

# IB Diploma Program Course Booklet





#### Welcome to the International Baccalaureate Diploma Program (IBDP)!

On behalf of the staff of Raffles World Academy (RWA), I would like to take this opportunity to welcome you to the next stage of your secondary education career, the IBDP. To begin this program, you will have successfully completed the MYP or equivalent program and will now be ready to move on to your pre-university course.

In this booklet you will find material to introduce you to both, the requirements of the IBDP as well as to courses offered by RWA, for Grades 11 and 12. For more information, please visit the IBO website at <u>http://www.ibo.org</u>.

We wish you all the best as you prepare to enter this exciting program!

Sean Quigley Head /Deputy Head of Secondary School Raffles World Academy, Dubai

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The International Baccalaureate (IB) Learner Profile is the IB mission statement translated into a set of learning outcomes. The aim of all IB programs is "to develop internationally -minded people who, recognising their common humanity and shared guardianship of the planet, help to create a better and more peaceful world" (IB, 2006). Through the Diploma Program, Raffles World Academy aims to develop the attitudes (learning outcomes) as described in the IB learner Profile. IB learners strive to be:

Attribute	Description
Inquirers	We nurture our curiosity, developing skills for inquiry 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 ac- tion on complex problems. We exercise initiative in making reasoned and ethi- cal decisions.
Communicators	We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the per- spective 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 everywhere. We take re- sponsibility 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 ser- vice, and we act to make a positive difference in the lives of others and the world around us.
Risk -takers	We approach uncertainty with fore-thought and determination; we work inde- pendently and cooperatively 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 an. They are able to assess and understand their strengths and limitations in order to support their learning and personal development.



The International Baccalaureate's Diploma Program (DP), created in 1968, is a demanding preuniversity course of study that leads to external examinations; it is designed for highly motivated students aged 16 to 19. The program has earned a reputation for rigorous assessment, giving IB Diploma holders access to the world's leading universities. The IB has shown over the course of almost 50 years that IB Diploma Program students are well prepared for university work.

The Diploma Program's grading system is criterion based: each student's performance is measured against well--defined levels of achievement consistent from one examination session to the next. Grades reflect attainment of knowledge and skills relative to set standards that are applied equally to all schools. Top grades are not, for example, awarded to a certain percentage of students.

The program is a comprehensive two--year international curriculum that generally allows students to fulfil the requirements of their national or state education systems. The Diploma Program incorporates the best elements of national systems, without being based on any one. Internationally mobile students are able to transfer from one IB World School to another, while students who remain closer to home benefit from a highly respected international curriculum. The program was born of efforts to establish a common curriculum and valid university entry credentials for students moving from one country to another. International educators were motivated by practical considerations but also by an idealistic vision: students should share an academic experience that would emphasize critical thinking, intercultural understanding and exposure to a variety of points of view.

Today, more than half the students world-wide opting for the Diploma Program come from state or national systems rather than from international schools. The idealism has remained unchanged, however. The IB's goal is to provide students with the values and opportunities that will enable them to develop sound judgement, make wise choices, and respect others in the global community. The program equips students with the skills and attitudes necessary for success in higher education and employment. The program has the strengths of a traditional liberal arts curriculum, but with three important additional features, shown at the centre of the hexagonal curriculum model.

Raffles World Academy is an authorized IB World School and a member of the Middle East International Baccalaureate Association (MEIBA). Currently over 2000 schools, in 130 countries, offer the IB Diploma Program. The IB is headquartered in The Hague, but also has offices in Washington DC, Singapore and Cardiff.





International Baccalaureate diplomas and certificates are accepted around the world as a qualification for university entrance. Since 1969, IB students have entered over 600 universities in Europe, the Americas, Asia, Africa, and Australia, and the list of institutions accepting IB students, which includes the most prestigious institutions throughout the world, is growing every year.

Many university admissions personnel have stated that they prefer IBDP students because the course develops a variety of skills needed for university study, and successful IBDP graduates have already demonstrated the ability to work at this level. In addition, IBDP students, having studied a range of subjects, can make a more informed choice of undergraduate programs. Many employers, too, recognise the value of analytical skills, flexibility and adaptability, all of which are stressed in the IB program. Thus, the IBDP offers not only preparation for university, but also for life after university.

As the IBDP is a pre--university course, each student must design a course suited to his or her needs and interests. All students preparing to join the IBDP therefore must discuss their possible options with the IBDP Coordinator, as well as with their parents, considering their future university plans. It should be noted that many universities have specific requirements in terms of courses taken and grades achieved, and some may require entrance examinations.

Higher Level (HL) courses are considered equivalent to British 'A' Level courses, and to American Advanced Placement (AP) or 'Honours' courses. IB Higher Level courses are considered for advanced standing or credit at many Canadian and US universities. IB Diploma students with excellent HL subject scores may be offered a year's credit or advanced placement in Canadian or US universities or US--type universities overseas.

IB Courses without the Diploma are accepted in many countries, including the US and Canada, and are accepted for entry by UK foundation programs; IB Courses may also be accepted by less competitive UK universities.





## The IBDP Curriculum Model for Grades 11 – 12

The diagram below represents the IB Diploma Program curriculum model.



RWA offers students *two* different options:

## 1. The International Baccalaureate (IB) Diploma

In the IB Diploma Program, students must

- select one subject from each of groups 1-6
- select 3 subjects at Higher Level (HL) and 3 at Standard Level (SL)
- maintain a grade 4 or above in each subject
- submit an Extended Essay of 4000 words in one of the IBDP subjects during the second year of the program
- complete the Theory of Knowledge course requirements
- meet CAS requirements

## 2. International Baccalaureate (IB) Courses

- any 6 subjects can be taken at either HL or SL
- Courses students must meet CAS requirements
- students should maintain a grade 3 or above in each subject in order to meet minimum promotion requirements

Both these programs also lead to the award of the RWA High School Diploma.

The IBDP Curriculum Model at Raffles World Academy, Dubai



## **Choosing IBDP Options**

All students in Grade 10 will select their DP subject options early in Semester 2. Each student should discuss the options with their parents or guardians and meet with the DP Coordinator if they have any questions. Students should ask for advice if they are uncertain about any aspect of the program or about requirements for university entrance.

 To qualify for the full IB Diploma students must take <u>six</u> subjects spread across the various groups of the hexagon, <u>three</u> of which must be at Higher Level. The core components of CAS, TOK and the Extended Essay are compulsory for full IB Diploma students.

To access the full IB Diploma Program (IBDP), Grade 10 students are required to attain a minimum total MYP score of 35 points. This includes minimum attainment grades of 4 in English Language and Literature, Mathematics and Science.

• Qualifying entry requirements for the full IBDP as well as individual subject entry requirements will be shared with you in a separate document.

Group 1	Language A	English: Language and Literature English: Literature	HL SL HL SL
	Language B	Arabic English French	HL SL HL SL HL SL
Group 2	Language Ab Initio	Spanish French Arabic	SL SL SL
Group 3	Individuals and Societies	Business and Management Economics Geography Global Politics History Information Technology in a Global Society Psychology Environmental Systems and Societies*	HL SL HL SL HL SL HL SL HL SL HL SL SL
Group 4	Sciences	Biology Chemistry Physics Computer Science Sports, Exercise and Health Science Environmental Systems and Societies*	HL SL HL SL HL SL HL SL HL SL SL
Group 5	Mathematics	Mathematics Maths Studies	HL SL SL
Group 6	The Arts OR an additional subject from Groups 3 or 4	Visual Arts Theatre Film	HL SL HL SL HL SL

#### IBDP Courses offered at Raffles World Academy, Dubai

\*Environmental Systems and Societies SL is a *transdisciplinary subject*, ie, it may be considered a Group 3 or a Group 4 subject.



#### English A: Literature, HL and SL

The study of literature is concerned with the exploration of human experience: the complex pursuits, anxieties, joys and fears to which we are all exposed in our daily lives. It promotes the examination of one of the more enduring fields of human creativity, and provides opportunities for developing independent, critical and clear thinking. It also fosters respect for the imagination and a perceptive approach to the understanding and interpretation of literary works. It encourages students to appreciate the artistry of literature and to develop an ability to reflect critically on their reading.

Internal assessment	SL	HL
Essay	Not required	A 1200-1500 word formal essay, fol- lowing a line of inquiry of your own choice into one of the texts studied. Weight: 20%
Individual oral	A 15-minute individual oral exploring two of the texts studied in relation to a global issue of the student's choice. Weight: 30%	A 15-minute individual oral exploring two of the texts studied in relation to a global issue of the student's choice. Weight: 20%
External assessment	SL	HL
Paper 1: Literary analysis	A literary analysis of a previously unseen passage Weight: 35%	A literary analysis of two previously unseen passages Weight: 35%
Paper 2: Essay	A literary essay comparing and con- trasting two works in response to a question Weight: 35%	A literary essay comparing and con- trasting two works in response to a question. Weight: 25%

Course Descriptions Group 1 subjects



## English A: Language and Literature, HL and SL

This course comprises four parts: two relate to the study of language and two to the study of literature. The study of the texts produced in a language is central to an active engagement with language and culture and, by extension, to how we see and understand the world in which we live.

A key aim of the Language and Literature course is to encourage students to question the meaning generated by texts, and to see their relation to culture. Students engage in textual analysis of both literary and non-literary texts, and the formal elements used to create meaning. Students are enabled to understand that texts, both literary and non-literary, can be seen as autonomous yet simultaneously related to culturally-determined reading practices.

Internal assessment	SL	HL
Essay	Not required	A 1200-1500 word formal essay on either a literary or non-literary text, following a line of inquiry of your own choice into one of the texts studied. Weight: 20%
Individual oral	A 15-minute individual oral exploring two of the texts studied in relation to a global issue of the student's choice. Weight: 30%	A 15-minute individual oral exploring two of the texts studied in relation to a global issue of the student's choice. Weight: 20%
External assessment	SL	HL
<b>Paper 1</b> Textual analysis	An analysis of a previously unseen non-literary passage Weight: 35%	An analysis of two previously unseen non-literary passages Weight: 35%
<b>Paper 2</b> Essay	A literary essay comparing and con- trasting two works in response to a question Weight: 35%	A literary essay comparing and con- trasting two works in response to a question Weight: 25%



Please note that the IB does not permit Group 2 languages to be taken as self-taught.

#### Language B: HL and SL

These are second language courses for students **with some previous experience** of learning the language who have attained a fair level of fluency. The focus is on language acquisition and development and the discovery of the culture of countries where the language is spoken; the study of literary and other texts plays an important part. The skills of listening, speaking, reading and writing are developed and assessed.

Students of Arab nationality must select Arabic B at HL or SL.

They are also required to sit the UAE Ministry of Education Arabic exam in order to meet graduation requirements.

Internal assessment	SL	HL
A conversation with the te er , based on a visual stim followed by discussion base an additional theme . Duration : 12-15 minutes		A conversation with the teach er, based on an extract from one of the literary works stud ied in class, followed by discus sion based on one or more o the themes from the syllabus Duration: 12-15 minutes
External assessment	SL	HL
Paper 1 Productive skills	One writing task of 250-400 words from a choice of 3, each from a different theme, choos- ing a text type from those listed in the examination instructions. (1 hour 15 minutes)	One writing task of 450-600 words from a choice of 3, each from a different theme, choos ing a text type from those listed in the examination in structions. (1 hour 30 minutes)
Paper 2	Listening comprehension Reading comprehension	Listening comprehension Reading comprehension
Receptive skills	Comprehension exercises on 3 audio passages and 3 written texts, drawn from all 5 themes.	Comprehension exercises on a audio passages and 3 written texts, drawn from all 5 themes



Please note that the IB does not permit Group 2 languages to be taken as self-taught.

## Language ab Initio: SL only

Language ab initio courses provide an opportunity for students to study the language at a beginner's level. Students should have **no prior experience of the target language or very limited previous exposure**. The *ab initio* course focuses on spoken interaction, using a whole range of resources and texts as a stimulus for discussion.

Listening, speaking, reading, and writing skills are developed. There are plenty of opportunities not just to learn the language but also about cultures within these courses.

Vocabulary and grammar are structured around the following topics:

- 1. Identities
- 2. Experiences
- 3. Human ingenuity
- 4. Social organization
- 5. Sharing the planet

Students will be assessed according to the IB guidelines for internal and external assessments.

The internal assessment will count towards 25% and the external assessment will count towards 75% of the final course grade. The rubrics will be made familiar to the students through their regular use throughout the course.

At the end of the Language ab initio course candidates will be expected to demonstrate the ability to:

- communicate information and some basic ideas clearly and effectively, in a limited range of situations
- understand and use accurately the essential spoken and written forms of the language
- understand and use a limited range of vocabulary in common usage
- use a register that is generally appropriate to the situation
- show an awareness of some elements of the culture(s) related to the language studied



## **Business and Management: HL and SL**

At both Higher and Standard levels, the aim of the course is to enhance the student's ability to make informed business decisions while taking into account the international context – culturally, socially and in areas relating to business. Equally important is the necessity to factor social responsibility and its consequences into business activity at every level. This course looks at individuals in organizations as well as various tools and models used by organizations to achieve their objectives. In particular, students are made aware of the differences in the application of these in local, regional and global contexts.

Both HL and SL students will follow a core curriculum that includes a study of the following topics:

- 1. Business organization and the environment
- 2. Human resource management
- 3. Accounts and finance
- 4. Marketing
- 5. Operations management

The course also involves a significant coursework component. Students are expected to carry out a research project or a written assignment, depending on their level of study, which is an in-depth study of a business problem facing a company of their choice. They are required to generate a working document that may be used by the selected business as a solution to this problem.

#### **Economics: HL and SL**

The Economics course embodies global and international awareness in several distinct ways. Two of the four sections of the course are devoted to specific areas of economics that contribute to international awareness and understanding—Section 3: International Economics, and Section 4: Development Economics. In addition, earlier topics in the course explore the ways in which different countries deal with common economic issues such as government intervention, market failure, sustainability and achieving macroeconomic objectives. Inherent in the syllabus is a consideration of different perspectives, economic circumstances, and social and cultural diversity.

Economics seeks to develop international understanding and foster a concern for global issues, as well as to raise students' awareness of their own responsibility at a local and national level. Economics also aims to develop values and attitudes that will help students reach a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interconnected world.

Both HL and SL students will follow a core curriculum that includes a study of the following topics :

- 1. Microeconomics
- 2. Macroeconomics
- 3. International economics
- 4. Development economics



# Geography: HL and SL

The IB Geography course aims to achieve the following:

- 1. Develop an understanding of the interrelationships between people, places, spaces and the environment
- 2. Develop a concern for human welfare and the quality of the environment and an understanding of the need for planning and sustainable management
- 3. Appreciate the relevance of geography in analyzing contemporary issues and challenges and develop a global perspective of diversity and change.

Apart from core themes including Populations, Global Climate and Global resource consumption, the core extension topics include Power, Places and networks, Human development and diversity, Global risk and resilience. Students also have optional topics including fresh water, oceans and coastal margins; extreme environments (deserts and glacial); hazards and disasters; leisure, sport and tourism; geography of food and health; urban environments.

The practical component of the course involves a project which requires fieldwork to gain data which is then presented, analysed and interpreted using geographical techniques and skills.

## History: HL and SL

History is more than merely the study of the past. It is the process of recording, describing and interpreting the past through the investigation of a variety of sources. The study of history gives people an understanding of themselves and others in relation to the world, both past and present.

In order to understand the past, students engage with both, exposure to primary historical sources and the work of historians. Historical study involves selection and interpretation of data and its critical evaluation. It requires and develops an individual's understanding of, and empathy for, people living in other periods and contexts.

The aims of the IB History course are to:

- 1. Encourage an understanding of the present through critical reflection on the past
- 2. Encourage an understanding of the impact of historical developments at national, regional and international levels.
- 3. Develop an awareness of one's own historical identity through the study of historical experiences of different cultures.

The skills of analysis and evaluation, central to the study of history are much valued by universities and potential employers. Indeed it is an essential subject for anyone wishing to pursue a career in journalism and media studies, economics, archaeology, anthropology, international relations and law, among others. Interestingly banks are the largest single employer of history graduates.



# Information and Technology in a Global Society (ITGS): HL and SL

The ITGS course at both levels encourages students to think like IT managers rather than just regular users. The course is based on international aspects in which students will be exposed, through the internet, newspaper articles, videos, and audio files, to different contexts where they will be required to make appropriate IT decisions and recommendations. In addition to this, both HL and SL students have to design and implement an IT solution for a real client.

Both HL and SL students will follow a core curriculum that includes a study of the following topics:

- 1. Social and ethical significance
- 2. Application to specified scenarios
- 3. IT systems

There are several key assessment objectives which apply to both HL and SL. These include:

- 1. Knowledge and Understanding of specified content
- 2. Applications and Analysis
- 3. Synthesis and Evaluation
- 4. Use of ITGS skills

The practical component of the course involves a project which is designed as a solution to a problem faced by a real-life company of the student's choice.

#### Psychology: HL and SL

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

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



# **Global Politics: HL and SL**

The 21st century is characterized by rapid change and increasing interconnectedness, impacting individuals and societies in unprecedented ways and creating complex global political challenges. Global politics is an exciting, dynamic subject that draws on a variety of disciplines in the social sciences and humanities, reflecting the complex nature of many contemporary political issues. The study of global politics enables students to critically engage with different and new perspectives and approaches to politics in order to comprehend the challenges of the changing world and become aware of their role in it as active global citizens.

The Diploma Programme Global Politics course explores fundamental political concepts such as power, equality, sustainability and peace in a range of contexts. It allows students to develop an understanding of the local, national, international and global dimensions of political activity and processes, as well as to explore political issues affecting their own lives. The course helps students to understand abstract political concepts by grounding them in real-world examples and case studies. It also invites comparison between such examples and case studies to ensure a wider and transnational perspective.

SL and HL students study the four core units and undertake an engagement activity through a case studies approach, HL students also examine and evaluate two global political challenges, which by their nature are complex, contestable and interlinked; this provides further depth at HL.



#### Physics: HL and SL

The most fundamental of the experimental sciences, Physics underpins the other two sciences which in many ways derive from it. The subject itself covers a wide range of topics including forces, waves, and energy, light and associated theory. These themes and others are further explored in the form of one optional unit. Practical work involves a series of activities which aim to develop a number of practical skills but students are assessed on a single investigation of their personal interest that makes up 20% of the course. This investigation is internally assessed and sent to external examiners for moderation. In addition a Group 4 project examines the students' ability to work in a team setting.

#### **Biology: HL and SL**

This course develops existing knowledge about living organisms from MYP study as well as the understanding of the subject. With a gradual transition, the IBDP course involves an in-depth treatment of topics such as cells, biochemistry, genetics, human and plant physiology, ecology and evolution. The course is divided into two parts: a compulsory core and options which make the learning experience more tailor-made to student interests. Internally assessed practical work makes up 20% of the course and will involve individual practical work followed by an assessed experimental write up. In addition, a Group 4 project allows the students to work in a team setting effectively.

#### **Chemistry: HL and SL**

Chemistry, often called the central science, is an experimental science that combines academic study with acquisition of practical and investigational skills. Its principles underpin both the physical environment in which we live and all biological systems. Apart from being studied for its intrinsic value, Chemistry is a prerequisite for many other courses in higher education including medicine, pharmacy, biological sciences and environmental sciences. It also serves as a useful preparation for employment. Through the study of the nature of science, students will appreciate how the body of scientific knowledge has grown in size and complexity from the times of the alchemist of the old to the modern scientist with sophisticated tools.

The IB Chemistry course is taken at both Higher Level and at Standard Level. The teaching of the subject allows for a complementary marriage between theory and experimental work. Students thereby develop proficiency in their practical skills and increase facility in the use of mathematics - the language of science. Through five approaches to learning, students develop transferable interpersonal and ICT skills essential for the 21<sup>st</sup> century.

Students will complete an Internal Assessment which will be sent for external moderation and will count for 20% of the total mark. There final written examination comprises of Paper 1 (Multiple choice), Paper 2 (Structured and extended response) and Paper 3 (a data-based question and one Option). A group project will be completed by all Group 4 subject students to reinforce the inquiry process and collaboration.

Throughout the course, emphasis is placed on international-mindedness, green chemistry, the environment and sustainability of global resources.



## Computer Science: HL and SL

The IB Computer Science course requires an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The course, underpinned by conceptual thinking, draws on a wide spectrum of knowledge, and enables and empowers innovation, exploration and the acquisition of further knowledge. During the course the student will develop computational solutions.

This will involve the ability to:

- identify a problem or unanswered question
- design, prototype and test a proposed solution
- liaise with clients to evaluate the success of the proposed solution and make recommendations for future developments.

The aims of the Computer Science HL/SL courses are to:

- provide opportunities for study and creativity within a global context that will stimulate and challenge students developing the skills necessary for independent and lifelong learning
- provide a body of knowledge, methods and techniques that characterize computer science
- enable students to apply and use a body of knowledge, methods and techniques that characterize computer science
- demonstrate initiative in applying thinking skills critically to identify and resolve complex problems
- engender an awareness of the need for, and the value of, effective collaboration and communication in resolving complex problems
- develop logical and critical thinking as well as experimental, investigative and problem-solving skills
- develop and apply the students' information and communication technology skills in the study of computer science to communicate information confidently and effectively
- raise awareness of the moral, ethical, social, economic and environmental implications of using science and technology
- develop an appreciation of the possibilities and limitations associated with continued developments in IT systems and computer science
- encourage an understanding of the relationships between scientific disciplines and the overarching nature of the scientific method.

HL	SL
Core Topics as stated in SL	Core Topics:
HL extension: Students study one of the following options:	The topics that must be studied, including some practical work, are:
Option A: Databases Option B: Modelling and simulation Option C: Web science Option D: Object-oriented programming (OOP)	Topic 1: System fundamentals Topic 2: Computer organization Topic 3: Networks Topic 4: Computational thinking, problem- solving and programming
Internal assessment Solution Practical application of skills through the development of a product and associated documentation	Internal assessment Solution Practical application of skills through the development of a product and associated documentation



## Sports, exercise and health science (SEHS): HL and SL

The course lies within Group 4 Experimental sciences. Group 4 students explore the concepts, theories, models and techniques that underpin each subject area and through these develop their understanding of the scientific method.

SEHS students participate in a compulsory Group 4 project. This collaborative and interdisciplinary exercise provides an opportunity for students to explore scientific solutions to global questions.

The course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology and nutrition, which are studied in the context of sport, exercise and health. Students will cover a range of core elements and practical investigations. This will provide the 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 internationalism and ethics by considering sport, exercise and health relative to the individual and in a global context. Studies in Sports, Exercise and Health Science can lead to careers in: coaching, teaching, leisure management, journalism, sports science, physiotherapy, sports medicine, sports development, fitness instructing, sports design and technology and many other areas as the world of sport and physical recreation provides a rich variety of interesting and rewarding career opportunities.

Topics ( SL+ HL)	HL	Option topics ( any two)
1. Anatomy	7. Further anatomy	A. Optimizing physiological
2. Exercise physiology	8. The endocrine system	performance
3. Energy systems	9. Fatigue	B. Psychology of sports
4. Movement analysis	10. Friction and drag	C. Physical activity and
5. Skill in sports	11. Skill acquisition and analysis	health
6. Measurement and evaluation of human performance	12. Genetics and athletic perfor- mance	D. Nutrition for sports, exer- cise and health
	13. Exercise and immunity	1

Assessment at a Glance			
Туре	Format	Weighting (SL)	Weighting (HL)
External		80%	80%
Paper 1	Multiple-choice questions	20	20
Paper 2	Short answer & extended response	35	35
Paper 3	Short answer & extended response	25	25
Internal	and Mart 11 Color of Mart & Area of Color & Area and Color	20%	20%
IA	Short and Long-term investigations	20	20



## Environmental Systems and Societies: SL only\*

Environmental Systems and Societies (ESS) is an interdisciplinary course in which students gain an appreciation for the close links between the systems and processes of our environment and the societies which can either threaten or maintain them.

Students who take ESS SL can use this course as either a Group 3 or Group 4 option\*.

Internal assessment accounts for 25% of the final assessment and is comprised of a series of practical and fieldwork activities.

# **Curriculum overview**

#### Core content

- 1. Foundations of environmental systems and societies
- 2. Ecosystems and ecology
- 3. Biodiversity and conservation
- 4. Water and aquatic food production systems and societies
- 5. Soil systems and terrestrial food production systems and societies
- 6. Atmospheric systems and societies
- 7. Climate change and energy production
- 8. Human systems and resource use

Assessment at a glance			
Type of assessment	Format of assessment	Time (hours)	Weighting of final grade (%)
External		3	75
Paper 1	Case study	1	25
Paper 2	Short answers and struc- tured essays	2	50
Internal			
Individual investigation	Written report of a research question designed and implemented by the student.	10	25

\*Environmental systems and societies SL is a transdisciplinary subject meeting requirements in both Groups 3 and 4



Starting in September 2019, there will be two subjects in Block 5.

# Mathematics: Analysis and Approaches, HL and SL

This course is appropriate for students who enjoy developing their mathematics to become fluent in the construction of mathematical arguments and develop strong skills in mathematical thinking. They will also be fascinated by exploring real and abstract applications of these ideas, with and without the use of technology. Students who take Mathematics: Analysis and approaches will be those who enjoy the thrill of mathematical problem solving and generalization. This subject is aimed at students who will go on to study subjects with substantial mathematics content such as mathematics itself, engineering, physical sciences, or economics, for example.

Mathematics: Analysis and Approaches reflects the emphasis on calculus and on algebraic, graphical and numerical approaches.

# Mathematics: Applications and Interpretation, HL and SL

This course is appropriate for students who are interested in developing their mathematics for describing our world and solving practical problems. They will also be interested in harnessing the power of technology alongside exploring mathematical models. Students who take Mathematics: Applications and interpretation will be those who enjoy mathematics best when seen in a practical context. This subject is aimed at students who will go on to study subjects such associal sciences, natural sciences, statistics, business, some economics courses, psychology, and design, for example.

Mathematics: Applications and interpretation emphasizes the applied nature of the subject, and also the interpretation of results in context is an important element of the subject.

Thirty hours are set aside for inquiry, problem-solving and the internal assessment tasks within both subjects at SL and HL. Students can engage in extended work on areas of mathematics not easily assessed in examinations. This will allow students to develop the skills necessary to grow as mathematicians and to approach the internal assessment with the required skills et.



The Mathematics courses aim to contribute to students' personal attributes, subject understanding and global awareness by enabling them to:

- 1. Develop a curiosity and enjoyment of mathematics, and appreciate its elegance and power
- 2. Develop an understanding of the concepts, principles and nature of mathematics
- 3. Communicate mathematics clearly, concisely and confidently in a variety of contexts
- 4. Develop logical and creative thinking and patience and persistence in problem solving to instill confidence in using mathematics
- 5. Employ and refine their powers of abstraction and generalization
- 6. Take action to apply and transfer skills to alternative situations to other areas of knowledge and to future developments in their local and global communities
- 7. Appreciate the moral, social and ethical questions arising from the work of mathematicians and its applications
- 8. Appreciate the universality of mathematics and its multicultural, international and historical perspectives
- 9. Appreciate the contribution of mathematics to other disciplines and as a particular *area of knowledge* in the TOK course
- 10. Develop the ability to reflect critically upon their own work and the work of others
- 11. Independently and collaboratively extend their understanding of mathematics

# **External assessment**

Mathematics: Analysis and Approaches SL will be assessed with two written papers.

Paper 1 will be without the use of technology and Paper 2 will allow the use of a graphical calculator. Each paper has two sections.

**Mathematics: Applications and Interpretation SL** will be assessed with two written papers both of which will required the use of technology in the form of a graphical calculator.

Both these courses at **HL** will be assessed in a similar way to the corresponding SL courses on Papers 1 and 2 and in addition will include a Paper 3.

The HL Paper 3 in both subjects may be a one-hour problem solving paper possibly requiring the use of spreadsheets and graphing software. There may be two extended questions, based on content from the syllabus but leading to generalization or interpretation of the problems.



# Visual Arts : HL and SL

The new visual arts syllabus (2016) has been divided into three core areas. These core areas are designed and interlinked with the assessment tasks.

During the two-year DP visual arts course, students will explore the relationship between these areas and how each area informs and impacts their work in visual arts. The course includes opportunities for structured learning about the formal elements of a wide range of artistic expression, together with extensive exploration of a more experimental nature.

The two-year visual arts course consists of three parts:

#### Part 1: Comparative Study (20% marks)

#### What do students have to do?

Students are required to analyse and compare artworks, objects or artifacts by different artists. This independent, critical and contextual investigation should explore artworks, objects and artifacts from differing cultural contexts.

Students at both SL and HL will examine and compare at least three pieces, at least two of which should be by different artists. It is valuable for students to have experienced at least one of the works in real time and space.

Students present their findings as a personal and critically reflective analysis, using both visual and written forms of notation.

#### Part 2: Process Portfolio (40% marks)

#### What do students have to do?

Students at SL and HL submit carefully selected materials which demonstrate their experimentation, exploration, manipulation and refinement of a variety of visual arts activities during the two-year course.

The work, which may be extracted from their visual arts journal and other sketchbooks, notebooks, folios and so on, should have led to the creation of both resolved and unresolved works.

The selected process portfolio work shows 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.

#### Part 3: Exhibition (40% marks)

#### Selection of Work

Students will select a sample of resolved work and reflect on what makes these effective pieces for exhibition, particularly in response to their own clearly stated intentions and the messages they wanted to communicate about their artwork. Students will have the opportunity to display their works at the end of the two year course and talk about their achievements to parents, teachers, family and friends.



# Film: HL and SL

Film is a powerful communication medium and art form. The IB Film course aims to develop students' skills so that they become adept in both interpreting and making film texts.

PARTS OF THE COURSE	SL	HL
External - SL (30%) HL (20%)	Textual AnalysisStudents at SL demonstrate theirKnowledge and Understanding ofhow meaning is created through awritten analysis of a prescribed filmtext based on a chosen extract (nolonger than five minutes) from thatfilm. Students consider the culturalcontext of the film and a variety offilm elements.Students submit:1)Textual Analysis (1750 words maximum) and all sources used.	<ul> <li>Textual Analysis</li> <li>Students at HL demonstrate their</li> <li>Knowledge and Understanding of how meaning is created through a written analysis of a prescribed film text based on a chosen extract (no longer than five minutes) from that film. Students consider the cultural context of the film and a variety of film elements.</li> <li>Students submit: <ol> <li>Textual Analysis (1750 words maximum) and all sources used.</li> </ol> </li> </ul>
External - SL (30%) HL (20%)	<ul> <li>Comparative Study</li> <li>Students at SL carry out research into a chosen area of film focus, identifying and comparing two films from within that area and presenting their findings as a multi- media comparative study.</li> <li>Students submit:         <ol> <li>A recorded multimedia com- parative study (10 minutes maximum.)</li> <li>A list of sources used</li> </ol> </li> </ul>	<ul> <li>Comparative Study</li> <li>Students at HL carry out research into a chosen area of film focus, identifying and comparing two films from within that area and presenting their findings as a multimedia comparative study.</li> <li>Students submit:         <ol> <li>A recorded multimedia comparative.</li> <li>A list of sources used</li> </ol> </li> </ul>
Internal - SL (40%) HL (25%)	<ul> <li>Film Portfolio</li> <li>Students at SL undertake a variety of filmmaking exercises in three</li> <li>film production roles , clearly de- fined filmmakers intentions. They acquire and develop practical skills and techniques through participa- tion in film exercises, experiments and the creation of at least one completed film.</li> <li>Students submit: <ol> <li>portfolio pages (9 pages maxi- mum; 3 pages maximum per film role) and a list of sources used</li> <li>A film reel (9 minutes maxi- mum; 3 minutes maximum per film role, including one completed film)</li> </ol> </li> </ul>	<ul> <li>Film Portfolio (25%)</li> <li>Students at HL undertake a variety of filmmaking exercises in three film production roles , clearly defined filmmakeers intentions. They acquire and develop practical skills and techniques through participation in film exercises, experiments and the creation of at least one completed film.</li> <li>Students submit: <ol> <li>portfolio pages (9 pages maximum; 3 pages maximum per film role) and a list of sources used</li> <li>A film reel (9 minutes maximum; 3 minutes maximum per film role, including one completed film)</li> </ol> </li> <li>Collaborative Film (35%) Making clear links to works and directors they have encountered, and skills and techniques acquired, students at HL work collaboratively in a core production team to plan and create an original and completed film. </li> <li>Students submit: <ol> <li>A project report (2,000 words maximum and a list of all sources used)</li> <li>A completed film (7mins maximum)</li> </ol> </li> </ul>

Course Descriptions Group 6 subjects



# Theatre Arts: HL and SL

Theatre Arts 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.

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.

The Theatre core syllabus at HL and SL consists of three interrelated areas – Theatre in Context, Theatre Processes and Presenting Theatre. Students are required to explore these three areas from the perspective of creator, designer, director, performer and spectator.

## **External assessment tasks**

Task 1: Solo theatre piece (HL only)

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.
 SL HL
 N/A 35%

Task 2: Director's notebook (SL and HL)

• 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.

SL	HL
35%	20%

Task 3: Research presentation (SL and HL)

• 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.

SL	HL		
30%	<b>20%</b>		

# Internal assessment task

Task 4: Collaborative project (SL and HL)

• 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.

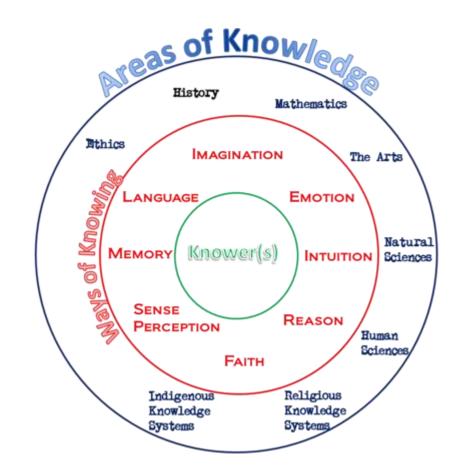
SL HL 35% 25%



## Theory of Knowledge

Students working towards an IB Diploma study Theory of Knowledge. This course encourages students to reflect on the nature of knowledge by critically examining different ways of knowing and different areas of knowledge. While there is no examination in this course there are internal and external assessment components. Final assessment is based upon two assignments: a 1200 – 1600 word essay and an oral presentation.

TOK activities and discussions help students to discover and express their views on a variety of topics and to acknowledge and tolerate alternative viewpoints. Connections are also made between the different diploma subjects and distinctions are clarified. Typically the course is taught by more than one teacher to allow students to be exposed to different perspectives and is based on a program outline provided by IB.



Source: https://stevenbarbour.wikispaces.com



## Extended Essay

The Extended Essay is a compulsory component of every student's Diploma program. The aim of the Extended Essay is to teach students the research, organization, and academic writing skills that they will need at university and possibly also in professional life. In many respects, it is similar to an undergraduate thesis in that it allows the student to pursue a course of research in an area of interest to him or her.

This 4,000 word essay is an in-depth study on a topic chosen by the student from one of the subjects they are studying. This course of research is decided upon by the student, in consultation with the supervisor. It must be completed by all IB Diploma students in their own time under the supervision of a qualified teacher at the school. The learning involved in completing the Extended Essay is aligned closely with the characteristics in the IB learner profile making students responsible for their own knowledge acquisition and understanding.

Other points to note:

- The Extended Essay must be no more than 4000 words in length.
- The essay must include proper citation of sources and a comprehensive bibliography.
- Regular reflections should be documented, to complete the Reflections on Planning and progress Form.
- Work on the essay will begin in Semester 2 of Grade 11.
- Students will be expected to carry out independent research in their chosen topic. A large part of the work will be done during the summer holiday between Years 1 and 2 of the IB Diploma Program.
- Each student will have an Extended Essay Supervisor to provide individual support, guidance and subject- specific information. Three reflection sessions will be held by them.
- Parents can support their children by providing them with the means books, periodicals, internet access, etc. to help them complete their essays successfully. Students should become familiar with and make use of the resources at the Library of RWA and/or a university library in the area where they will be during the summer before their final year of IBDP study.
- For successful completion of the Extended Essay, students must meet all deadlines. Extended Essay supervisors will contact parents in the event that these deadlines are not being met.

## Grading of Theory of Knowledge and Extended Essay

Bonus points awarded for TOK are linked to the marks awarded for the Extended Essay. The grading chart is shown below.

IB Diploma candidates should remember that any candidate receiving an E (Elementary) for both TOK and Extended Essay OR no grade for either of these will not be awarded an IB Diploma.

		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	o	Failing condition	Failing condition			
	Grade D	2	1	o	o	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			



## Creativity, Action, Service: CAS

CAS is at the heart of the IB Diploma Program, being one of the three essential elements in every student's Diploma Program experience. Students need to achieve eight learning outcomes by providing evidence and reflections in a Journal to prove that they have done so. To achieve the learning outcomes stipulated they should complete approximately 150 hours (3-4hrs a week) of activities over a minimum of 18 months, with a reasonable balance between creativity, action and service. CAS enables students to enhance their personal and interpersonal development through experiential learning. At the same time it provides an important counterbalance to the academic pressures of the rest of the Diploma Program

Creative pursuits may include, for example, work in music, art or drama. Students whose academic timetable does not allow them to follow music or art courses may nevertheless find opportunities to develop their creative skills through the CAS program. These creative pursuits must have a purpose – such as a performance at the end of the program, or the completion of a collection of poems – to qualify as CAS time.

Active pursuits are intended to keep students fit and physically healthy. While this does include all sports, it also includes activities such as hiking or yoga. The activities must be purposeful. In other words, coaching and organizing a basketball team would be a purposeful, educational experience, as would an organized program of gymnastics; throwing a ball around with some friends would not count as CAS time.

Service, as the name suggests, is helping the community and learning how one can help. Service can take many forms, such as participating in environmental clean--up campaigns or helping disadvantaged members of the community such as the disabled or very old. Some students do service projects in the summer between their two Diploma years. As long as a student is giving his or her time to help others in purposeful way, this can be a valid CAS activity.

It is also important that students themselves become involved in developing the activities they want the school to offer. The school will endeavour to be as flexible as possible and will try to accommodate any valuable proposal. CAS time is the students' time to express themselves.

The CAS Coordinator will monitor all IBDP students to ensure that they complete their CAS programs. The Coordinator oversees the entire CAS program, helping students to find suitable CAS activities, and will be happy to discuss any aspects of the program with students and parents.



## **Coursework**

Starting in the first year of the IBDP course, students will begin to hand in coursework assignments for all their subjects. The need to organise this coursework is crucial. Should students fall behind, they will find it almost impossible to meet all the demands made upon their time. It is important that students:

- 1. Manage their time effectively
- 2. Keep up to date with all assignments
- 3. Always respect coursework deadlines
- 4. Ask the DP Coordinator or their subject teachers for help or guidance should they find that they are unable to manage the workload.

Parents have an important role in helping their children to manage their coursework. Students whose parents are supportive and sympathetic will find the course easier to manage.

All coursework must be submitted by the deadlines published by the DP Coordinator. To help students manage their time, coursework deadlines have been staggered to include part of Grade 11 and most of Grade 12. The deadlines allow students to work through each subject in turn. If a deadline is missed, then a student will not have time to catch up because another assignment will be due. It is, therefore, crucial that the coursework schedule be closely followed.

Coursework deadlines must be respected. Failure to meet deadlines will have serious consequences, which may include students being asked to return home until they have completed assignments, and ultimately, they may be excluded from IBDP examinations.

#### Academic Honesty

All internal assessment or coursework– i.e. work which is submitted to IB as a part of a student's final assessment – must be the student's own, unaided work. If a student allows a tutor, friend, sibling or other family member to help with coursework, then this student's work will be disqualified. The IB is very clear that coursework must be the unaided efforts of the student. Similarly, students who copy the work of others and then try to submit it as their own, are being dishonest and guilty of malpractice.

Students entered for IBDP examinations found guilty of malpractice will be reported to the IB and their coursework will be disqualified. Furthermore, students excluded from IB examinations for reasons of malpractice may, in severe cases, be excluded from all future IB examinations.

Parents who wish to help their children can do so by providing them with the research materials that they need and with the time and space to complete their work undisturbed. The temptation to become involved and to offer advice is understandable, but it is best to allow teachers to provide the guidance that the students need and that can be legitimately offered.

All coursework must be appropriately referenced using the **Harvard Referencing System**. The DP Coordinator will introduce Academic Honesty in the DP to all students in their first year of the program.