

# The IB Diploma at Haileybury Astana





The International Baccalaureate is the fastest growing Pre-university course in the world and is increasingly the first choice of top UK schools for their pupils. It is very interesting that independent research in the UK shows that IB pupils perform better in their degrees and earn more money after they leave university than with any other qualification.

At Haileybury we were one of the first schools in the UK to adopt the IB and we continue this tradition at Haileybury Astana. The IB is a qualification which prepares pupils really well for independent university study and is an excellent preparation for the future.

We are all happy to talk to either parents or pupils and help you understand anything you need about the IB. We also offer advice and support on UK and American university entrance with specialist staff and on line programmes to help you every step of the way.

The IB is an exciting future and I look forward to us sharing the journey together.

A handwritten signature in cursive script that reads "Jonathan Ullmer".

**Jonathan Ullmer MBE**  
Headmaster



On behalf of the IB team here at Haileybury Astana, I would like to extend a warm welcome to you and your parents.

As you move into Year 12, you are faced with a variety of options, which is both exciting and daunting in equal measure. What subjects do I choose? Is the IB right for me? Which university should I choose? At Haileybury Astana, we understand that you are facing many uncertainties; however, my team and I are here to offer expert tailored support and advice that should go some way to alleviating any uncertainty you may have.

The information on the pages that follow is intended to inform both you and your parents about the opportunities available on the IB Diploma programme here at Haileybury Astana. Many pupils find it difficult to choose the subjects they wish to study, and we hope that this guide will be helpful when making these decisions. It contains useful information about the IB, as well as individual subject briefs that provide an overview of the subject and an outline of the assessments associated with each subject.

I look forward to welcoming you to Haileybury Astana and working with you over the course of what promises to be an exciting, stimulating and engaging two years.

**Paul Rowe**  
IB coordinator



## The IB Learner Profile

The IB Learner Profile represents 10 attributes valued by IB world schools. These attributes, and others like them, are key to helping individuals and groups become responsible members of local, national and global communities. The IB defines these as follows:

### **Inquirers**

We nurture our curiosity, developing skills for enquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

### **Knowledgeable**

We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

### **Thinkers**

We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

### **Communicators**

We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

### **Principled**

We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people elsewhere. We take responsibility for our actions and their consequences.

### **Open-minded**

We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

### **Caring**

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

### **Risk-takers**

We approach uncertainty with forethought and determination; we work independently and co-operatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

### **Balanced**

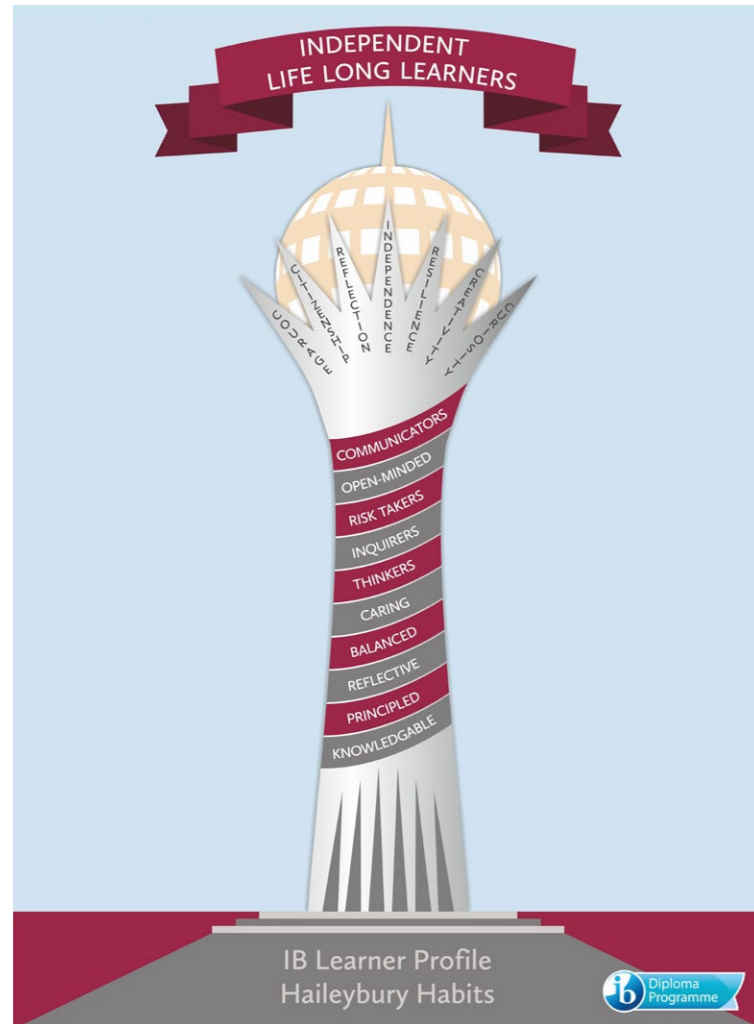
We understand the importance of balancing different aspects of our lives - intellectual, physical and emotional - to achieve well-being for ourselves and others. We recognise our interdependence with other people and with the world in which we live.

### **Reflective**

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

# Haileybury Habits

Our own values programme supports the IB Learner Profile and forms a central part of the curriculum for all year groups.



*“The course has things included that seem more appropriate later in life; like understanding taxes, mortgages and exchange rates in Maths, for example.”*

Patrick Thorp

# About The International Baccalaureate Diploma Programme

The International Baccalaureate Diploma Programme is an assessed programme for pupils aged 16 to 19. It was established in 1968 to provide pupils with a balanced education, to facilitate geographic and cultural mobility and to promote international understanding. Teachers at the International School of Geneva created the programme, with assistance from several other international schools. Since then, innovative and committed teachers and examiners from around the world have played a significant role in the development of the programme.

The IBDP enables the development of pupils who:

- Have excellent breadth and depth of knowledge;
- Flourish physically, intellectually, emotionally and ethically;
- Study at least two languages;
- Excel in traditional academic subjects; and
- Explore the nature of knowledge through the programme’s unique theory of knowledge course.

International research shows, among other things, that IBDP pupils are better able than their peers to cope with demanding workloads, manage their time and meet the expectations placed on them.

We, at Haileybury Astana, believe the International Baccalaureate Diploma Programme to be the best pre-university experience on offer today. It is the gold standard in international Sixth Form education and has been shown to provide the best preparation for the most competitive universities.

## Diploma Requirements

In order to gain the full IB Diploma, pupils are required to study six (6) subjects:

- Three (3) subjects must be studied at Higher Level (HL)
- Three (3) subjects must be studied at Standard Level (SL)

Each of the six subjects is awarded a grade on a scale of 1 to 7, with 7 being the highest grade. In addition, a maximum of 3 bonus points may be gained from a candidate’s combined Extended Essay and Theory of Knowledge grades.

Maximum number of possible points to be obtained on an IB Diploma:

$[(6 \text{ subjects} \times 7 \text{ points}) + 3 \text{ bonus points}] = 45 \text{ points}$

In order to obtain the full Diploma a pupil

- Must score a minimum of 24 points
- Aim for at least a combined 12 points or above in their three Higher Level subjects
- Must also submit an Extended Essay and Theory of Knowledge assessments Grade D or above
- Must meet the CAS requirements
- Must not have any Failing Conditions<sup>1</sup>

*“The IB opened so many doors for me – whenever I applied to a university or an internship, the IB was seen as a bonus on my CV. Doing the IB was the best choice I could have made.”*

Cornelia Steinmeyer

<sup>1</sup> A detailed list of Failing Conditions can be supplied upon request

### Assessment in the IB Diploma

For most subjects the assessment is made up of internal assessment (coursework) and external examinations. The internal assessment (coursework) is normally marked internally and then moderated externally by the IB Organisation (IBO). The final examinations are set and marked externally by the IBO and taken during the month of May in the second year of the course. Details of the coursework proportions per subject are supplied in the table below:

Group	Group Name	Proportion
1	Language A	50%
2	Language B	50%
	Ab Initio	45%
3	Individuals and Societies	20% - 45%
4	Experimental Sciences	20% - 36%
5	Mathematics	20%
6	Visual Arts	100%
	Film	100%
Core	Theory of Knowledge	100%
	Extended Essay	
	Creativity, Action and Service	

### Pathways: The IB Course Programme at HAS

There may be a situation within the two years of the course where it is apparent that a pupil is struggling with the demands of the full IB Diploma programme. In these instances, if it is appropriate, there may be an option to follow the IB Course programme. The IB Course programme offers pupils the opportunity to have a free choice, within the limits imposed by the school timetable, of up to six subjects. Subjects may be taken at either Higher Level (HL) or Standard Level (SL).

A pupil's choice of subjects within the IB Course programme will be planned to suit the individual needs of the pupil. It will normally consist of a minimum of 5 subjects and include English and Mathematics. Additional IGCSE subjects may also be included in the package.

Course pupils will normally be required to participate in the Theory of Knowledge (TOK) course and complete the CAS programme. Most pupils will also undertake an Extended Essay. However, participation in the three core elements will be decided on a case-by-case basis.

After the first year of the IB, pupils whose performance is satisfactory but not strong enough to continue with the full IB Diploma or with IB courses will gain the Haileybury Advanced Diploma, which can prepare them for Foundation courses overseas in the UK and America.





*Haileybury UK was founded in 1862 and has always been at the forefront of best educational practice. It was one of the first schools in the UK to introduce the IB Diploma programme*

**IB Subjects - Prerequisites for University Entrance**

The IB Diploma is fully recognised as an entry qualification to universities, including the most prestigious, anywhere in the world.

“Because the IB differentiates better than A levels... if we are hesitant about making an offer, we would be more likely to make an offer to an IB student than an A level student.”  
**Cambridge Director of Admissions**



**UNIVERSITY OF  
CAMBRIDGE**



**CITY UNIVERSITY  
LONDON**

“We regard the IB as one of the best qualifications. Progression from IB Diploma students is very good indeed.”  
**City University**

“There is a stark contrast between IB and A level students with the former at an advantage”  
**London School of Economics**



THE LONDON SCHOOL  
OF ECONOMICS AND  
POLITICAL SCIENCE

“We hold the IB qualification in the highest regard”  
**University of  
Edinburgh**



The following are general guidelines that are a starting point but requirements for specific programmes can change. There are many subjects not listed here that can be studied at university level, which have no specific IBDP prerequisites. Pupils are responsible for checking latest university entrance requirements, which can change each year. The guide below is only for very general use to help you and remember every university has its own requirements.

	UK	USA	Canada	Australia
<b>Architecture</b>	May require HL Mathematics; HL Physics; Art or Design Technology; portfolio	Recommend HL or SL Mathematics and HL Science for B.ARCH; may require portfolio	May require HL or SL Mathematics; may require two Sciences (GCSE may satisfy one); may require portfolio	Recommend HL or SL Mathematics and/or Physics; may require portfolio
<b>Art and Design, Performing Arts</b>	Portfolio / audition usually required; relevant IBDP subject usually required	Portfolio / audition usually required; relevant IBDP subject usually required	Portfolio / audition usually required; relevant IBDP subject usually required	Portfolio / audition usually required; relevant IBDP subject usually required
<b>Business/ Commerce</b>	May require SL Mathematics; IB Business usually not required	No specific prerequisites; IB Business usually not required	May require HL or SL Mathematics; IB Business usually not required	May require HL or SL Mathematics; IB Business usually not required
<b>Economics</b>	Often require HL Mathematics; may require SL Mathematics; IB Economics usually not required	No specific prerequisites; IB Economics usually not required	May require SL Mathematics; IB Economics usually not required	May require SL Mathematics; IB Economics usually not required
<b>Engineering</b>	Usually require HL Mathematics and HL Physics	Recommend SL or HL Mathematics and one or more HL Sciences	May require HL or SL Mathematics; usually requires two Sciences (Chemistry often required even for Computer Science)	May require HL or SL Mathematics; and Chemistry or Physics

	UK	USA	Canada	Australia
<b>Science</b>	May require SL or HL Mathematics and one or more HL Science	Recommend HL or SL Mathematics and one or more HL Science	May require HL or SL Mathematics; usually requires two Sciences	May require SL Mathematics and one HL Science
<b>Law</b>	May require English A; essay-based subjects recommended (e.g., History)	Not available as undergraduate option	Not available as undergraduate option	May require English A
<b>English literature</b>	Recommend IBDP English A: Literature prerequisites required	No specific prerequisites required	No specific prerequisites required	Recommend IBDP English A: Literature
<b>Medicine</b>	Requires two HL Sciences; HL Chemistry and usually HL Biology	Not available as undergraduate option	Not available as undergraduate option	Usually requires Chemistry and may require another Science or Mathematics (HL or SL); background in Biology helpful
<b>Psychology</b>	May require SL Mathematics; may prefer two HL from Biology, Chemistry, Mathematics, Physics or Psychology	No specific prerequisites; IBDP Psychology usually not required	May require SL Mathematics; IBDP Psychology usually not required	May require SL Mathematics; IBDP Psychology usually not required

Note: European universities often have specific IBDP prerequisites in Languages, Humanities, Mathematics, and Sciences. Interested pupils must check individual university websites for details. Remember there are now many European Universities with degrees taught all in English.

*“I knew I wanted to apply to Medical School but didn’t want to give up History, English and Languages.”*

Vasundhara Talwar

### Subject Choices

When making subject choices, pupils should take into consideration the following:

- Aptitude and prior attainment: it is important to choose a course that is within the ability of the pupil. Suggested entry requirements for each of the subjects: HL subjects: (I)GCSE B or above or the equivalent SL subjects: (I)GCSE C or above (or the equivalent)
- Interest: ISCO (Morrisby) tests, which are taken by all Year 11s at Haileybury Astana, give an objective assessment of pupils’ interests and abilities with regard to careers.
- Career and university entry requirements: Someone wishing to read Medicine would almost certainly need to read Biology and Chemistry at HL, for example. Equally, different university systems have different requirements (for example, German universities are quite particular). The university counselors will be happy to advise you. While Haileybury Astana is happy to give advice, it is the pupils’ responsibility to ensure that any necessary entry requirements are met.
- Diploma requirements: as stated above, three subjects must be chosen at HL, and three at SL.
- Group 6 choices: Electives may be used to supplement your other group choices; or for breadth and personal interest you may choose one of the Arts - given that the IB demands 6 subjects, universities are supportive of an Arts subject being taken in Group 6. Please check university requirements carefully.

Subject Choices will be made provisionally during Year 11 with final confirmation at the start of Year 12. All pupils will need to discuss their plans with their tutor, subject teachers, parents, and the IB Coordinator before finalising their choices.

Please note that subject offerings in the table below are provisional at this stage and are dependent on pupil numbers, teacher availability and final timetable arrangements.

Group 1	Language A	English, Russian.
Group 2	Language B	English, Russian, French, Spanish, Russian Ab (SL Only), Spanish Ab Initio (SL only)
Group 3	Individuals & Societies	Business & Management, Economics, Geography, History
Group 4	Experimental Sciences	Biology, Chemistry, Physics, Environmental Systems and Societies (SL only), SEHS
Group 5	Mathematics	Mathematics Higher, Mathematics Standard (SL), Mathematical Studies (SL)
Group 6	The Arts & Electives	Visual Arts, Music or A second subject from Groups 3 or 4

## The IB Core

As the diagram on the right shows, the IB Diploma programme is divided into a central core and six academic subjects.

At the core are three components:

- An Extended Essay – The EE is a 4000 word essay on a subject of interest to the pupil.
- A course on the theory of knowledge -TOK invites pupils to question the basis and limits of knowledge from their own perspective.
- CAS - Creativity, Activity and Service -Pupils must undertake and reflect on a variety of activities. These may include learning to play an instrument, improving sporting skills or being a reading mentor. The school has an extensive range of service activities in the local community in which pupils are actively encouraged to take part.



*“For any pupil unsure of what to take into higher education, the IB will prepare you adequately and will help you make that decision—it is the ultimate tool for making you ‘well rounded’.”*

Darren Gerard



# Theory of Knowledge (TOK)

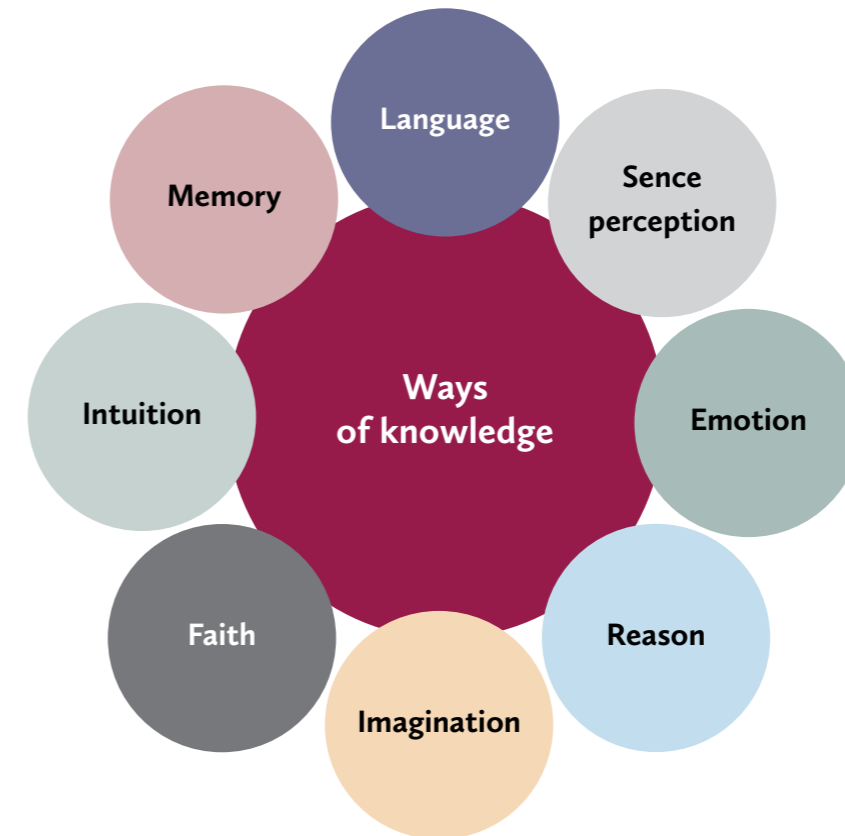
The Creativity, Action, Service element must be completed but does not count towards Diploma points. The Extended Essay and Theory of Knowledge components are awarded grades A to E, with A being the highest grade and E being the lowest.

These grades are then combined according to the following table and up to three core points can be awarded.

**The Diploma Points Matrix**

	Grade A	Grade B	Grade C	Grade D	Grade E	No grade N
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

Theory of knowledge (TOK) is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge. It plays a special role in the DP by providing an opportunity for pupils to reflect on the nature of knowledge, to make connections between areas of knowledge and to become aware of their own perspectives and those of the various groups whose knowledge they share. It is a core element undertaken by all DP pupils, and schools are required to devote at least 100 hours of class time to the course. The overall aim of TOK is to encourage pupils to formulate answers to the question “how do you know?” in a variety of contexts, and to see the value of that question. This allows pupils to develop an enduring fascination with the richness of knowledge.



## Extended Essay (EE)

The aims of the TOK course are to:

- Make connections between a critical approach to the construction of knowledge, the academic disciplines and the wider world
- Develop an awareness of how individuals and communities construct knowledge and how this is critically examined
- Develop an interest in the diversity and richness of cultural perspectives and an awareness of personal and ideological assumptions
- Critically reflect on their own beliefs and assumptions, leading to more thoughtful, responsible and purposeful lives
- Understand that knowledge brings responsibility, which leads to commitment and action.

### Assessment of TOK

Type Of Assessment	Format of Assessment	Weighting of Final Grade (%)
<b>External</b>		
Part 1: Essay on a prescribed title	One essay on a title chosen from a list of six prescribed titles.	67
<b>Internal</b>		
Part 2: Presentation	One presentation to the class by an individual or a group (max of three persons); approximately 10 minutes per pupil. One written presentation planning document for each pupil.	33

The extended essay is a compulsory, externally assessed piece of independent research into a topic chosen by the pupil and presented as a formal piece of academic writing. The extended essay is intended to promote high-level research and writing skills, intellectual discovery and creativity while engaging pupils in personal research. This leads to a major piece of formally presented, structured writing of up to 4,000 words in which ideas and findings are communicated in a reasoned, coherent and appropriate manner.

Pupils are guided through the process of research and writing by an assigned supervisor (a teacher in the school). All pupils undertake three mandatory reflection sessions with their supervisor, including a short interview, or viva voce, following the completion of the extended essay.

Extended essay topics may be chosen from a list of approved DP subjects—normally one of the pupil's six chosen subjects for the IB diploma or the world studies option. World studies provides pupils with the opportunity to carry out an in-depth interdisciplinary study of an issue of contemporary global significance, using two IB disciplines.

The aims of the extended essay are to provide pupils with the opportunity to:

- Engage in independent research with intellectual initiative and rigour
- Develop research, thinking, self-management and communication skills
- Reflect on what has been learned throughout the research and writing process.

### Assessment of the Extended Essay

Type Of Assessment	Format of Assessment	Weighting of Final Grade (%)
<b>External</b>		
Part 1: Essay	4000 word essay on a subject of interest to the pupil	100

## Creativity, activity, service (CAS)

*“The IB incorporates so many different skills. Being an all-round individual, I was very pleased to know that my sport and music (i.e. extra-curricular) played a big part.”*

Ben Stewart

Creativity, Activity, Service is an integral part of the IB pupils' Diploma. It complements academic study with less formal, experiential learning in situations which challenge and extend pupils' capabilities and enable them to recognise and respond to inequality and injustice in society by proposing practical solutions to what often appear to be intractable problems.

The program also fosters pupils' emotional and psychological maturity and acts as a counterweight to the pressures placed on young people to disengage from or remain passive within society. Pupils are given the opportunity to participate in a balanced range of activities across the three components and to reflect, in a variety of ways, on their evolution as productive and purposeful agents of change, aware of their capabilities to reshape the world in which they live.

CAS activities are undertaken within and beyond HAS, both individually and as part of a group, and based around the following components:

**Creativity:** Often linked to service, but including any activity of a creative nature.

**Activity:** This includes rigorous physical activity, whether individually or as a team; sports, IB PE, expeditions such as Duke of Edinburgh and IA, the active, physical aspects of creative and service activities.

**Service:** This covers activities which have a useful impact on, and beneficial consequences for others, including service to the disadvantaged and the disenfranchised; service to the school or the local or international community and custodianship of the environment.

The CAS programme aims to develop pupils who:

- Enjoy and find significance in a range of CAS experiences
- Purposefully reflect upon their experiences
- Identify goals, develop strategies and determine further actions for personal growth
- Explore new possibilities, embrace new challenges and adapt to new roles
- Actively participate in planned, sustained, and collaborative CAS projects
- Understand they are members of local and global communities with responsibilities towards each other and the environment.

### Requirements

CAS is a core part of the curriculum across both Year 12 and 13. It is formally timetabled every Wednesday afternoon for 1 period, and to be successful in CAS there needs to be evidence of weekly engagement across 18 months. This evidence is in the form of critical reflection through different mediums such as blogs, journals, photographs and video diaries. This recorded information forms the crucial evidence that is used in the CAS experiential learning final reflection that is written at the conclusion of the 18 months of activities. All of the above documents form a pupil's CAS Portfolio.

## Group 1: Studies in Language and Literature

This is a language that you are at home with, and can naturally use from day to day. For some people, this is an easy choice: they have an obvious “first language”. For others, speaking a mixture of languages every day at home and school, the choice is not quite so clear.

We offer taught First Language courses in English and Russian. Literature is focused on literary criticism and promotes the ability to form independent literary judgements. Literature will allow you to explore different interpretations and experiences of the world, as you experience the range of anxieties, joys and fears that human beings are exposed to in the daily business of living. You'll gain a healthy respect for the power of imagination and you'll learn to analyse complex ideas and express thoughts orally and on paper. Whether or not you continue to study language and literature after leaving school, the command and understanding that you gain through the IB first language course will open doors for you for the rest of your life.



## English Literature

### Course Aims

- Introduce pupils to a range of texts from different periods, styles and genres.
- Develop in pupils the ability to engage in close, detailed analysis of individual texts and make relevant connections.
- Develop the pupils' powers of expression, both in oral and written communication.
- Encourage the pupils to recognise the importance of the contexts in which texts are written and received.
- Encourage, through the study of texts, an appreciation of the different perspectives of people from other cultures, and how these perspectives construct meaning.
- Encourage pupils to appreciate the formal, stylistic and aesthetic qualities of texts.
- Promote in pupils an enjoyment of, and lifelong interest in, language and literature.
- Develop in pupils an understanding of the techniques involved in literary criticism.
- Develop the pupils' ability to form independent literary judgments and to support those ideas.

### Overview

Language A: Literature is a pure literature course designed for either native speakers of English or pupils with mother tongue fluency.

At Higher Level pupils must study 13 texts and at Standard Level, 11 texts. Some of the texts must be drawn from a list of World Literature texts, which thus expand the frame of reference far beyond that of the native culture; some works are studied as individual works of literature and some are studied as part of small groups of interrelated texts.

IB pupils should end up with an appreciation of literature, which is both rigorous in its depth and international in its breadth and perspective.

## Assessment in Literature

Higher Level		Standard Level	
External Assessment (70%)	Internal Assessment (30%)	External Assessment (70%)	Internal Assessment (30%)
<b>Paper 1 (20%)</b> Literary commentary	Individual oral commentary (15%)	<b>Paper 1 (20%)</b> Guided literary analysis	Individual oral commentary (15%)
<b>Paper 2 (25%)</b> Essay on studied works	Individual oral presentation (15%)	<b>Paper 2 (25%)</b> Essay on studied works	Individual oral presentation (15%)
<b>Written Assignment (25%)</b> c. 1500 words		<b>Written Assignment (25%)</b> c. 1500 words	

### Potential Careers

The skills acquired while studying literature are invaluable in any career requiring analytical thought and an ability to communicate clearly and succinctly, both in writing and in person. Literary specialists excel in careers such as publishing, law, advertising, marketing, politics, journalism, communications and PR.



## Russian Language and Literature

### Course Aims

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

### Overview

Language and Literature is a course that values literary texts and non-literary genres equally. This is an ideal course for pupils who want to retain an engagement with literature as well as extend their analytical and critical thinking skills to a wider range of oral, written and visual texts and provides a greater engagement with and understanding of media texts, the use of language in a variety of cultural contexts, the way language shapes our identity and in turn impacted upon by our experience.

Higher Level pupils will study 6 texts; Standard Level will study 4 texts.

## Group 2: Language acquisition

### Assessment in Language and Literature

Higher Level		Standard Level	
External Assessment (70%)	Internal Assessment (30%)	External Assessment (70%)	Internal Assessment (30%)
<b>Paper 1 (25%)</b> Comparative textual analysis	Individual oral commentary (15%)	<b>Paper 1 (25%)</b> Textual analysis	Individual oral commentary (15%)
<b>Paper 2 (25%)</b> Essay on studied texts	Further oral activity (15%)	<b>Paper 2 (25%)</b> Essay on studied texts	Further oral activity (15%)
<b>Written Tasks (20%)</b> 4 pieces c.1000 words		<b>Written Assignment (25%)</b> 3 pieces c.1000 words	

### Potential Careers

The skills acquired while studying Language and Literature are invaluable in any career requiring analytical thought and an ability to communicate clearly and succinctly, both in writing and in person. Language and Literature specialists often excel in careers such as publishing, law, advertising, marketing, politics, journalism, communications and PR.

As a pupil in an international school, you already know the importance of language. Studying an additional language goes beyond basic communication.

An additional language opens doors to other cultures and builds bridges between societies. You'll learn more about people by studying their language and culture, and you'll broaden yourself in the process. Our global society is becoming smaller and smaller, and the language skills and cultural tolerance you learn as part of the IB programme will serve you well, whatever you end up doing and wherever you end up living.



## English, Russian, French and Spanish B

### Course Aims

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

### Overview

The Higher and Standard Level courses for Language B both give pupils the opportunity to increase competence in the written and the spoken language and also aim to develop their knowledge of the culture and civilisation of the relevant country. On the linguistic side, pupils work to broaden their vocabulary, to build a solid knowledge of grammatical structures and to develop their competence at expressing themselves in a range of spoken and written contexts. By reading literary and non-literary texts, by having the opportunity to watch and discuss foreign language broadcasts, bulletins and films and by working with the language assistants, it is hoped that pupils will acquire an increased awareness of the life and culture of the country or countries in question.

## Assessment in Language B

Higher Level		Standard Level	
External Assessment	Internal Assessment	External Assessment	Internal Assessment
<b>Paper 1 (25%)</b> 1 hour 30 minutes: questions on five Texts	<b>Oral commentary (20%)</b> 15-18 minutes: individual oral presentation followed by conversation with the teacher	<b>Paper 1 (25%)</b> <i>Receptive skills</i> 1 hour 30 minutes: questions on four Texts	<b>Oral commentary (20%)</b> <i>Interactive skills</i> 12-15 minutes: individual oral presentation followed by conversation with the teacher
<b>Paper 2 (25%)</b> 1 hour 30 minutes: two written tasks - one creative response (250-400 words) and one personal response (150 - 200 words)		<b>Paper 2 (25%)</b> <i>Written productive skills</i> 1 hour 30 minutes response to one task (250 - 400 words)	

### Potential Careers

Studying a language is useful in variety of careers - the business world, the tourism industry, literature, journalism and the media, translation or teaching. However its real value lies in the skills you will acquire over the two-year period. An understanding of people, foreign culture and a perspective on an increasingly "global" world is without doubt crucial. Furthermore, a wide range of employers value language graduates above many others, simply because they have developed the people skills to communicate and interact with others.

## Russian and Spanish Ab Initio (SL Only)

### Course Aims

- Develop pupils' intercultural understanding
- Enable pupils to understand and use the language they have studied in a range of contexts and for a variety of purposes
- Encourage, through the study of texts and through social interaction, an awareness and appreciation of the different perspectives of people from other cultures
- Develop pupils' awareness of the role of language in relation to other areas of knowledge
- Develop pupils' awareness of the relationship between the languages and cultures with which they are familiar
- Provide pupils with a basis for further study, work and leisure through the use of an additional language
- Provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of an additional language.

### Overview

The IB DP language ab initio course is designed to provide pupils with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. This process encourages the learner to go beyond the confines of the classroom, expanding an awareness of the world and fostering respect for cultural diversity. The language ab initio course develops pupils' linguistic abilities through the development of receptive, productive and interactive skills by providing them opportunities to respond and interact appropriately in a defined range of everyday situations.

## Assessment in Ab Initio

External Assessment SL	Internal Assessment SL
<b>Paper 1</b> <i>Receptive skills</i> 1 hr: 30 questions on four texts	<b>Individual Oral</b> <i>Interactive skills</i> 10-12 minutes: individual oral presentation followed by questions and interview
<b>Paper 2</b> <i>Written productive skills</i> 1 hour: two short written responses	
<b>Written assignment</b> <i>Receptive and written productive skills</i> 200-300 words: guided writing	

### Potential Careers

Studying a language is useful in variety of careers - the business world, the tourism industry, literature, journalism and the media, translation or teaching. However its real value lies in the skills you will acquire over the two-year period. An understanding of people, foreign culture and a perspective on an increasingly "global" world is without doubt crucial. Furthermore, a wide range of employers value language graduates above many others, simply because they have developed the people skills to communicate and interact with others.



## Group 3: Individuals and Societies

These subjects are about human experience and behaviour. People live in lots of different physical, economic and social environments.

You'll learn about how people interact with each other and their environment, and about the history of social and cultural institutions. You'll find that studying individuals and societies in an international school with pupils from a range of different countries is a unique preparation for life in a global society.

In addition, each subject is designed to foster in you the capacity to identify, to analyse critically and to evaluate theories, concepts and arguments relating to the nature and activities of individuals and societies.



## Business Management

### Course Aims

- Encourage a holistic view of the world of business
- Empower pupils to think critically and strategically about individual and organizational behaviour
- Promote the importance of exploring business issues from different cultural perspectives
- Enable the pupil to appreciate the nature and significance of change in a local, regional and global context
- Promote awareness of the importance of environmental, social and ethical factors in the actions of individuals and organizations
- Develop an understanding of the importance of innovation in a business environment.

### Overview

The main goal of Business Management at HAS is to allow pupils to examine business decision making processes and understand how these impact on and are affected by internal and external environments. Pupils will develop an understanding of business theory and an ability to apply business principles, practices and skills.

During the course pupils will explore a wide range of business organisations and activities, as well as the cultural and economic context in which businesses operate. Business Management will furnish pupils with the knowledge and skills needed for a successful career in the corporate world.

## Assessment in Business Management

Higher Level		Standard Level	
External Assessment	Internal Assessment	External Assessment	Internal Assessment
<b>Paper 1 (35%)</b> <i>(Based on a pre-issued case study)</i>	Research Project (25%)	<b>Paper 1 (40%)</b> <i>(Based on a pre-issued case study)</i>	Written Commentary (25%)
<b>Paper 2 (40%)</b> <i>(Pupils are required to answer 3 questions from a choice of 5 based on stimulus materials)</i>		<b>Paper 2 (35%)</b> <i>(Pupils are required to answer 3 questions from a choice of 5 based on stimulus materials)</i>	

### Potential Careers

The Business Management course is excellent preparation for the world of work, as no matter what career a pupil decides to follow, there will always be an element of business within it. Whether it be a career in medicine or law, architecture or horticulture, an understanding of how businesses operate will prove invaluable. Business Management proves to be excellent preparation for any career in the corporate world, such as in human resources, marketing, finance or operations.

## Economics

### Course Aims

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

### Overview

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

The DP economics course emphasizes the economic theories of microeconomics, which deal with economic variables affecting individuals, firms and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are not 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 economics course encourages pupils to develop international perspectives, fosters a concern for global issues and raises pupils' awareness of their own responsibilities at a local, national and international level. Teachers explicitly teach thinking and research skills such as comprehension, text analysis, transfer, and use of primary sources.

## Assessment in Economics

Higher Level		Standard Level	
External Assessment	Internal Assessment	External Assessment	Internal Assessment
<b>Paper 1 (25%)</b>	<b>Coursework (20%)</b>	<b>Paper 1 (40%)</b>	<b>Coursework (25%)</b>
Pupils to answer 2 essay questions from a choice of 4	Pupils are required to produce 3 commentaries of a maximum of 750 words, analysing media articles using economics theory.	Pupils to answer 2 essay questions from a choice of 4	Pupils are required to produce 3 commentaries of a maximum of 750 words, analysing media articles using economics theory.
<b>Paper 2 (35%)</b>		<b>Paper 2 (35%)</b>	
Pupils to answer 2 data response questions from a choice of 4		Pupils to answer 2 data response questions from a choice of 4	

### Potential Careers

The skills, developed through the study of Economics, are valued in a wide range of careers such as accountancy, financial services, business management, marketing, politics, sales and the civil service.

## Geography

### Course Aims

- To promote a global perspective and international understanding
- To relate geography to contemporary issues
- To develop concern for the diversity of the natural environment
- To promote a respect for different cultures
- To develop an appreciation and understanding of the spatial patterns of physical and human patterns in the environment
- To understand and apply geographical methods and techniques

### Overview

Geography is a dynamic subject that is firmly grounded in the real world and focuses on the interactions between individuals, societies and the physical environment in both time and space. It seeks to identify trends and patterns in these interactions and examines the processes behind them. Geography is distinctive in that it occupies the middle ground between social sciences and natural sciences. The DP geography course integrates both physical and human geography, and ensures that pupils acquire elements of both scientific and socio-economic methodologies. Geography takes advantage of its position between both these groups of subjects to examine relevant concepts and ideas from a wide variety of disciplines. This helps pupils develop an appreciation of, and a respect for, alternative approaches, viewpoints and ideas.

## Assessment in Geography

Higher Level		Standard Level	
External Assessment	Internal Assessment	External Assessment	Internal Assessment
<b>Paper 1 (25%)</b>	<b>Coursework (20%)</b>	<b>Paper 1 (40%)</b>	<b>Coursework (25%)</b>
Multiple short answer and one extended response	Written report based on fieldwork (2,500 words maximum)	Multiple short answer and one extended response	Written report based on fieldwork (2,500 words maximum)
<b>Paper 2 (35%)</b>		<b>Paper 2 (35%)</b>	
Three structured questions based on stimulus material		Two structured questions based on stimulus material	
<b>Paper 3 (20%)</b>			
One essay question			

### Potential Careers

Geography pupils are highly sought after in areas such as finance and banking, hydrology and flood management, education, surveying, GIS, climatology, urban and transport planning, emergency management, demography, oceanography and many other areas. Geography pupils have excellent transferable skills making them attractive to most employment sectors.

## History

### Course Aims

- Develop an understanding of, and continuing interest in, the past
- Encourage pupils to engage with multiple perspectives and to appreciate the complex nature of historical concepts, issues, events and developments
- Promote international-mindedness through the study of history from more than one region of the world
- Develop an understanding of history as a discipline and to develop historical consciousness including a sense of chronology and context, and an Understanding of different historical perspectives develop key historical skills, including engaging effectively with sources
- Increase pupils' understanding of themselves and of contemporary society by encouraging reflection on the past.

### Overview

The DP history course is a world history course based on a comparative and multi-perspective approach to history. It involves the study of a variety of types of history, including political, economic, social and cultural, and provides a balance of structure and flexibility.

The course emphasizes the importance of encouraging pupils to think historically and to develop historical skills as well as gaining factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. In this way, the course involves a challenging and demanding critical exploration of the past. Teachers explicitly teach thinking and research skills such as comprehension, text analysis, transfer, and use of primary sources.

There are six key concepts that have particular prominence throughout the DP history course: change, continuity, causation, consequence, significance and perspectives.

## Assessment in History

Higher Level		Standard Level	
External Assessment	Internal Assessment	External Assessment	Internal Assessment
<b>Paper 1 (20%)</b> 1 hour 4 source based questions.	<b>Guided Coursework (20%)</b>	<b>Paper 1 (30%)</b>	<b>Guided Coursework (25%)</b>
<b>Paper 2 (25%)</b> 1 hour 30 minutes 2 Essays on themes, eg. War and Single Party States		<b>Paper 2 (45%)</b>	
<b>Paper 3 (35%)</b> 2 hours 20 minutes 3 Essays on a depth study continent eg. Asia.			

### Potential Careers

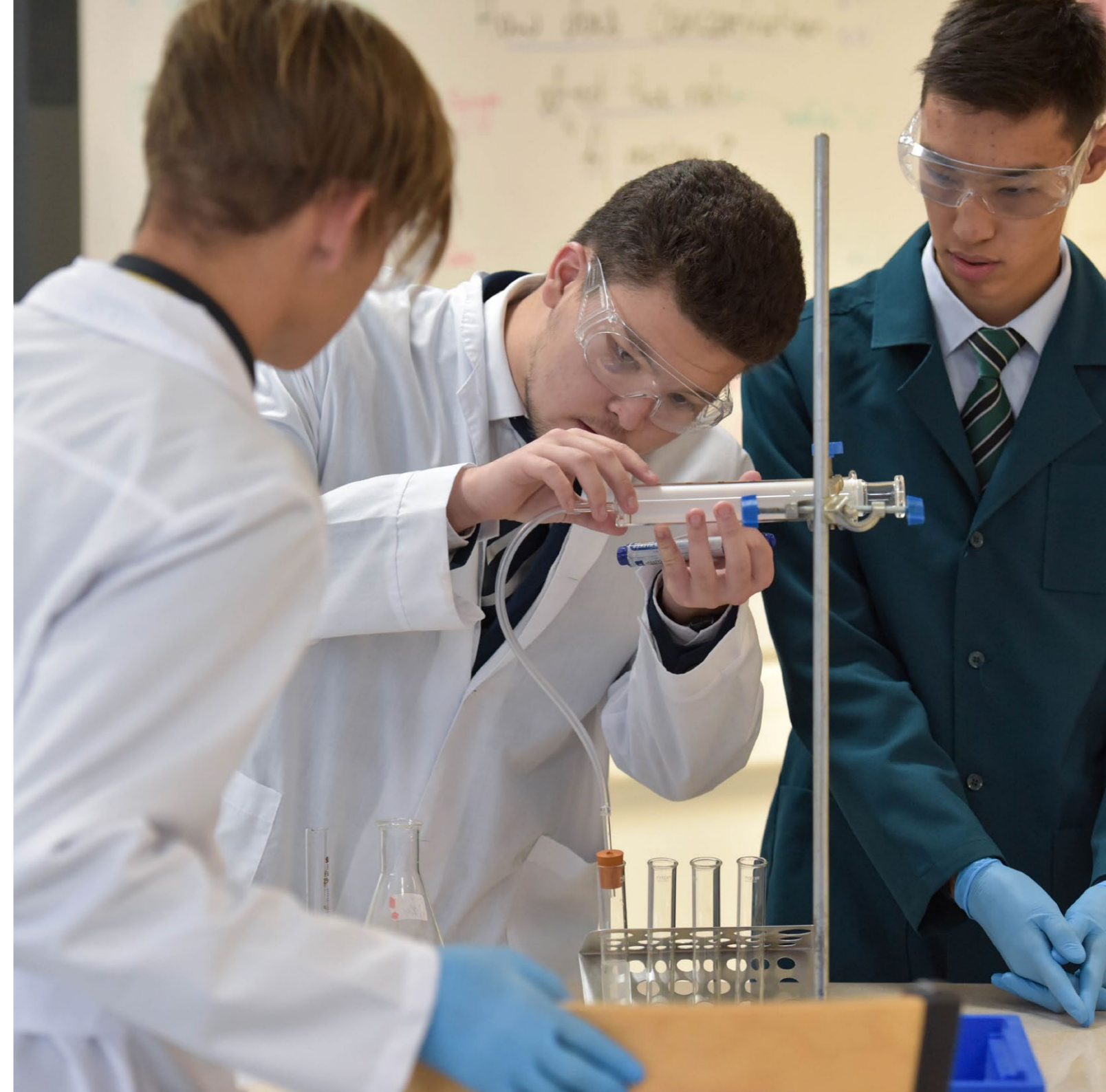
History is a subject of great academic rigour, which develops highly knowledgeable people with a well-rounded view of the world. History; therefore, lends itself well to careers in media, journalism, politics, international relations, education and research. However, the study of History also requires an analytical approach and the evaluation and interpretation of evidence, which means the subject is favoured by the accounting and legal professions.

## Group 4: Sciences

As you'll expect, these subjects are about science. More than that, though, you'll learn how scientists work and share ideas: about the "scientific method".

If you have a love of science then of course the group 4 subjects will appeal to you, but the main skill which you will acquire from your group 4 subject(s) is the ability to answer technical questions and justify your answer. This will usually involve selecting the correct information to use from the large amount you are presented with. This is of course what making decisions in real life is like and so is a vital skill to have in any career.

The group 4 subjects emphasise experimental work and a practical approach to learning, which will complement the different ways of learning in other parts of the IB programme. You can also choose to study two sciences together. This will be particularly important for you if you're thinking about careers in engineering, medicine or the pure sciences.



## Biology

### Course Aims

- Appreciate scientific study and creativity within a global context through stimulating and challenging opportunities
- Acquire a body of knowledge, methods and techniques that characterize science and technology
- Apply and use a body of knowledge, methods and techniques that characterize science and technology
- Develop an ability to analyse, evaluate and synthesize scientific information
- Develop a critical awareness of the need for, and the value of, effective collaboration and communication during scientific activities
- Develop experimental and investigative scientific skills including the use of current technologies
- Develop and apply 21st century communication skills in the study of science
- Become critically aware, as global citizens, of the ethical implications of using science and technology
- Develop an appreciation of the possibilities and limitations of science and technology
- Develop an understanding of the relationships between scientific disciplines and their influence on other areas of knowledge.

### Overview

Put simply, Biology is the 'study of living things' though it encompasses a wide range of topics including molecular Biology, human physiology, disease and ecology. As well as preparing pupils for degree courses such as medicine and veterinary science, the course aims to instil a sense of wonder about the natural world and our place within it.

This course requires numerical skills and logical analysis more commonly associated with subjects such as Physics and Mathematics, yet it also calls upon pupils to develop sound writing skills. What is more, whilst a secure knowledge of a limited body of facts is expected, an ability to apply that knowledge is also essential, as is a degree of practical competence.

## Assessment in Biology

Assessment	Standard Level	Higher Level
<b>Paper 1</b>	Multiple Choice - 30 questions	Multiple Choice - 40 questions
<b>Paper 2</b>	Data based extended-response questions on the core material.	Data based and extended-response questions on the core and AHL material.
<b>Paper 3</b>	Data based and short answer questions	Data based and short answer questions
<b>Internal Assessment</b>	10 hour individual investigation	10 hour individual investigation

### Potential Careers

Universities and employers value the skills that Biology pupils develop, including those in communication (both written and verbal), critical thinking, data analysis, experimental work, information technology, team working and time management. The study of Biology leads into careers such as medicine, the pharmaceutical or chemical industry or in laboratories involved in environmental research. Pupils interested in conservation and the environment often work for governmental conservation agencies, private consulting firms, or even computer companies.

## Chemistry

### Course Aims

- Appreciate scientific study and creativity within a global context through stimulating and challenging opportunities
- Acquire a body of knowledge, methods and techniques that characterize science and technology
- Apply and use a body of knowledge, methods and techniques that characterize science and technology
- Develop an ability to analyse, evaluate and synthesize scientific information
- Develop a critical awareness of the need for, and the value of, effective collaboration and communication during scientific activities
- Develop experimental and investigative scientific skills including the use of current technologies
- Develop and apply 21st century communication skills in the study of science
- Become critically aware, as global citizens, of the ethical implications of using science and technology
- Develop an appreciation of the possibilities and limitations of science and technology
- Develop an understanding of the relationships between scientific disciplines and their influence on other areas of knowledge.

### Overview

Chemistry is an experimental science that combines academic study with the acquisition of practical and investigational skills. Chemical principles underpin both the physical environment in which we live and all biological systems. Chemistry is often a prerequisite for many other courses in higher education, such as medicine, biological science and environmental science.

Both theory and practical work should be undertaken by all pupils as they complement one another naturally, both in school and in the wider scientific community. The DP chemistry course allows pupils to develop a wide range of practical skills and to increase facility in the use of mathematics. It also allows pupils to develop interpersonal and information technology skills, which are essential to life in the 21st century.

By studying chemistry pupils should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the subject.

## Assessment in Chemistry

Assessment	Standard Level	Higher Level
<b>Paper 1</b>	Multiple Choice - 30 questions	Multiple Choice - 40 questions
<b>Paper 2</b>	Short-answer and extended-response questions on the core material.	Data based and extended-response questions on the core and AHL material.
<b>Paper 3</b>	Options Paper	Options Paper
<b>Internal Assessment</b>	10 hour individual investigation	10 hour individual investigation

### Potential Careers

Studying Chemistry provides you with a variety of important transferable skills that will serve you well whatever your subsequent choice of career. Chemistry at Higher Level is essential for further study in medicine, dentistry and veterinary medicine, as well as chemical engineering and civil engineering. Its 'central' nature amongst the sciences means it lends itself well to pairing with either Biology or Physics in a 'two higher sciences' programme.



## Physics

### Course Aims

- Appreciate scientific study and creativity within a global context through stimulating and challenging opportunities
- Acquire a body of knowledge, methods and techniques that characterize science and technology
- Apply and use a body of knowledge, methods and techniques that characterize science and technology
- Develop an ability to analyse, evaluate and synthesize scientific information
- Develop a critical awareness of the need for, and the value of, effective collaboration and communication during scientific activities
- Develop experimental and investigative scientific skills including the use of current technologies
- Develop and apply 21st century communication skills in the study of science
- Become critically aware, as global citizens, of the ethical implications of using science and technology
- Develop an appreciation of the possibilities and limitations of science and technology
- Develop an understanding of the relationships between scientific disciplines and their influence on other areas of knowledge.

### Overview

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.

Besides helping us better understand the natural world, physics gives us the ability to alter our environments. This raises the issue of the impact of physics on society, the moral and ethical dilemmas, and the social, economic and environmental implications of the work of physicists.

By studying physics pupils should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the subject.

## Assessment in Physics

Assessment	Standard Level	Higher Level
<b>Paper 1</b>	Multiple Choice - 30 questions	Multiple Choice - 40 questions
<b>Paper 2</b>	Short-answer and extended-response questions on the core material.	Data based and extended-response questions on the core and AHL material.
<b>Paper 3</b>	Section A: one data-based question and several short-answer questions on experimental work Section B: short-answer and extended-response questions from one option	Section A: one data-based question and several short-answer questions on experimental work Section B: short-answer and extended-response questions from one option
<b>Internal Assessment</b>	10 hour individual investigation	10 hour individual investigation

### Potential Careers

The successful Physics pupil will find a wide range of careers open up. Skills acquired on the course, along with the discipline and rigour of the core material, will allow pupils to consider just about any future pathway, from university courses in pure science, engineering, to business, humanities or languages.

## Environmental Systems and Society (ESS)

### Course Aims

- Acquire the knowledge and understandings of environmental systems and issues at a variety of scales
- Apply the knowledge, methodologies and skills to analyse environmental systems and issues at a variety of scales
- Appreciate the dynamic interconnectedness between environmental systems and societies
- Value the combination of personal, local and global perspectives in making informed decisions and taking responsible actions on environmental issues
- Be critically aware that resources are finite, that these could be inequitably distributed and exploited, and that management of these inequities is the key to sustainability
- Develop awareness of the diversity of environmental value systems
- Develop critical awareness that environmental problems are caused and solved by decisions made by individuals and societies that are based on different areas of knowledge engage with the controversies that surround a variety of environmental issues create innovative solutions to environmental issues by engaging actively in local and global contexts.

### Overview

Environmental systems and societies (ESS) is an interdisciplinary course offered only at standard level (SL). This course can fulfill either the individuals and societies or the sciences requirement. Alternatively, this course enables pupils to satisfy the requirements of both subjects groups simultaneously while studying one course.

ESS is firmly grounded in both a scientific exploration of environmental systems in their structure and function, and in the exploration of cultural, economic, ethical, political and social interactions of societies with the environment. As a result of studying this course, pupils will become equipped with the ability to recognize and evaluate the impact of our complex system of societies on the natural world.

The interdisciplinary nature of the DP course requires a broad skill set from pupils, including the ability to perform research and investigations, participation in philosophical discussion and problem-solving. The course requires a systems approach to environmental understanding and promotes holistic thinking about environmental issues. Teachers explicitly teach thinking and research skills such as comprehension, text analysis, knowledge transfer and use of primary sources. They encourage pupils to develop solutions at the personal, community and global levels.

### Assessment in ESS

Assessment	Weighting	Criteria
Paper 1	25%	1 hour - case study
Paper 2	50%	2 hours - short answer and structured essay
Internal Assessment	25%	10 hours - individual investigation

### Potential Careers

The Environmental Systems and Societies course provides pupils with a broad range of transferable skills, such as public speaking and presentation delivery, group work, forming and expressing personal opinions and the ability to analyse and reason effectively. These skills would prove invaluable in careers such as journalism, politics, law, surveying and environmental management as well as careers in management and business.



## Sport, exercise and health science (SEHS)

### Course Aims

- Appreciate scientific study and creativity within a global context through stimulating and challenging opportunities
- Acquire a body of knowledge, methods and techniques that characterize science and technology
- Apply and use a body of knowledge, methods and techniques that characterize science and technology
- Develop an ability to analyse, evaluate and synthesize scientific information
- Develop a critical awareness of the need for, and the value of, effective collaboration and communication during scientific activities
- Develop experimental and investigative scientific skills including the use of current technologies
- Develop and apply 21st century communication skills in the study of science
- Become critically aware, as global citizens, of the ethical implications of using science and technology
- Develop an appreciation of the possibilities and limitations of science and technology
- Develop an understanding of the relationships between scientific disciplines and their influence on other areas of knowledge.

### Overview

The IB DP course in sports, exercise and health science standard level (SL) involves the study of the science that underpins physical performance. The course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology and nutrition. Pupils cover a range of topics and carry out practical (experimental) investigations in both laboratory and field settings. This provides an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyse human performance. Where relevant, the course will address issues of international dimensions and ethics by considering sport, exercise and health relative to the individual in a global context.

## Assessment in SEHS

Assessment	Standard Level	Higher Level
<b>Paper 1</b>	Multiple Choice - 30 questions	Multiple Choice - 40 questions
<b>Paper 2</b>	Short-answer and extended-response questions on the core material.	Data based and extended-response questions on the core and AHL material.
<b>Paper 3</b>	Several short-answer questions (all compulsory) in each of the two options studied.	Section A: Pupils answer one data-based question and several short-answer questions on the core and AHL Section B: Pupils answer two extended-response questions on the core and AHL
<b>Internal Assessment</b>	10 hour individual investigation	10 hour individual investigation

### Potential Careers

SEHS can prepare you for a variety of careers including but not limited to exercise physiologist, fitness centre manager, sports administrator, sports coach, sports development officer, sports therapist, sport and exercise psychologist and teacher.

## Group 5: Mathematics

Mathematics flows in and around our everyday lives. Wherever you go and whatever you do, mathematics will play some part in your future.

You'll need to buy and sell goods, read timetables, understand architects' plans. Perspective for artists, rhythms and harmonies for musicians, financial trends for economists, stress patterns for engineers: these are all places where you may meet and use mathematics in your life. Different people have different needs, though, and we offer three mathematics programmes to make sure that you can study the right kind of mathematics at the right level for you.



## Mathematics at Higher Level

### Course Aims

- Enjoy mathematics, and develop an appreciation of the elegance and power of mathematics develop an understanding of the principles and nature of mathematics
- Communicate clearly and confidently in a variety of contexts
- Develop logical, critical and creative thinking, and patience and persistence in problem-solving employ and refine their powers of abstraction and generalization
- Apply and transfer skills to alternative situations, to other areas of knowledge and to future developments
- Appreciate how developments in technology and mathematics have influenced each other appreciate the moral, social and ethical implications arising from the work of mathematicians and the applications of mathematics
- Appreciate the international dimension in mathematics through an awareness of the universality of mathematics and its multicultural and historical perspectives
- Appreciate the contribution of mathematics to other disciplines, and as a particular “area of knowledge” in the TOK course.

### Overview

The IB DP higher level mathematics course focuses on developing important mathematical concepts in a comprehensible, coherent and rigorous way, achieved by a carefully balanced approach.

Pupils 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. Pupils 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 are also encouraged to develop the skills needed to continue their mathematical growth in other learning environments.

The internally assessed exploration allows pupils to develop independence in mathematical learning. Pupils are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. The exploration also allows pupils to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

## Assessment in HL

Higher Level	
External Assessment	Internal Assessment
Paper 1 (30%)	
Paper 2 (30%)	Mathematical Exploration (20%)
Paper 3 (20%)	

### Potential Careers

Mathematics is considered a facilitating subject and as such, it is valuable in any career but particularly important in careers requiring Mathematics as a major component. These careers include engineering, the actuarial profession and other financial sectors, economics, IT, computer programming and systems administration, research and development and statistical analysis. Intelligence agencies require top class mathematicians, as do many other careers.



## Mathematics at Standard Level

### Course Aims

- Enjoy mathematics, and develop an appreciation of the elegance and power of mathematics develop an understanding of the principles and nature of mathematics
- Communicate clearly and confidently in a variety of contexts
- Develop logical, critical and creative thinking, and patience and persistence in problem-solving employ and refine their powers of abstraction and generalization
- Apply and transfer skills to alternative situations, to other areas of knowledge and to future developments
- Appreciate how developments in technology and mathematics have influenced each other appreciate the moral, social and ethical implications arising from the work of mathematicians and the applications of mathematics
- Appreciate the international dimension in mathematics through an awareness of the universality of mathematics and its multicultural and historical perspectives
- Appreciate the contribution of mathematics to other disciplines, and as a particular “area of knowledge” in the TOK course.

### Overview

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

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

## Assessment in Mathematics SL

Mathematics Standard Level	
External Assessment	Internal Assessment
Paper 1 (40%)	Mathematical Exploration (20%)
Paper 2 (40%)	

### Potential Careers

The study of mathematics is useful for developing critical thinking, problem solving, and being analytical in one’s response to a number of diverse problems. It requires application and dedication and helps pupils develop independence. As such, it is invaluable in any career but the standard level course will be particularly important in careers requiring mathematics as a component. These careers include the financial sector, medicine, IT, computer programming and systems administration, business, research and development, even marketing and sales, as well as many other areas.



## Mathematical Studies

### Course Aims

- Enjoy mathematics, and develop an appreciation of the elegance and power of mathematics develop an understanding of the principles and nature of mathematics
- Communicate clearly and confidently in a variety of contexts
- Develop logical, critical and creative thinking, and patience and persistence in problem-solving employ and refine their powers of abstraction and generalization
- Apply and transfer skills to alternative situations, to other areas of knowledge and to future developments
- Appreciate how developments in technology and mathematics have influenced each other appreciate the moral, social and ethical implications arising from the work of mathematicians and the applications of mathematics
- Appreciate the international dimension in mathematics through an awareness of the universality of mathematics and its multicultural and historical perspectives
- Appreciate the contribution of mathematics to other disciplines, and as a particular “area of knowledge” in the TOK course.

### Overview

The IB DP mathematical studies standard level (SL) course focuses on important interconnected mathematical topics. The syllabus focuses on: placing more emphasis on pupil understanding of fundamental concepts than on symbolic manipulation and complex manipulative skills; giving greater emphasis to developing pupils’ mathematical reasoning rather than performing routine operations; solving mathematical problems embedded in a wide range of contexts; using the calculator effectively.

There is an emphasis on applications of mathematics and statistical techniques. It is designed to offer pupils with varied mathematical backgrounds and abilities the opportunity to learn important concepts and techniques and to gain an understanding of a wide variety of mathematical topics, preparing them to solve problems in a variety of settings, develop more sophisticated mathematical reasoning and enhance their critical thinking.

## Assessment in Mathematical Studies

Mathematical Studies	
External Assessment	Internal Assessment
Paper 1 (40%)	Mathematical Exploration (20%)
Paper 2 (40%)	

### Potential Careers

Pupils will be probably be looking at careers which do not involve Mathematics. If the pupil is unsure it is advisable to check with the university the pupil would potentially like to attend to ensure that Maths Studies is acceptable for their prospective course.



## Group 6: The Arts

When you study Music or Visual Art, you'll spend time exploring diversity across time, places and cultures.

You'll learn to express yourself with greater confidence and competence, and you'll develop perception, creativity and analytical skills. Your study of the Arts will be the start of a lifelong relationship, and your ability to perceive a situation more deeply will stay with you, carrying over into other disciplines and changing the way you view the world.





## Visual Arts

### Course Aims

- Enjoy lifelong engagement with the arts
- Become informed, reflective and critical practitioners in the arts
- Understand the dynamic and changing nature of the arts
- Explore and value the diversity of the arts across time, place and cultures express ideas with confidence and competence
- Develop perceptual and analytical skills.

In addition, the aims of the visual arts course at SL and HL are to enable pupils to:

- Make artwork that is influenced by personal and cultural contexts
- Become informed and critical observers and makers of visual culture and media develop skills, techniques and processes in order to communicate concepts and ideas.

### Overview

The IB Diploma Programme visual arts course encourages pupils to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which pupils 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, pupils are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for pupils who want to go on to further study of visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts.

The role of visual arts teachers should be to actively and carefully organize learning experiences for the pupils, directing their study to enable them to reach their potential and satisfy the demands of the course. Pupils should be empowered to become autonomous, informed and skilled visual artists.

## Assessment in Visual Arts

Assessment	Standard Level	Higher Level
Comparative Study (20%)	10–15 screens which examine and compare at least 3 artworks, at least 2 of which should be by different artists  A list of sources used	10–15 screens which examine and compare at least 3 artworks, at least 2 of which need to be by different artists  3–5 screens which analyse the extent to which the pupil’s work and practices have been influenced by the art and artists examined  A list of sources used
Process Portfolio (40%)	9–18 screens which evidence the pupil’s sustained experimentation, exploration, manipulation and refinement of a variety of art-making activities	13–25 screens which evidence sustained experimentation, exploration, manipulation and refinement of a variety of art-making activities
Exhibition (40%)	A curatorial rationale that does not exceed 400 words  4–7 artworks  Exhibition text (stating the title, medium, size and intention) for each artwork	A curatorial rationale that does not exceed 700 words  8–11 artworks  Exhibition text (stating the title, medium, size and intention) for each artwork

### Potential Careers

The study of visual arts is useful in a wide range of careers. As well as being desirable for careers within the arts such as fine art, graphics, fashion, product design, theatre design, textiles, architecture, photography, advertising/marketing, ceramics, metalwork, education, curation and art history, it encourages creative approaches to problem solving, promotes dexterity and control on a practical level and a sequential development of ideas.

## Music

### Course Aims

- Enjoy lifelong engagement with the arts
- Become informed, reflective and critical practitioners in the arts
- Understand the dynamic and changing nature of the arts
- Explore and value the diversity of the arts across time, place and cultures
- Express ideas with confidence and competence Develop perceptual and analytical skills
- Develop their knowledge and potential as musicians, both personally and collaboratively.

### Overview

The IB Diploma Programme music course seeks to develop students' knowledge and potential as musicians, both personally and collaboratively. IB Diploma Programme music students are required to study musical perception and actively listen to a wide range of music from different parts of the world, musical cultures and time periods. They also develop aural perception and understanding of music by learning about musical elements, including form and structure, notations, musical terminology, and context. Through the course of study, students become aware of how musicians work and communicate.

## Assessment in Music

Assessment	Standard Level	Higher Level
Listening Paper (30%)	Four Musical Perception Questions	Five Musical Perception Questions
Musical Links Investigation (20%)	A written media script of 2,000 words or less, investigating the significant musical links between two or more pieces from distinct musical cultures	A written media script of 2,000 words or less, investigating the significant musical links between two or more pieces from distinct musical cultures
Creating or Performing (50%)	Creating: Two pieces of coursework with recordings and written work Solo performing: A recording selected from pieces presented during one or more public performances Group performing: A recording selected from pieces presented during two or more public performances	Creating: three pieces of coursework with recordings and written work Solo performing: A recording selected from pieces presented during one or more public performances

### Potential Careers

The study of Music is useful in a wide range of careers and will be particularly useful for those who would like to become musicians. However, it can also lead to teaching, events management, as well as careers in film, broadcasting, theatre, radio and other arts related careers.

# Key Contacts

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