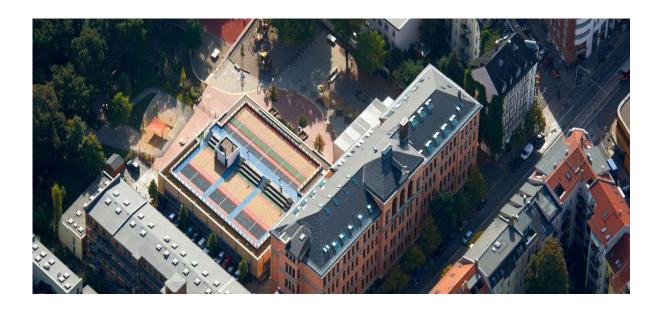
LEIPZIG INTERNATIONAL SCHOOL





Secondary School Curriculum Guide
Grades 11 &12





Table of Contents

SCHOOL MI	SSION AND VISION	2
WHAT IS TH	HE IB DIPLOMA PROGRAMME?	3
Why IB?		4
THE LEARNI	ER PROFILE	5
APPROACH	ES TO TEACHING AND LEARNING	7
EARNING A	N IB DIPLOMA	8
THE VALUE	OF AN IB BILINGUAL DIPLOMA	9
ACADEMIC	HONESTY	. 11
THE CORE C	OF THE DIPLOMA PROGRAMME	. 12
AN OVERVI	EW OF THE SUBJECT DISCIPLINES	. 17
GROUP 1	LANGUAGE A: STUDIES IN LANGUAGE AND LITERATURE	. 17
GROUP 2	LANGUAGE B: LANGUAGE ACQUISITION	22
GROUP 3	INDIVIDUALS AND SOCIETIES	26
GROUP 4	SCIENCES	36
GROUP 5	MATHEMATICS	43
GROUP 6	THE ARTS	46
EXAMINATI	ONS and FEES	. 50
CONTACTS.		.51





SCHOOL MISSION AND VISION

Our Mission

Leipzig international
School is an inclusive
learning community
which empowers and
inspires today's learners
to make meaningful
impacts in tomorrow's
world.

Our Vision

Learning to be a Citizen of the World.

OUR VALUES

COURAGEOUS

- ✓ We have the courage to listen, empathize, persist, follow our passions, and grow.
- ✓ We have the courage of our convictions knowing that we are members of a supportive and respectful learning community.

INCLUSIVE

✓ We embrace diversity by celebrating our common humanity, empowering all learners on their personal journeys of growth.

PROUD

✓ We recognize the unique opportunity we have as members of the LIS community and we enthusiastically embrace our responsibility to make a positive impact on ourselves, each other, and the world.

Our Shared Understanding of High-Quality Learning

At LIS, we believe that high-quality learning is an inclusive process placing students at the heart of their learning experience. Learners are guided along individualised paths fostering curiosity, independence and self-awareness, whilst developing critical thinking skills, adaptability and courage. They take ownership of their learning journey, proudly following their passions to grow and make positive impacts in our world.





WHAT IS THE IB DIPLOMA PROGRAMME?

The International Baccalaureate Diploma Programme (IB DP) is an academically challenging program recognized worldwide.

The DP curriculum consists of six subject groups and a DP core.

Diploma Programme students must choose one subject from each group to study over the course of two years. In addition, all students fulfill the core requirements of the Diploma Programme, which consists of Theory of Knowledge, the Extended Essay and Creativity, Activity and Service.

DP CORE

- ✓ Theory of Knowledge (TOK) is a course in which students reflect on the nature of knowledge and on how we know what we claim to know.
- ✓ The Extended Essay (EE) is an independent, self-directed piece of research, finishing with a 4,000-word paper.
- ✓ CAS are experiences and projects related to creativity, activity and service.

SUBJECT DISCIPLINES

Group 1: Studies in Language and Literature – Language A

Group 2: Language acquisition – Language B / ab initio

Group 3: Individuals and societies

Group 4: Sciences

Group 5: Mathematics

Group 6: The arts

At least three (not more than four) subjects must be studied at Higher Level while the other subjects will be studied at Standard Level.

Higher Level subjects receive 240 hours of learning approximately over two years; Standard Level subjects receive 150 hours of learning.

For some subjects, Higher Level means harder and more extended complexity of material and subject matter; for others, there is merely more to study and slightly tougher assessment criteria (but only commensurate with the additional hours of study).





Why IB?

Reasons

why the IB Diploma Programme (DP) is ideal preparation for university

1



It increases academic opportunity

Research" shows that DP graduates are much more likely to be enrolled at top higher education institutions than entrants holding other qualifications. 2



IB students care about more than just results

Through creativity, action, service (CAS) you learn outside the classroom and develop emotionally and ethically as well as intellectually.

3



It encourages you to become a confident and independent learner

> For example, the extended essay requires independent research through an in-depth study.

6



The IB encourages critical thinking

Learn how to analyse and evaluate issues, generate ideas and consider new perspectives.



Graduates are globally minded

Language classes encourage an international mindset, key for increasingly globalized societies.





It's an international qualification

The DP is recognized globally by universities and employers

7



DP students have proven time management skills

Take good study habits and strong time management to further education and the working world. 9



Subjects are not taught in isolation

Theory of knowledge (TOK) classes encourage you to make connections between subjects. 10



It encourages breadth and depth of learning

fou are able to choose courses from six subject groups and study subjects at different levels.

It assesses more than examination techniques

> Learn to understand, not just memorize facts or topics and prepare for exams.

*Based on IB research - www.ibo.org/research

o international Parcalaumate Organization 2014 International Parcalaumate* | Parcalaumate International* | Pachillerate Internacional







THE LEARNER PROFILE

The IB learner prole represents 10 attributes valued by IB World Schools. We believe these attributes, and others like them, can help individuals and groups become responsible members of local, national and global communities.

We expect that IB teachers and student are familiar with the 10 traits and refer to these attributes when communicating in and outside the classroom, so it becomes part of conversations, as teachers guide and educate students to become lifelong learners.



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.

KNOWLEDAGBLE:

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 everywhere. 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 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 recognize 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.



APPROACHES TO TEACHING AND LEARNING

Approaches to Teaching and Learning (ATL) are deliberate strategies, skills and attributes that permeate IB teaching and learning environment. The focus on the ATLs will improve the quality of teaching and learning.

LEARNING:

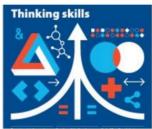
In order to develop successful IB learners we must not only focus on what students learn but also how they learn. Teaching these skills will support the students in understanding how they learn best.

TEACHING:

There are six key pedagogical principles that underpin all IB programmes. Teaching in IB programmes is:

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















EARNING AN IB DIPLOMA

- ✓ Students take <u>written examinations</u> at the end of the programme (in May of Grade 12), which are marked by external IB examiners (external assessment). Students <u>also complete</u> <u>assessment tasks in the school, which are either initially marked by teachers</u> (internal assessment) and then moderated by external moderators or sent directly to external examiners.
- ✓ <u>Assessment is criterion-related</u>, which means student performance is measured against prespecified assessment criteria based on the aims and objectives of each subject curriculum, rather than the performance of other students taking the same examinations.
- ✓ The <u>marks awarded</u> for each course range <u>from 1 (lowest) to 7 (highest)</u>. Students can also be awarded up to three additional points for their combined results on theory of knowledge (TOK) and the extended essay (EE).
- ✓ CAS the remaining element in the DP core does not contribute to the points total but authenticated participation is a requirement for the award of the diploma.
- ✓ The <u>diploma</u> is awarded to students who gain <u>at least 24 points</u>, subject to certain minimum levels of performance across the whole programme and to satisfactory participation in the creativity, action, service requirement.

The highest total that a Diploma Programme student can be awarded is 45 points. Students must score a minimum of 12 points in HL subjects and 9 points in SL subjects.

Students cannot gain less than grade D in both EE and TOK.





THE VALUE OF AN IB BILINGUAL DIPLOMA

Students will receive a Bilingual IB diploma if they study two languages from the Group 1, Studies in Language and Literature, and achieve grade 3 or higher in both.

Students who gain a grade 3 or higher in one Language and Literature course and a grade 3 or higher in an individuals and society subject, completed in a different language will also receive the bilingual diploma.

The Bilingual diploma...

- ✓ fits well with the nature of the school, as we strive to empower students to become citizens of the world.
- ✓ Bilingualism drives cultural understanding in an increasingly global environment, which is also in line with LIS's philosophy.
- ✓ Being bilingual and multilingual offers specific cognitive benefits.
- ✓ provides advantages to future education (e.g., earning college credit or plans to study abroad)





IB DIPLOMA RECOGNITION AND QUALIFICATION

There is an agreement with the KMK that recognises the IB Diploma results with a conversion to a German Abitur.

As long as certain criteria are met and the paperwork is submitted in good time, this conversion occurs for all students who choose to fulfil it.

In order to qualify for a *Hochschulzugangsberechtigung* (HZB), the following criteria needs to be met:

- ✓ A study of a first and a second language;
- ✓ If a second language is studied (i.e. the student is not studying two Language A courses), the Language B must be at Higher Level;
- ✓ Either mathematics or a natural or experimental science must be studied at Higher Level (note, this is not a requirement of IBO, but is a requirement for the HZB);
- ✓ Note, the Environmental Systems & Societies course (a Group 3 & Group 4 hybrid course) is not HZB-recognised. This subject is currently not offered at LIS.
- ✓ No more than one Level 3, and no grade lower than Level 3;
- ✓ All courses must be studied for two years consecutively.

Should you have any questions or concerns, it is imperative that you speak to the Beyond LIS team, IB Coordinator, or the Assistant Principals or Principal before finalising your subject choices.

More information about the agreement between IB and KMK can be found <u>here</u>.





ACADEMIC HONESTY

During the two-year IB course, much work will be completed for formative and summative assessments and for learning development (see LIS Assessment Handbook) alongside submitted coursework assessments, and thus an understanding of Academic Honesty is crucial:

It is the policy of Leipzig International School that:

- All students understand the basic meaning and significance of academic honesty;
- All work produced by students is their own, authentic work;
- All such authentic work has the ideas and words of others fully acknowledged;
- Students understand and obey the rules relating to proper conduct in examinations;
- Students understand the difference between collaboration and collusion, and that it is unacceptable to present work arrived at through a process of collusion;
- The policy refers to all assignments set and completed in school or at home, ranging from basic pieces of homework to formal assessments required by Cambridge and the IBO.

What is 'Academic Honesty'?

- The production of 'authentic' pieces of work;
- Proper conduct in relation to the conduct of examinations;
- The full acknowledgement of the original authorship and ownership of creative material;
- The protection of all forms of intellectual property which include forms of intellectual and creative expression, as well as patents, registered designs, trademarks, moral rights and copyright.

Anything else is called 'Malpractice':

- Malpractice is behaviour that results in, or may result in the candidate or any other candidate gaining an unfair advantage in one or more assessment component;
- Examples include: collusion; plagiarism; inadvertent, inaccurate accreditation and citation.





THE CORE OF THE DIPLOMA PROGRAMME

The Diploma Programme is made up of the 6 subject disciplines and the required DP core. The core are 3 required components that aim to broaden the student's educational experience, stimulate critical thinking and challenges them to apply their knowledge and skills.

THEORY OF KNOWLEDGE

Overview of the course

In TOK, students reflect on the knowledge, beliefs and opinions that they have built up from their years of academic studies and their lives outside the classroom. The course is intended to be challenging and thought-provoking—as well as empowering—for students.

What TOK is not:

- It is *not a philosophy class*, though there will be times when we touch on how thinkers in the past have explored knowledge questions. Critical thinking is common to both philosophy and TOK.
- It is *not a debating society*. The intent in the design of the inquiries in class is to explore questions and examine multiple perspectives, not to try to prove ourselves right and wrong.
- It is *not a course without a curriculum*. On the one hand, the curriculum is YOU, the knower. On the another hand the **curriculum** is made up of three deeply interconnected parts:
 - The core theme—Knowledge and the knower: This theme encourages students to reflect on themselves as knowers and thinkers, and to consider the different communities of knowers to which we belong.
 - 2. Optional themes: This element provides an opportunity to take a more in-depth look at two themes of particular interest to teachers and students. The given themes all have a significant impact on the world today and play a key role in shaping people's perspectives and identities. Teachers select two optional themes from a choice of five: knowledge and technology; knowledge and language; knowledge and politics; knowledge and religion; and knowledge and indigenous societies.
 - 3. **Areas of knowledge:** The areas of knowledge (AOK) are specific branches of knowledge, each of which can be seen to have a distinct nature and sometimes use different methods of gaining knowledge. In TOK, students explore five compulsory areas of knowledge: history; the human sciences; the natural sciences; mathematics; and the arts.

To help teachers and students explore these three parts of the TOK curriculum, guidance and suggested **knowledge questions** are provided. These suggested knowledge questions are organized into a **framework of four elements: scope, perspectives, methods and tools, and ethics.** This "knowledge framework" encourages a deep exploration of each theme and AOK. Having these common elements run throughout the different parts of the curriculum also helps to unify the course





and helps students to make effective connections and comparisons across the different themes and areas of knowledge.

<u>Assessment</u>

There are two assessment tasks in the TOK course:

- 1. The **TOK exhibition** assesses the ability of the student to show how TOK manifests in the world around us. The exhibition is an internal assessment component; it is marked by the teacher and is externally moderated by the IB. (counts for 1/3 of the grade)
- 2. The **TOK essay** engages students in a more formal and sustained piece of writing in response to a title focused on the areas of knowledge. The essay is an external assessment component; it is marked by IB examiners. The essay must be a maximum of 1,600 words and must be on one of the six prescribed titles issued by the IB for each examination session. (counts for 2/3 of the grade)

EXTENDED ESSAY

Overview

The extended essay or EE is "an in-depth study of a focused topic chosen from the list of approved diploma subjects, normally one of the student's six chosen subjects for the IB diploma. It is intended to promote high level research and writing skills, intellectual discovery and creativity. It provides the students with an opportunity to engage in personal research in a topic of their own choice, under the guidance of a supervisor (a teacher at school). This leads to a major piece of formally presented, structured writing in which ideas and findings are communicated in a reasoned and coherent manner, appropriate to the subject chosen." (Extended essay guide, p. 5)

The essay is no longer than 4000 words. A good minimum is 3500.

The students are guided through this research process in the IB work study class, which meets once a week during junior and senior year.

Some examples

"The effects of sugar-free chewing gum on the pH of saliva in the mouth after a meal."

"To what extent has the fall in the exchange rate of the US dollar affected the tourist industry in Carmel, California?"

"How does Piaget's theory of developmental stages of learning provide for a defense of art education in public schools?"





<u>Assessment</u>

An IB examiner externally assesses the EE (total marks = 34).

NOTE: Assessment TOK + EE

Theory of Knowledge (TOK) and the Extended Essay (EE) are required elements for the IB Diploma. A student <u>must pass</u> TOK and the EE in order to earn the IB diploma. Students can earn up to **three** additional points for their combined results on TOK and EE, as demonstrated in the following matrix.

The diploma points matrix

May 2015 onwards

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





CREATIVITY, ACTIVITY, SERVICE

In CAS, the student is involved in a range of activities alongside their academic studies. It forms a counterbalance to the academic pressures of the program.

In CAS, students learn through experience. It gives them the opportunity to take initiative, collaborate with others, and foster a sense of accomplishment and enjoyment of their own work.

Overview

There are three strands of CAS:

Creativity: arts, and other experiences that involve creative thinking.

Activity: physical exertion contributing to a healthy lifestyle

Service: an unpaid and voluntary exchange that has a learning benefit for the student.

In order to demonstrate these concepts, students are required to undertake a CAS Project. The project challenges students to: show initiative, demonstrate perseverance, and develop skills such as collaboration, problem solving and decision making.

<u>Assessment</u>

CAS is not formally assessed. However, students reflect on their CAS experiences and provide evidence of achieving eight learning outcomes for CAS.

- Increased awareness of strengths and areas for growth
- Undertaking new challenges
- Planned and initiated activities
- Working collaboratively with others
- Showing perseverance and commitment
- Engaged with issues of global importance
- Consideration of ethical implications
- Developing new skills

The CAS activities and reflections are recoded on an online tool called ManageBac.





SUBJECTS OFFERED IN THE IB DIPLOMA PROGRAMME AT LIS

Group 1: Studies in Language and Literature (language A)*	 English Literature SL / HL English Language and Literature SL / HL German Literature SL / HL German Language and Literature SL / HL Self-Taught Literature SL
Group 2: Language Acquisition (Language B – ab initio)*	 English B HL German B HL Spanish B HL French B HL
Group 3: Individual and societies	 Business Management SL / HL Geography SL/ HL History SL/ HL Economics SL / HL Psychology SL / HL
Group 4: Sciences	 Biology SL / HL Chemistry SL / HL Physics SL / HL Computer science SL / HL
Group 5: Mathematics	 Math Analysis and Approaches SL / HL Math Applications and Interpretations SL / HL
Group 6: The Arts	Visual arts SL / HLMusic SL / HL

^{*}We, as a school, place for language level based on suitable challenge. It is not a choice.

WHEN MAKING IB SUBJECT SELECTIONS YOU SHOULD CONSIDER:

- ✓ How interested are you in the subjects?
- ✓ What do you want to study at university? Are there any university prerequisites (e.g. do you need a specific subject at HL?)
- ✓ Which subjects will you take at Higher Level? Remember you need to gain minimum grade 4 in each HL subject.
- ✓ What advice have you received from your teachers and others who know you well?
- ✓ Have you scheduled a meeting with the guidance counselor?

√





AN OVERVIEW OF THE SUBJECT DISCIPLINES

GROUP 1 LANGUAGE A: STUDIES IN LANGUAGE AND LITERATURE

In Language A, students are expected to develop their proficiency, fluency and linguistic range, and in particular to acquire the vocabulary appropriate to the analysis of texts. They will also deepen their understanding of a wide variety of concepts explored through literary and non-literary texts in order to interpret, analyse, evaluate and then communicate this understanding in clear, organized and developed products.

As well as the development of the relevant skills, both courses are divided into three areas of exploration—the exploration of the nature of the interactions between readers, writers and texts; the exploration of how texts interact with time and space; and the exploration of intertextuality and how texts connect with each other. Within this framework, each course has its own emphases.

Language A: literature

Students will focus exclusively on literary texts, adopting a variety of approaches to textual criticism. Students explore the nature of literature, the aesthetic function of literary language and literary textuality, and the relationship between literature and the world.

Language A: language and literature

In this course, students study a wide range of literary and non-literary texts in a variety of media. By examining communicative acts across literary form and textual type alongside appropriate secondary readings, students will investigate the nature of language itself and the ways in which it shapes and is influenced by identity and culture. Approaches to study in the course are meant to be wide ranging and can include literary theory, sociolinguistics, media studies and critical discourse analysis among others.

LITERATURE (HL and SL)

Overview of the course

In the literature course, students will learn about the various **manifestations of literature** as a powerful mode of **writing across cultures and throughout history**. They will explore and develop an understanding of factors that contribute to the production and reception of literature, such as:

- the creativity of writers and readers
- the nature of the interaction with the writers' and readers' respective contexts and with literary tradition





- the ways in which language can give rise to meaning and/or effect
- the performative and transformative potential of literary creation and response.

Through close analysis of literary texts in a number of forms and from different times and places, students will consider their own interpretations, as well as the critical perspectives of others. In turn, this will encourage the exploration of how viewpoints are shaped by cultural belief systems and how meanings are negotiated within them. Students will be involved in processes of critical response and creative production, which will help shape their awareness of how texts work to influence the reader and how readers open up the possibilities of texts. With its focus on literature, this course is particularly concerned with developing sensitivity to aesthetic uses of language and empowering students to consider the ways in which literature represents and constructs the world and social and cultural identities.

The course is structured around three areas of exploration

Readers, writers and texts

Works are chosen from a variety of literary forms. The study of the works could focus on the relationships between literary texts, readers and writers as well as the nature of literature and its study. This study includes the investigation of the response of readers and the ways in which literary texts generate meaning. The focus is on the development of personal and critical responses to the particulars of literary texts.

Time and space

Works are chosen to reflect a range of historical and/or cultural perspectives. Their study focuses on the contexts of literary texts and the variety of ways literary texts might both reflect and shape society at large. The focus is on the consideration of personal and cultural perspectives, the development of broader perspectives, and an awareness of the ways in which context is tied to meaning.

Intertextuality: Connecting texts

Works are chosen so as to provide students with an opportunity to extend their study and make fruitful comparisons. Their study focuses on intertextual relationships between literary texts with possibilities to explore various topics, thematic concerns, generic conventions, literary forms or literary traditions that have been introduced throughout the course. The focus is on the development of critical response grounded in an understanding of the complex relationships among literary texts.





<u>Difference between SL and HL</u>

At standard level (SL), at least 9 works must be studied across the three areas of exploration while at higher level (HL), at least 13 works must be studied.

The IB has created an extensive Prescribed reading list of authors in a wide range of languages to accompany studies in language and literature courses. In selecting works, teachers should achieve a balance between literary form, period and place: works must cover three literary forms, three periods and three countries or regions (as defined on the Prescribed reading list) in at least two continents.

<u>Assessment</u>

Typical of most IB courses, student work is assessed both externally and internally.

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TIME		Weigh final g	ting of
External		SL	HL	SL 70%	HL 80%
Paper 1	Guided literary analysis (SL / HL) The paper consists of two passages from two different literary forms, each accompanied by a question. SL: Students choose one passage and write an analysis of it. HL: Students write an analysis of each of the passages.	1h 15 min 2h 15min		35	35
Paper 2	Comparative essay (SL / HL The paper consists of four general questions. In response to one question, students write a comparative essay based on two works studied in the course.	1h 45 min	1h 45min	35	25
Essay	Higher level (HL) essay Students submit an essay on one literary text or work studied during the course. The essay must be 1,200–1,500 words in length.				20
Internal	,			30%	20%
Oral work	Individual oral Supported by an extract from one work written originally in the language studied and one from a work studied in translation, students will offer a prepared response of 10 minutes, followed by 5 minutes of questions by the teacher, to the following prompt: Examine the ways in which the global issue of your choice is presented through the content and form of two of the works that you have studied.	15 min		30	20





LANGUAGE AND LITERATURE (HL and SL)

Overview of the course

In the language and literature course students will explore the crucial role language plays in communication, reflecting experience and shaping the world. Students will also learn about their own roles as producers of language and develop their productive skills. Throughout the course, students will explore the various ways in which language choices, text types, literary forms and contextual elements all effect meaning. Through close analysis of various text types and literary forms, students will consider their own interpretations, as well as the critical perspectives of others, to explore how such positions are shaped by cultural belief systems and to negotiate meanings for texts. Students will engage in activities that involve them in the process of production and help shape their critical awareness of how texts and their associated visual and audio elements work together to influence the audience/reader and how audiences/readers open up the possibilities of texts. With its focus on a wide variety of communicative acts, the course is meant to develop sensitivity to the foundational nature, and pervasive influence, of language in the world at large.

The course is structured around three areas of exploration

Readers, writers and texts

Non-literary texts are chosen from a variety of sources and media to represent as wide a range of text types as possible, and works are chosen from a variety of literary forms. The study of the non-literary texts and works focuses on the nature of language and communication and the nature of literature and its study. This study includes the investigation of how texts themselves operate as well as the contexts and complexities of production and reception. Focus is on the development of personal and critical responses to the particulars of communication.

Time and space

Non-literary texts and literary works are chosen from a variety of sources, literary forms and media that reflect a range of historical and/or cultural perspectives. Their study focuses on the contexts of language use and the variety of ways literary and non-literary texts might both reflect and shape society at large. The focus is on the consideration of personal and cultural perspectives, the development of broader perspectives, and an awareness of the ways in which context is tied to meaning.

Intertextuality: connecting texts

Non-literary texts and literary works are chosen from a variety of sources, literary forms and media in a way that allows students an opportunity to extend their study and make fruitful comparisons. Their study focuses on intertextual relationships with possibilities to explore various topics, thematic concerns, generic conventions, modes or literary traditions that have been introduced throughout the





course. The focus is on the development of critical response grounded in an understanding of the complex relationships among texts.

Difference between SL and HL

Each area of exploration must involve the study of both literary works (4 for SL and 6 for HL) and non-literary texts, with equal time devoted to the study of each. Texts and works must be chosen from a variety of cultures and languages. In selecting them, teachers should attempt to achieve a balance in relation to text-type, literary form, period and place.

Assessment

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TIME	TIME		ting I
External				70%	80%
Paper 1	Guided textual analysis (SL / HL) The paper consists of two non-literary passages, from two different text types, each accompanied by a question. SL: Students choose one passage and write an analysis of it. HL: Students write an analysis of each of the passages.	1h 15min	2h 15min	35	30
Paper 2	Comparative essay (SL / HL) The paper consists of four general questions. In response to one question students write a comparative essay based on two works studied in the course.	1h 45min	1h 45min	35	25
Essay	HL essay Students submit an essay on one non-literary text or a collection of non-literary texts by one same author, or a literary text or work studied during the course. The essay must be 1,200-1,500 words in length.				20
Internal	, , ,			30%	20%
Oral work	Individual oral Supported by an extract from one non-literary text and one from a literary work, students will offer a prepared response of 10 minutes, followed by 5 minutes of questions by the teacher, to the following prompt: Examine the ways in which the global issue of your choice is presented through the content and form of two of the texts that you have studied.	15	min	30	20





GROUP 2 LANGUAGE B: LANGUAGE ACQUISITION

LANGUAGE B (HL and SL)

Overview of the course

In the language B course, students develop the ability to communicate in the target language through the study of language, themes and texts.

The study of language requires careful attention to forms, structures, functions and conceptual understandings of language. Knowledge of vocabulary and grammar—the what of language—is reinforced and extended by understanding the why and how of language: audience, context, purpose, meaning. Students expand the range of their communication skills by understanding and producing a wide variety of oral and written texts for audiences, contexts and purposes associated with academic and personal interests.

For the **development of receptive skills**, language B students must study authentic texts that explore the culture(s) of the target language. In addition, the study of two literary works is required at HL.

A key aim of the language B course is to develop international-mindedness through the study of language, culture, and ideas and issues of global significance.

The five prescribed themes and recommended topics are:

Themes	Guiding principle	Recommended topics
Identities	Explore the nature of the self and what it is to	Lifestyles
	be human.	Health and wellbeing
		Beliefs and values
		Subcultures
		Language and identity
Experiences	Explore and tell the stories of the events,	Leisure activities
	experiences and journeys that shape our lives.	Holidays and travel
		Life stories
		Rites of passage
		 Customs and traditions
		Migration
Human ingenuity	Explore the ways in which human creativity and	Entertainment
	innovation affect our world.	Artistic expressions
		 Communication and media
		Technology
		Scientific innovation
Social organization	Explore the ways in which groups of people	Social relationships
	organize themselves, or are organized, through	Community
	common systems or interests.	Social engagement
		Education
		The working world
		Law and order



Sharing the planet	Explore the challenges and opportunities faced	The environment
	by individuals and communities in the modern	Human rights
	world.	Peace and conflict
		Equality
		Globalization
		• Ethics
		Urban and rural environment

<u>Difference between HL and SL</u>

At both levels of language B (SL and HL), students learn to communicate in the target language in familiar and unfamiliar contexts. They describe situations, narrate events, make comparisons, explain problems, and state and support their personal opinions on a variety of topics relating to course content.

The distinction between language B SL and HL can also be seen in the level of competency the student is expected to develop in the receptive, productive and interactive skills described below.

The study of two literary works originally written in the target language is required only at language B HL.

	SL	HL		
Receptive	Students understand a range of written and	Students understand and evaluate a wide		
	spoken authentic personal, professional and	variety of written and spoken authentic		
	mass media texts on topics of interest. They	personal, professional and mass media texts;		
	understand descriptions of events, feelings	they understand fundamental elements of		
	and wishes; they understand comparisons	literary texts such as theme, plot and		
	and recognize a straightforward, linear	character. They analyse arguments,		
	argument. They use context to deduce the	distinguishing main points from relevant		
	meaning of sentences and unknown words supporting details and explanations. T			
	and phrases.	a variety of strategies to deduce meaning.		
Productive	Students write texts for a variety of	Students present and develop their ideas and		
	purposes and make oral presentations on	opinions on a variety of topics, both orally		
	topics of interest. They write descriptive	and in writing. They construct and support		
	texts and personal correspondence; they	arguments with explanations and examples.		
	make comparisons, narrate stories, provide	They speak and write at length, and with		
	detailed accounts, and express their	purpose, in order to meet a wide range of		
	thoughts and opinions on abstract or cultural	communicative needs: describing, narrating,		
	topics.	comparing, explaining, persuading,		
		justifying, evaluating.		
Interactive	Students initiate and maintain the flow of	Students initiate, maintain and close oral		
	conversations and discussions. They express	exchanges, displaying some ability to make		
	and respond to opinions and feelings on a	adjustments in style or emphasis. They use a		
	variety of topics. They use and understand	variety of strategies to maintain the flow of		



clear speech on a variety of topics relating to course content and the culture(s) of the target language. Students use a variety of strategies to negotiate meaning and foster communication.

conversations and discussions on a variety of topics relating to course content and the culture(s) of the target language. Students are adept in negotiating meaning and fostering communication.

<u>Assessment</u>

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TIME		Weighting of final grade
External		SL	HL	75%
Paper 1	Productive skills (SL / HL) One writing task from a choice of three, each from a different theme, choosing a text type from among those listed in the examination instructions. SL: 250–400 words HL: 450–600 words		25	
Paper 2	Receptive skills (SL / HL) Comprehension exercises on three audio passages and three written texts, drawn from all five themes. • Listening comprehension SL: 45 min HL: 1h • Reading comprehension SL: 1h HL: 1h	1h 45 min	2h	50
Internal				25%
Oral work	Individual oral A conversation with the teacher SL: based on a visual stimulus, followed by discussion based on an additional theme. HL: based on an extract from one of the literary works studied in class, followed by discussion based on one or more of the themes from the syllabus.	12-1	5 min	25



LANGUAGE AB INITIO

Language ab initio is a language acquisition course designed for students with no prior experience of the target language, or for those students with very limited previous exposure.

At the language ab initio level, a student develops receptive, productive and interactive communicative skills. Students learn to communicate in the target language in familiar and unfamiliar contexts.

There are **five prescribed themes** and because a structured learning environment is crucial for the success of beginning language learners, the language ab initio syllabus **prescribes four topics** for each of the five prescribed themes.

- Identities: Personal attributes, Personal relationships, Eating and drinking, Physical wellbeing
- Experiences: Daily routine, Leisure, Holidays, Festivals and celebrations
- Human ingenuity: Transport, Entertainment, Media, Technology
- Social organization: Neighborhood, Education, The workplace, Social issues
- Sharing the planet: Climate, Physical geography, The environment, Global issues

Assessment

Language ab initio is available at SL only.

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TIME	Weighting of final grade
External			75%
Paper 1	Productive skills	1h 30 min	25
	Two written tasks of 70–150 words each from a choice		
	of three tasks, choosing a text type for each task from		
	among those listed in the examination instructions.		
Paper 2	Receptive skills	1h 30 min	50
	 Listening comprehension (45 min) 		
	 Reading comprehension (1h) 		
	Comprehension exercises on three audio passages		
	and three written texts, drawn from all five themes.		
Internal			25%
Oral work	Individual oral assessment	7- 10 min	25
	A conversation with the teacher, based on a visual		
	stimulus and at least one additional course theme.		





GROUP 3 INDIVIDUALS AND SOCIETIES

BUSINESS MANAGEMENT (HL and SL)

Overview of the course

This course is designed to meet the current and future needs of students who want to develop their knowledge of business content, concepts and tools to assist with business decision-making.

Through the exploration of four interdisciplinary concepts—creativity, change, ethics and sustainability—this course empowers students to explore these concepts from a business perspective. Business management focuses on business functions, management processes and decision-making in contemporary contexts of strategic uncertainty.

Students examine how business decisions are influenced by factors that are internal and external to an organization and how these decisions impact upon a range of internal and external stakeholders. Emphasis is placed on strategic decision-making and the operational business functions of human resource management, finance and accounts, marketing, and operations management.

The business management course encourages the application of local, national and global examples to content and concepts through the various internal and external assessments.

Difference between HL and SL

Like all the other subjects in IB, the SL course in business management covers 150h of teaching, compared to the 240h for HL. HL requires extra depth and breadth, which is covered in specific extension material for HL only, such as organizational culture, budgets, sales forecasting, management information systems, only to name a few.

Paper 2 for both SL and HL focuses on developing quantitative skills; however, HL students will need to develop these further in greater depth.

Paper 3 is an HL-only paper based on a social enterprise, where students identify and describe a human need and the potential organizational challenges facing the social entrepreneur. Further to this, students are required to write a decision-making document that includes a business recommendation.





<u>Assessment</u>

TYPE OF ASSESSMENT	FORMAT OF	ASSESSMENT	TII	ME	Weigh final g	nting of grade
External	SL	HL	SL	HL	SL 70%	HL 80%
Paper 1 (SL/HL)	Based on a pre-released statemer background for the unseen case s	· · · · · · · · · · · · · · · · · · ·	1h 30) min	35	25
	Section A: Syllabus content: Units topics. Students answer all structubased on the case study (20 marks Section B: Syllabus content: Units topics. Students answer one out o questions based on the case study	red questions in this section s) 1–5 excluding HL extension f two extended response				
Paper 2 (SL/HL)	Based on the unseen stimulus ma Section A: Syllabus content: Units 1–5 excluding HL extension topics. Students answer all structured questions		1h 30min	1h 45min	35	30
	in this section based on the unseen stimulus material (20 marks)	section based on the unseen stimulus material (30 marks)				
	Section B: Syllabus content: Units 1–5 excluding HL extension topics. Students answer one out of two questions comprised of some structured questions and an extended response question based on the unseen stimulus material (20 marks)	Section B: Syllabus content: Units 1–5 including HL extension topics. Students answer one out of two questions comprised of some structured questions and an extended response question based on the unseen stimulus material (20 marks)				
Paper 3 (HL only)		Based on unseen stimulus material about a social enterprise.	-	1h 15min	-	25
		Syllabus content: Unit 1–5 including HL extension topics. Students answer one compulsory question based on the unseen stimulus material (25 marks)				
Internal					25%	20%
Business research project	Students produce a research proje problem facing a particular organi Maximum 1,800 words. (25 marks	zation using a conceptual lens.				



GEOGRAPHY (HL and SL)

Overview of the course

Within individuals and societies subjects, geography is distinctive in its spatial dimension and occupies a middle ground between social or human sciences and natural sciences. The Diploma Programme geography course integrates physical, environmental and human geography, and ensures that students acquire elements of both socio-economic and scientific methodologies.

Geography is a dynamic subject that is firmly grounded in the real world and focuses on the interactions between individuals, societies and physical processes in both time and space. The core theme provides an overview of the geographic foundation for the key global issues of our time. The purpose is to provide a broad factual and conceptual introduction to the geography of population dynamics, climate change and resource consumption issues. Through these concepts students investigate the way in which people adapt and respond to change, and evaluates actual and possible management strategies associated with such change.

Geography describes and helps to explain the similarities and differences between different places. Examining concepts and ideas from a wide variety of disciplines helps students develop life skills and have an appreciation of, and a respect for, alternative approaches, viewpoints and ideas.

Difference between HL and SL

Although the skills and activity of studying geography are common to both SL and HL students, HL students are required to acquire a further body of knowledge, to demonstrate critical evaluation and to further synthesize the concepts in the HL extension.

- Both SL and HL students study the core geographic perspectives—global change.
- Both SL and HL students complete a fieldwork study for the internal assessment.
- SL students study two optional themes, which are "Urban Environments" and "Food and Health"; HL students study those themes as well, and an additional third optional "Hazards", providing further breadth.
- HL students study the HL extension geographic perspectives—global interactions, and further
 examine, evaluate and synthesize the prescribed concepts, which by their nature are
 complex, contestable, interlinked and require holistic treatment. This provides further depth
 at HL.





<u>Assessment</u>

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT			ME	Weigh final g	ting of rade
External	SL HL SL HL				SL 75%	HL 80%
Paper 1	Each option has a structured q	uestion and one extended	1h	2h	35	35
(SL/HL)	answer question from a choice	e of two.	30min	15min		
Paper 2	Three structured questions, ba	ased on each SL/HL core unit.	1h 1	5min	40	25
(SL/HL)	Infographic or visual stimulus,	with structured questions.	th structured questions.			
	One extended answer questio	One extended answer question from a choice of two.				
Paper 3	-	Choice of three extended	-	1h		20
(HL only)		answer questions, with two				
		parts, based on each HL core				
		extension unit.				
Internal					25%	20%
Fieldwork	One written report based on a fieldwork question from any					
	suitable syllabus topic, information.					



HISTORY: 20TH CENTURY WORLD HISTORY (HL and SL)

Overview of the course

History is a dynamic, evidence-based discipline that involves an engagement with the past. It is the process of recording, reconstructing, investigating and interpreting the past through the investigation of sources. It is a rigorous intellectual discipline, focused around **6 key concepts: change, continuity, causation, consequence, significance and perspectives.**

The syllabus has a common core consisting of **5 prescribed subjects** and **12 topics in world history**. Studying history develops an understanding, and demands a critical exploration of the past, which leads to a deeper understanding of the nature of humans and of the world today. The IB history course is a world history course based on a comparative and multi-perspective approach to history. The course promotes international-mindedness through the study of history from more than one region of the world.

Difference between HL and SL

Students at standard level (SL) and higher level (HL) are presented with a syllabus that has a common core consisting of prescribed subjects and topics in world history. In addition, students at HL are also required to undertake an in-depth study of three sections from one of the HL regional options. While many of the skills of studying history are common to both SL and HL, the difference in recommended teaching hours at SL and HL signals a clear distinction between the demands made on students, with the greater depth of study required for HL.

Assessment

Student work is assessed both externally (assessed by IB examiners) and internally (marked by teachers and externally moderated by the IB).





TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT		TIME		Weighting of final grade	
External	SL	HL	SL	HL	SL 75%	HL 80%
Paper 1	Source-based paper based on the five prescribed subjects.			1h	30	20
(SL/HL)	Choose one prescribed subject from a choice of five.					
	Answer for	ur structured questions.				
Paper 2	Essay paper based on the 12 world history topics.		1h	30min	45	25
(SL/HL)	Answer two essay questions on two different topics.					
Paper 3		Separate papers for each of the four		2h 30min		35
(HL only)		regional options. For the selected				
		region, answer three essay				
		questions.				
Internal					25%	20%
Historical	Students are required to complete a historical investigation into					
investigation	a topic of their choice.					



ECONOMICS (HL and SL)

Overview of the course

Economics is an exciting, dynamic subject that allows students to develop an understanding of the complexities and interdependence of economic activities in a rapidly changing world.

At the heart of economic theory is the problem of scarcity. While the world's population has unlimited needs and wants, there are limited resources to satisfy these needs and wants. As a result of this scarcity, choices have to be made. The economics course, at both SL and HL, uses economic theories to examine the ways in which these choices are made:

- at the level of producers and consumers in individual markets = microeconomics
- at the level of the government and the national economy = macroeconomics
- at an international level where countries are becoming increasingly interdependent through international trade and the movement of labour and capital = the global economy.

The choices made by economic agents (consumers, producers and governments) generate positive and negative outcomes and these outcomes affect the relative well-being of individuals and societies. As a social science, economics examines these choices through the use of models and theories.

Given the rapidly changing world, economic activity and its outcomes are constantly in flux. Therefore, students are encouraged, throughout the course, to research current real-world issues. Through their own inquiry, it is expected that students will be able to appreciate both the values and limitations of economic models in explaining real-world economic behaviour and outcomes.

By focusing on the six real-world issues through the nine key concepts (scarcity, choice, efficiency, equity, economic well-being, sustainability, change, interdependence and intervention), students of the economics course will develop the knowledge, skills, values and attitudes that will encourage them to act responsibly as global citizens.

Difference between HL and SL

The skills and activity of studying economics are common to both SL and HL students.

When it comes down to examinations, the HL student is required to acquire an ability to analyze, synthesize and evaluate that knowledge—and to develop quantitative skills in order to explain and analyze economic relationships, in order to provide informed policy advice. These skills are specifically assessed in HL paper 3.





<u>Assessment</u>

Typical of most IB courses, student work is assessed both externally (assessed by IB examiners) and internally (marked by teachers and externally moderated by the IB).

TYPE OF	FORMAT OF ASSESSMENT	TIME Wei		Weigh	eighting of	
ASSESSMENT				final grade		
External		SL	HL	SL	HL	
				70%	80%	
Paper 1	An extended response paper	1h 15 min		30	20	
(SL/HL)	Students answer one question from a choice of three.					
Paper 2	A data response paper	1h 45 min		40	30	
(SL/HL)	Students answer one question from a choice of two.					
Paper 3	Policy paper		1h		30	
(HL only)	Students answer two compulsory questions. Includes both		45min			
	quantitative and qualitative questions.					
Internal				30%	20%	
Portfolio	Students produce a portfolio of three commentaries (800			30	20	
	words each), based on different sections of the syllabus					
	and on published extracts from the news media.					
	Each of the three commentaries should use a different key					
	concept as a lens through which to analyze the published					
	extracts.					





PSYCHOLOGY (HL and SL)

Overview of the course

The IB Psychology course is the systematic study of behavior and mental processes. The core of the course examines the interaction of biological, cognitive and sociocultural influences on human behavior.

The biological approach to understanding behavior will look at a human being at its most basic level, e.g. nervous system, endocrine system, the brain, etc. and how anatomy and physiology affects behavior.

The cognitive approach will explore e.g. memory, perception, the link cognition and emotions, etc. The sociocultural approach will explore concepts such as social norms, social identity, stereotypes, conformity, etc.

Whereas the core provides a foundation and broad overview of psychology, the options (abnormal psychology, developmental psychology, health psychology and the psychology of human relationships), allow students the opportunity to study a specialized area of psychology in depth (including empirical studies and theories).

The methodology and application of psychological research (qualitative and quantitative) are also key considerations of the IB psychology course. Ethical considerations are also paramount to the nature of the subject.

Students taking the course can expect to develop an understanding of how psychological knowledge is generated, developed and applied. This will allow them to have a greater understanding of themselves and appreciate the diversity of human behavior.

Difference between HL and SL

- Both SL and HL students are assessed on the syllabus core, the approaches to behavior.
 HL students will also study extensions to the core: role of animal research in understanding
 human behavior, cognitive processing in the digital world, the influence of globalization on
 individual attitudes, identities and behavior. These differences will be reflected in Paper 1,
 section B.
- Both SL and HL students are assessed on the options. SL students will study 1 option, while HL studies will study 2. This will be reflected in Paper 2.
- HL students are directly assessed on their knowledge and comprehension of qualitative research methodology in Paper 3.



<u>Assessment</u>

Typical of most IB courses, student work is assessed both externally (assessed by IB examiners) and internally (marked by teachers and externally moderated by the IB).

SL

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TIME	Weighting of final grade
External			75%
Paper 1	Section A: Three short-answer questions on the core approaches to psychology Section B: One essay from a choice of three on the biological, cognitive and sociocultural approaches to	2h	50
Paper 2	behaviour . One question from a choice of three on one option	1h	25
Internal	One question from a choice of three on one option	Til	25%
	A report of a simple consumption and study panduated by		25/0
Experimental study	A report of a simple experimental study conducted by the student.		

HL

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TIME	Weighting of final grade
External			80%
Paper 1	Section A: Three short-answer questions on the core approaches to psychology	2h	40
	Section B: One essay from a choice of three on the biological, cognitive and sociocultural approaches to behaviour. One, two or all of the essays will reference the additional HL topic.		
Paper 2	Two questions; one from a choice of three on each of two options.	2h	20
Paper 3	Three short-answer questions from a list of six static questions on approaches to research.	1h	20
Internal			20%
Experimental study	A report of a simple experimental study conducted by the student.		





GROUP 4 SCIENCES

The course chosen by each student should reflect consideration of the following factors:

- ✓ mathematical ability and prior results in science courses
- ✓ level of interest in science
- ✓ and future plans for university and beyond.

BIOLOGY (HL and SL) – new syllabus as of August 2023

Overview of the course

Through the study of DP biology, students are empowered to make sense of living systems through unifying themes. By providing opportunities for students to explore conceptual frameworks, they are better able to develop understanding and awareness of the living world around them. This is carried further through a study of interactions at different levels of biological organization, from molecules and cells to ecosystems and the biosphere.

Integral to the student experience of the DP biology course is the learning that takes place through scientific inquiry. With an emphasis on experimental work, teachers provide students with opportunities to ask questions, design experiments, collect and analyse data, collaborate with peers, and reflect, evaluate and communicate their findings.

<u>Difference between HL and SL</u>

Students at standard level (SL) and higher level (HL) explore the same themes as common core, a common internal assessment (IA) scheme. There are topics which are content that should only be taught at HL students.

The four themes and some examples of topics are:

- Unity and Diversity:
 - e.g. origins of cells*, cell structure, viruses*, diversity of organisms, conservation of biodiversity
- Form and Function:
 - e.g. carbohydrates and lipids, proteins, membranes, cell specialization, muscle and motility*
- Interaction and Interdependence:
 - e.g. enzymes, metabolism, cell respiration, photosynthesis, chemical signaling*, etc.
- Continuity and Change:
 - e.g. DNA replication, protein synthesis, mutations, gene editing, gene expression*



^{*} Topics with content that should only be taught to HL students



TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT		TIME		Weighting of final grade	
External	SL	HL	SL	HL	SL 80%	HL 80%
Paper 1	Paper 1A: Multiple-choic Paper 1B: Data-based qu are syllabus related, addi	estions (4 questions that	1h 30min	2h	36	36
Paper 2	Data-based and short-answer questions Extended-response questions		1h 30min	2h 30min	44	44
Internal					20%	20%
Scientific investigation	which the student gath order to answer their question. The outco	ssed through the form of a				



CHEMISTRY (HL and SL) – new syllabus as of August 2023

Overview of the course

Chemistry is primarily concerned with identifying patterns that help to explain matter at the microscopic level. This then allows matter's behaviour to be predicted and controlled at a macroscopic level. The subject therefore emphasizes the development of representative models and explanatory theories, both of which rely heavily on creative but rational thinking.

DP chemistry enables students to constructively engage with topical scientific issues. Students examine scientific knowledge claims in a real-world context, fostering interest and curiosity. By exploring the subject, they develop understandings, skills and techniques which can be applied across their studies and beyond.

Topics in the course:

- 1. Structures: Models of the particulate nature of matter
- 2. Structures: Models of bonding and structure
- 3. Structures: Classification of matter
- 4. Reactivity: What drives chemical reactions?
- 5. Reactivity: How much, how fast and how far?
- 6. Reactivity: What are the mechanisms of chemical change?

Difference between HL and SL

While the skills and activities of group 4 science subjects are common to students at both SL and HL, students at HL are required to study some topics in greater depth.





TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT		TIME		Weighting of final grade	
External	SL	HL	SL	HL	SL 80%	HL 80%
Paper 1	Paper 1A: Multiple-choic Paper 1B: Data-based qu are syllabus related, addi	estions (4 questions that	1h 30min	2h	36	36
Paper 2	Data-based and short-answer questions Extended-response questions		1h 30min	2h 30min	44	44
Internal					20%	20%
Scientific investigation	which the student gath order to answer their question. The outco	ssed through the form of a				



PHYSICS (HL and SL) – new syllabus as of August 2023

Overview of the course

Physics is concerned with an attempt to understand the natural world; from determining the nature of the atom to finding patterns in the structure of the universe. It is the search for answers from how the universe exploded into life to the nature of time itself. Physics involves the study of matter and its motion through space and time, along with related concepts such as energy and force.

Observations are 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 leading to a better understanding of the natural world, physics gives us the ability to alter our environments.

DP physics enables students to constructively engage with topical scientific issues. Students examine scientific knowledge claims in a real-world context, fostering interest and curiosity. By exploring the subject, they develop understandings, skills and techniques which can be applied across their studies and beyond.

It is recommended that students have a good background in mathematics when deciding to choose this course.

Difference between HL and SL

While the skills and activities of group 4 science subjects are common to students at both SL and HL, students at HL are required to study some topics in greater depth.

TOPICS	Topics with content that should be taught to all students	•• Topics with content that should be taught to all students plus additional HL content	••••Topics with content that should only be taught to HL students
A Space, time and motion	A.1 Kinematics • A.2 Forces and momentum • A.3 Work, energy and power •		A.4 Rigid body mechanics ••• A.5 Galilean and special relativity •••
B. The particulate nature of matter	B.1 Thermal energy transfers • B.2 Greenhouse effect • B.3 Gas laws • B.5 Current and circuits •		B.4 Thermodynamics •••
C. Wave behaviour	C.2 Wave model • C.4 Standing waves and resonance •	C.1 Simple harmonic motion •• C.3 Wave phenomena •• C.5 Doppler effect ••	





D. Fields	D.3 Motion in electromagnetic fields •	D.1 Gravitational fields •• D.2 Electric and magnetic fields ••	D.4 Induction •••
E. Nuclear and quantum physics	E.4 Fission ● E.5 Fusion and stars ●	E.1 Structure of the atom •• E.3 Radioactive decay ••	E.2 Quantum physics •••

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT		TIME		Weighting of final grade	
External	SL	HL	SL	HL	SL 80%	HL 80%
Paper 1	Paper 1A: Multiple-choice questions Paper 1B: Data-based questions (4 questions that are syllabus related, addressing all themes)		1h 30min	2h	36	36
Paper 2	Data-based and short-answer questions Extended-response questions		1h 30min	2h 30min	44	44
Internal	·				20%	20%
Scientific investigation	which the student gath order to answer their of question. The outco	on is an open-ended task in ers and analyses data in own formulated research me of the scientific ssed through the form of a 00 words)				





COMPUTER SCIENCE (HL and SL) - new syllabus as of August 2023

Overview of the course

The course is designed to give the student a thorough understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The students will be introduced to fundamental principles of programming and computer system design. Computational thinking involves the ability to:

- think procedurally, logically, concurrently, abstractly, recursively and think ahead
- utilize an experimental and inquiry-based approach to problem-solving
- develop algorithms and express them clearly
- appreciate how theoretical and practical limitations affect the extent to which problems can be solved computationally.

<u>Difference between HL and SL</u>

While the skills and activities of computer science are common to students at both SL and HL, students at HL are required to study extension material of a more demanding nature. The distinction between SL and HL is therefore one of both breadth and depth.

Assessment

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TIME		Weigh final g	_
External		SL	HL	SL 70%	HL 80%
Paper 1	A problem-solving paper that includes questions requiring the reading, understanding, interpretation and writing of code in Java or Python.	1h 15 min	2h	35	40
Paper 2	This paper focuses on applying theory and practice to real-world contexts, and includes a structured question framed by a given technology context.	1h	2h	35	40
Internal				30%	20%
Computational solution report	An individual computational solution development project. Students produce a report that details the development of a computational solution following the software development life cycle (SDLC) process.			30	20





GROUP 5 MATHEMATICS

MATHEMATICS: APPLICATIONS AND INTERPRETATIONS SL (or short "AI")

Overview of the course

This course recognizes the increasing role that **mathematics and technology** play in a diverse range of fields in a data-rich world. As such, it emphasizes the meaning of mathematics in context by focusing on topics that are often used as **applications or in mathematical modelling**. The largest section is on **statistical** techniques.

The course is designed for students with varied mathematical backgrounds and abilities, and offers those students opportunities to learn important concepts and techniques and to gain an understanding of a wide variety of mathematical topics. It prepares students to be able to solve problems in a variety of settings, to develop more sophisticated mathematical reasoning, and to enhance their critical thinking. Students taking this course are well prepared for a career in social sciences, humanities, languages or arts.

The course covers the following topics:

- Numbers and algebra
- Probabilities and Statistics
- Geometry and trigonometry
- Mathematical models
- Introduction to calculus

<u>Assessment</u>

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TIME	Weighting of final grade
External			80%
Paper 1 (with calculator)	Compulsory short-response questions based on the whole syllabus.	1h 30min	40
Paper 2 (with calculator)	Compulsory extended-response questions based on the whole syllabus.	1h 30min	40
Internal			20%
Mathematical Exploration	The project is an individual piece of written that involves investigating an area of mathematics		





MATHEMATICS: ANALYSIS AND APPROACHES HL / SL (or short "AA")

Overview of the course

This course recognizes the need for **analytical expertise** in a world where innovation is increasingly dependent on a **deep understanding of mathematics**.

This course includes topics that are both traditionally part of a pre-university mathematics course (for example, functions, trigonometry, calculus) as well as topics that are amenable to investigation, conjecture and proof, for instance the study of sequences and series at both SL and HL, and proof by induction at HL.

The course allows the use of technology, as fluency in relevant mathematical software and hand-held technology is important regardless of choice of course.

Topics in this course are:

- Numbers and Algebra
- Functions and equations
- Geometry and trigonometry
- Statistics and probability
- Calculus

Differentiation between SL and HL

<u>Mathematics Analysis SL</u>: The majority of these students will expect to need a sound mathematical background as they prepare for future studies in subjects such as chemistry, economics, medicine, etc.

<u>Mathematics Analysis HL</u>: The majority of these students will be expecting to include mathematics as a major component of their university studies, either as a subject in its own right or within courses such as physics, engineering, and technology. Others might take this course because they have a strong interest in mathematics and enjoy meeting its challenges and engaging with its problems.

<u>Assessment</u>





TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT		TIM	1E	Weight final g	•
External	SL	HL	SL	HL	80%	89%
Paper 1	Section A: Compulsor	y short-response questions	1h 30min	2h	40	30
(no calculator)	based on th	e whole syllabus.				
	Section B: Compulsory e	extended-response				
	questions ba	sed on the whole syllabus.				
Paper 2	Section A: Compulsory short-response questions		1h 30min	2h	40	30
(with	based on the whole syllabus.					
calculator)	Section B: Compulsory extended-response					
	questions based on the whole syllabus.					
Paper 3		Two compulsory extended		1h		20
		response problem-solving				
	questions					
Internal					209	%
Mathematical	This is a piece of w	ritten work that involves				
exploration	investigating an	area of mathematics				



GROUP 6 THE ARTS

There are no prerequisites for enrollment, and successful completion of the courses is possible for students with limited previous experience.

The course and level chosen by each student should reflect consideration of the following factors: quantity and quality of experience in the chosen discipline, level of interest, choices of other subjects in the framework of the IB diploma, and future plans for university and beyond.

Below is a brief description of each discipline and the distinctions between SL and HL.

MUSIC (HL and SL)

Overview of the course

Music study develops listening, creative and analytical skills, as well as encouraging cultural understanding and international-mindedness. In this way, music is a catalyst for expanding critical thinking—a crucial life skill. When we understand others and ourselves through music, we are empowered to make positive and effective change in the world.

In this course, students and teachers engage in a journey of imagination and discovery through partnership and collaboration. Students develop and affirm their unique musical identities while expanding and refining their musicianship. Throughout the course, students are encouraged to explore music in varied and sometimes unfamiliar contexts. Additionally, by experimenting with music, students gain hands-on experience while honing musical skills. Through realizing and presenting samples of their musical work with others, students also learn to communicate critical and artistic intentions and purpose.

As students develop as young musicians, the course challenges them to engage practically with music as researchers, performers and creators, and to be driven by their unique passions and interests while also broadening their musical and artistic perspectives.

The music curriculum reflects the substantial global increase in access to digital technologies. New technology has always been a driving force behind the development of musical genres, styles and practices. For 21st-century musicians, learning to make music by engaging with a range of technologies is now a fundamental skill and is therefore a central aspect of this curriculum.

Difference between HL and SL

The syllabus differentiates between SL and HL. The greater breadth and depth required for HL is reflected through an additional assessment task. This task requires HL students to demonstrate knowledge and understanding of the core syllabus areas by formulating and communicating intentions for a project that is based on: real-life practices of music-making, their experiences as developing musicians in this course and their collaboration with others.



External			
		SL	HL
Exploring music in context	Students select samples of their work for a portfolio submission (max. 2,400 words). Student submit: 1. written work demonstrating engagement with, and understanding of, diverse musical material 2. practical exercises: o creating: one creating exercise (score max. 32 bars and/or audio 1 minute as appropriate to style) o performing: one performed adaptation of music from a local or global context for the student's own instrument (max. 2 minutes) 3. supporting audio material (not assessed).	30%	20%
Presenting music	Students submit a collection of works demonstrating engagement with diverse musical material from four areas of inquiry. The submission contains: 1. Presenting as a researcher	40%	30%
Internal			
Experimenting with music	Students submit an experimentation report with evidence of their musical processes in creating and performing in two areas of inquiry in a local and/or global context. The report provides a rationale and commentary for each process. Students submit: 1. a written experimentation report that supports the experimentation (max. 1,500 words) 2. practical musical evidence of the experimentation process o three related excerpts of creating (total max. 5 minutes) three related excerpts of performing (total max. 5 minutes)	30%	20%
The contemporary music-maker (HL only)	Students submit a continuous multimedia presentation documenting their real-life project. Students submit multimedia presentation (max. 15 minutes), evidencing: 1. the project proposal 2. the process and evaluation 3. the realized project, or curated selections of it.		30%





VISUAL ARTS (HL and SL)

Overview of the course

The impulse to make art is common to all people. From earliest times, human beings have displayed a fundamental need to create personal, social, cultural and aesthetic meaning through art. Expression in the visual arts is characterized by forms of visual representation which reflect the cultures of different societies. Artistic expression ranges from traditional forms embedded in particular societies and cultures to the varied and dispersed practices associated with design, craft, electronic media, drawing, painting, printmaking, and sculpture.

This course encourages students to challenge their own creative and cultural boundaries. Students are encouraged to explore the visual arts within and across local, regional, national, international, and intercultural boundaries. Students are not required to have had previous experience in the Visual Arts in order to take this course since it is designed to allow them to experience art on an individual basis and to develop of their own creative abilities.

The course covers **3 core areas** which are interlinked with the assessment tasks:

- Visual arts in context: a lens through which students are encouraged to explore perspectives, theories and cultures that inform and influence visual arts practice. Students should be able to research, understand and appreciate a variety of contexts and traditions and be able to identify links between them.
- Visual arts methods: addresses ways of making artwork through the exploration and acquisition of skills, techniques and processes, and through engagement with a variety of media and methods.
- Communicating visual arts: involves students investigating, understanding and applying the
 processes involved in selecting work for exhibition and public display. It engages students in
 making decisions about the selection of their own work.

Students are required to investigate the core areas through exploration of theoretical, art-making and curatorial practice.

Difference between HL and SL

The assessment tasks require HL students to reflect on how their own work has been influenced by exposure to other artists and for them to experiment in greater depth with additional art-making media, techniques and forms.

HL students are encouraged to produce a larger body of resolved works and to demonstrate a deeper consideration of how their resolved works communicate with a potential viewer.





TYPE OF	FORMAT OF ASSESSMENT	Weighting of	
ASSESSMENT		final grade	
External		SL	HL
		6	0%
Part 1:	Independent critical and contextual investigation explores artworks,	7	20
Comparative study	objects and artifacts from differing cultural contexts . Analyzing and		
	comparing different artworks by different artists.		
Part 2:	Students submit carefully selected materials which evidence their	40	
Process portfolio	experimentation, exploration, manipulation and refinement of a		+0
Process portiono	variety of visual arts activities during the two-year course.		
	variety of visual arts activities during the two-year course.		
Internal		4	0%
Part 3:	Students submit for assessment a selection of resolved artworks from		
exhibition	their exhibition. The selected pieces should show evidence of their		
	technical accomplishment during the visual arts course and an		
	understanding of the use of materials, ideas and practices appropriate		
	to visual communication.		





EXAMINATIONS and FEES

LIS students are entered for the May examination session.

The schedule for the May session is published by the IBO and is shared with students and families in a timely manner. Please note: the examination session can affect public holidays, in the sense that examinations may occur on German public holidays.

External examination fees are charged by IBO. **These are not included in LIS tuition fees,** and therefore parents and guardians will be invoiced for these once final registrations are made.

and are approximately 85 euros per subject, 105 euros for the three CORE components, with a 100+ euros registration fee per candidate. Thus, families can expect to be invoiced slightly in excess of 700 euros per student.

Results come out on July 6th each year – students can access these directly – and certificates follow in late-August or early-September.

Candidates are expected to comply with the *General Regulations of the Diploma Programme,* the policy on *Academic Honesty* and *the Notice to Candidates Notifications* published by the IBO.





CONTACTS

Neil Allen

Secondary Principal Neil.Allen@lis.school

Office: room 305

Isabel Van Dyck

IB Diploma Coordinator Isabel.vandyck@lis.school

IB Office: room 403

Jamie Wilkinson

Assistant Principal for Learning Jamie.Wilkinson@lis.school

Office: room 305,5

Birgitta Hall

Beyond LIS Coordinator (college counselling)

Birgitta.Hall@lis.school

Office: room 402,5

More information about the International Baccalaureate Diploma Programme, course descriptions and university recognition, visit www.ibo.org

