

Subject Guide

Queensland Academies - Health Sciences Campus

Introduction

The curriculum for the Queensland Academy - Health Sciences Campus is the International Baccalaureate Diploma Programme. The International Baccalaureate Diploma Programme is a highly regarded, internationally recognised certification leading to tertiary study anywhere in the world. It is part of the philosophy of the IB Diploma that all students study a traditional, broadly focused curriculum with the study of languages, maths, science and humanities being compulsory for all students.

Founded in the 1960s, the International Baccalaureate Organisation (IBO) evolved from an international effort by schools to establish a common curriculum and university entry credential for geographically mobile students. The IB Diploma now has wide acceptance and is held in high esteem throughout the world. It is a two year programme in the final secondary years of education, designed to:

- prepare students for tertiary studies
- provide students with a balanced education
- foster critical thinking skills
- encourage cultural understanding and tolerance
- enable students to move between countries and cultures without affecting their education
- develop international awareness and broadened perspectives

A student who is awarded the IB Diploma has demonstrated a strong commitment to learning, both in terms of mastery of the subject content and in the development of the skills and discipline necessary for success in a competitive world. IB Diploma students enjoy ready acceptance and success in university studies in Queensland and throughout the world.

Who is the IB Diploma for?

The IB is a good choice of programme for any student who wishes to study at a University and is interested in:

- studying a sound comprehensive curriculum recognised for both depth and breadth of academic studies
- participating in activities that encourage a sense of adventure, self-discovery, social responsibility and international awareness

The IB Diploma Programme

To be eligible for the award of the IB Diploma, students are required to:

- Study six academic subjects, one from each of the groups represented by the diagram below (exceptions for group 6 apply)
- Complete at least three (and not more than four) of these at the Higher Level and the remainder at the Standard Level;
- Satisfactorily complete the following additional core requirements:
 - Theory of Knowledge (ToK)
 - Extended Essay (EE)
 - Creativity, Activity and Service (CAS)

The Award of the IB Diploma

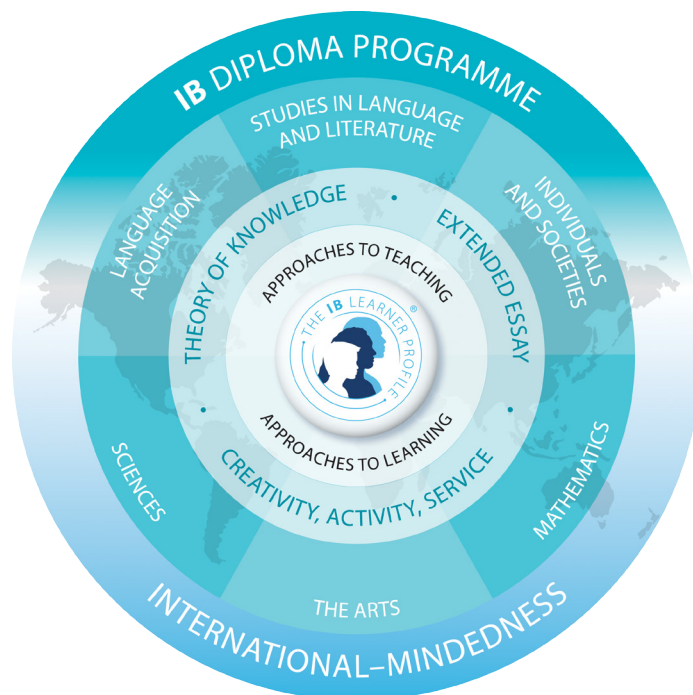
The award of the Diploma requires:

- A minimum total of 24 points (with a maximum of 45 points possible); and
- The satisfactory completion of the Extended Essay, ToK and CAS; and
- The completion of one subject from each of the six groups (exceptions for group 6 – students may instead, study a second science or humanities subject) with three of the subjects at Higher Level (HL) and the others at Standard Level (SL)

Curriculum Offerings

International Baccalaureate Diploma Framework

The Academy's three year learning programme will have as its essential core, the International Baccalaureate Diploma. The Diploma Programme has a traditional time frame of two years. Year 10 students will begin the IB Diploma Programme in Term 4 of Year 10. In Year 10 students select subjects that are an introduction to the Diploma course.



Students choose one from each Group unless otherwise stated

IB Diploma Group	Year 10	Years 11-12
Group 1 Studies in Language and Literature	English Language and Literature	English Literature HL English Language and Literature SL
Group 2 Language B	Introduction to either French or Mandarin, or continuation of French or Mandarin if already a competent speaker (eg. student has come from an immersion programme)	French ab initio (Beginner SL) Mandarin ab initio (Beginner SL) French (SL) Mandarin (SL)
Group 3 Individuals and Society	Introduction to Business Management Introduction to Psychology Introduction to Economics	Business Management (SL & HL) Psychology (SL & HL) Economics (HL)
Group 4 Experimental Sciences	Biology Chemistry Physics Sports, Exercise & Health Science	Biology (HL) Chemistry (SL & HL) Physics (HL) Sports, Exercise & Health Science (HL)
Group 5 Mathematics	Mathematics	Mathematics Studies (SL) Mathematics (SL) Mathematics (HL)
Group 6 Arts or Second Science or Psychology or Business Management or Economics	Students cannot choose a science previously chosen in Group 4 Music Biology Chemistry Physics Sports, Exercise & Health Science Introduction to Psychology Introduction to Business Management Introduction to Economics	Music (HL) Biology (HL) Chemistry (SL & HL) Physics (HL) Sports, Exercise & Health Science (HL) Psychology (SL & HL) Business Management (SL & HL) Economics (HL)
Core All compulsory	Introduction to Theory of Knowledge (TOK) Creativity, Activity and Service (CAS)	Theory of Knowledge (TOK) Creativity, Activity and Service CAS) Extended Essay (4000 word original research paper) (EE)

GROUP 1 - Studies in Language and Literature

English A: Language and Literature SL

The aims of the Language and Literature course at standard level are to:

- introduce students to a range of texts from different periods, styles and genres
- develop in students the ability to engage in close, detailed analysis of individual texts and make relevant connections
- develop the students' powers of expression, both in oral and written communication
- encourage students to recognize the importance of the contexts in which texts are written and received
- encourage, through the study of texts, an appreciation of the different perspectives of people from other cultures, and how these perspectives construct meaning
- encourage students to appreciate the formal, stylistic and aesthetic qualities of texts
- promote in students an enjoyment of, and lifelong interest in, language and literature.
- develop in students an understanding of how language, culture and context determine the ways in which meaning is constructed in texts
- encourage students to think critically about the different interactions between text, audience and purpose.

The English A: Language and Literature programme is primarily aimed at students who are required to have an understanding of the conventions of a variety of texts and to consider the importance of the role language and reading plays in an intellectual life. This course is suitable for students who intend to pursue literature, or related studies, at university, as well as at students whose formal study of literature will not continue beyond this level.

This course is concerned with various cultural conceptions, interpretations and experiences conveyed through visual and written text. The study of language and literature, therefore, can be seen as a study of the complex ways language is used to shape perspectives through various literary and non-literary texts. The course enables an exploration of one of the more enduring fields of human creativity and artistic ingenuity, and provides immense opportunities for encouraging 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 and non-literary works.

Throughout the Language and Literature course, the study of texts, both literary and non-literary, provides a focus for developing an understanding of how language works to create meanings in a culture, as well as in particular texts. All texts may be understood according to their form, content, purpose and audience, and through the social, historical, cultural and workplace contexts that produce and value them. Responding to, and producing, texts promotes an understanding of how language sustains or challenges ways of thinking and being.

English A: Literature HL

The aims of the English A: Literature programme at higher level are to:

- encourage a personal appreciation of literature and develop an understanding of the techniques involved in literary criticism
- develop the students' powers of expression, both in oral and written communication, and provide the opportunity of practising and developing the skills involved in writing and speaking in a variety of styles and situations
- introduce students to a range of literary works of different periods, genres, styles and contexts
- broaden the students' perspective through the study of works from other cultures and languages
- introduce students to ways of approaching and studying literature, leading to the development of an understanding and appreciation of the relationships between different works
- develop the ability to engage in close, detailed analysis of written text
- promote in students an enjoyment of, and lifelong interest in literature

The English A: Literature programme is primarily a pre-university course in literature. It is aimed at students who intend to pursue literature, or related studies, at university, as well as at students whose formal study of literature will not continue beyond this level.

Literature is concerned with our conceptions, interpretations and experiences of the world. The study of literature, therefore, can be seen as a study of all the complex pursuits, anxieties, joys and fears that human beings are exposed to in the daily business of living. It enables an exploration of one of the more enduring fields of human creativity and artistic ingenuity, and provides immense opportunities for encouraging 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 which requires the clear expression of ideas both orally and in writing.

The English A: Literature programme encourages students to see literary works as products of art and their authors as craftsmen whose methods of production can be analysed in a variety of ways and on a number of levels. This is achieved through the emphasis placed on exploring the means used by different authors to convey their subjects in the works studied. It is further reinforced by the comparative framework emphasized for the study of these works in all four parts of the programme. In view of the international nature of the IBO, the English A: Literature programme does not limit the study of literature to the achievements of one culture or the cultures covered by any one language. The study of Works in Translation is important to IB students because of its global perspective. It can play a strong role in promoting a world spirit through the unique opportunities it offers for the appreciation of the various ways in which cultures influence and shape the experiences of life common to all humanity. The Works in Translation element of the Literature programme does not aim to cover the history of literature or the so-called great works of humanity. It does not aim to equip students with a mastery of other cultures. It is envisaged as having the potential to enrich the international awareness of IB students and to develop in them the attitudes of tolerance, empathy and a genuine respect for perspectives different from their own.

GROUP 2 - Language B

French or Mandarin (Chinese)

The aims of group 2 are to:

- enable students to understand and use the language they have studied in a range of contexts and for a variety of purposes
- enable students to use the language appropriately
- encourage, through the study of texts and through social interaction, an awareness and appreciation of the different perspectives of people from other cultures
- develop students' awareness of the role of language in relation to other areas of knowledge
- provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of a language
- provide students with a basis for further study, work and leisure through language
- develop students' awareness of the relationship between the languages and cultures with which they are familiar

The study of a modern language entails acquiring a language system and applying it in four active and interrelated ways: through listening, speaking, reading and writing. These four skills involve exchanging ideas and effective communication. Effective communication, in turn, involves the intellectual process of understanding how ideas can best be expressed to the audience concerned. Understanding ideas, and expressing them clearly and convincingly, demands an awareness of the cultural characteristics of the audience.

Language B Ab Initio

The language ab initio courses are language learning courses for beginners, designed to be followed over the Diploma by students who have no previous experience of learning the target language. The main focus of the courses is on the acquisition of language required for purposes and situations usual in everyday social interaction. Language ab initio courses are only available at standard level.

Language ab initio courses aim to develop a variety of linguistic skills, and a basic awareness of the culture(s) using the language, through the study of a core syllabus and language-specific syllabuses is for a beginner who has little or no previous experience of the language.

Language B Standard Level

The language B courses are language learning courses for students with some previous experience of learning the target language. The main focus of these courses is on language acquisition and the development of skills considerably beyond those expected of an ab initio candidate, to a fairly sophisticated degree.

Language B courses give students the opportunity to reach a high degree of competence in a language and explore the culture(s) using the language. The range of purposes and situations for which and in which the language is used extends well beyond those at ab initio, to the domains of work, social relationships, and the discussion of abstract ideas, for example. The types of language needed for these purposes and situations are more refined. Language B is for a student who has 2 to 5 years experience of the target language.

GROUP 3 - Individuals and Societies

Business Management

The aims of the Business Management course are to:

- encourage a holistic view of the world of business
- empower students to think critically and strategically about individual and organizational behaviour
- promote the importance of exploring business issues from different cultural perspectives
- enable the student to appreciate the nature and significance of change in a local, regional and global context
- promote awareness of the importance of environmental, social and ethical factors in the actions of individuals and organizations
- develop an understanding of the importance of innovation in a business environment

Business Management is a rigorous, challenging and dynamic discipline in the individuals and societies subject group. Although business management shares many skills and areas of knowledge with other humanities and social sciences, it is distinct in a number of ways. Business Management studies business functions, management processes and decision-making in contemporary contexts of strategic uncertainty.

The Diploma Programme Business Management course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques. Emphasis is placed on strategic decision-making and the operational business functions of human resource management, finance and accounts, marketing and operations management. The course encourages the appreciation of ethical concerns, as well as issues of corporate social responsibility (CSR), at both a local and global level.

Developing international-mindedness is at the heart of the Diploma Programme Business Management course. The course encourages the use of contemporary examples and case studies at a variety of levels, from the local to the global, as well as from smaller-scale businesses to multinational ones. The course promotes the ideals of international cooperation and responsible citizenship. Students are encouraged to make sense of the forces and circumstances that drive and restrain change in an interdependent and multicultural world. The Diploma Programme Business Management course contributes to students' developments as critical and effective participants in local, national and world affairs.

Psychology

The aims of the psychology course are to:

- develop an awareness of how psychological research can be applied for the benefit of human beings
- ensure that ethical practices are upheld in psychological inquiry
- develop an understanding of the biological, cognitive and sociocultural influences on human behaviour
- develop an understanding of alternative explanations of behaviour
- understand and use diverse methods of psychological inquiry

Psychology is the systematic study of behaviour and mental processes. Psychology has its roots in both the natural and social sciences, leading to a variety of research designs and applications, and providing a unique approach to understanding modern society.

IB Psychology examines the interaction of biological, cognitive and sociocultural influences on human behaviour, thereby adopting an integrative approach. Understanding how psychological knowledge is generated, developed and applied enables students to achieve a greater understanding of themselves and appreciate the diversity of human behaviour. The ethical concerns raised by the methodology and application of psychological research are key considerations in IB Psychology.

IB Psychology takes a holistic approach that fosters intercultural understanding and respect. In the core of the IB psychology course, the biological level of analysis demonstrates what all humans share, whereas the cognitive and sociocultural levels of analysis reveal the immense diversity of influences that produce human behaviour and mental processes. Cultural diversity is explored and students are encouraged to develop empathy for the feelings, needs and lives of others within and outside their own culture. This empathy contributes to an international understanding.

Economics

The aims of the Economics course are to:

- develop an understanding of microeconomic and macroeconomic theories and concepts and their real-world application
- develop an appreciation of the impact on individuals and societies of economic interactions between nations
- develop an awareness of development issues facing nations as they undergo the process of change.

Economics is a dynamic social science, forming part of the individuals and societies subject group. The study of economics is essentially about dealing with scarcity, resource allocation and the methods and processes by which choices are made in the satisfaction of human wants. As a social science, economics uses scientific methodologies that include quantitative and qualitative elements.

The IB Diploma Programme economics course emphasizes the economic theories of microeconomics, which deal with economic variables affecting individuals, firms and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are not to be studied in a vacuum—rather, they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability.

The ethical dimensions involved in the application of economic theories and policies permeate throughout the economics course as students are required to consider and reflect on human end-goals and values. The economics course encourages students to develop international perspectives, fosters a concern for global issues, and raises students' awareness of their own responsibilities at a local, national and international level. The course also seeks to develop values and attitudes that will enable students to achieve a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interdependent world.

GROUP 4 - Experimental Sciences

The aims of all courses in group 4 are to enable students to:

- provide opportunities for scientific study and creativity within a global context that will stimulate and challenge students
- provide a body of knowledge, methods and techniques that characterise science and technology
- enable students to apply and use a body of knowledge, methods and techniques that characterize science and technology
- develop an ability to analyse, evaluate and synthesize scientific information
- engender an awareness of the need for, and the value of, effective collaboration and communication during scientific activities
- develop experimental and investigative scientific skills
- develop and apply the students' information and communication technology skills in the study of science
- raise awareness of the moral, ethical, social, economic and environmental implications of using science and technology
- develop an appreciation of the possibilities and limitations associated with science and scientists
- encourage an understanding of the relationships between scientific disciplines and the overarching nature of the scientific method.

Group 4 students at standard level (SL) and higher level (HL) undertake a common core syllabus, a common Internal Assessment (IA) scheme and have some overlapping elements in the options studied. They are presented with a syllabus that encourages the development of certain skills, attributes and attitudes, relevant to each discipline.

While the skills and activities of Group 4 Science subjects are common to students at both SL and HL, students at HL are required to study some topics in greater depth, to study additional topics and to study extension material of a more demanding nature in the common options. The distinction between SL and HL is one of breadth and depth.

Biology

Biologists have accumulated huge amounts of information about living organisms, and it would be easy to confuse students by teaching large numbers of seemingly unrelated facts. In the Diploma Programme Biology course, it is hoped that students will acquire a limited body of facts and, at the same time, develop a broad, general understanding of the principles of the subject.

Although the Diploma Programme Biology course has been written as a series of discrete statements (for assessment purposes), there are four basic biological concepts that run throughout; structure and function, universality versus diversity, equilibrium within systems, checks and balances and evolution. These four concepts serve as themes that unify the various topics that make up the three sections of the course: the core, the additional higher level (AHL) material and the options.

Chemistry

Chemistry is an experimental science that combines academic study with the acquisition of practical and investigational skills. It is called the central science, as chemical principles underpin both the physical environment in which we live and all biological systems. Apart from being a subject worthy of study in its own right, Chemistry is a prerequisite for many other courses in higher education, such as medicine, biological science and environmental science, and serves as useful preparation for employment.

The Diploma Programme Chemistry course includes the essential principles of the subject but also, through selection of options, allows teachers some flexibility to tailor the course to meet the needs of their students.

The course is available at both standard level (SL) and higher level (HL), and therefore accommodates students who wish to study science in higher education and those who do not.

Physics

Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself, from the very smallest particles—quarks (perhaps 10⁻¹⁷ m in size), which may be truly fundamental—to the vast distances between galaxies (10²⁴ m).

Alongside the growth in our understanding of the natural world, perhaps the more obvious and relevant result of physics to most of our students is our ability to change the world. This is the technological side of physics, in which physical principles have been applied to construct and alter the material world to suit our needs, and have had a profound influence on the daily lives of all human beings—for good or bad. This raises the issue of the impact of physics on society, the moral and ethical dilemmas, and the social, economic and environmental implications of the work of physicists. These concerns have become more prominent as our power over the environment has grown, particularly among young people, for whom the importance of the responsibility of physicists for their own actions is self-evident.

Physics is therefore, above all, a human activity, and students need to be aware of the context in which physicists work. Illuminating its historical development places the knowledge and the process of physics in a context of dynamic change, in contrast to the static context in which physics has sometimes been presented. This can give students insights into the human side of physics: the individuals; their personalities, times and social milieux; and their challenges, disappointments and triumphs.

Sports, Exercise and Health Science

Over many decades scientific inquiry has accumulated a vast array of knowledge that contributes to our understanding of health and human performance in relation to sports and exercise. The Diploma Programme course in Sports, Exercise and Health Science involves the study of the science that underpins physical performance and provides the opportunity to apply these principles across the traditional disciplines of anatomy and physiology, biomechanics, psychology and nutrition.

Studying the course will allow students to develop skills in areas such as planning and implementing training programs, sports psychology, developing nutritional plans and understanding the complexities of human movement during sporting activity. As such a sports scientist has the ability to, no matter the activity, plan, develop and implement a full training program. Furthermore in a world where physical inactivity is increasing and contributing to chronic ill health a sports scientist should be equally comfortable in prescribing physical activity as part of a medical treatment plan.

As an experimental science the Sports, Exercise and Health Science Diploma Programme combines academic study with practical work and investigative skills in order to develop a range of transferable skills.

GROUP 5 - Mathematics

The aims of all courses in group 5 are to enable students to:

- appreciate the multicultural and historical perspectives of mathematics
- enjoy the courses and develop an appreciation of the elegance, power and usefulness of the subjects
- develop logical, critical and creative thinking
- develop an understanding of the principles and nature of the subject
- employ and refine their powers of abstraction and generalization
- develop patience and persistence in problem solving
- transfer skills to alternative situations and to future developments
- communicate clearly and confidently in a variety of contexts.

The nature of Mathematics can be summarized in a number of ways: for example, it can be seen as a well defined body of knowledge, as an abstract system of ideas, or as a useful tool. For many people it is probably a combination of these, but there is no doubt that mathematical knowledge provides an important key to understanding the world in which we live. Mathematics can enter our lives in a number of ways: we buy produce in the market, consult a timetable, read a newspaper, time a process or estimate a length.

Mathematics, for most of us, also extends into our chosen profession: artists need to learn about perspective; musicians need to appreciate the mathematical relationships within and between different rhythms; economists need to recognize trends in financial dealings; and engineers need to take account of stress patterns in physical materials. Scientists view mathematics as a language that is central to our understanding of events that occur in the natural world. Some people enjoy the challenges offered by the logical methods of mathematics and the adventure in reason that mathematical proof has to offer. Others appreciate mathematics as an aesthetic experience or even as a cornerstone of philosophy. This prevalence of mathematics in our lives provides a clear and sufficient rationale for making the study of this subject compulsory within the Diploma Programme.

Mathematics Studies (MS SL)

This course is available at Standard Level only. It caters for students with varied backgrounds and abilities. More specifically, it is designed to build confidence and encourage an appreciation of mathematics in students who do not anticipate a need for mathematics in their future studies. Students taking this course need to be already equipped with fundamental skills and a rudimentary knowledge of basic processes.

MS SL is the least demanding mathematics course. It is similar in challenge to the QSA Maths A. Students need to be aware that not all universities recognise it as a maths pre-requisite beyond Maths A even though some of the concepts and topics studied are at the equivalent of QSA Maths B.

Mathematics Standard Level (MSL)

This course caters for students who already possess knowledge of basic mathematical concepts, and who are equipped with the skills needed to apply simple mathematical techniques correctly. The majority of these students will expect to need a sound mathematical background as they prepare for future studies in subjects such as chemistry, economics, psychology and business administration.

MSL is an introduction-to-calculus type course, equivalent to Maths B-C. It is for students who need a fairly rigorous mathematics foundation for their chosen field of study, typically in sciences or some engineering areas.

Mathematics Higher Level (MHL)

This course caters for students with a good background in mathematics who are competent in a range of analytical and technical skills. The majority of these students will be expecting to include mathematics as a major component of their university studies, either as a subject in its own right or within courses such as physics, engineering and technology. Others may take this subject because they have a strong interest in mathematics and enjoy meeting its challenges and engaging with its problems.

MHL is a demanding course (equivalent Maths C and first year university level). It is for students with a great interest in mathematics or who wish to pursue university studies in engineering, sciences or mathematics.

GROUP 6 - The Arts

The aims of all subjects in group 6 are to enable students to:

- enjoy lifelong engagement with the arts
- become informed, reflective and critical practitioners in the arts
- understand the dynamic and changing nature of the arts
- explore and value the diversity of the arts across time, place and cultures
- express ideas with confidence and competence
- develop perceptual and analytical skills.
- develop their knowledge and potential as musicians, both personally and collaboratively.

Music

Music functions as a means of personal and communal identity and expression, and embodies the social and cultural values of individuals and communities. This scenario invites exciting exploration and sensitive study.

Music, and all of its associations, may vary considerably from one musical culture to another: yet music may share similarities. Such richness offers a variety of ways to encounter and engage with a constantly changing world. A vibrant musical education fosters curiosity and openness to both familiar and unfamiliar musical worlds.

Through such a study of Music we learn to hear relationships of pitch in sound, pattern in rhythm and unfolding sonic structures. Through participating in the study of music we are able to explore the similarities, differences and links in music from within our own culture and that of others across time. Informed and active musical engagement allows us to explore and discover relationships between lived human experience and specific sound combinations and technologies, thus informing us more fully of the world around us, and the nature of humanity.

The Diploma Programme Music course provides an appropriate foundation for further study in music at university level or in music career pathways. It also provides an enriching and valuable course of study for students who may pursue other careers. This course also provides all students with the opportunity to engage in the world of music as lifelong participants.

Core Requirements of the International Baccalaureate Diploma Programme

All IB Diploma students must satisfy the following three core requirements in addition to their six chosen academic subjects:

Theory of Knowledge (ToK)

The aims of the TOK course are to:

- develop a fascination with the richness of knowledge as a human endeavour, and an understanding of the empowerment that follows from reflecting upon it
- develop an awareness of how knowledge is constructed, critically examined, evaluated and renewed, by communities and individuals
- encourage students to reflect on their experiences as learners, in everyday life and in the Diploma Programme, and to make connections between academic disciplines and between thoughts, feelings and actions
- encourage an interest in the diversity of ways of thinking and ways of living of individuals and communities, and an awareness of personal and ideological assumptions, including participants' own
- encourage consideration of the responsibilities originating from the relationship between knowledge, the community and the individual as citizen of the world.

The Theory of Knowledge (ToK) programme is central to the educational philosophy of the International Baccalaureate and so is a compulsory component. ToK develops the critical reasoning skills of students, and enables them to draw points of comparison as well as points of distinction, between the six subjects that make up their IB Diploma. The programme oscillates between exploration of areas of knowledge (History, Art, Mathematics, Science, Ethics, Politics and Religion) and understanding of the role that our filters of knowledge (language, perception, logic and emotion) play on our acceptance or rejection of knowledge within or between those areas. Its central question is 'How do I, or how do we, know that a given assertion is true, or a given judgment is well grounded?'

The TOK course, a flagship element in the Diploma Programme, encourages critical thinking about knowledge itself, to try to help young people make sense of what they encounter. Its core content is questions like these: What counts as knowledge? How does it grow? What are its limits? Who owns knowledge? What is the value of knowledge? What are the implications of having, or not having knowledge?

Extended Essay (EE)

The aims of the Extended Essay are to provide students with the opportunity to:

- pursue independent research on a focused topic
- develop research and communication skills
- develop the skills of creative and critical thinking
- engage in a systematic process of research appropriate to the subject
- experience the excitement of intellectual discovery

All IBO Diploma Programme students are required to undertake original research and write a fully referenced research essay of some 4,000 words. This offers the opportunity for students to investigate a topic of special interest to them and acquaints them with the kind of independent research and writing skills expected in university level studies.

The topic arises from one of the six subjects studied by the student and the essay is completed under the supervision of an appropriate mentor.

Creativity, Activity and Service (CAS)

The CAS programme aims to develop students who are:

- reflective thinkers—they understand their own strengths and limitations, identify goals and devise strategies for personal growth
- willing to accept new challenges and new roles
- aware of themselves as members of communities with responsibilities towards each other and the environment
- active participants in sustained, collaborative projects
- balanced—they enjoy and find significance in a range of activities involving intellectual, physical, creative and emotional experiences

Creativity, activity, service (CAS) is at the heart of the Diploma Programme. It is one of the three essential elements in every student's Diploma Programme experience. It involves students in a range of activities alongside their academic studies throughout the Diploma Programme.

The three strands of CAS, which are often interwoven with particular activities, are characterized as follows.

- **Creativity:** arts, and other experiences that involve creative thinking.
- **Activity:** physical exertion contributing to a healthy lifestyle, complementing academic work elsewhere in the Diploma Programme.
- **Service:** an unpaid and voluntary exchange that has a learning benefit for the student.

CAS enables students to enhance their personal and interpersonal development through experiential learning. At the same time, it provides an important counterbalance to the academic pressures of the rest of the Diploma Programme. The CAS programme will be both challenging and enjoyable, a personal journey of self discovery. Each individual student has a different starting point, and therefore different goals and needs, but for many their CAS activities include experiences that are profound and life changing. Successful completion of the CAS requirements is essential for the award of the Diploma.

