard Level Honors

Assessment Objectives

Demonstrate knowledge of:

- Arithmetic and geometric sequences and series
- Financial applications
- Logarithms and exponentials
- Functions and equations
- Trigonometry
- Bivariate data
- Probability
- Normal distribution
- Chi-squared analysis

Computer Science

About the Course

IB Computer Science is a Group 4 Science course, but we offer it in Group 6 to give students more course options.

IB Computer Science is engaging, accessible, inspiring, and rigorous, and draws on a wide spectrum of knowledge. The course enables and empowers innovation, exploration, and the acquisition of further knowledge, teaching students how Computer Science interacts with and influences cultures and society, and how individuals and societies behave.

The course requires understanding of fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. Students explore ethical issues and learn to use computational thinking, which involves the ability to think procedurally, logically, concurrently, abstractly, recursively, and in advance. Students utilize an experimental and inquiry-based approach to problem-solving, appreciating how theoretical and practical limitations affect the extent to which problems can be solved computationally.

In the course, students develop computational solutions, which involves the ability to identify a problem or unanswered question; design, prototype, and test a proposed solution; and liaise with clients to evaluate the success of the proposed solution and make recommendations for future developments.

Topics of study include:

- System fundamentals
- Computer organization
- Networks
- Computational thinking, problem-solving, and programming

Higher Level students also study:

- Abstract data structures
- Resource management
- Control case study

Standard and Higher Level Honors students also study one of the following options:

- Databases
- Modeling and simulation
- Web science
- Object-oriented programming (OOP)

Recommended Prior Learning

Higher Level Honors

Students must have achieved an A grade or higher in Mathematics and IGCSE Computer Science on their Year 11 final report. They should also have an overall interest in computer programming.

Standard Level Honors

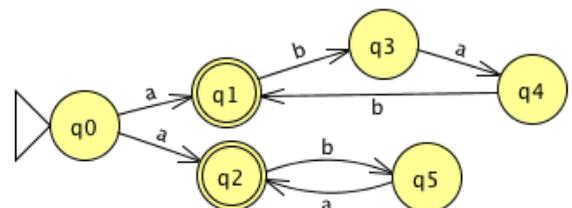
Students must have achieved a B grade or higher in Mathematics and IGCSE Computer Science on their Year 11 final report. They should also have an overall interest in computer programming.

College Prep

Students must have achieved a C grade or higher in Mathematics on their Year 11 final report.

Assessment Objectives

- Know, understand, apply, and use relevant facts and concepts
- Know, understand, apply, and use appropriate methods and techniques
- Know and understand science terminology, and apply, and use it to communicate effectively
- Know, understand, apply, and use methods of presenting information
- Construct, analyze, evaluate, and formulate success criteria and solution specifications, including task outlines, designs, and test plans
- Construct, analyze, evaluate, and formulate appropriate techniques within a specified solution
- Demonstrate the personal skills of cooperation and perseverance as well as appropriate technical skills for effective problem-solving in developing a specified solution



Design Technology

About the Course

Design Technology is a Group 4 Science course, but we offer it in Group 6 to give students more course options.

The scientific study of Design Technology focuses on the links between materials science, human nature, innovation, and creativity. Design is human-centered and focuses on the needs, wants, and limitations of the end user. IB Design Technology students focus on the analysis, development, synthesis, and evaluation required during the design process. The course is structured on three core elements: the nature of design; the role of science and technology in design; and the characteristics of a good designer. The technological study of materials, manufacturing processes, and the changes these have brought to society are the focus of this part of the course.

Students develop an understanding of the possibilities offered by science in order to realize the full potential of what they can design in terms of utilizing new technologies, products, and systems. Inquiry and problem-solving are at the heart of the subject, and students learn to utilize the Design Cycle Model through the development of their work.

Assessment Objectives

All Design Technology students must demonstrate knowledge of:

- Human factors and ergonomics
- Resource management and sustainable production
- Modeling
- Final production
- Innovation and design
- Classic design

Higher Level students must also demonstrate knowledge of:

- User-centered design
- Sustainability
- Innovation and markets
- Commercial production

In addition, students must also produce a coursework portfolio to meet the following criteria:

- Analysis of a design opportunity
- Conceptual design
- Development of detailed design
- Testing and evaluation
- Detailed development of a commercial product (**HL only**)
- Making choices for commercial production (**HL only**)

Recommended Prior Learning

Higher Level Honors

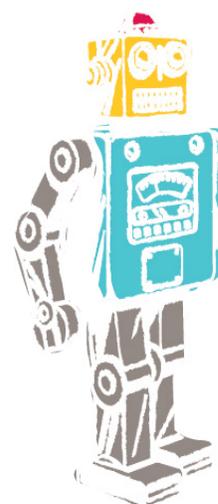
Students must have good prior knowledge of design and materials. Suitable preparation at this level should include the successful study of a course such as IGCSE Design Technology, Mathematics, and Physics to an A grade or higher at Honors Level.

Standard Level Honors

It is recommended that students have previously completed a Design Technology or Product Design course to a minimum of a C grade.

College Prep

Students are not required to have any prior knowledge of design or materials, although some scientific background is recommended. They should possess a basic understanding of Mathematics and Science to a B grade or higher at College Prep Level.



Film

About the Course

Film is both an art form and powerful medium for communication. IB Film aims to develop students' skills so they become adept at interpreting and making film texts. Emphasizing the importance of working individually and collaboratively, the course enables students to develop the professional and technical skills (including organization) needed to creatively express themselves in film. A challenge for students following this course is to become aware of their own perspectives and biases, and to learn to respect those of others.

Recommended Prior Learning

Higher Level Honors

This course is recommended for students who achieved a B grade or higher in Media Studies on their Year 11 final report.

Standard Level Honors

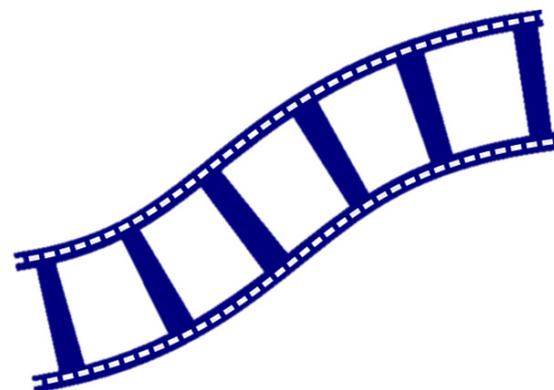
This course is recommended for students who achieved a B grade or higher in Media Studies on their Year 11 final report.

College Prep

This course is recommended for students who achieved a B grade or higher in Media Studies on their Year 11 final report.

Assessment Objectives

- Understand the variety of ways in which film creates meaning
- Understand and effectively use appropriate film language
- Show originality and creativity in developing an idea through the various stages of film-making, from conception to finished production
- Demonstrate technical skills and appropriate use of available technology
- Draw together knowledge, skills, research and experience, and apply analytically to evaluate film texts
- Understand the historical, theoretical, sociocultural, economic, and institutional contexts of film in more than one country
- Research, plan, and organize working processes
- Reflect upon and evaluate film production processes and completed film texts



Music

About the Course

Music is a practical subject that encourages discovery through experimentation, risk-taking, and the presentation of ideas. The IB Diploma Programme Music course is multifaceted and gives students the opportunity to actively engage in music as creators, performers, and researchers. It emphasizes working both individually and collaboratively. IB Music students in the 2021-22 cohort will commence an entirely new and revised IB Music Programme – one which is more in line with contemporary Music practices. There is no longer a formal written ‘Listening Paper’ exam with the new IB music programme.

Throughout the course, students embody three roles:

- the researcher
- the creator
- the performer

In these roles, they inquire, create, perform, and reflect on the course’s three musical processes:

- Exploring music in context
- Experimenting with music
- Presenting music

Students and teachers have the flexibility and agency to personalize their own approaches to musical forms, genres and pieces.

The exploration of diverse musical material is focused through four lenses:

- Music for sociocultural and political expression
- Music for listening and performance
- Music for dramatic impact, movement and entertainment
- Music technology in the electronic and digital age

Engagement with these Areas of Inquiry takes place across three contexts: Personal, Local, and Global.

Assessment Objectives

Each assessment submission links directly to one of the course’s three musical processes and requires candidates to evidence engagement with that process through the three (or four for HL) musical roles:

1. Exploring music in context
 - Students select samples of their work for a portfolio submission (maximum 2,400 words)
2. Experimenting with music
 - Students submit an experimentation report with evidence of their musical processes in creating and performing focused through at least two areas of inquiry in a local and/or global context. The report provides a rationale and commentary for each process
3. Presenting music
 - Students submit a collection of works demonstrating engagement with diverse musical material from four areas of inquiry
4. The contemporary music-maker (Higher Level Honors only)
 - Students submit a continuous multimedia presentation documenting their real-life project

Recommended Prior Learning

The music course at both Standard Level Honors and Higher Level Honors requires the student to be at least Grade 5 on an instrument/voice and have a comprehensive understanding of reading western notation.

The course is designed to allow students to experience music on a personal level while expanding their musical identity. The individual student’s prior experiences will determine the student’s pathways through, and engagement with, the course.



Sports, Exercise & Health Science (SEHS)

About the Course

The IB Diploma Programme in Sports, Exercise & Health Science for both Standard Level and Higher Level involves the study of the science that underpins physical performance. The course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology, and nutrition.

Students cover a range of topics and carry out practical (experimental) investigations in both laboratory and field settings. This provides an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyze human performance.

Where relevant, the course will address issues of international dimensions and ethics by considering sport, exercise, and health relative to the individual in a global context.

All students must demonstrate knowledge in the following topics:

Year 12

- Nutrition and Energy Systems
- Human Anatomy
- Exercise and Performance Physiology
- Skill Acquisition
- Cardiorespiratory Physiology
- Measuring Human Performance in Sport
- Internal Assessment Preparation

Year 13

- Biomechanics
- Optimizing Physiological Performance in Sport
- Nutritional and Non-Nutritional Ergogenic Aids
- Environmental Physiology
- The Mind and Sports Performance
- Exam preparation

In addition, the course for **Higher Level students** includes:

- Further anatomy
- The endocrine system
- Fatigue
- Friction and drag
- Skill acquisition and analysis
- Genetics and athletic performance
- Exercise and immunity

Recommended Prior Learning

Higher Level Honors

This course is recommended for students who achieved an A grade or higher in Honors Physical Education and a B grade or higher in Honors Science courses on their Year 11 report.

Standard Level Honors

This course is recommended for students who achieved a B grade or higher in Honors Physical Education and a C grade or higher in Honors Science courses on their Year 11 final report.

College Prep

It is recommended that students have previously studied Physical Education or Biology at Honors or College Prep level.

Assessment Objectives

- Demonstrate understanding of scientific facts and concepts; methods, techniques, and terminology; and methods of presenting scientific information
- Apply and use facts, concepts, methods, techniques, and terminology to effectively communicate and present scientific information
- Construct, analyze, and evaluate hypotheses, research questions and predictions; scientific methods and techniques; and scientific explanations
- Demonstrate the personal skills of cooperation, perseverance, and responsibility appropriate for effective scientific investigation and problem-solving
- Demonstrate the manipulative skills necessary to carry out scientific investigations with precision and safety

College Prep

Students who take IB Sports, Exercise & Health Science at College Prep level will undergo modular based assessment. Students do not take a final exam or complete an Internal Assessment. Results from module exams are averaged out to provide students with a final course examination grade.

Visual Arts

About the Course

The Visual Arts have been a vital part of our everyday lives affecting the way we communicate, understand, and express ourselves. The Visual Arts are built into our communities and cultures through traditional crafts and modern practices. They may have a sociopolitical impact as well as ritual, spiritual, decorative, and functional value.

The IB Programme allows students to explore their creativity and challenge their cultural expectations. Students learn to be active thinkers, highly engaged in the world around them and will gain a better understanding of historical contexts surrounding art movements and historical moments. They will develop strong analytical skills whilst building their technical skills and creative art-making practice.

In addition to exploring and comparing visual arts from different perspectives and contexts, students are expected to engage in, experiment with, and critically reflect on a wide range of contemporary practices and media. Through inquiry, investigation, reflection, and creative application, visual arts students develop an appreciation for the expressive and aesthetic diversity in the world around them, becoming critically informed makers and consumers of visual culture.

Recommended Prior Learning

Higher Level Honors

This course is recommended for students who achieved an A grade or higher in Art and B grade or higher in English on their Year 11 final report. Students should demonstrate passion for Visual Arts and the ability to independently produce work that meets assessment objectives.

Standard Level Honors

This course is recommended for students who achieved a B grade or higher in Art and B grade or higher in English on their Year 11 final report. Students should demonstrate the ability to analytically interpret artwork.

College Prep

No previous study is required, but students should have genuine interest in Visual Arts. To be considered for this course, students must submit a portfolio of work that meets the school's requirements. They must also finish a related project over the summer break preceding entry to the course.

Assessment Objectives

Comparative Study

- Analyze formal qualities
- Interpret function and purpose
- Evaluate cultural significance
- Make comparisons and connections
- Present and appropriately use subject-specific language
- Make connections to own art-making practice

Process Portfolio

- Demonstrate solid skills, techniques and processes
- Conduct critical investigations
- Clearly communicate ideas and intentions
- Demonstrate ability to review, refine and reflect on work

Exhibition

- Produce a coherent body of work
- Demonstrate technical competence
- Showcase conceptual qualities



Assessment

Purpose of Assessment

Assessment is the gathering and analysis of information about student performance. It identifies what students know, understand, can do, and feel at different stages in the learning process; this information guides teachers in instruction.

Assessment is an ongoing and daily part of school life, and the formative comments students receive develop their understanding of the skills and knowledge required to be successful in each course. The aims and purpose of assessment are to:

- Provide information to enhance and improve learning and teaching
- Provide information for target-setting for individuals, groups, and cohorts
- Share learning goals with students
- Involve students in self-assessment
- Help students know and recognize the standards they are aiming for
- Raise standards of learning
- Identify possibilities for academic intervention
- Inform parents of their child's progress

IB Assessment

The IBDP culminates in written examinations marked by external IB examiners. Students also complete assessment tasks in school, which are initially marked by teachers and then moderated by external examiners, or sent directly to external examiners. IB subjects are assessed using a points system from 1 to 7. The IB Diploma is awarded to students who achieve at least 24 points (subject to minimum levels of performance across the whole programme) and satisfactorily complete the Extended Essay, Theory of Knowledge, and Creativity, Action, and Service requirements. The highest total an IBDP student can achieve is 45 points.

Setting Targets

Regardless of previous academic achievement, students are expected to make appropriate progress and continually improve. Our teachers are highly trained in estimating and setting academic targets that challenge student learning. Teachers use students' results to set challenging, yet achievable academic targets. High School students usually achieve short-term targets by each academic report and long-term targets by the end of the school year or the end of High School. We continually track and monitor the academic achievements of every student in every subject to ensure they are reaching their goals. Students also reflect on their academic achievement during every lesson and after homework assignments and assessments. If a teacher identifies a student whose progress is slowing, the school administers an individual learning plan to help ensure the student is back on track by the next report.



Assessment (continued)

Academic Reports

Academic reports describe students' academic and social development and list targets in all subjects for the student to concentrate on before the next report. Teachers communicate with families about student achievement and progress via four reports during the school year in October, January, March, and June.

Staff use results from the October and March reports to evaluate which course route each student should pursue. The student's course route and attainment grade are detailed on the academic reports in January and June, and entered onto their college transcript. Any transitions between course routes must be discussed among the student, parents, teachers, and School Leadership Team. There are parent consultations with teachers scheduled during the school year. Parents may also meet with teachers outside of the consultation dates.

Grades

There are two semesters during the school year. At the end of each semester, students receive a grade for each subject, which reflects their attainment over the semester. The subject grades for Semester 1 and Semester 2 are published on the students' official college transcript.

Halfway through each semester, students receive a "progress grade". This grade is not published on the college transcript and serves to demonstrate the students' current attainment.

Students receive an assessment map from for each subject at the start of the school year. The map outlines how final and progress grades are determined.



August - December



January - June

Questions?

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