CANADIAN
INTERNATIONAL
SCHOOL

The IB Diploma Programme

COURSE DESCRIPTION BOOKLET

***The contents of this Handbook have been taken from **www.ibo.org**

COURSE DESCRIPTION BOOKLET

The IB Diploma Programme
The International Baccalaureate(IB) Diploma Programme (DP)

For Grades 11 and 12
2016 - 2018

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The Purpose of this Handbook

The purpose of this booklet is to give a glimpse of the International Baccalaureate Diploma Program (IBDP) and the subject offerings at the Canadian International School, to guide students and the parent community in making informed choices of subjects and their levels.

What is IBDP*?

Established in 1968, the International Baccalaureate® (IB) Diploma Programme (DP) was the first programme offered by the IB and is taught to students aged 16-19. The IBDP is an assessed programme. It is respected by leading universities across the globe.

Through the DP, schools are able to develop students who:

- have excellent breadth and depth of knowledge
- flourish physically, intellectually, emotionally and ethically
- study at least two languages
- excel in traditional academic subjects
- explore the nature of knowledge through the programme's unique theory of knowledge course.

The IB Diploma Programme is a challenging two-year pre-university curriculum, primarily aimed at students aged 16 to 19. It leads to a qualification that is widely recognized by the world's leading universities.

Students learn more than a body of knowledge. The Diploma Programme prepares students for university and encourages them to:

- ask challenging questions
- learn how to learn
- develop a strong sense of their own identity and culture
- develop the ability to communicate with and understand people from other countries and cultures.

The curriculum contains six subject groups together with the DP core: creativity, activity, service (CAS); the extended essay (EE); and theory of knowledge (TOK).

How does this work?

The IBDP centres on the DP core. Three components make up the core, which are studied alongside individual subjects and throughout a student's time in the DP.

These components provide a framework for the study of individual subjects. The components of the DP core are outlined in the DP curriculum. The DP organizes teaching and learning through six subject groups, underpinned by the DP core. Students choose a course from within each subject group.

The three core elements are:

- Theory of knowledge, in which students reflect on the nature of knowledge and on how we know what we claim to know.
- The extended essay, which is an independent, self-directed piece of research, finishing with a 4,000- word paper.

• Creativity, activity service, in which students complete a project related to those three concepts. The six subject groups are:
• Studies in language and literature
• Language acquisition
• Individuals and societies
• Sciences.
• Mathematics
• The arts.
There are different courses within each subject group.
Candidates for the diploma study six subjects selected from the subject groups. Normally three subjects are studied at higher level (courses representing 240 teaching hours), and the remaining three subjects are studied at standard level (courses representing 150 teaching hours). All three parts of the core—extended essay, theory of knowledge and creativity, action, service—are compulsory and are central to the philosophy of the Diploma Programme.
• The extended essay has a prescribed limit of 4,000 words. It offers the opportunity to investigate a topic of individual interest, and acquaints students with the independent research and writing skills expected at university.
• The interdisciplinary theory of knowledge course is designed to provide coherence by exploring the nature of knowledge across disciplines, encouraging an appreciation of other perspectives.
• Participation in the CAS programme encourages candidates to be involved in artistic pursuits, sports, and community service work. The programme fosters students' awareness and appreciation of life beyond the academic arena.

At the end of the two-year programme, candidates are assessed both internally and externally in ways that measure individual performance against stated curriculum and assessment objectives for each subject.

In nearly all subjects at least some of the assessment is carried out internally by teachers, who mark individual pieces of work produced as part of a course of study. Examples include oral exercises in language subjects, projects, student portfolios, reports, class presentations, practical laboratory work, mathematical investigations and artistic performances.

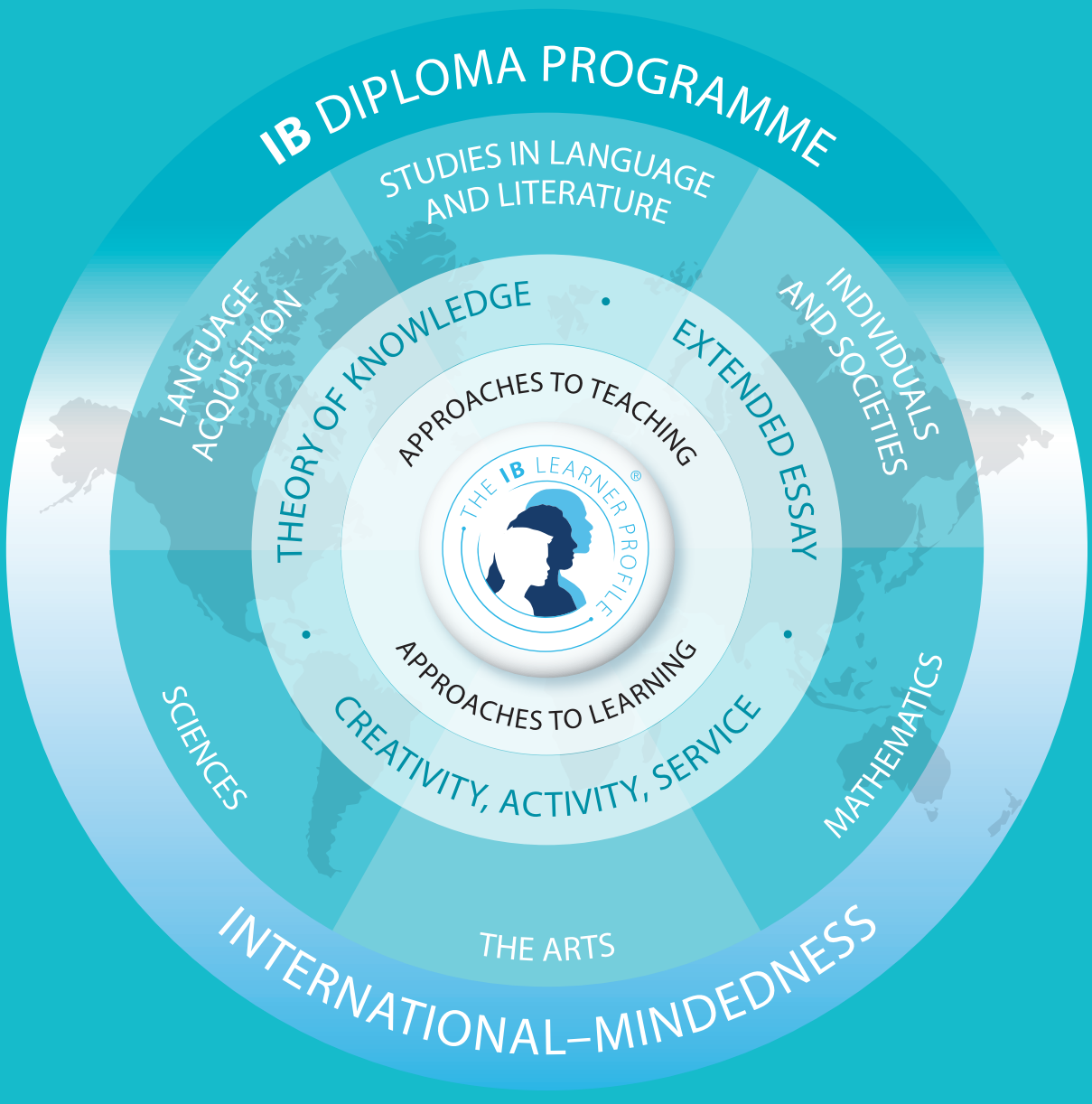
Some assessment tasks are conducted and overseen by teachers, but are then marked externally by examiners. Examples include written assignments or tasks for language subjects in groups 1 and 2, the essay for theory of knowledge and the extended essay.

Because of the greater degree of objectivity and reliability provided by the standard examination environment, externally marked examinations form the larger share of the assessment for most subjects.
The grading system is criterion-related (results are determined by performance against set standards, and not in relation to the performance of other students); validity, reliability and fairness are the watchwords of the Diploma Programme's assessment strategy.

Each of the IB's programmes, including the DP, is committed to the development of students according to the attributes shown in the IB learner profile. The profile aims to develop learners who are:

- Inquirers
- Knowledgeable
- Thinkers
- Communicators
- Principled
- Open-minded
- Caring
- Risk-takers
- Balanced
- Reflective

(*Information extracted from IBO website)



Learning Skills And Approaches to Teaching and Learning (ATL)

The IBDP at CIS adheres to the pedagogical approaches from the IBO.
These approaches serve as a conceptual grounding for the design of teaching and learning that permeates throughout the subjects offered.
They are based on the understanding that knowledge can only arise through the integration of a certain set of skills. The honing of these skills provides the IBDP with a uniqueness which is appreciated by educational institutions across the world.

What are the IB learning skills?

1. Thinking skills
2. Communications skills
3. Social skills
4. Self-management skills
5. Research skills

How does the IBDP address the complexities of learning and teaching?. The implementation of ATL´s.

ATL are deliberate strategies, skills and attitudes that permeate the IB teaching and learning environment.
ATL supports the IB belief that a large influence on a student's education is not only what you learn but also how you learn.
Focus on ATL will improve the quality of teaching and learning across the programmes and may result in more engaged teachers and students.

The pedagogical side of teaching is also acknowledged by featuring an approach…

1) based on inquiry
2) focused on conceptual understanding
3) developed in local and global contexts
4) focused on effective teamwork and collaboration
5) differentiated to meet the needs of all learners
6) informed by formative and summative assessment.

"What is of paramount importance in the pre-university stage is not what is learned but learning how to learn … What matters is not the absorption and regurgitation either of fact or predigested interpretations of facts, but the development of powers of the mind or ways of thinking which can be applied to new situations and new presentations of facts as they arise." — Alec Peterson Peterson, A. 1972. The *International Baccalaureate: An experiment in International Education. London.* George Harrap.

From ¨Approaches to teaching and learning in the International Baccalaureate (IB) Diploma Programme¨ (www.ibo.org)

International Diploma Programme at CIS

At CIS, IBDP started in 1999. Our school code is 001121. We offer 22 different subjects for the six subject groups of the IBDP curriculum. The subjects and the level that we offer are as follows.

	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
Higher Level	English A1 Language & Literature	Hindi B English B	Bus & Mgt Economics Psychology History ITGS	Biology Chemistry Physics Com. Science	Mathematics	Theatre Arts Visual Arts Music
Standard Level	English A1 Language & Literature SS Self-Taught Language A Lit French A Lang & Lit	French B Spanish B French ab initio Spanish ab initio Hindi B English B	Bus & Mgt Economics Psychology History *ESS ITGS	Biology Chemistry Physics Com. Science *ESS	Math SL Math Studies	Theatre Arts Visual Arts Music

*This is an interdisciplinary subject, which can be taken in lieu of Group 3 or 4. We offer this subject in conjunction with other Group 4 subjects.

Subject Selection

- at least three and not more than four subjects must be offered at higher level (HL) and the others at standard level (SL)
- a mathematics subject must be selected from group 5
- the sixth subject may be selected from group 6 or from groups 1 to 5.

A candidate may include alternatives to mainstream subjects within a diploma, provided that certain conditions are met. These alternatives include pilot subjects, interdisciplinary subjects and school-based syllabuses.

It is essential to establish whether a particular combination of subjects constitutes a diploma as soon as a candidate begins his or her courses of study.

An interdisciplinary standard level subject meets the requirements of two groups through a single subject. A sixth subject must then be chosen to meet the requirements of the diploma. The additional subject may be chosen from any of the groups in the programme model, including a group already covered by the interdisciplinary subject. **"*Environmental systems and societies"** SL—this course meets the requirements of groups 3 and 4.

Our school timetable allots the subject grouping as follows. So, please choose subjects in such a way that they are not coinciding with another subject that you might have chosen. It will be easy if you choose one subject from each of the blocks.

Block 1	Block 2	Block 3
Buss.& Mgmt. HL/SL Gr 2	Buss & Mgmt. HL/SL Gr 1	Biology HL/SL
Economics HL/SL Gr 1	Chemistry HL/SL Gr 2	Physics HL/SL Gr 1
Music HL/SL	Economics HL/SL Gr 2	Chemistry HL/SL Gr 1
Physics HL/SL Gr 2	Psychology HL/SL	Comp. science HL/SL Gr 1
Theatre HL/SL	Biology HL/SL Gr 2	ESS SL
Visual arts HL/SL	Comp. Sc. HL/SL Gr 2	History HL/SL
		ITGS HL / SL

Block 4	Block 5	Block 6
English HL Gr 1	Math HL Gr 1	French B SL
English SL Gr 1	Math SL Gr 1	French ab in. SL
English B HL/SL	Math St. SL	Hindi B HL/SL
Math SL Gr 2	English HL Gr 2	Spanish B SL
English SL Gr 3	English SL Gr 2	Spanish ab in. SL
Math HL Gr 2	English SL Gr 3	French A L & L

Three Sciences

General expectations

In response to the essential need for students intending to pursue higher education in Indian medical and engineering colleges, CIS is now open to offer three sciences (Biology, Physics, and Chemistry) as the three of the six subjects required to complete IBDP.

IBO guidelines for subject choices allow students to have such choices, and be registered as non-regular diploma candidate. The mention of "non-regular diploma" category does not appear in their final diploma transcript. However, the indication of such a wish has to be sent for approval by the IBO at the beginning of the IBDP.

CIS will admit students with such choices if:

• the student has indicated medical college in India as destination for post-IBDP studies,
• the student has an IGCSE or equivalent grade of A and above in two of the three sciences taken separately in Grade 10,
• none of the three sciences have a grade of C or below,
•there is a recommendation by the subject teachers in the case of CIS students,
•the performance in CIS admission tests and the final board exam results support the request of non- CIS students.

Four Subjects at Higher Level (HL)
The provision of taking four subjects at higher level is allowed under the following conditions.

• Students intending to join/appear Indian medical and engineering joint entrance exam, where they need to have Physics, Chemistry, Biology, and Math as subjects studied in high schools. Such students should have proven ability of excelling in the four subjects by virtue of their grades in IGCSE or equivalent exams where they have grades of A or above in any three of the four subjects, and not a grade of C or less in any subject.

• The option of having four HL subjects is also offered as a fallback plan for students who are unsure about their third HL at the time of starting IBDP. So, a student may be allowed to start with four HL till the end of IB1, with a consent and recommendation to drop the HL subject in which the performance has not been meeting the threshold standards.

In cases where the student proves to be excelling in all four HL subjects, he/she may be allowed to continue as such in their IB2 after getting recommendation to do so by their concerned teachers.

Please note that the CIS IBDP Coordinator, and the MS/HS Principal have the final say on allowing such a provision to any student intending to take four subject at HL and continue as such, based on required evidence of proficiency in these subjects and recommendation from their teachers.

Anticipated Category Examination Registration
IBO does allow students to take up to two SL subjects as anticipated category registration, at the end of IB1. This attempt is counted as one of the three sessions that is available to every candidate. Please see the MS/HS Principal and IBDP Coordinator for approval.

Exceptions
A candidate may offer a second group 1 subject instead of a group 2 subject. Instead of a group 6 subjects a candidate may offer:
• an additional subject chosen from groups 1 to 4

Core Component Community, Activity, Service* (CAS)

Creativity, activity, service (CAS) is one of the three essential elements that every student must complete as part of the Diploma Programme (DP). Studied throughout the Diploma Programme, CAS involves students in a range of activities alongside their academic studies. It is not formally assessed. However, students reflect on their CAS experiences as part of the DP, and provide evidence of achieving the eight learning outcomes for CAS.

Significance of CAS

CAS enables students to enhance their personal and interpersonal development by learning through experience. It provides opportunities for self-determination and collaboration with others, fostering a sense of accomplishment and enjoyment from their work.
At the same time, CAS is an important counterbalance to the academic pressures of the DP.

Structure of CAS

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 DP.

- Service – an unpaid and voluntary exchange that has a learning benefit for the student. The rights, dignity and autonomy of all those involved are respected.

In order to demonstrate these concepts, students are required to undertake a CAS Project.

The project challenges students to:
- show initiative
- demonstrate perseverance
- develop skills such as collaboration, problem solving and decision making.

IB guidance on CAS

A good CAS programme should be both challenging and enjoyable – a personal journey of self-discovery. Each 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. CAS is a component of the DP core.

Scope: To complement the academic disciplines of the curriculum and to provide balance to the demands of scholarship placed upon the IB student. To challenge and extend the individual by developing a spirit to discover beyond the horizon. To be self-reliant and a responsible person. To be able to face the challenges of the ever changing global scenario.

Core Component Extended Essay* (EE)

The EE is a required component of the International Baccalaureate® (IB) Diploma Programme (DP). It is an independent, self-directed piece of research, finishing with a 4,000-word paper.

Significance of EE

The extended essay provides:

- Practical preparation for undergraduate research
- An opportunity for students to investigate a topic of special interest to them, which is also related to one of the student's six DP subjects.

Through the research process for the extended essay, students develop skills in:

- formulating an appropriate research question
- engaging in a personal exploration of the topic
- communicating ideas
- developing an argument.

Participation in this process develops the capacity to analyse, synthesise and evaluate knowledge.

Structure of EE

Students are supported throughout the process of researching and writing the extended essay, with advice and guidance from a supervisor who is usually a teacher at the school.

There are three mandatory reflection sessions in the process, where student will have to reflect on the process of learning and their progress after meeting with their supervisor. The third and final mandatory session is the "Viva Voce", which is a short interview between the supervisor and the student.

The extended essay and interview can be a valuable stimulus for discussion in countries where interviews are required prior to acceptance for employment or for a place at university.

Key features of EE assessment

All extended essays are externally assessed by examiners appointed by the IB.
They are marked on a scale from 0 to 34.

The score a student receives relates to a band. The bands are:

- A – work of an excellent standard.
- B – work of a good standard.
- C –work of a satisfactory standard.
- D – work of a mediocre standard.
- E – work of an elementary standard (failing condition).

Core Component Theory of Knowledge (TOK)*

TOK plays a special role in the International Baccalaureate® (IB) Diploma Programme (DP), by providing an opportunity for students to reflect on the nature of knowledge, and on how we know what we claim to know. It is one of the components of the DP core and is mandatory for all students. The TOK requirement is central to the educational philosophy of the DP.

Significance of TOK

TOK aims to make students aware of the interpretative nature of knowledge, including personal ideological biases – whether these biases are retained, revised or rejected.

It offers students and their teachers the opportunity to:

- reflect critically on diverse ways of knowing and on areas of knowledge
- consider the role and nature of knowledge in their own culture, in the cultures of others and in the wider world.

In addition, TOK prompts students to:

- be aware of themselves as thinkers, encouraging them to become more acquainted with the complexity of knowledge
- recognize the need to act responsibly in an increasingly interconnected but uncertain world.

TOK also provides coherence for the student, by linking academic subject areas as well as transcending them. It therefore demonstrates the ways in which the student can apply their knowledge with greater awareness and credibility.

Structure of TOK

As a thoughtful and purposeful inquiry into different ways of knowing, and into different kinds of knowledge, TOK is composed almost entirely of questions.

The most central of these is "How do we know?", while other questions include:

- What counts as evidence for X?
- How do we judge which is the best model of Y?
- What does theory Z mean in the real world?

Through discussions of these and other questions, students gain greater awareness of their personal and ideological assumptions, as well as developing an appreciation of the diversity and richness of cultural perspectives.

Key features of TOK assessment

The TOK course is assessed through an oral presentation and a 1600 word essay.

The presentation assesses the ability of the student to apply TOK thinking to a real-life situation, while the essay takes a more conceptual starting point.

For example, the essay may ask students to discuss the claim that the methodologies used to produce knowledge depend on the use to which that knowledge will be used.

* The information contained in this page has been sourced from http://www.ibo.org/en/programmes/diploma-programme/curriculum/

EE and TOK Point Matrix*

		Theory of knowledge					
		Grade A	Grade B	Grade C	Grade D	Grade E	No grade N
Extended essay	Grade A	3	3	2	2	Failing condition	Failing condition
	Grade B	3	2	2	1	Failing condition	Failing condition
	Grade C	2	2	1	0	Failing condition	Failing condition
	Grade D	2	1	0	0	Failing condition	Failing condition
	Grade E	Failing condition	Failing condition	Failing condition	Failing condition	Failing condition	Failing condition
	No grade N	Failing condition	Failing condition	Failing condition	Failing condition	Failing condition	Failing condition

Group 1 - Studies in Language and Literature English A: language and literature HL/SL* French A: language and literature SL only

It is a requirement of the programme that students study at least one subject from group 1.
In group 1, students will study literature, including selections of literature in translation, and may choose to combine this with language or performance studies, depending on their choice of course. Students will choose to study their group 1 subject(s) in a language in which they are academically competent.
In studying the group 1 courses, students are able to develop:

- a personal appreciation of language and literature
- skills in literary criticism
- an understanding of the formal, stylistic and aesthetic qualities of texts
- strong powers of expression, both written and oral
- an appreciation of cultural differences in perspective

The range of texts studied in language A courses is broad, and students grow to appreciate a language's complexity, wealth and subtleties in a variety of contexts. A specific aim is to engender a lifelong interest in literature and a love for the elegance and richness of human expression.
The course is organized into four parts, each focused on the study of either literary or non-literary texts. Together, the four parts of the course allow the student to explore the language A in question through its cultural development and use, its media forms and functions, and its literature. Students develop skills of literary and textual analysis, and also the ability to present their ideas effectively. A key aim is the development of critical literacy.
Syllabus outline
Higher level (240 hours)

- Internal assessments: Individual oral commentary (IOC) – 15%;
  Further oral activity (FOA) – 15%
- External assessment: Paper 1 (Comparative Textual Analysis) – 25%;
  Paper 2 (Essay) – 25%; Written task – 20%

Group 1 - Studies in Language and Literature English A (Cont.)

Standard level (150 hours)

- Internal assessments: Individual oral commentary (IOC) – 15%; Further oral activity (FOA) – 15%
- External assessment: Paper 1 (Textual Analysis) – 25%; Paper 2 (Essay) – 25%; Written task – 20%

Content structure

Higher level

- Language in cultural context, and language and mass communication,
- study of three works, one or two of which is (are) a text(s) in translation from the prescribed literature in translation (PLT) list,
- study of three works chosen from the prescribed list of authors (PLA)

for the language A studied,

- production of four written tasks, two of which are submitted for external assessment,
- one of the assessed tasks must be a critical response to one of six questions,
- a comparative analysis of a pair of texts, at least one of which is non-literary.

Standard level

- Language in cultural context, and language and mass communication,
- study of two works, one of which is a text in translation from the prescribed literature in translation (PLT) list,
- study of two works chosen from the prescribed list of authors (PLA) for the

language A studied,

- production of three written tasks, one of which is submitted for external assessment,
- an analysis of one non-literary text or extract.

Key features of the curriculum and assessment models

- Students study 6 works at higher level and 4 works at standard level from a representative selection of genres, periods and places
- Students develop the techniques needed for the critical analysis of communication, becoming alert to interactions between text, audience and purpose
- An understanding of how language, culture and context determine the construction of meaning is developed through the exploration of a wide variety of texts, some of which are studied in translation
- Students are assessed through a combination of formal examinations, written coursework and oral activities
- The formal examination comprises two essay papers, one requiring the analysis of unseen literary and non-literary texts, and the other a response to a question based on the literary works studied

Students also produce written tasks in a variety of genres, and perform two oral activities presenting their analysis of works read

Scope: Students will develop strong critical analysis skills which is integral to any process of analysis. It could lead into higher studies in English Literature and Language, Journalism and Media studies, Film Studies, Theater Studies and the study of Liberal Arts. It is essential for pursuing studies in Psychology and Philosophy..

Group 1 - Studies in Literature: (SST school-supported self-taught)
Korean, Dutch, Japanese, Swedish SL

Nature of the subject

It is a requirement of the programme that students study at least one subject from group 1. In group 1, students will study literature, including selections of literature in translation. Students will choose to study their group 1 subject(s) in a language in which they are academically competent.

In studying the group 1 courses, students are able to develop:

- a personal appreciation of language and literature
- skills in literary criticism
- an understanding of the formal, stylistic and aesthetic qualities of texts
- strong powers of expression, both written and oral
- an appreciation of cultural differences in perspective

The range of texts studied in language A courses is broad, and students grow to appreciate a language's complexity, wealth and subtleties in a variety of contexts. A specific aim is to engender a lifelong interest in literature and a love for the elegance and richness of human expression.

The course is organized into four parts, each focused on the study of either literary or non-literary texts. Together, the four parts of the course allow the student to explore the language A in question through its cultural development and use, its media forms and functions, and its literature. Students develop skills of literary and textual analysis, and also the ability to present their ideas effectively. A key aim is the development of critical literacy.

Syllabus outline

Standard level (150 hours)

External assessment: Paper 1 (Guided literary Analysis) – 20%;
Paper 2 (Essay) – 25%;Written task – 25%
Alternative oral examination: Individual oral commentary (IOC) – 15%;
Individual oral presentation– 15%

Standard level -

- study of two works in translation from the prescribed literature in translation (PLT) list,
- study of two works (detailed study) and three works (literary genres) chosen from the prescribed list of authors (PLA) for the language A studied,
- A study of three works freely chosen in any combination as paper 4 options

Group 2 - Language acquisition* Language B HL/SL (English, French, Hindi, and Spanish)

Nature of the subject

Language B Standard Level (SL) and Higher Level (HL) are language acquisition courses for students with some previous experience of learning the language. While studying the language, students also explore the culture(s) connected with it.

Higher and standard levels are differentiated by the recommended teaching hours, the depth of syllabus coverage, the required study or literature at HL, and the level of difficulty and requirements of the assessment tasks and criteria.

The range of purposes and situations for using language in the language B courses extends well beyond those for language ab initio.

The course is organized into themes. Three core themes are required: communication and media, global issues, and social relationships. In addition, at both HL and SL, teachers select two more themes from five options provided.

Finally, two works of literature are studied at HL only. Syllabus outline (Higher level & Standard level)

- Internal assessment (individual oral and interactive oral activity): 30%
- External assessment: 70%

Contents

Core: Communication and media, Global issues, Social relationships

Options (any two): Cultural diversity, Customs and traditions, Health, Leisure, Science and technology

Also, at HL, students read two works of literature.

Key features of the curriculum and assessment models

- The minimum prescribed number of hours is 150 for SL and 240 for HL
- Interactive, productive and receptive skills are developed through contextualized study of language, texts and themes
- Intercultural understanding and plurilingualism are key goals of the course
- Students are exposed to a variety of authentic texts and they produce work in a variety of communicative contexts
- Students are assessed both externally and internally
- External assessment at SL consists of exercises to demonstrate understanding of authentic print texts based on the core themes (receptive skills), a writing exercise based on the options (productive skills), and a written assignment based on the core themes (integrating receptive and productive skills)
- External assessment at HL consists of exercises to demonstrate understanding of authentic print texts based on the core themes (receptive skills), two writing exercises, one based on the core and the other based on the options (productive skills), and a written assignment based on one of the literary texts (integrating receptive and productive skills)

Group 2 - Language acquisition* Language B HL/SL (Cont.)

- Internal assessment at both SL and HL tests students' abilities in listening and speaking in a genuine conversation format (integrating receptive, productive and interactive skills). Internal assessment consists of an individual oral based on the options (presentation and discussion with the teacher), and an interactive oral based on the core (three classroom activities assessed by the teacher)

Scope: Developing proficiency in a second language gives students cultural awareness and tolerance in an internationally minded setting

Recommended prerequisite: Must have studied these languages at IGCSE or equivalent, as a second language, and may not be a native speaker.

Group 2 - Language acquisition* Language ab initio SL (Spanish and French)

Nature of the subject

The language ab initio course is a language acquisition course for students with little or no experience of the language.The course is organized into three themes: individual and society, leisure and work, and urban and rural environment. Each theme comprises a list of topics that provide students with opportunities to practice and explore the language and to develop intercultural understanding.

Through the development of receptive, productive and interactive skills, students develop the ability to respond and interact appropriately in a defined range of everyday situations.

Syllabus outline

- Internal assessment (interactive skills - individual oral): 25%
- External assessment: 75%

Contents

Individual and society: daily routine; education; food and drink; personal details, appearance and character; physical health; relationships; shopping

Leisure and work: employment; entertainment; holidays; media; sport; technology; transport

Urban and rural environment: environmental concerns; global issues; neighborhood, physical geography, town and services, weather

Key features of the curriculum and assessment models

- Only available at standard level (SL)
- The minimum prescribed number of hours is 150
- Interactive, productive and receptive skills are developed through contextualized study of language, texts and themes
- Intercultural understanding is a key goal of the course
- Students are exposed to a variety of authentic texts and they produce work in a variety of communicative contexts
- Students are assessed both externally and internally
- External assessment consists of exercises to demonstrate understanding of authentic

Group 2 - Language acquisition* Language ab initio SL (Cont.)

print texts (receptive skills), two short writing exercises (productive skills), and a written assignment (integrating receptive and productive skills)

- Internal assessment tests students' abilities in listening and speaking in a genuine conversation format (integrating receptive, productive and interactive skills). Internal assessment consists of a presentation and follow-up questions based on a visual stimulus, and a general conversation with the teacher based in part on the written assignment

Scope: Learning a new language gives students cultural awareness and tolerance in an internationally minded setting

Recommended prerequisite: Candidates must not have studied these subjects before, and are not native speakers of these languages.

Group 3 - Individuals and Societies Business and Management HL & SL*

Nature of the subject

The 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.

Students learn to analyze, discuss and evaluate business activities at local, national and international levels. The course covers a range of organizations from all sectors, as well as the socio-cultural and economic contexts in which those organizations operate.

The course covers the key characteristics of business organization and environment and the business functions of human resource management, finance and accounts, marketing and operations management. Links between the topics are central to the course. Through the exploration of six underpinning concepts (change, culture, ethics, globalization, innovation and strategy), the course allows students to develop a holistic understanding of today's complex and dynamic business environment. The conceptual learning is firmly anchored in business management theories, tools and techniques and placed in the context of real world examples and case studies.

The course encourages the appreciation of ethical concerns at both a local and global level. It aims to develop relevant and transferable skills, including the ability to: think critically; make ethically sound and well-informed decisions; appreciate the pace, nature and significance of change; think strategically; and undertake long term planning, analysis and evaluation. The course also develops subject-specific skills, such as financial analysis.

The aims of the business management course at HL and SL are to:

1. encourage a holistic view of the world of business
2. empower students to think critically and strategically about individual and organizational behaviour

3. promote the importance of exploring business issues from different cultural perspectives
4. enable the student to appreciate the nature and significance of change in a local, regional and global context
5. promote awareness of the importance of environmental, social and ethical factors in the actions of individuals and organizations
6. develop an understanding of the importance of innovation in a business environment.

Syllabus outline

Higher level (240 hours)

- Internal assessment (research project): 25%
- External assessment: 75%

Standard level (150 hours)

- Internal assessment (written commentary): 25%
- External assessment: 75%

Contents:

Core (HL/SL): Business organization and environment, Human resource management, Finance and accounts, Marketing, Operation management.
HL Extension: Topics from the core units
Internal assessment: Written Commentary (SL), Research Project (HL)

Key features of the curriculum and assessment models

• External assessment for HL and SL students consists of two written examination papers. Paper one is based on a pre-seen case study issued in advance, and paper two consists of structured questions based on stimulus material and an extended response question that assesses students' understanding of the key concepts of the course.

• Internal assessment for HL students is a research project and for SL students a written commentary. In both tasks, students study real world business organizations. These are internally marked by subject teachers and then externally moderated.

Scope:

Business & Management HL and SL subjects could lead into areas of higher studies such in business management, economics, international business, marketing, human Resources, finance, statistics, corporate and international law, organizational behaviour, accounting, actuarial science etc..

Group 3 - Individuals and Societies Economics HL & SL*

Nature of the subject

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 dynamic social science, economics uses scientific methodologies that include quantitative and qualitative elements.

The 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.

Syllabus outline (Higher level & Standard level)

- Internal assessment (commentaries): 20%
- External assessment: 80%

Contents

Core (for HL/SL): Microeconomics, Macroeconomics, International economics, Development economics

HL Extension: Topics from the core units

Internal assessment: Portfolio of three commentaries

Key features of the curriculum and assessment models

- The minimum prescribed number of hours is 240 for HL and 150 for SL.
- Students are assessed both internally and externally.
- At both standard level and higher level, candidates are required to study four topics: microeconomics, macroeconomics, international economics and development economics with some sub-topics within these reserved solely for higher level. These sections are assessed by two examinations at standard level and three examinations at higher level.
- In addition to the examinations, candidates must submit an internal assessment. Both standard level and higher level economics students must produce a portfolio of three commentaries based on articles from published news media.

Scope:

Students with economics HL and SL can pursue career in economics, liberal arts, business studies, law, political sciences etc.

Group 3 - Individuals and Societies History HL & SL*

Nature of the subject

History is more than the study of the past. It is the process of recording, reconstructing and interpreting the past through the investigation of a variety of sources.

It is a discipline that gives people an understanding of themselves and others in relation to the world, both past and present.

The Diploma Programme history course aims to promote an understanding of history as a discipline, including the nature and diversity of its sources, methods and interpretations. It also helps students to gain a better understanding of the present through critical reflection upon the past. It is hoped that many students who follow the course will become fascinated with the discipline, developing a lasting interest in it whether or not they continue to study it formally.

Students and teachers have a choice of two routes through the Diploma Programme history course. The route one history course explores the main developments in the history of Europe and the Islamic world from 500 to 1570, while the route two history course focuses on 20th century world history.

Whichever route is selected the course provides both structure and flexibility, fostering an understanding of major historical events in a global context. It requires students to make comparisons between similar and dissimilar solutions to common human situations, whether they be political, economic or social. It invites comparisons between, but not judgments of, different cultures, political systems and national traditions.

Syllabus outline

Higher level (240 hours)

- Internal assessment (historical investigation): 20%
- External assessment: 80%

Standard level (150 hours)

- Internal assessment (historical investigation): 25%
- External assessment: 75%

Contents

Core (for HL/SL): Prescribed subjects (Military leaders, Conquest and its impact, The move to global war, Rights and protest, Conflict and intervention), World history topics [Society and economy (750–1400), Causes and effects of medieval wars (750– 1500), Dynasties and rulers (750–1500), Societies in transition (1400–1700), Early Modern states (1450–1789), Causes and effects of Early Modern wars (1500–1750), Origins, development and impact of industrialization (1750–2005), Independence movements (1800–2000), Evolution and development of democratic states (1848–2000), Authoritarian states (20th century), Causes and effects of 20th-century wars, The Cold War: Superpower tensions and rivalries (20th century)]

Group 3 - Individuals and Societies History HL & SL* (Cont.)

Options - Depth studies: (only for HL . To take any one): History of Africa and the Middle East, History of the Americas, History of Asia and Oceania, History of Europe

Historical investigation

Key features of the curriculum and assessment models.

- Students are assessed both internally and externally.
- External assessment for SL students consists of two written papers. For HL students there are three written papers.
- Internal assessment for SL and HL students is to write a historical investigation conducted by the student. This is internally marked by subject teachers and then externally moderated by IB examiners.

Scope:

Students with history HL and SL could pursue career in history, law, politics, archaeology, and any liberal arts field.

Group 3 - Individuals and Societies Information Technology in a Global Society (ITGS) HL & SL*

Nature of the subject

This innovative course lies within Group 3 which examines individuals and societies. The ITGS framework is modelled on a 'triangle'. It uses an integrated approach, encouraging students to make informed judgements and decisions about the role of information and communication technologies in contemporary society.

Syllabus outline

Higher level (240 hours)

- Internal assessment (individual investigation): 20%
- External assessment: 80%

Standard level (150 hours)

- Internal assessment (individual investigation): 30%
- External assessment: 70%

Contents

Core (for HL/SL): Strand 1: Social and ethical significance, Strand 2: Application to specified scenarios, Strand 3: IT systems

HL Extension: These extensions are from the three core strands

The project (practical application of IT skills): The application of skills and knowledge to develop an original IT product for a specified client

Key features of the curriculum and assessment models

- The ITGS course is based on three interconnected strands; Social and ethical significance, Application to specified scenarios, IT systems.
- The ITGS triangle lies at the heart of the pedagogy. With an understanding of the information technologies, students must be able to evaluate social/ethical issues in specified scenarios.

Group 3 - Individuals and Societies Information Technology in a Global Society (Cont.)

- The course is continuously reviewed to ensure it is current and relevant. Minor changes in syllabus content may be introduced each May, for first examinations two years later.
- ITGS requires students to have strong research and higher order thinking skills.
- Teachers may choose any relevant contemporary article to illustrate scenarios. A vibrant wiki has been developed to help teachers share resources.
- Collaboration between schools, teachers and students is encouraged. Teachers need to keep abreast of emerging online tools, applications and hardware.
- A component (HL only) is linked to the annually issued case study. This requires students to investigate a new topic related to the subject in greater depth.
- ITGS requires students to develop a product that would be suitable for a client. The aim of this assessment is to support and prepare students for the workplace.
- ITGS is the perfect platform to study social informatics at university level.

Scope: ITGS HL and SL subjects could lead into areas of higher studies such as liberal arts, cyber law, web site and blogging, e-commerce, data collections and any field related to the world wide web and technology.

Group 3 - Individuals and Societies Psychology HL & SL*

Nature of the subject

The IB Diploma Programme psychology course is the systematic study of behaviour and mental processes. Since the psychology course examines the interaction of biological, cognitive and sociocultural influences on human behaviour, it is well placed in group 3, individuals and societies. Students undertaking the course can expect to develop an understanding of how psychological knowledge is generated, developed and applied.

This will allow them to have a greater understanding of themselves and appreciate the diversity of human behaviour. The holistic approach reflected in the curriculum, which sees biological, cognitive and sociocultural analysis being taught in an integrated way ensures that students are able to develop an understanding of what all humans share, as well as the immense diversity of influences on human behaviour and mental processes. The ethical concerns raised by the methodology and application of psychological research are also key considerations of the IB psychology course.

The Diploma Programme psychology course is designed to allow for in-depth analysis, evaluation and consolidation of learning. The overall aim of the course is to give students a deeper understanding of the nature and scope of psychology. Teachers are encouraged to find ways of delivering the course that are most relevant to their students' interests and to the school's resources. This course should be taught in an integrated way, as the different parts of the syllabus complement each other. This will allow students to make comparisons and evaluate different psychological theories and arguments.

Group 3 - Individuals and Societies Psychology HL & SL* (Cont.)

Syllabus outline

Higher level (240 hours)

- Internal assessment (individual investigation): 20%
- External assessment: 80%

Standard level (150 hours)

- Internal assessment (individual investigation): 25%
- External assessment: 75%

Contents

Core (for HL/SL): The biological level of analysis, The cognitive level of analysis, The sociocultural level of analysis Options (SL will take any one of these, and HL will take any two): Abnormal psychology, Developmental psychology, Health psychology, Psychology of human relationships, Sport psychology

Qualitative Research Methodology (for HL only): Qualitative research in psychology
Simple Experimental Studies (for HL/SL): Introduction to experimental research methodology

Key features of the curriculum and assessment models

Available at standard (SL) and higher levels (HL)

- Students are assessed both internally and externally.
- External assessment for SL students consists of two written papers. For HL students there are three written papers.
- Internal assessment for SL and HL students is to write a report of a simple experimental study conducted by the student. This is internally marked by subject teachers and then externally moderated by IB examiners.

Scope: Students with psychology SL and HL subjects can pursue a career in psychology, neuroscience, forensic studies, liberal arts etc.

Group 4 - Sciences Biology HL & SL*

Nature of the subject

At one end of the scale is the cell, its molecular construction and complex metabolic reactions. At the other end of the scale biologists investigate the interactions that make whole ecosystems function. Many discoveries remain to be made and great progress is expected in the 21st century. Through studying a science subject students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, the emphasis on a practical approach. In addition, through the overarching theme of the "Nature of Science" this knowledge and skills will be put into the context of way science and scientists work in the 21st Century and the ethical debates and limitations of creative scientific endeavour. The sciences are taught practically. Students have opportunities to design investigations, collect data, develop manipulative skills, analyse results, collaborate with peers and evaluate and communicate their findings.

The investigations may be laboratory based or they may make use of simulations and data bases. Students develop the skills to work independently on their own design, but also collegiately, including collaboration with schools in different regions, to mirror the way in which scientific research is conducted in the wider community.

Syllabus outline: Higher level (240 hours), Standard level (150 hours)

- Internal assessment (individual investigation): 20%
- External assessment: 80%

Contents

Core (for HL/SL): Cell biology, Molecular biology, Genetics, Ecology, Evolution and biodiversity, Human physiology

AHL (for HL only): Nucleic acids, Metabolism, cell respiration and photosynthesis, Plant biology, Genetics and evolution, Animal physiology

Options (any one of these): Neurobiology and behavior; Biotechnology and bioinformatics; Ecology and conservation; Human physiology

Practical scheme of work: Practical activities, Individual investigation (internal assessment–IA), Group 4 project

Key features of the curriculum and assessment models

- Students are assessed both externally and internally
- Biology students at SL and HL undertake a common core syllabus and a common internal assessment (IA) scheme.
- While there are core skills and activities common to both SL and HL students, students at HL are required to study the options and some topics in greater depth as well as some additional topics. The distinction between SL and HL is one of breadth and depth.
- A practical approach to the course delivery is emphasised through the interdisciplinary group 4 project and a mixture of both short-term and long-term experiments and investigations.
- Internal assessment accounts for 20% of the final assessment and this is assessed through a single individual investigation. This investigation may involve a hands-on approach, use of data-bases, modelling, simulation or a hybrid. Student work is internally assessed by the teacher and externally moderated by the IB.

The external assessment of biology consists of three written papers. In paper 1 there are 30 (at SL) or 40 (at HL) multiple-choice questions. Paper 2 contains short-answer and extended-response questions on the core (and Additional Higher Level (AHL) material at HL). Paper 3 has two sections; Section A contains one data-based question and several short-answer questions on experimental work on the core (and AHL material at HL).

Section B contains short-answer and extended-response questions from each of the four options

Scope: Biology HL and SL subjects could lead into areas of higher studies such as liberal arts, medicine, fisheries, veterinary sciences, agricultural sciences, forensic sciences, environmental sciences, genetics, immunology, dentistry, forestry etc.

Recommended: *A minimum grade of a C and above in IGCSE or equivalent biology subject examination

Group 4 - Sciences Chemistry HL & SL*

Nature of the subject

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

Through studying a science subject students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, the emphasis on a practical approach. In addition, through the overarching theme of the "Nature of Science" this knowledge and skills will be put into the context of way science and scientists work in the 21st Century and the ethical debates and limitations of creative scientific endeavour. Students have opportunities to design investigations, collect data, develop manipulative skills, analyse results, collaborate with peers and evaluate and communicate their findings. The investigations may be laboratory based or they may make use of simulations and data bases.

Syllabus outline: Higher level (240 hours), and Standard level (150 hours)

- Internal assessment (individual investigation): 20%
- External assessment: 80%

Contents

Core (for HL/SL): Stoichiometric relationships, atomic structure, periodicity, chemical bonding and structure, energetics/thermochemistry, chemical kinetics, equilibrium, acids and bases, redox processes, organic chemistry, measurement and data processing

AHL (for HL only): Atomic structure, the periodic table—the transition metals, chemical bonding and structure , energetics/thermochemistry, chemical kinetics, equilibrium, acids and bases, redox processes, organic chemistry, measurement and analysis

Options (any one of these): Materials; Biochemistry; Energy; Medicinal chemistry

Practical scheme of work: Practical activities, Individual investigation (internal assessment–IA), Group 4 project

Key features of the curriculum and assessment models

- Students are assessed both externally and internally
- Chemistry students at SL and HL undertake a common core syllabus and a common internal assessment (IA) scheme. While there are core skills and activities common to 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 options. A practical approach to the course delivery is emphasized through the interdisciplinary group 4 project and a mixture of both short-term and long-term experiments and investigations.
- Internal assessment accounts for 20% of the final assessment and this is assessed through a single individual investigation. This investigation may involve a hands-on approach, use of data-bases, modelling, simulation or a hybrid. Student work is internally assessed by the teacher and externally moderated by the IB.

Group 4 - Sciences Chemistry HL & SL*(Cont.)

The external assessment of chemistry consists of three written papers. In paper 1 there are 30 (at SL) or 40 (at HL) multiple-choice questions. Paper 2 contains short-answer and extended-response questions on the core (and Additional Higher Level (AHL) material at HL). Paper 3 has two sections; Section A contains one data-based question and several short-answer questions on experimental work on the core (and AHL material at HL).

Section B contains short-answer and extended-response questions from each of the four options.

Scope: Students with Chemistry HL and SL can pursue career in medicine, engineering, environmental science and, geology, geophysics, liberal arts etc.

Recommended: A minimum grade of a C and above in IGCSE or equivalent chemistry subject examination.

Group 4 - Sciences* Computer Science HL & SL

Nature of the subject

Computer science previously formed an option in group 5 of the Diploma Programme curriculum but now lies within group 4.As such, it is regarded as an experimental science, alongside biology, chemistry, design technology, physics and environmental systems and societies.

This group change is significant as it means DP students can now select computer science as their group 4 subject rather than having to select it in addition to mathematics as was previously the case.

The IB computer science course is a rigorous and practical problem-solving discipline.

Syllabus outline

Higher level (240 hours)

- Internal assessment: Group 4 project and Solution – 20%
- External assessment: 80%

Standard level (150 hours)

- Internal assessment: Group 4 project and Solution – 30%(individual investigation)
- External assessment: 70%

Contents

Core (for HL/SL): System fundamentals, Computer organization, Networks, Computational thinking, problem-solving and programming

HL extension (for HL only): Abstract data structures, Resource management, Control

Case study (for HL only): Additional subject content introduced by the annually issued case study

Options (any one of these): Databases, Modelling and simulation, Web science, Object oriented programming (OOP)

Solution: Practical application of skills through the development of a product and associated documentation Group 4 project

Group 4 - Sciences* Computer Science HL & SL

Key features of the curriculum and assessment models

- Students are assessed both externally and internally
- Computational thinking lies at the heart of the course and is integrated with other topics. This will be supported by practical activities including programming.
- Four course options are available; databases, modelling and simulation, web science, object oriented programming. Algorithmic thinking will only be externally assessed at the level of pseudo-code
- Practical programming experience will be an essential element of developing higher-level thinking skills; this may be assessed as a part of the internal assessment. There is no designated language
- The internal assessment is internally assessed by the teacher and externally moderated by the IB at the end of the course.

The external assessment of computer science SL consists of two written papers. The Paper 1 is an examination paper consisting of two compulsory sections. Section A consists of several compulsory short answer questions. Section B consists of three compulsory structured questions. The Paper 2 is an examination paper linked to the option studied. The paper consists of between two and five compulsory questions. The external assessment of computer science HL consists of three written papers. Paper 1 is an examination paper consisting of two compulsory sections. Section A consists of several compulsory short answer questions. Section B consists of five compulsory structured questions. Paper 2 is an examination paper linked to the option studied. The paper consists of between three and seven compulsory questions. Paper 3 is an examination paper of 1 hour consisting of four compulsory questions based on a pre-seen case study. The use of calculators is not permitted in any computer science examination.

Scope: Students with computer science HL and SL can pursue career in liberal arts, computing, artificial intelligence, programing etc.

Group 3 and 4 - Interdisciplinary subject Environmental Systems and Societies (ES&S) SL*

Nature of the subject

Through studying environmental systems and societies (ES&S) students will be provided with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. The teaching approach is such that students are allowed to evaluate the scientific, ethical and socio-political aspects of issues. ES&S is one of two interdisciplinary courses offered in the Diploma Programme, Literature and Performance is the other interdisciplinary course. Because it is an interdisciplinary course, students can study this course and have it count as either a group 3 course or a group 4 course or as both a group 3 and group 4 course. This leaves students the opportunity to study (an) additional subject(s) from any group of the hexagon including (an) additional subject(s) from groups 3 or 4.

Group 3 and 4 - Interdisciplinary subject Environmental Systems and Societies (Cont.)

Students will be able to study this course successfully with no specific previous knowledge of science or geography. However, as the course aims to foster an international perspective, awareness of local and global environmental concerns and an understanding of the scientific methods, a course that shares these aims would be good preparation.

During the course, students will study seven different topics. The most important aspect of the ES&S course is hands-on work in the laboratory and/or out in the field.

Syllabus outline:

- Internal assessment (individual investigation): 20%
- External assessment: 80%

Contents*

Core: Foundations of environmental systems and societies, Ecosystems and ecology, Biodiversity and conservation, Water and aquatic food production systems and societies, Soil systems and terrestrial food production systems and societies, Atmospheric systems and societies, Climate change and energy production, human systems and resource use.
Practical scheme of work: Practical activities, Individual investigation.

Key features of the curriculum and assessment models*

- Available only at standard level (SL)
- The minimum prescribed number of hours is 150
- A hands-on approach to the course delivery is emphasised.
- Students are assessed both externally and internally
- External assessment consists of two written papers and provides opportunities for students to demonstrate an understanding through the application, use, synthesis, analysis and evaluation of environmental issues, information, concepts, methods, techniques and explanations.
- Internal assessment accounts for 20% of the final assessment and is comprised of a series of practical and fieldwork activities. This assessment component enables students to demonstrate the application of their skills and knowledge, and to pursue their personal interests, without the time limitations and other constraints that are associated with written examinations.

Scope: Students with IB ESS SL can pursue a career in environment and conservation, environmental accounting, liberal arts etc.

Group 4 - Sciences Physics HL & SL*

Nature of the subject

Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself from the very smallest particles to the vast distances between galaxies.
Despite the exciting and extraordinary development of ideas throughout the history of physics, observations remain essential to the very core of the subject. Models are developed to try to understand observations, and these themselves can become theories that attempt to explain the observations.

Through studying a science subject students should become aware of how scientists work and communicate with each other. In addition, through the overarching theme of the "Nature of Science" this knowledge and skills will be put into the context of the way science and scientists work in the 21st Century and the ethical debates and limitations of creative scientific endeavour.

The sciences are taught practically. Students have opportunities to design investigations, collect data, develop manipulative skills, analyse results, collaborate with peers and evaluate and communicate their findings. The investigations may be laboratory based or they may make use of simulations and data bases. Students develop the skills to work independently on their own design, but also collegiately, including collaboration with schools in different regions, to mirror the way in which scientific research is conducted in the wider community.
Syllabus outline: Higher level (240 hours), and Standard level (150 hours)

- Internal assessment (individual investigation): 20%
- External assessment: 80%

Contents

Core (for HL/SL): Measurements and uncertainties, Mechanics, Thermal physics, Waves, Electricity and magnetism, Circular motion and gravitation, Atomic, nuclear and particle physics, Energy production

AHL (for HL only): Wave phenomena, Fields, Electromagnetic induction, Quantum and nuclear physics
Options (any one of these): Relativity; Engineering physics; Imaging; Astrophysics
Practical scheme of work: Practical activities, Individual investigation (internal assessment–IA), Group 4 project

Key features of the curriculum and assessment models

- Students are assessed both externally and internally
- Physics students at SL and HL undertake a common core syllabus and a common internal assessment (IA) scheme. While there are core skills and activities common to 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 options. The distinction between SL and HL is one of breadth and depth.

Group 4 - Sciences Physics HL & SL* (Cont.)

•A practical approach to the course delivery is emphasized through the interdisciplinary group 4 project and a mixture of both short-term and long-term experiments and investigations.

•Internal assessment accounts for 20% of the final assessment and this is assessed through a single individual investigation. This investigation may involve a hands-on approach, use of data-bases, modelling, simulation or a hybrid. Student work is internally assessed by the teacher and externally moderated by the IB.

The external assessment of physics consists of three written papers. In paper 1 there are 30 (at SL) or 40 (at HL) multiple-choice questions. Paper 2 contains short-answer and extended-response questions on the core (and Additional Higher Level (AHL) material at HL). Paper 3 has two sections; Section A contains one data-based question and several short-answer questions on experimental work on the core (and AHL material at HL).

Section B contains short-answer and extended-response questions from each of the four options.
Scope: Physics HL and SL subjects could lead into areas of higher studies in engineering, architecture, biophysics, geophysics, etc.

Recommended: A minimum grade of a C and above in IGCSE or equivalent physics subject examination.

Group 5 - Mathematics Mathematics HL*

Nature of the subject
The course focuses on developing important mathematical concepts in a comprehensible, coherent and rigorous way. This is achieved by means of a carefully balanced approach. Students are encouraged to apply their mathematical knowledge to solve problems set in a variety of meaningful contexts. Development of each topic should feature justification and proof of results. Students embarking on this course should expect to develop insight into mathematical form and structure, and should be intellectually equipped to appreciate the links between concepts in different topic areas. They should also be encouraged to develop the skills needed to continue their mathematical growth in other learning environments.

The internally assessed component, the exploration, offers students the opportunity for developing independence in their mathematical learning. Students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. The exploration also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

Group 5 - Mathematics Mathematics HL* (Cont.)

This course is a demanding one, requiring students to study a broad range of mathematical topics through a number of different approaches and to varying degrees of depth. Students wishing to study mathematics in a less rigorous environment should therefore opt for one of the standard level courses, mathematics SL or mathematical studies SL. Students who wish to study an even more rigorous and demanding course should consider taking further mathematics HL in addition to mathematics HL

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. Students registering for further mathematics HL will be presumed to know the topics in the core syllabus of mathematics HL and to have studied one of the options, irrespective of whether they have also registered for mathematics HL.

This course caters for students with a good background in mathematics who are competent in a range of analytical and technical skills.

Syllabus outline

- Internal assessment (Mathematical exploration): 20%
- External assessment: 80%

Contents

Core: Algebra, Functions and equations, Circular functions and trigonometry, Vectors, Statistics and probability, Calculus Options (any one of these): Statistics and probability, Sets, relations and groups, Calculus, Discrete mathematics Mathematical exploration: Internal assessment in mathematics HL is an individual exploration. This is a piece of written work that involves investigating an area of mathematics.

Key features of the curriculum and assessment models

- The minimum prescribed number of hours is 240.
- Students are assessed both externally and internally

Math HL external assessment has three papers. Paper 1 and 2, Section A has compulsory short-response questions based on the core syllabus. Section B of Paper 1 and 2 has compulsory extended-response questions based on the core syllabus. Use of calculator is not allowed in Paper 1 but graphic display calculator is required Paper 2. Paper 3 has compulsory extended-response questions based mainly on the syllabus options. Graphic display calculator required for Paper 3.

Scope: Student taking Math HL course are well prepared for a career in engineering & technology, Geology, Geophysics, Astronomy, Math, Physics and Economics etc.

Recommended: A minimum grade of a B and above in IGCSE or equivalent additional mathematics subject examination

Group 5 - Mathematics Mathematics SL*

Nature of the subject

The course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way, rather than insisting on the mathematical rigour required for mathematics HL. Students should, wherever possible, apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context.

The internally assessed component, the exploration, offers students the opportunity for developing independence in their mathematical learning. Students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. The exploration also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.
This course does not have the depth found in the mathematics HL courses. Students wishing to study subjects with a high degree of mathematical content should therefore opt for a mathematics HL course rather than a mathematics SL course.

Syllabus outline

- Internal assessment (mathematical exploration): 20%
- External assessment: 80%

Contents

Core: Algebra, Functions and equations, Circular functions and trigonometry, Vectors, Statistics and probability, Calculus Mathematical exploration: Internal assessment in mathematics SL is an individual exploration. This is a piece of written work that involves investigating an area of mathematics.

Key features of the curriculum and assessment models

- The minimum prescribed number of hours is 150
- Students are assessed both externally and internally

The external assessment Paper 1 and Paper 2 section A has compulsory short-response questions based on the whole syllabus. Section B of both Paper 1 and 2 has compulsory extended-response questions based on the whole syllabus.
Use of calculator is not allowed for Paper 1 but Graphic display calculator is required for Paper 2.

Scope: Students who take Math SL are prepared take business management, engineering, medicine, economics and architecture, liberal arts etc.

Group 5 - Mathematics Mathematical Studies SL*

Nature of the subject

The course syllabus focuses on important mathematical topics that are interconnected. The syllabus is organized and structured with the following tenets in mind: placing more emphasis on student understanding of fundamental concepts than on symbolic manipulation and complex manipulative skills; giving greater emphasis to developing students' mathematical reasoning rather than performing routine operations; solving mathematical problems embedded in a wide range of contexts; using the calculator effectively.

The course includes project work, a feature unique to mathematical studies SL within group 5. Each student completes a project, based on their own research; this is guided and supervised by the teacher. The project provides an opportunity for students to carry out a mathematical study of their choice using their own experience, knowledge and skills acquired during the course. This process allows students to take sole responsibility for a part of their studies in mathematics.

The students most likely to select this course are those whose main interests lie outside the field of mathematics, and for many students this course will be their final experience of being taught formal mathematics. All parts of the syllabus have therefore been carefully selected to ensure that an approach starting from first principles can be used.

As a consequence, students can use their own inherent, logical thinking skills and do not need to rely on standard algorithms and remembered formulae. Students likely to need mathematics for the achievement of further qualifications should be advised to consider an alternative mathematics course.

Owing to the nature of mathematical studies SL, teachers may find that traditional methods of teaching are inappropriate and that less formal, shared learning techniques can be more stimulating and rewarding for students. Lessons that use an inquiry-based approach, starting with practical investigations where possible, followed by analysis of results, leading to the understanding of a mathematical principle and its formulation into mathematical language, are often most successful in engaging the interest of students.

Furthermore, this type of approach is likely to assist students in their understanding of mathematics by providing a meaningful context and by leading them to understand more fully how to structure their work for the project.

Syllabus outline

- Internal assessment (project): 20%
- External assessment: 80%

Group 5 - Mathematics Mathematical Studies SL* (Cont.)

Contents

Core: Number and algebra, Descriptive statistics, Logic, sets and probability, Statistical applications, Geometry and trigonometry, Mathematical models, Introduction to differential calculus

Project: The project is an individual piece of work involving the collection of information or the generation of measurements, and the analysis and evaluation of the information or measurements.

Key features of the curriculum and assessment models*

- The minimum prescribed number of hours is 150
- Students are assessed both externally and internally

External assessment for Mathematical studies has Paper 1 with 15 compulsory short-response questions based on the whole syllabus, and Paper 2 with 6 compulsory extended-response questions based on the whole syllabus. For both the papers, Graphic display calculator must be used.

Scope: Students with IB Math Studies can go for higher education in liberal arts etc.

Group 6 - The Arts Music HL & SL*

Nature of the subject

Through the music course students develop their knowledge and potential as musicians, both personally and collaboratively.

Involving aspects of the composition, performance and critical analysis of music, the course exposes students to forms, styles and functions of music from a wide range of historical and socio-cultural contexts. Students create, participate in, and reflect upon music from their own background and those of others. They develop practical and communicative skills which provide them with the opportunity to engage in music for further study, as well as for lifetime enjoyment.

Both standard level (SL) and higher level (HL) music students are required to study musical perception. SL students in music are then required to choose one of three options:

- creating (SLC)
- solo performing (SLS)
- group performing (SLG).

HL students are required to present both creating and solo performing.

In the teaching of the music course it should be possible to have groups of students that include both SL and HL students. Through a variety of teaching approaches, all students—whether SL or HL—will be encouraged to develop their creative and critical abilities and to enhance their appreciation and enjoyment of music.

Group 6 - The Arts Music HL & SL* (Cont.)

Syllabus outline

Higher level

- Internal assessment (creating, and solo performing): 50%
- External assessment (music perception): 50%

Standard level

- Internal assessment (creating, solo performing, or group performing): 50%
- External assessment (music perception): 50%

Contents

Music perception - Study, analysis and examination, comparing and contrasting of musical cultures (HL/SL)

Creating - The development of creative skills through exploration, control and development of musical elements (compulsory for HL and SLC students only)

Solo performing - The development of performance skills through solo music making (compulsory for HL and SLS students only)

Group performing - The development of performance skills through group music making (compulsory for SLG students only)

Key features of the curriculum and assessment models

- Available at standard (SL) and higher levels (HL)
- The minimum prescribed number of hours is 150 for SL and 240 for HL
- Students are assessed both externally and internally
- External assessment consists of a) the Listening paper (musical perception questions), and b) the Musical links investigation (a written media script investigating the significant musical links between two or more pieces from distinct musical cultures)
- Internal assessment consists, at HL, of a) Creating, and b) Solo performing. At SL students choose one option from among the following: a) Creating, b) Solo performing, c) Group performing.

Scope: Future careers opportunities for IB Music students include music business, music education, music production and engineering, music therapy, performance, professional music, songwriting etc.

Group 6 - The Arts Theatre HL & SL*

Nature of the subject

Theatre is a dynamic, collaborative and live art form.

It is a practical subject that encourages discovery through experimentation, the taking of risks and the presentation of ideas to others. It results in the development of both theatre and life skills; the building of confidence, creativity and working collaboratively.

The IB Diploma Programme theatre course is a multifaceted theatre-making course of study. It gives students the opportunity to make theatre as creators, designers, directors and performers. It emphasizes the importance of working both individually and collaboratively as part of an ensemble. It offers the opportunity to engage actively in the creative process, transforming ideas into action as inquisitive and productive artists.

Group 6 - The Arts Theatre HL & SL* (Cont.)

Students experience the course from contrasting artistic perspectives. They learn to apply research and theory to inform and to contextualize their work. The theatre course encourages students to appreciate that through the processes of researching, creating, preparing, presenting and critically reflecting on theatre— as participants and audience members—they gain a richer understanding of themselves, their community and the world.

Through the study of theatre, students become aware of their own personal and cultural perspectives, developing an appreciation of the diversity of theatre practices, their processes and their modes of presentation. It enables students to discover and engage with different forms of theatre across time, place and culture and promotes international-mindedness.

Syllabus outline

Higher level

- Internal assessment (collaborative project): 25%
- External assessment (solo theatre piece, Director's notebook, research presentation): 75%

Standard level

- Internal assessment (collaborative project): 35%
- External assessment (Director's notebook, research presentation): 65%

Contents

Core: Practices - creating theatre based on theory (HL only), working with play texts, examining world theatre traditions, collaboratively creating original theatre; Context - theatre in context, theatre processes, and theatre presenting

Theatre Journal, and Research

Key features of the curriculum and assessment models

- Available at standard (SL) and higher levels (HL)
- The minimum prescribed number of hours is 150 for SL and 240 for HL
- Students are assessed both externally and internally
- For Task 1 - solo theatre piece, students at HL research a theatre theorist they have not previously studied, identify an aspect(s) of their theory and create and present a solo theatre piece (4–8 minutes) based on this aspect(s) of theory
- For Task 2 - Director's notebook, students at SL and HL choose a published play text they have not previously studied and develop ideas regarding how it could be staged for an audience.
- For Task 3 - research presentation, students at SL and HL plan and deliver an individual presentation (15 minutes maximum) to their peers in which they outline and physically demonstrate their research into a convention of a theatre tradition they have not previously studied.
- The Task 4 - collaborative project is an internal assessment. Students at SL and HL collaboratively create and present an original piece of theatre (lasting 13–15 minutes) for and to a specified target audience, created from a starting point of their choice.

Scope: Performing and liberal arts, filmmaking, and drama etc.

Group 6 - The Arts Visual Arts HL & SL*

Nature of the subject

The visual arts are an integral part of everyday life, permeating all levels of human creativity, expression, communication and understanding.

They range from traditional forms embedded in local and wider communities, societies and cultures, to the varied and divergent practices associated with new, emerging and contemporary forms of visual language. They may have sociopolitical impact as well as ritual, spiritual, decorative and functional value; they can be persuasive and subversive in some instances, enlightening and uplifting in others.

We celebrate the visual arts not only in the way we create images and objects, but also in the way we appreciate, enjoy, respect and respond to the practices of art-making by others from around the world. Theories and practices in visual arts are dynamic and ever- changing, and connect many areas of knowledge and human experience through individual and collaborative exploration, creative production and critical interpretation.

The IB Diploma Programme visual arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art- makers.

In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to study visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts.

Supporting the International Baccalaureate mission statement and learner profile, the course encourages students to actively explore the visual arts within and across a variety of local, regional, national, international and intercultural contexts. 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.

Syllabus outline: Higher level (240 hours) and Standard level (150 hours)

- Internal assessment (exhibition): 40%
- External assessment (comparative study, process portfolio): 60%

Contents (for both HL/SL)

Core: Practices - theoretical, art-making, and curatorial practices; Context - communicating visual arts, Visual arts in context, Visual arts methods

Visual Arts Journal, Art-making forms, and Research

Key features of the curriculum and assessment models

- Students are assessed both externally and internally

FOR PART 1:

Comparative study, students at HL and SL analyze and compare different artworks by different artists. This independent critical and contextual investigation explores artworks, objects and artefacts from differing cultural contexts. All students submit a list of sources used. Students submit 10– 15 screens which examine and compare, at least three artworks for HL and two for SL, at least two of which need to be by different artists. The work selected for comparison and analysis should come from contrasting contexts (local, national, international and/or intercultural). HL students submit 3–5 screens which analyze the extent to which their work and practices have been influenced by the art and artists examined.

FOR PART 2

process portfolio, students submit carefully selected materials which evidence their experimentation, exploration, manipulation and refinement of a variety of visual arts activities during the two-year course. Students submit 13–25 screens for HL or 9-18 screens for SL, which evidence their sustained experimentation, exploration, manipulation and refinement of a variety of art-making activities The submitted work must have been created in at least three art-making forms for HL, and two art making forms for SL, selected from a minimum of two columns of the art-making forms table.

FOR PART 3

The Part 3 internal assessment exhibition is internally assessed by the teacher and externally moderated by the IB at the end of the course. Students submit for assessment a selection of resolved artworks from their exhibition - 8 to 11 artworks for HL and 4 to 7 for SL. The selected pieces should show evidence of their technical accomplishment during the visual arts course and an understanding of the use of materials, ideas and practices appropriate to visual communication.

Scope: Visual Arts HL and SL subjects could lead into areas of higher studies such as studio/fine arts, architecture, film and media production, photography, and various design fields such as fashion design, graphic design, theater design and technology, industrial design and interior design.

IB DIPLOMA PROGRAMME SUBJECT CHOICES 2016 - 2017

Name: _____Citizenship: _____Date: _____

Destination country/ies for further education_____

Expected University course after IBDP:_____

	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
Higher Level	English A1 Language & Literature	Hindi B English B	Bus & Mgt Economics Psychology History	Biology Chemistry Physics Com. Science	Mathematics	Theatre Arts Visual Arts Music
Standard Level	English A1 Language & Literature SS Self-Taught Language A Lit French A Lang & Lit	French B Spanish B French ab initio Spanish ab initio Hindi B English B	Bus & Mgt Economics Psychology History	Biology Chemistry Physics Com. Science ESS	Math SL Math Studies	Theatre Arts Visual Arts Music

BLOCK 1	BLOCK 2	BLOCK 3
Buss.& Mgmt. HL/SL Gr 2 Economics HL/SL Gr 1 Music HL/SL Physics HL/SL Gr 2 Theatre HL/SL Visual arts HL/SL	Buss & Mgmt. HL/SL Gr 1 Chemistry HL/SL Gr 2 Economics HL/SL Gr 2 Psychology HL/SL Biology HL/SL Gr 2 Comp. Sc. HL/SL Gr 2	Biology HL/SL Physics HL/SL Gr 1 Chemistry HL/SL Gr 1 Comp. science HL/SL Gr 1 ESS SL History HL/SL
BLOCK 4	**BLOCK 5**	**BLOCK 6**
English HL Gr 1 English SL Gr 1 English B HL/SL Math SL Gr 2 English SL Gr 3 Math HL Gr 2	Math HL Gr 1 Math SL Gr 1 Math St. SL English HL Gr 2 English SL Gr 2 English SL Gr 3	French B SL French ab in. SL Hindi B HL/SL Spanish B SL Spanish ab in. SL French A L & L

Please Note : While making subject selection, please chose one subject from each group, making sure that each of those subjects are from each of the six blocks too. You can not chose two subject from the same block. A group 6 subject may be substituted by another subject from either group 3 or 4. A total of 3 HL and 3 SL subject must be chosen.

DIPLOMA	PROPOSED SUBJECTS
HL 1st choice	
HL 2nd choice	
HL 3rd choice	
SL 1st choice	
SL 2nd choice	
SL 3rd choice	

DIP. COURSES	APPROVED SUBJECTS	LEVEL
1		
2		
3		
4		
5		
6		

This course selection is tentative, subject to continuation of offer of the chosen subject, and successful completions of IGCSE or equivalent exam with recommended minimum grade level.

*Subjects need a minimum enrolment of 5 students to be on offer for a specific cohort.

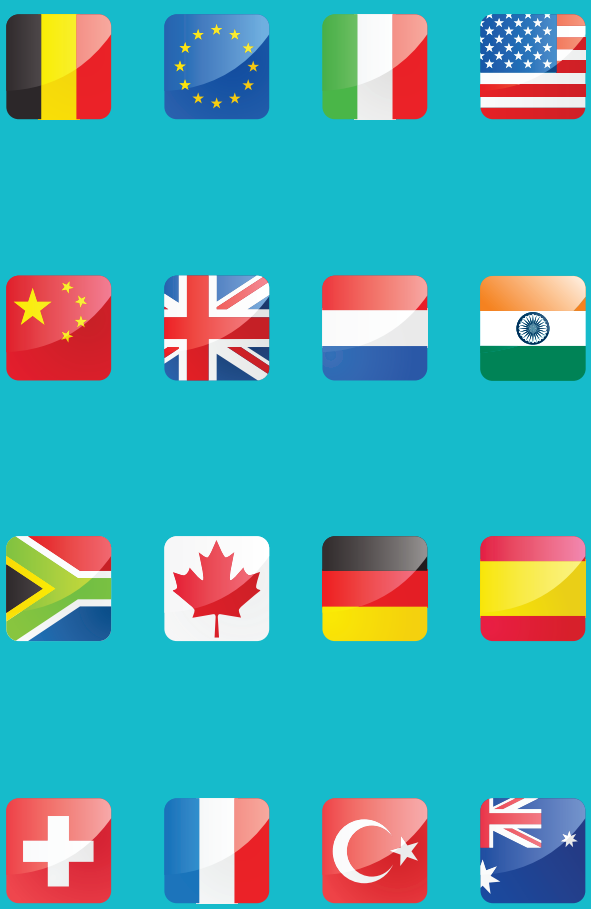
The course selection will not be considered final. The final decision will be made in August at the start of the academic year.

Student's signature

Parent/Guardian's signature

IB Coordinator's signature

Shaping The Future... Together! Today!



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CIS is a culturally-rich mosaic serving each student by providing a world-class international education, nurturing potential, developing life-long skills, and preparing students for an ever-changing global community.

CONTACT DETAILS:
Survey No 4 and 20, Manchenahalli.
Yelahanka, Bangalore 560 064, INDIA.
Tel: +91 80 42494444

Mr. SHANE KELLS
Head of School
email: hos@cisb.org.in

Mr. ROBERT JAMES KING
MS/HS Principal
email: ms-hsprincipal@cisb.org.in

Ms. TRACY KING & Mr. GINES BERNAL ROS
IB Coordinator
email: ibcoordinator@cisb.org.in

Ms. GEETHA SWAMY
College Guidance Counselor
email: guidance-counselor@cisb.org.in