

2023 – 2024 COURSE SELECTION GUIDE IB DIPLOMA PROGRAMME ISD CAREERS PROGRAMME



## **TABLE OF CONTENTS**

ISD Guiding Statements	04
ISD Definition of High-Quality Learning and Teaching	05
ISD Definition of Global Citizenship	06
IB Mission Statement	07
IB Learner Profile	08
Why Study DP: DP Alumni Voices	09
Graduation Pathways	09
Admissions to IBDP at ISD	09
The DP Diagramme Level	10
The Core – CAS, TOK, EE.	10
Course Offerings	11
How do I choose my courses?	12
Course Outlines & Descriptions (Intro Page)	12
English Literature A English Language and Literature A French Language and Literature A SSST Language A	13
<b>Group 2: Language Acquisition</b> English B French B French ab initio Spanish ab initio	29
<b>Group 3: Individuals and Societies</b> Business Management Economics History Psychology	47
<b>Group 4: Experimental Sciences</b> Biology Chemistry Environmental Systems and Society Physics Sports, Exercise & Health Science	57

#### International School of Dakar



## TABLE OF CONTENTS CONT.

<b>Group 5: Mathematics</b> Mathematics Analysis and Approaches HL Mathematics Applications and Interpretation HL Mathematics Analysis and Approaches SL Mathematics Applications and Interpretation SL	75
<b>Group 6: The Arts</b> Film Theatre Visual Arts	88
Assessment	104
The Diploma Points Matrix	105
Predicted Grade Policy	106
What happens next? & Further Information	107



## **GUIDING STATEMENTS**

Challenge | Create | Change

### Who We Are

ISD is a diverse community of learners that fosters creativity, open-mindedness, responsibility and excellence. As an IB World School, ISD promotes student achievement and global citizenship.

### What We Believe

A well-rounded and rigorous program of academics, arts and athletics builds a foundation for life-long learning and fulfillment.

A collaborative culture enhances individual development and effective communication. Inspired teaching leads to personal accomplishment and growth. A successful learner has the courage to tackle complex problems and be of service to others.

Creative opportunities encourage students to become responsible leaders and to discover their talents and passions.

## **Strategic Areas**

International School of Dakar students should ...

- 1.Be well rounded in all aspects of education: academic, artistic, sports, and service.
- 2. Discover their talents and passions.
- 3.Be responsible leaders in a complex and changing world.

## **Strategic Goals**

- 1. Students fully develop and utilize social and emotional skills.
- 2. Students create and perform complex works in the visual, musical, and dramatic arts.
- 3. Students succeed in the International Baccalaureate Program.
- 4. Students explore, identify, and develop their talents and passions.
- 5. Students acquire responsible leadership competencies.
- 6. Students apply responsible leadership competencies to complex issues

These Guiding Statements were adopted on October 2, 2014.



## ISD DEFINITION OF HIGH-QUALITY LEARNING AND TEACHING

High-Quality Learning and Teaching (HQLT) at The International School of Dakar is a pedagogical approach that integrates a student-centered ethos, collaboration, research-based teaching practices, targeted assessments, and engaging learning experiences. Our approach is rooted in the IB philosophy, including the promotion of international mindedness and global citizenship as we serve a truly diverse student body.

At ISD, a student-centered ethos is central to high-quality learning and teaching. This approach involves putting students' needs, interests, and learning goals at the center of all learning and teaching activities.

This approach recognises that students come from diverse backgrounds and have unique learning styles. The school seeks to create an inclusive, supportive, and responsive learning environment where engaging, inspiring learning experiences are a key component. These experiences are meaningful, relevant, and enjoyable for students and promote critical thinking, creativity, and collaboration. Students develop a love of learning that will serve them well throughout their lives.

Collaboration is a key element of high-quality learning and teaching, and it involves working in partnership with colleagues, parents, and the wider community of Dakar and Senegal, to support student learning and growth. This collaborative approach helps to create a supportive learning environment where all learners feel valued, respected, and engaged.

Research-based and evidence-based teaching practices and strategies have been proven effective in promoting student learning and growth. These practices are informed by updated research and professional development opportunities, and they are consistently evaluated and refined to ensure they meet the needs of all learners. A range of instructional strategies, resources, and technologies are employed.

Targeted assessments are also a key component, and involve using a range of formative and summative assessments to monitor student progress and identify areas where additional support is needed. These assessments are designed to be aligned with learning objectives and used to inform teaching and learning strategies and measure student outcomes.

The International Baccalaureate (IB) program principles inform our approach including the emphasis on academic rigor, personal development and global citizenship. Approaches to Learning skills are developed as well as a student's intellectual, emotional, and social skills and ability to become active, compassionate, and responsible members of their communities and the wider world.

#### International School of Dakar



## **ISD DEFINITION OF GLOBAL CITIZENSHIP**

Global citizenship at ISD is inclusive of the school community and beyond. It incorporates the core values of empathy, respect, openness, acceptance, and flexibility.

This allows ISD to move into "action" ensuring equity through an evolving curriculum which is reflective of the local community and a global perspective.

ISD's guiding statements and the IB Learner Profile empower students to make connections through their own experiences to the world around them through inquiry. In line with the CIS code of ethics, global citizenship at ISD refers to an awareness of our diverse community with multiple opportunities to celebrate cultural differences and commonalities through both curricular and co-curricular activities.

At ISD, global citizenship is developed through:

- Gaining appreciation of multiple perspectives through classroom, local, and global experiences;
- Developing awareness of the world through the United Nations Sustainable Development Goals (SDGs) and an understanding of diverse cultures, perspectives, and values;
- Creating a safe space for social justice dialogue and actionable follow-up with a commitment to upholding the UN Rights of the Child
- Having a strong sense of self which enables students to inquire about the world on a local or global scale through a diverse and ethical lens;
- Respecting and serving others as students take action to create a more sustainable and better world;
- Fostering awareness on a personal, local and global level leading to a world perspective and interconnectivity;
- Demonstrating empathy and open-mindedness through authentic engagement and active service at personal, local and global levels;

Global citizenship requires an understanding of the interconnectedness of the world, and promotes a mindset of shared responsibility and respect.



## THE IBO MISSION STATEMENT

The International Baccalaureate<sup>®</sup> aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.



WHY STUDY IBDP DP Alumni Voices

"It has been invaluable to be taught how to learn, how to be curious, how to build argumentation, form & defend an opinion on a basis of facts. Every day of my working life I think about the IB system and the unbelievable privilege it was to be educated that way in the formative years. Literally, every day."

- Thomas Maddens, International School of Tanganyika, Class of 2008, Film Maker.

"Communication! IBDP is fantastic at developing effective writers and presenters! In college, I felt miles ahead of my peers in terms of the number of presentations I had done in high school and my comfort in communicating complex subjects to a large audience. IB history and lit in particular also taught me how to write "

- Erin Kelsey, International School Manila, Class of 2015. Data Analyst.

I'd say IBDP has been the making of me. It ensured that I received a broad but deep education and taught me to approach knowledge and information analytically: to ask not just what we know, but how and why we know it. These are skills I use every day in my teaching and research – and which I seek to instill in my own undergraduates.

- Dr. Levi Roach. International School of Tanganyika, Class of 2003. Lecturer in Medieval History, University of Exeter. The IBDP probably is the best preuniversity program in the world. Unlike other programs, it's not a program that requires you to simply learn the material and regurgitate in an exam, but on the contrary, at the end of the two years, you become someone who can critically think, analyze and understand concepts. It prepares and molds you into a well-rounded character and thinker, that prepares you for university and life.

- Dr. MK Pathan, International School of Tanganyika, Class of 2004. Pediatric Registrar at South Tipperary General Hospital, Rep of Ireland.

I really liked the CAS aspect of the diploma as it forced us out of our comfort zones and it led me to do many activities that I would not have done before. I feel as though CAS makes us more holistic students. Lastly, I think the IB helped me become more independent with my research.

- Adele Meurette, International School of Dakar, Class of 2021.

## **ISD HIGH SCHOOL GRADUATION PATHWAYS**

# Students at ISD have a choice of three pathways to graduation.



## **The IBDP Diploma**

- 6 IBDP classes
  - 3 Higher Level
  - 3 Standard Level
- Theory of Knowledge
- CAS
- EE



## **IBDP Courses**

- 6 IBDP classes
  - Higher Level or Standard Level
- CAS
- Theory of Knowledge (optional)
- EE (optional)



## **ISD** Careers Programme

- 2 IBDP Courses
  - Any courses, HL or SL; taught on campus or via Pamoja
- 1 Language Course = 1 SL Course
  - Any course taught on campus, or online via an accredited institution
- 2 Career-related Studies Courses = 2 SL Courses
  - Related to the intended career path, entrance to technical school, workforce
  - Online via an accredited institution Savannah College of Art and Design (SCAD), World Academy of Sport/Federation University.
- Internship = 1 HL Course
  - 240 hours in total (3 hours/week over 40 weeks)
- ISD CP Core Components
  - Reflective Project
  - CAS

## ADMISSION TO IBDP/CP AT ISD

Students choose their pathway, subjects and levels based on their interests, strengths and future plans. In some instances, the school will recommend a particular pathway.

Teacher's subject and level recommendations should be taken into consideration, particularly for Languages and Mathematics.

### International School of Dakar

## THE DIPLOMA PROGRAMME MODEL

Students choose courses from the following subject groups: studies in language and literature; language acquisition; individuals and societies; sciences; mathematics; and the arts.

Students may opt to study additional sciences, individuals and societies, or languages courses, instead of a course in the arts.



Students will take some subjects at higher level (HL) and some at standard level (SL). HL and SL courses differ in scope but are measured according to the same grade descriptors, with students expected to demonstrate a greater body of knowledge, understanding, and skills at a higher level.

Each student taking the full Diploma takes at least three (but not more than four) subjects at higher level, and the remaining at standard level.

Bi-lingual students may take 2 studies in literature and language and forgo a language acquisition course. They will then be awarded a bi-lingual diploma.

## THE CORE

All full Diploma Programme students will study the Core while students opting for Courses will participate in the CAS Programme and may choose to study Theory of Knowledge and write an Extended Essay. Students opting for the ISD Careers Programme will participate in CAS, write a research paper, and may choose to study Theory of Knowledge.



Students engaged in experiences relating to these three concepts and complete a project.



Students reflect on the nature of knowledge in various disciplines and on how we claim to know what we know.



Students research and write a 4,000 word, self-directed paper in one subject



Theory of Knowledge and Extended Essay grades are combined to give the possibility of additional diploma points (see page 104).

## **DP COURSE OFFERINGS**

Class of 2026

All courses offered at Higher Level and Standard Level unless specified as SL.

Group	Course Options
1: Language A Best academic language	DP English A: Literature DP English A: Lang & Lit DP French A: Lang & Lit DP Self-Taught A: Literature (with an online tutor - SL only)
2: Language B Acquisition language	DP English B DP French B DP French ab initio SL DP Spanish B SL OR Spanish ab initio SL (depending on interest) **DP Pamoja Course - Mandarin ab initio SL
3: Individuals & Societies	DP History DP Economics DP Psychology *DP Environmental Systems and Societies **DP Pamoja Course Business Management (we will possibly employ a teacher for this course depending on interest) **DP Pamoja Course Digital Society **DP Pamoja Course Philosophy SL
4: Experimental Sciences	DP Biology DP Chemistry DP Physics DP Sports Exercise and Health Science (we will possibly offer this course depending on interest) *DP Environmental Systems and Societies
5: Mathematics	DP Mathematical Applications HL/SL DP Mathematical Analysis HL/SL
6: Arts (Electives)	DP Theatre Arts DP Visual Art DP Film

\* ESS is transdisciplinary and can be taken in either Group 3 or Group 4 or can count for both.

\*\*Pamoja Courses (online courses taught through Pamoja, an IB accredited organization)

## HOW DO I CHOOSE MY COURSES?

For some subjects, in particular Groups 1, 2 and 5, your teacher will steer you towards particular courses and levels (HL/SL). However, you should also ask yourself the following questions:

What subjects do I enjoy?	Where are my strengths?
What do I want to study in university/college?	What courses/levels are required by universities I may want to attend?
What careers am I interested in?	What do my teachers advise?
What do my parents advise?	

## **COURSE OUTLINES**

The following pages will give you an overview of the courses listed below.

### Group 1: Studies in Literature and Language

English Literature A English Language and Literature A French Language and Literature A SSST Language A

### **Group 3: Individuals and Societies**

Business Management <sup>(See Ms Gifford for more information)</sup> Economics History Psychology

### **Group 5: Mathematics**

Mathematics Analysis and Approaches HL Mathematics Applications and Interpretation HL Mathematics Analysis and Approaches SL Mathematics Applications and Interpretation SL

## **Group 2: Language Acquisition** English B

French B French ab initio Spanish ab initio

### **Group 4: Experimental Sciences**

Biology Chemistry Environmental Systems and Society Physics Sports, Exercise & Health science

### Group 6: The Arts

Film Theatre Visual Arts



# Group 1: Studies in Literature and Language

English Literature A English Language and Literature A French Language and Literature A SSST Language A

## International School of Dakar IBDP English A: Literature HL/SL

Instructor: Jennifer Newton Rm: 305 Contact Information: jennifern@faculty.isd.sn

## **Course Description:**

The study of literature is instrumental in developing an awareness and understanding of the self and how it relates to others. Through the study of tests written originally in the language studied and in translation, students gain an understanding of the ways in which different languages and literatures represent the world and how these can reflect and help create diverse identities. Students also become aware that representations of the world vary across cultures and are encouraged to consider the reasons why so that they can attain a better understanding of how people experience and represent the world.

## **Syllabus Content:**

There are three main syllabus components or "Areas of Exploration" (AOE) in the course: **Readers, Writers and Texts** is an area that introduces students to the nature of language and literature and involves close attention to the details of texts to examine the choices made by authors and the way(s) meaning is communicated, as well as the role of the reader in generating meaning. **Time and Space** is an area that examines the way(s) a text speaks to the world at large, looking at how it may speak to certain audiences or generations of people, as well as how meaning changes depending on context. **Intertextuality** is an area that examines how texts "speak" to each other as well as exploring the connection(s) between and among media, text and audience involving diverse traditions and ideas.

## **Textual Guidelines:**

- HL: 4 forms (prose fiction, prose nonfiction, poetry, drama); SL: 3 Forms
- HL: 4 texts in translation; SL: 3 texts in translation
- HL: 4 places; SL: 3 places
- HL/SL: 3 periods of time
- HL: 4 texts maximum freely chosen; SL: 3 texts maximum freely chosen
- Ensure that the "periods of time" are not just from the end of the 19th century, the 20th century, and the 21st century.
- Ensure that there are several female writers and several writers of color. Strive to include a writer who represents LGBTQ+ issues.
- Include writers from a variety of continents and places (i.e. not just North America, UK, and somewhere else in Europe).

### **Core Concepts:**

In addition to the AOE, there are seven core concepts which will link texts studied in the course. The chart below offers an abbreviated explanation of these:

Concept	Explanation
Identity	Identity can both refer to the perspectives, voices and characters in a text as well as that
	of the author (and the extent to which identities in a text represent the author) and even
	the reader. An exploration of identity in a text, in all its forms, is central to the analysis
	of the act of reading and interpretation.
	This relates to the context of a text's production and reception, and to the respective
Culture	values, beliefs and attitudes prevalent in it. This concept also plays an important role
	with regards to the relationship that is established between an individual text and the
	writing tradition that precedes it.
	This relates to the act of writing and the role imagination plays, as well as the reader
Creativity	engaging with the text and deriving potential meaning(s) from different interpretations.

	This is also related to the notion of originality and how this may be important or		
	desirable in the production and reception of a text.		
	This has to do with the relationship that a text establishes between a reader and writer		
Communication	How writers use style and structure to engage their audience, as well as particular		
	audiences they may have in mind (and assumptions about them) are relevant here.		
	A text may offer a multiplicity of perspectives which may, or may not, reflect the views		
Perspective	of its author. Readers also have their own perspectives which they bring to their		
	interaction with the text. This variety of perspectives impacts on the interpretation of a		
	text and therefore deserves critical attention and discussion.		
The complex ways in which texts refer to one another, appropriate elements from eac			
Transformation	other and transform them to suit a different aesthetic or communicative purpose, are		
	evidence of the importance of transformation in the process of creating a text. Also, the		
	act of reading is potentially transformative in itself, both for the text and the reader.		
	The way in which language and literature relate to reality has been the subject of long		
Representation	running debate among linguists and literary theorists. Some claim that literature should		
	represent reality as accurately as possible, while others claim art's absolute detachment		
	and freedom from reality and dismiss any duty to represent it in the work of art.		

Concepts in language and literature courses are meant to help organise and guide the study of texts across the three AOE. The concepts also facilitate the process of establishing connections between texts, making it easier for students to identify different ways in which the texts they study relate to one another.

#### **Assessments:**

External Assessments		
Paper 1: Guided textual analysis- 35%		
Standard Level (1 hour 15 minutes)	Higher Level (2 hours 15 minutes)	
The paper consists of two literary passages, from two different text styles, each accompanied by a question. Students <b>choose one</b> passage and write an analysis of it. (20 marks)	The paper consists of two literary passages, from two different text styles, each accompanied by a question. Students write an analysis of <b>each of</b> the passages. (40 marks)	
Paner 2: Comparative essav		

#### Comparative essay

#### Standard Level - 35% & Higher Level -25% (1 hour 45 minutes)

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. (30 marks)

#### Higher Level Essay- 20%

Students submit an essay on one literary text or a collection of literary texts by one same author, or a literary text or work studied during the course. (20 marks) The essay must be 1,200-1,500 words in length.

#### **Internal Assessment**

**Individual Oral** 

#### Standard Level- 30% & Higher Level- 20% (15 minutes)

This component consists of an individual oral which is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Supported by an extract from both one English-language text and text 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 works that you have studied. (40 marks)* 

#### **Learner Portfolio:**

In addition to other assessments, students are required to maintain a collection of work done over the two-year course, referred to as the Learner Portfolio. This will not be directly assessed or moderated by the IB, however, schools may be required to submit Learner Portfolios to determine the authenticity of a student's work, to certify that academic honesty has been respected or to evaluate the syllabus in a school. The Learner Portfolio will include a variety of activities, from creative responses and reflections to/on literary and non-literary works to practice work in anticipation of assessments. Teachers will regularly assign, collect and monitor work for the Learner Portfolio over the two years of the course.

#### **Connection Across Learning**

This course uses knowledge that connects to History, Psychology, and Art. Literature is taught in the context of time, place, and artistic movements, as well as insights into identity formation with regards to culture, community, and biology.

### **Theory of Knowledge Links:**

Links to ToK are made explicitly throughout the course.

- As part of the introduction to the course students discuss "How much of your understanding of the world comes from one person's interpretation of the world?" and "To what extent does studying a variety of text types help us to better understand ourselves in the present?"
- In reading texts like *The Crucible* and *In Cold Blood*, TOK questions such as "how does language shape our understanding of knowledge and truth?" and "how do the ways of knowing influence our interpretation and understanding of literary texts?"
- While with texts such as *Silence, So Long a Letter* questions such as "in what ways can literature challenge or reinforce existing knowledge claims?" can be addressed.
- For all assessments, the methods used by the creator and the role of creation presents a variety of questions: "Who decides which texts are significant?", "What is the role of individuals in history".

## CAS Links:

Examples of CAS experiences that have links to English include the following;

- Creativity: Students can create original projects or experiences that integrate elements of Literature such as through an original spoken word piece that explores themes of identity and belonging, drawing inspiration from the texts studied in Literature.
- Action: The reading of texts like *So Long a Letter* sparks an interest and discussion in Senegalese culture in contrast to colonial powers inherent in French and Islamic incursions.
- The texts covered deal with fields of inquiry including: Politics, Power and Justice; Culture, Identity and Community; Beliefs, values and Education, which raise awareness of CAS related issues and trigger the students into action.
- Students can demonstrate how they have applied knowledge and skills from Literature in their CAS experiences by citing their knowledge of literary analysis to create a blog or documentary that explores the connections between classic literature and social justice issues.

### International School of Dakar IBDP English A: Language and Literature HL/SL

Jennifer Newton Rm: 305	Virginia Issaris Séré	Katie Sagna Rm: 404a	Kelli Karg Rm: 306
jennifern@faculty.isd.sn	virginiai@faculty.isd.sn	katies@faculty.isd.sn	kellik@faculty.isd.sn

#### **Course Description:**

In this course, students will 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.

#### **Course Outline:**

Year 1		
Semester 1	Non-literary texts include: infographic, appeal, photography, film* Literary texts: 1 SL work, 1 HL work Assessment practice: paper 1, parts of the IA	
Semester 2	Non-literary texts include: cartoons, advertising, op-ed, speeches Literary texts may include: 1 SL work, 1 HL work, 1 summer reading (novel) Assessment practice: paper 2, paper 1 (full exam), practice IA	
Year 2		
Semester 1	Non-literary texts include: other types per instructor discretion Literary texts: 1 SL work, 1 HL work Assessment practice: paper 1, practice IA, official IA, HL essay	
Semester 2	Assessment practice: paper 2, paper 1 (full exam)	

Core Texts		
Class of 2025	Class of 2024	
Poetry of Carol Ann Duffy So Long A Letter by Mariama Ba The Things They Carried by Tim O'Brien	Poetry of Carol Ann Duffy So Long A Letter by Mariama Ba The Reluctant Fundamentalist by Mohsin Hamid	

**Possible texts include:** The Things They Carried, Woman at Point Zero, The Reluctant Fundamentalist, Purple Hibiscus, So Long A Letter (tr.), poetry of Carol Ann Duffy, Narrative of the Life of Frederick Douglass, The Door(tr.), The Elephant Vanishes (tr.), This is a Man (tr.), Disgraced, Master Harold...And the Boys, The Crucible, and additions are per teacher consensus

### **Syllabus Content:**

There are three main syllabus components or "Areas of Exploration" (AOE) in the course: **Readers, Writers and Texts** is an area that introduces students to the nature of language and literature and involves close attention to the details of texts to examine the choices made by authors and the way(s) meaning is communicated, as well as the role of the reader in generating meaning. **Time and Space** is an area that examines the way(s) a text speaks to the world at large, looking at how it may speak to certain audiences or generations of people, as well as how meaning changes depending on context. **Intertextuality** is an area that examines how texts "speak" to each other as well as exploring the connection(s) between and among media, text and audience involving diverse traditions and ideas.

In Grade 12, students examine all of these areas through the study of particular texts and within organized units. In other words, the AOE will not be looked at in isolation or in a particular order, but will rather be addressed through the study of texts and core concepts, along with larger global issues.

### **Core Concepts:**

In addition to the AOE, there are seven core concepts which will link texts studied in the course. The chart below offers an abbreviated explanation of these:

Concept	Explanation
Identity	Identity can both refer to the perspectives, voices and characters in a text as well as that of the author (and the extent to which identities in a text represent the author) and even the reader. An exploration of identity in a text, in all its forms, is central to the analysis of the act of reading and interpretation.
Culture	This relates to the context of a text's production and reception, and to the respective values, beliefs and attitudes prevalent in it. This concept also plays an important role with regards to the relationship that is established between an individual text and the writing tradition that precedes it.
Creativity	This relates to the act of writing and the role imagination plays, as well as the reader engaging with the text and deriving potential meaning(s) from different interpretations. This is also related to the notion of originality and how this may be important or desirable in the production and reception of a text.
Communication	This has to do with the relationship that a text establishes between a reader and writer. How writers use style and structure to engage their audience, as well as particular audiences they may have in mind (and assumptions about them) are relevant here.
Perspective	A text may offer a multiplicity of perspectives which may, or may not, reflect the views of its author. Readers also have their own perspectives which they bring to their interaction with the text. This variety of perspectives impacts on the interpretation of a text and therefore deserves critical attention and discussion.
Transformation	The complex ways in which texts refer to one another, appropriate elements from each other and transform them to suit a different aesthetic or communicative purpose, are evidence of the importance of transformation in the process of creating a text. Also, the act of reading is potentially transformative in itself, both for the text and the reader.
Representation	The way in which language and literature relate to reality has been the subject of long running debate among linguists and literary theorists. Some claim that literature should represent reality as accurately as possible, while others claim art's absolute detachment and freedom from reality and dismiss any duty to represent it in the work of art.

Concepts in language and literature courses are meant to help organise and guide the study of texts across the three AOE. The concepts also facilitate the process of establishing connections between texts, making it easier for students to identify different ways in which the texts they study relate to one another.

#### Assessments:

External Assessments		
Paper 1: Guided textual analysis- 35%		
Standard Level (1 hour 15 minutes)Higher Level (2 hours 15 minutes)		
The paper consists of two non-literary passages, from two different text styles, each accompanied by a question. Students <b>choose one</b> passage and write an analysis of it. (20 marks)	The paper consists of two non-literary passages, from two different text styles, each accompanied by a question. Students write an analysis of <b>each of</b> the passages. (40 marks)	
Paper 2: Comparative essay		
Standard Level - 35% & Higher Level -25% (1 hour 45 minutes)		
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. (30 marks)		

#### Higher Level Essay- 20%

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. (20 marks) The essay must be 1,200-1,500 words in length.

#### **Internal Assessment**

#### Individual Oral

#### Standard Level- 30% & Higher Level- 20% (15 minutes)

This component consists of an individual oral which is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Supported by an extract from both 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 works that you have studied. (40 marks)

#### **Learner Portfolio:**

In addition to other assessments, students are required to maintain a collection of work done over the two-year course, referred to as the Learner Portfolio. This will not be directly assessed or moderated by the IB, however, schools may be required to submit Learner Portfolios to determine the authenticity of a student's work, to certify that academic honesty has been respected or to evaluate the syllabus in a school. The Learner Portfolio will include a variety of activities, from creative responses and reflections to/on literary and non-literary works to practice work in anticipation of assessments. Teachers will regularly assign, collect and monitor work for the Learner Portfolio over the two years of the course.

#### **Connections Across Learning:**

As we begin to make stronger connections across the subject areas, we will start by asking the students to inquire into the interconnectedness of the DP subjects through their transfer skills and prior knowledge. As we engage with the following questions, small groups can tackle how their various classes tie to our objectives and skills, and how they can apply to the wider world:

- 1. How does the study of English Language and Literature enhance your understanding of other DP subjects?
- In what ways can English Language and Literature concepts be applied to real-world situations in other DP subjects?
   How can the interconnectedness between English Language and Literature and other DP subjects contribute to your overall learning experience?

#### **Theory of Knowledge Links:**

Links to ToK are made explicitly throughout the course.

- As part of the introduction to the course students discuss "How much of your understanding of the world comes from one person's interpretation of the world?" and "To what extent does studying a variety of text types help us to better understand ourselves in the present?"
- In reading texts like *The Reluctant Fundamentalist* and political cartoons, TOK questions such as "how does language shape our understanding of knowledge and truth?" and "how do the ways of knowing influence our interpretation and understanding of literary texts?"
- While with texts such as *If this is a Man, So Long a Letter* and portraiture from Kehinde Wiley questions such as "in what ways can literature challenge or reinforce existing knowledge claims?" can be addressed.
- For all assessments, the methods used by the creator and the role of creation presents a variety of questions: "Is it possible to present language in an unbiased way?", "Who decides which texts are significant?", "What is the role of individuals in history".

#### CAS Links:

Examples of CAS experiences that have links to English include the following;

- Creativity: Students can create original projects or experiences that integrate elements of L&L such as through an original spoken word piece that explores themes of identity and belonging, drawing inspiration from the texts studied in L&L.
- Action: The reading of texts like So Long a Letter sparks an interest and discussion in Senegalese culture in contrast to colonial powers inherent in French and Islamic incursions.
- The non-literary texts covered deal with fields of inquiry including: Politics, Power and Justice; Culture, Identity and Community; Beliefs, values and Education, which raise awareness of CAS related issues and trigger the students into action.
- Students can demonstrate how they have applied knowledge and skills from L&L in their CAS experiences by citing their knowledge of literary analysis to create a blog or documentary that explores the connections between classic literature and social justice issues.

### International School of Dakar IBDP French A: Language and Literature HL/SL

Oumar Thiam : 309	Xousath Souvandy : 108 - 208
oumart@faculty.isd.sn	xousaths@faculty.isd.sn

#### **Course Description:**

In this course, students will 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.

#### **Course Outline:**

Year 1		
Semester 1	La création du modèle raciste Non-literary texts include: Pictures, articles, comics, advertisements, films, cartoons, and speeches* Literary texts: 1 SL work, 2 HL works Assessment practice: paper 1, parts of the IA	
Semester 2	Literary texts may include: 1 SL work, 2 HL works, Assessment practice: I.O (full exam), practice I.O Assessment practice: paper 2 (introduction + formative assessment),	
Year 2		
Semester 1	<i>Non-literary texts include:</i> other types per the instructor's discretion <i>Literary texts:</i> 2 SL works, 2 HL works <i>Assessment practice:</i> paper 1, practice IA, official IA, HL essay	
Semester 2	Assessment practice: paper 2, paper 1 (full exam)	

Core Texts		
Class of 2025	Class of 2024	
Drama: Une saison au Congo By Aimé césaire Le ventre de l'Atlantique By Fatou Diome Incendies by Wajid Mouwad (HL) 1984 By George Orwell	Antigone by Sophocle Les fourmis by Bernard Werber (HL)	
Possible texts include: Le discours de Lumumba. Tintin au Congo. Au temps d'harmonie. Kocoumbo: l'étudiant noir. Des		

clandestins à la mer : les tribulations de Yado.

#### **Syllabus Content:**

There are three main syllabus components or "Areas of Exploration" (AOE) in the course: **Readers, Writers and Texts** is an area that introduces students to the nature of language and literature and involves close attention to the details of texts to examine the choices made by authors and the way(s) meaning is communicated, as well as the role of the reader in generating meaning. **Time and Space** is an area that examines the way(s) a text speaks to the world at large, looking at how it may speak to certain audiences or generations of

people, as well as how meaning changes depending on context. **Intertextuality** is an area that examines how texts "speak" to each other as well as exploring the connection(s) between and among media, text and audience involving diverse traditions and ideas.

In Grade 12, students examine all of these areas through the study of particular texts and within organized units. In other words, the AOE will not be looked at in isolation or in a particular order, but will rather be addressed through the study of texts and core concepts, along with larger global issues.

#### **Core Concepts:**

In addition to the AOE, there are seven core concepts that will link texts studied in the course. The chart below offers an abbreviated explanation of these:

Concept	Explanation
Identity	Identity can both refer to the perspectives, voices and characters in a text as well as that of the author (and the extent to which identities in a text represent the author) and even the reader. An exploration of identity in a text, in all its forms, is central to the analysis of the act of reading and interpretation.
Culture	This relates to the context of a text's production and reception, and to the respective values, beliefs and attitudes prevalent in it. This concept also plays an important role with regards to the relationship that is established between an individual text and the writing tradition that precedes it.
Creativity	This relates to the act of writing and the role imagination plays, as well as the reader engaging with the text and deriving potential meaning(s) from different interpretations. This is also related to the notion of originality and how this may be important or desirable in the production and reception of a text.
Communication	This has to do with the relationship that a text establishes between a reader and writer. How writers use style and structure to engage their audience, as well as particular audiences they may have in mind (and assumptions about them) are relevant here.
Perspective	A text may offer a multiplicity of perspectives which may, or may not, reflect the views of its author. Readers also have their own perspectives which they bring to their interaction with the text. This variety of perspectives impacts on the interpretation of a text and therefore deserves critical attention and discussion.
Transformation	The complex ways in which texts refer to one another, appropriate elements from each other and transform them to suit a different aesthetic or communicative purpose, are evidence of the importance of transformation in the process of creating a text. Also, the act of reading is potentially transformative in itself, both for the text and the reader.
Representation	The way in which language and literature relate to reality has been the subject of long running debate among linguists and literary theorists. Some claim that literature should represent reality as accurately as possible, while others claim art's absolute detachment and freedom from reality and dismiss any duty to represent it in the work of art.

Concepts in language and literature courses are meant to help organize and guide the study of texts across the three AOE. The concepts also facilitate the process of establishing connections between texts, making it easier for students to identify different ways in which the texts they study relate to one another.

#### **Learner Portfolio:**

In addition to other assessments, students are required to maintain a collection of work done over the two-year course, referred to as the Learner Portfolio. This will not be directly assessed or moderated by the IB, however, schools may be required to submit Learner Portfolios to determine the authenticity of a student's work, to certify that academic honesty has been respected or to evaluate the syllabus in a school. The Learner Portfolio will include a variety of activities, from creative responses and reflections to/on literary and non-literary works to practice work in anticipation of assessments. Teachers will regularly assign, collect and monitor work for the Learner Portfolio over the two years of the course.

### **Connections Across Learning:**

As we begin to make stronger connections across the subject areas, we will start by asking the students to inquire into the interconnectedness of the DP subjects through their transfer skills and prior knowledge. As we engage with the following questions, small groups can tackle how their various classes tie to our objectives and skills, and how they can apply to the wider world:

- 1. How does the study of French Language and Literature enhance your understanding of other DP subjects?
- 2. In what ways can French Language and Literature concepts be applied to real-world situations in other DP subjects?
- 3. How can the interconnectedness between French Language and Literature and other DP subjects contribute to your overall learning experience?

#### **Theory of Knowledge Links:**

Links to ToK are made explicitly throughout the course.

- As part of the introduction to the course students discuss "How much of your understanding of the world comes from one person's interpretation of the world?" and "To what extent does studying a variety of text types help us to better understand ourselves in the present?"
- In reading texts like 1984 and the use of Nouvlang, students will answer TOK questions such as "how does language shape our understanding of knowledge and truth?" and "how do the ways of knowing influence our interpretation and understanding of literary texts?"
- While with texts such as *Le ventre de L'Atlantique; Une saison au Congo,* questions such as "in what ways can literature challenge or reinforce existing knowledge claims?" can be addressed.
- For all assessments, the methods used by the creator and the role of creation present a variety of questions: "Is it possible to present language in an unbiased way?", "Who decides which texts are significant?", "What is the role of individuals in history".

#### CAS Links:

Examples of CAS experiences that have links to French include the following;

- Creativity: Students can create original projects or experiences that integrate elements of L&L such as through an original spoken word piece that explores themes of identity and belonging, drawing inspiration from the texts studied in L&L.
- Action: The reading of texts like Une saison au Congo sparks an interest and discussion in African culture in contrast to colonial powers inherent in French incursions.
- The non-literary texts covered deal with fields of inquiry including: Politics, Power and Justice; Culture, Identity and Community; Beliefs, values and Education, which raise awareness of CAS related issues and trigger the students into action.
- Students can demonstrate how they have applied knowledge and skills from L&L in their CAS experiences by citing their knowledge of literary analysis to create a blog or documentary that explores the connections between classic literature and social justice issues.

#### Assessment:

External Assessments		
Paper 1: Guided textual analysis- 35%		
Standard Level (1 hour 15 minutes)	Higher Level (2 hours 15 minutes)	
The paper consists of two non-literary passages, from two different text styles, each accompanied by a question. Students <b>choose one</b> passage and write an analysis of it. (20 marks)	The paper consists of two non-literary passages, from two different text styles, each accompanied by a question. Students write an analysis of <b>each of</b> the passages. (40 marks)	
Paper 2: Comparative essay		
Standard Level - 35% & Higher Level -25% (1 hour 45 minutes)		
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. (30 marks)		
Higher Level Essay- 20%		
Students submit an essay on one non-literary text or a collection of non-literary texts by the same author or a literary text or work studied during the course. (20 marks) The essay must be 1,200-1,500 words in length.		

**Internal Assessment** 

**Individual Oral** 

#### Standard Level- 30% & Higher Level- 20% (15 minutes)

This component consists of an individual oral which is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Supported by an extract from both 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 works that you have studied. (40 marks)* 

## International School of Dakar IBDP Language A: Literature School-Supported Self-taught (SL) SSST Supervisor: Sophie Hautefeuille Rm: 107 Contact Information: sophieh@faculty.isd.sn

#### **COURSE DESCRIPTION**

The Language A: literature school-supported self-taught (SSST) course is part of the studies in language and literature group and is only offered at Standard level.

This course offers students a unique opportunity to study the literature of a language that may not be offered at the International School of Dakar as a taught subject. A certain level of autonomy is necessary and students are expected to independently administer the 150 hours required for the study of the course with the support of a tutor and the SSST coordinator.

The SSST Language A course follows the same objectives as the Language A: Literature course and is organized into three areas of exploration:

- **Readers, writers, and texts** introduce the notion of literature, its purposes, and the ways in which texts can be read, interpreted, and responded to.
- **Time and space** draw attention to the fact that texts are not isolated entities, but are connected to space and time.
- Intertextuality: connecting texts focuses on the connections between and among diverse texts, traditions, creators, and ideas.

#### The aims of the course in studies are to:

- engage with a range of texts in a variety of media and forms from different periods, styles, and cultures
- develop skills in listening, speaking, reading, writing, viewing, presenting, and performing

#### \*Communicators

- develop skills in interpretation, analysis, and evaluation \*Thinkers
- develop sensitivity to the formal and aesthetic qualities of texts and an appreciation of how they contribute to diverse responses and open up multiple meanings **\*Inquirers \*Open-minded**

• develop an understanding of relationships between texts and a variety of perspectives, cultural contexts, and local and global issues and an appreciation of how they contribute to diverse responses and open up multiple meanings **\*Principled** 

• develop an understanding of the relationships between studies in language and literature and other disciplines **\*Knowledgeable** 

- communicate and collaborate in a confident and creative way \*Communicators
- foster a lifelong interest in and enjoyment of language and literature.

#### \*IB Learner Profile Attributes

#### **CORE CONCEPTS**

Central to the DP language A courses are the seven concepts of culture, creativity, communication, perspective, transformation, representation, and identity.

#### READING

#### BOOKLIST

Language A: literature SSST students will read nine works over the 2 year course. They will choose these from a list of authors that the IB has created, called the Prescribed reading list, which can be found on the programme resource centre.

SSST students should compile a list of literary works to be studied in the SSST course according to the following requirements:

- nine works overall, written by authors on the Prescribed reading list
- a minimum of two works studied linked to each of the areas of exploration of the course
- coverage of at least three of the four literary forms (poetry, drama, fiction, non-fiction)
- coverage of at least three periods
- a minimum of four works originally written in the language A being studied, by authors on the Prescribed reading list
- a minimum of three works translated into your language A, originally written in a different language than the language A being studied, by authors on the Prescribed reading list
- works from a minimum of three places as defined by the Prescribed reading list in relation to the language A you are studying, covering at least two different continents.

#### **ROLES AND RESPONSIBILITIES**

#### An SSST supervisor

The ISD appoints an SSST supervisor who teaches a course in studies in language and literature.

#### A tutor in the SSST student first and best language

Your school must also assign a tutor who is proficient in your first and best language.

#### SSST LITERATURE A ASSESSMENTS

#### All assessment tasks for school-supported self-taught (SSST) students are <u>externally</u> assessed.

Paper 1 and paper 2 are the same as for taught students. The weightings for each component, as well as the assessment criteria and the marks awarded, are also the same as for taught students.

Assessment Component Weighting

External assessment (3 hours)         Paper 1: Guided literary analysis (1 hour 15 minutes)         The paper consists of two passages from two different literary forms, each accompanied by a question. Students choose one passage and write an analysis of it. (20 marks)	70% 35%
Paper 2 Comparative essay (1 hour 45 minutes)         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. (30 marks)	35%
<ul> <li>External assessment</li> <li>This component consists of an individual oral that is internally assessed by the teacher and externally moderated by the IB at the end of the course.</li> <li>Individual oral (15 minutes)</li> <li>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, 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. (40 marks)</li> </ul>	30%

#### LEARNER

#### PORTFOLIO

Compiling a learner portfolio is a key part of your journey as a self-taught student. The learner portfolio can be a journal, electronic or handwritten, notebook, folder, blog, or any other format that suits the student's learning style and shows his/her learning journey. It will be the basis of ongoing meetings with the SSST supervisor and tutor. This will not be directly assessed or moderated by the IB, however, schools may be required to submit Learner Portfolios to determine the authenticity of a student's work, to certify that academic honesty has been respected or to evaluate the syllabus in a school.

#### CONNECTIONS ACROSS LEARNING

SSST Literature A students make connections between their course and other subject areas. They understand that texts are affected by a wide variety of contexts such as the life of the author, the times in which they lived, historical conditions reflected in the text and many other real world factors. They will consider how **history**, **culture**, **geography** and many other external factors are all important to fully understand a literary text, and will look at how the works they are reading represent, reflect and become part of **life and culture**.

#### LINKS TO THEORY OF KNOWLEDGE

Links to TOK are made throughout the course. The following questions could be used to reflect on the connections between the areas of exploration and TOK:

1. What different kinds of knowledge does the reader gain through literature?

2. Can the meaning of a literary text ever be free from ambiguity? Can there ever be one true meaning of a literary text?

3. What is the relationship between the writer and the reader and how does it impact the reader's understanding of the literary text?

4. How does the experience differ when reading in the original language compared to reading in translation?

5. Does every literary text have an ideal reader? What are the challenges this presents for us as readers in our interaction with and understanding of the text?

6. How does the medium through which a literary text is presented impact how you experience it?

7. What constitutes or makes good evidence in literature?

#### LINKS TO CAS

There are many ways that the study of literature, knowledge of language A, and the development of reading, writing, speaking, and listening skills can be used in the context of CAS.

#### Development of first or best language

The language A studied as an SSST student may be a minority language in the school. Students should consider ways to assist fellow speakers in their school or community. They might want to consider translating some publications into their language A to provide assistance to these speakers. SSST students can also teach their mother tongue or promote it to the school community. **\*SERVICE** 

#### Literature

Students can help gather texts in other languages than English and help make them available at the school's library. They can create an awareness of the literature of their language A or form an advocacy group to take action against an injustice represented in texts. **\*CREATIVITY \*ACTION** 



# Group 2: Language Acquisition

English B French B French ab initio Spanish ab initio

## International School of Dakar IBDP English B HL/SL

Instructor: Sophie Burton/Estelle Thiam Rm: 107/206 Contact Information: <u>sophieh@faculty.isd.sn/</u> <u>estellet@faculty.isd.sn</u>

### **Course Description:**

IB DP English B HL/SL is a language acquisition course designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. Students further develop their ability to communicate in the target language through the study of language, themes, and texts. This course also gives the student wide exposure to the communities in which the target language is spoken, allowing the learner to go beyond the confines of the classroom, expanding their awareness of the world and fostering respect for cultural diversity. **Open-Minded\* Knowledgeable\* Caring\*** 

The distinction between Language B SL and HL can be seen in the level of competency the student is expected to develop in receptive, productive, and interactive skills. The Higher Level Language B course also includes the study of two literary works originally written in the target language (play, novel, prose, extracts, or poems). Through Approaches to learning in language acquisition courses, students develop the following range of special, critical, and creative-thinking skills:

- Thinking skills (inquiry-based tasks provide students with the opportunity to explore language and structures.) **Thinkers**\*
- Communication skills (students develop the ability to inform, describe, narrate, explain, persuade, and argue to a variety of audiences) **Communicators**\*
- Research skills (students use authentic sources to explore questions from different cultural perspectives and to expand their linguistic and intercultural knowledge.) **Inquirers\* Principled \***
- Self-management skills (students set their own goal to develop their linguistic and cultural competence) **Risk-takers\***
- Social skills (working collaboratively, taking part in group discussions, seminars and debates,)

#### \*IB Learner Profile Attributes

#### **Course Outline:**

The syllabus consists of five prescribed themes, which provide relevant contexts and opportunities for students to communicate about matters of personal, local or national, and global interest.

The five prescribed themes are:

• *Identities* - Explore the nature of the self and what it is to be human.

• *Experiences* - Explore and tell the stories of the events, experiences and journeys that shape our lives.

• *Human ingenuity* - Explore the ways in which human creativity and innovation affect our world.

• *Social organization* - Explore the ways in which groups of people are organized, through common systems or interests

• *Sharing the planet* - Explore the challenges and opportunities faced by individuals and communities in the modern world.

The themes allow students to compare the target language and culture(s) to other languages and cultures with which they are familiar. The themes also provide opportunities for students to make connections to other disciplinary areas in the DP. HL students explore fundamental elements of the literary works studied, such as themes, plot and characters. In language B HL, literature is intended as a stimulus for ideas to be explored, principally through oral assessment.

### **Connections Across Learning:**

• Environmental Systems and Societies

Students explore environmental consequences of human behaviors and sustainable solutions

• Visual arts

Students explore the function of street art (raising awareness of social and health issues)

• Science

Students discuss ethical issues surrounding science and technology (genetic manipulation, cloning, GM food)

## Theory of Knowledge links:

Language is one of the specific ways of knowing that is identified in the TOK course. In addition to this explicit exploration of language, the five themes of the language B curriculum provide students with a range of TOK links:

- At the beginning of their Language B course, students explore the concept of identity and discuss "Why do we not speak the same language?" and "To what extent is language a part of our identity?"
- For the Paper 1 assessment, students need to take into account the audience, context, audience and purpose of the text and ask themselves "How does the context affect the way the text is written or read?" and "What is the purpose of the text? How is language used to achieve this goal?"
- Through the study of the Human ingenuity theme, technological innovations are evaluated and students discuss "To what extent can intelligence be defined?" and "How intelligent is Artificial Intelligence and is it more intelligent than human intelligence?"

### CAS links:

• Service: Students volunteer to help languages learners with the study of the target language or student's mother tongue through the Mother Tongue Enrichment programme

- Service: Students research and learn about the languages and dialects spoken in the region they will travel to during their service trips.
- Activity: Students raise awareness of global issues and create displays in the target language (mural, posters, drawings) and take part in Community events (World Culture week) and International significant days (Peace Day, International Migrants Day, U.N Day)

#### Assessment:

ISD assessments will be completing both formative and summative assessments.

Students' receptive skills (reading and listening comprehension) and productive skills (writing, speaking) are assessed, at least once per semester, and graded from 1 to 7.

In Grade 11 and 12, assessments are all DP style assessments but assessments will be modified in Grade 11.

At the end of the course, the students will sit the following examinations:

	Assessment components	Weighting
	External assessment	75%
	Paper 1 (1 hour 30 minutes)	25%
	Productive skills—writing (30 marks)	
	One writing task of 450-600 words from a choice of three, each from a different	
	theme, choosing a text type from among those listed in the examination instructions.	
HL	Paper 2 (2 hours)	50%
	Receptive skills—separate sections for listening and reading (65 marks)	
	- Listening comprehension (1 hour) (25 marks)	
	- Reading comprehension (1 hour) (40 marks)	
	Comprehension exercises on three audio passages and three written texts, drawn	
	from all five themes.	

	Internal assessment	25%
	Individual oral assessment	25%
	A conversation with the teacher, 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. (30 marks)	
	External assessment	75%
	Paper 1 (1 hour 15 minutes)	25%
	Productive skills—writing (30 marks)	
	One writing task of 250-400 words from a choice of three, each from a different	
	theme, choosing a text type from among those listed in the examination instructions.	
	Paper 2 (1 hour 45 minutes)	50%
	Receptive skills — separate sections for listening and reading (65 marks)	
<b>C</b> 1	- Listening comprehension (45 minutes) (25 marks)	
SL	- Reading comprehension (1 hour) (40 marks)	
	Comprehension exercises on three audio passages and three written texts, drawn	
	from all five themes.	
	Internal assessment	25%
	Individual oral assessment	25%
	A conversation with the teacher, based on a visual stimulus, followed by discussion	
	based on an additional theme. (30 marks)	

## International School of Dakar IBDP French Language Acquisition HL/SL

Instructors: Seynabou Carnino - Rm: 403 - <u>seynabouc@faculty.isd.sn</u> Estelle Thiam - Rm: 206 - <u>estellet@faculty.isd.sn</u>

### **Course Description:**

IB DP French B is a language acquisition course designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. Students further develop their ability to communicate in the target language through the study of language, themes and texts. In doing so, they also develop conceptual **understandings** of how language works - as appropriate to the level of the course - and linguistic abilities through the development of receptive, productive and interactive skills. **Communicator**\*

This course also gives the student a wide exposure to the Francophone community, allowing the learner to go beyond the confines of the classroom, expanding their awareness of the world and fostering respect for cultural diversity. **Inquirers**\*

IB Learners will develop their receptive, productive and interactive skills in the target language by focusing their attention on the ways in which good communicators consider the audience, context and purpose of what they want to say or write.

Students will be expected to further develop the following Approach to Learning, which are crucial part of Language Acquisition:

- Communication skills: Use a range a range of speaking techniques to communicate with a variety of audiences, use appropriate forms of writing for different purposes and audiences, read critically a variety of sources for information, comprehension and for pleasure.
- Thinking skills:Create original works and ideas, use brainstorming and visual diagrams to generate new ideas and inquiries (**Inquirers**\*)
- Social skills: Building relationships within and outside the classroom
- Self-management skills (taking responsibility for roles within collaborative work, academic integrity, meeting deadlines)

#### \*IB Learner Profile Attributes

### **Course Outline:**

The skills IB Learners strive to develop are integrated into thematic units. The course covers 5 prescribed units:

- Identities (covered in DP 1)
- Experiences (Covered in DP 1)
- Sharing the Planet (Covered in DP 1)

- Social Organization (DP 2)
- Human Ingenuity (DP2)

Each theme is divided into subtopics, which are covered over the two years.

## **Connections Across Learning:**

Individual and societies:

• Study of different ethnic groups over the world, rites of passages, customs and traditions (subtopics of the theme Experience)

Physical Education and Health

• Being responsible for our health to live in good physical and mental health.

### **Theory of Knowledge Links:**

Links to ToK are made explicitly throughout the course.

During the study of the first topic Identity, students explore the subtopic Language and identity, language and stereotypes, perception of beauty. They will be encouraged to think about the following questions:

- To what extent is our perspective determined by a given culture?
- Why are we sensitive to the way others look at us?
- If we speak different languages, does our knowledge differ from one language to another? What are the stereotypes that are attached to the target culture?
- In what ways can language B aid in challenging them?

### CAS Links:

- Service: Emigration is a very current phenomenon in Senegal. Senegalese who have traveled clandestinely are being repatriated. Students engage with them (VIA NGOs) as part of CAS to learn from their experience and provide support where they can.
- Service: In Senegal, there may be concerns about the situation of talibes, children with serious illnesses, or girls who are not attending school. The students set up a project that gives them the opportunity to get involved in these different causes.
- Activity: Students have the option to volunteer, participate in the activities of an already established organization (Unicef, Handicap International), create a documentary on these issues, organize a benefit concert, and so on.

### Assessment:

ISD assessments will be completing both formative and summative assessments.

Students' receptive skills (reading and listening comprehension) and productive skills (writing, speaking) are assessed, at least once per semester, and graded from 1 to 7.

In Grade 11 and 12, assessments are all DP style assessments but assessments will be modified in Grade

11. At the end of the course, the students will sit the following examinations:

SL / HL

	Assessment components	Weighting
	External assessment	75%
	Paper 1 (1 hour 30 minutes)	25%
	Productive skills—writing (30 marks)	
	One writing task of 450-600 words from a choice of three, each from a different	
	theme, choosing a text type from among those listed in the examination instructions.	
HL	Paper 2 (2 hours)	50%
	Receptive skills—separate sections for listening and reading (65 marks)	
	- Listening comprehension (1 hour) (25 marks)	
	- Reading comprehension (1 hour) (40 marks)	
	Comprehension exercises on three audio passages and three written texts, drawn	
	from all five themes.	
	Internal assessment	25%
	Individual oral assessment	25%
	A conversation with the teacher, 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. (30 marks)	
	External assessment	75%
	Paper 1 (1 hour 15 minutes)	25%
	Productive skills—writing (30 marks)	
	One writing task of 250-400 words from a choice of three, each from a different	
	theme, choosing a text type from among those listed in the examination instructions.	
	Paper 2 (1 hour 45 minutes)	50%
	Receptive skills — separate sections for listening and reading (65 marks)	
SL	<ul> <li>Listening comprehension (45 minutes) (25 marks)</li> </ul>	
	- Reading comprehension (1 hour) (40 marks)	
	Comprehension exercises on three audio passages and three written texts, drawn	
	from all five themes.	
	Internal assessment	25%
	Individual oral assessment	25%
	A conversation with the teacher, based on a visual stimulus, followed by discussion	
	based on an additional theme. (30 marks)	
# International School of Dakar IBDP French Ab Initio SL

Instructor: Sophie Kappner - Room: 108 Contact Information: <u>sophiek@faculty.isd.sn</u>

## **Course Description:**

**DP1**: In DP1 of the Ab Initio French course, students focus on building a strong foundation in the French language. The primary emphasis is on acquiring essential vocabulary and mastering fundamental grammatical structures. Topics covered include greetings, introductions, numbers, daily routines, food, family, and basic travel-related vocabulary. Students also start to develop their listening and speaking skills, engaging in simple conversations and discussions. Cultural awareness is introduced through topics such as French-speaking countries, traditions, and holidays. DP1 serves as a crucial introductory phase where students lay the groundwork for more advanced language learning in DP2.

**DP2:** DP2 builds upon the knowledge and skills acquired in DP1, taking students to a higher level of proficiency in French. In this year, students expand their vocabulary to cover a broader range of topics, including education, health, travel, and society. The study of more complex grammatical structures allows students to construct more sophisticated sentences and express themselves with greater accuracy. Listening and speaking skills are further developed through more in-depth conversations, presentations, and debates. DP2 also delves deeper into French culture, exploring literature, art, cinema, and contemporary issues. By the end of DP2, students are expected to communicate comfortably in everyday situations and demonstrate a solid understanding of French culture and society.

### **Course outline:**

We are using the textbook <u>Panorama Francophone</u> as well as many additional resources presenting authentic texts and sources. The syllabus consists of five prescribed themes, which provide relevant contexts and opportunities for students to communicate about matters of personal, local or national, and global interest.

Theme	Guiding principle	Prescribed topics	Possible questions
Identities	Explore the nature of the self and	<ul> <li>Personal attributes</li> </ul>	How do I present myself to others?
	how we express who we are.	Personal relationships	How do I express my identity?
		<ul> <li>Eating and drinking</li> </ul>	How do I achieve a balanced and healthy lifestyle?
		<ul> <li>Physical well-being</li> </ul>	
Experiences	Explore and tell the stories of the	Daily routine	How does travel broaden our horizons?
	events, experiences and journeys	• Leisure	How would my life be different if I lived in another culture?
	that shape our lives.	<ul> <li>Holidays</li> </ul>	<ul> <li>What are the challenges of being a teenager?</li> </ul>
		Festivals and celebrations	How are customs and traditions similar or different across cultures?
Human	Explore the ways in which human	<ul> <li>Transport</li> </ul>	How do science and technology affect my life?
ingenuity	creativity and innovation affect	<ul> <li>Entertainment</li> </ul>	How do I use media in my daily life?
	our world.	• Media	What can I learn about a culture through entertainment?
		<ul> <li>Technology</li> </ul>	
Social	Explore the ways in which groups	<ul> <li>Neighbourhood</li> </ul>	What purpose do rules and regulations have in society?
organization	of people organize themselves, or	<ul> <li>Education</li> </ul>	What is my role in society?
	are organized, through common systems or interests	<ul> <li>The workplace</li> </ul>	<ul> <li>What options do I have in the world of work?</li> </ul>
	systems of interests.	<ul> <li>Social issues</li> </ul>	
Sharing the	Explore the challenges and	Climate	What can I do to help the environment?
planet	opportunities faced by individuals	<ul> <li>Physical geography</li> </ul>	<ul> <li>How do my surroundings affect the way I live?</li> </ul>
	world	The environment	What can I do to make the world a better place?
		<ul> <li>Global issues</li> </ul>	

### Approaches to Learning (ATL) skills

### **Communication Skills:**

In DP1, students begin developing basic communication skills, focusing on greetings, introductions, and daily routines. As they progress to DP2, they build upon these skills to engage in more in-depth conversations, presentations, and debates.

**ATL Application:** Students will need to effectively communicate in both spoken and written French throughout the course. This includes listening comprehension, clear articulation, and the ability to express ideas accurately and coherently. They will also learn how to structure presentations and written assignments.

#### **Research and Study Skills:**

**Course Outline:** The use of authentic texts and sources, such as the textbook "Panorama Francophone" and additional resources, requires students to research and gather information from various materials. **ATL Application:** Students will need to develop research and study skills to understand and analyze authentic French texts. This involves extracting information, summarizing content, and synthesizing ideas from diverse sources. These skills are particularly relevant during assessments, where they must demonstrate comprehension and interpretation.

#### Self-Management Skills:

**Assessment:** The course involves a combination of formative and summative assessments, including external and internal assessments. Students must manage their time and workload effectively to meet assessment deadlines and prepare for examinations.

**ATL Application:** Self-management skills, such as time management, organization, and goal setting, are crucial for students to balance their coursework, practice, and exam preparation effectively. They need to develop a structured study routine to perform well in both formative and summative assessments.

### **Connections Across Learning:**

By establishing these connections, students can see the interdisciplinary relevance of the Ab Initio French course and how it complements their overall DP education. This holistic approach fosters a deeper understanding of the language and its cultural significance, enhancing their ability to engage with a wide range of subjects within the DP.

**Links with Language and Literature (Group 1):** The Ab Initio French course helps students develop proficiency in French language and cultural understanding. This proficiency can be valuable when analyzing and interpreting French literature or exploring the linguistic nuances of literary texts.

Links with Individuals and Societies (Group 3): French culture and society are integral components of the Ab Initio French course. Students can examine the social, political, and historical aspects of French-speaking countries, connecting their language skills to broader sociopolitical contexts studied in Individuals and Societies subjects like History and Geography.

Links with Arts (Group 6): French culture has made significant contributions to the world of arts, including literature, visual arts, music, and cinema. Students can explore French artistic expressions and connect them to their studies in Visual Arts, Music, or Film within the Arts group.

## **Theory of Knowledge Links:**

The Ab Initio French course encourages critical thinking and communication skills.

**Knowledge and Language:** The study of French language and culture in DP1 and DP2 involves the acquisition of knowledge through language. Students engage in conversations, read texts, and interpret cultural expressions in French.

**Cultural Perspectives and Bias:** DP2 delves deeper into French culture, exploring literature, art, cinema, and contemporary issues. Cultural perspectives and biases are inherent in these cultural expressions..

**The Nature of Knowledge:** Throughout DP1 and DP2, students gather information from authentic French texts and sources, analyze them, and synthesize ideas. They also engage in formative and summative assessments that require them to demonstrate their understanding of the French language and culture.

### CAS Links:

French language skills can be applied in service projects that involve working with French-speaking communities or organizations. Additionally, participating in French cultural activities or events can contribute to the Creativity and Activity components of CAS.

Service - Community Engagement: Students engage in service activities that involve using their French language skills to benefit the local community

**Creativity - Cultural Exploration:** Students explore their creativity by participating in or organizing cultural events related to French language and French and Senegalese culture.

Activity - Physical Well-being: Learning a new language, such as French, also involves mental agility and focus. Students can link their language learning to maintaining overall physical and mental well-being. Example: Practicing French language skills through physical activities like yoga, dance, or sports. They can engage in activities that enhance memory, concentration, and language retention.

### Assessment:

- **Formative assessments** are to monitor student learning and to provide ongoing feedback that can be used by myself to improve my teaching and by students to improve their learning.
- Summative assessments measure student performance against criteria to determine achievement levels.

<b>Paper 1 (1 hour) -</b> 25%	External assessment Productive skills— writing (30 marks) 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.
<b>Paper 2 (1 hour 45 minutes) -</b> 50%	Receptive skills—separate sections for listening and reading Listening comprehension (45 minutes) (25 marks) - 25% Reading comprehension (1 hour) (40 marks) - 25% Comprehension exercises on three audio passages and three written texts, drawn from all five themes.
Internal assessment- 25%	This component is internally assessed by the teacher and externally moderated by the IB at the end of the course. Individual oral assessment A conversation with the teacher, based on a visual stimulus and at least one additional course theme. (30 marks)

# International School of Dakar IBDP Spanish B HL/SL

Instructor: JulieAnne Edmond Rm: 109 Contact Information: julieannee@faculty.isd.sn

### **Course Description:**

IB DP Spanish B HL/SL is a language acquisition course designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. Students further develop their ability to communicate in the target language through the study of language, themes, and texts. This course also gives the student wide exposure to the communities in which the target language is spoken, allowing the learner to go beyond the confines of the classroom, expanding their awareness of the world and fostering respect for cultural diversity. **Open-Minded\* Knowledgeable\* Caring\*** 

The distinction between Language B SL and HL can be seen in the level of competency the student is expected to develop in receptive, productive, and interactive skills. The Higher Level Language B course also includes the study of two literary works originally written in the target language (play, novel, prose, extracts, or poems). Through Approaches to learning in language acquisition courses, students develop the following range of special, critical, and creative-thinking skills:

- Thinking skills (inquiry-based tasks provide students with the opportunity to explore language and structures.) **Thinkers**\*
- Communication skills (students develop the ability to inform, describe, narrate, explain, persuade, and argue to a variety of audiences) **Communicators**\*
- Research skills (students use authentic sources to explore questions from different cultural perspectives and to expand their linguistic and intercultural knowledge.) **Inquirers\* Principled \***
- Self-management skills (students set their own goal to develop their linguistic and cultural competence) **Risk-takers**\*
- Social skills (working collaboratively, taking part in group discussions, seminars and debates,)

### \*IB Learner Profile Attributes

### **Course Outline:**

The syllabus consists of five prescribed themes, which provide relevant contexts and opportunities for students to communicate about matters of personal, local or national, and global interest.

The five prescribed themes are:

• *Identities* - Explore the nature of the self and what it is to be human.

- *Experiences* Explore and tell the stories of the events, experiences and journeys that shape our lives.
- *Human ingenuity* Explore the ways in which human creativity and innovation affect our world.
- *Social organization* Explore the ways in which groups of people are organized, through common systems or interests

• *Sharing the planet* - Explore the challenges and opportunities faced by individuals and communities in the modern world.

The themes allow students to compare the target language and culture(s) to other languages and cultures with which they are familiar. The themes also provide opportunities for students to make connections to other disciplinary areas in the DP. HL students explore fundamental elements of the literary works studied, such as themes, plot and characters. In language B HL, literature is intended as a stimulus for ideas to be explored, principally through oral assessment.

## **Connections Across Learning:**

- *Environmental Systems and Societies* Students explore environmental consequences of human behaviors and sustainable solutions
- *Visual Arts* -Students explore the function of street art (raising awareness of social and health issues)
- *Science* Students discuss ethical issues surrounding science and technology (genetic manipulation, cloning, GM food)

### Theory of Knowledge links:

Language is one of the specific ways of knowing that is identified in the TOK course. In addition to this explicit exploration of language, the five themes of the language B curriculum provide students with a range of TOK links:

- At the beginning of their Language B course, students explore the concept of identity and discuss "Why do we not speak the same language?" and "To what extent is language a part of our identity?"
- For the Paper 1 assessment, students need to take into account the audience, context, audience and purpose of the text and ask themselves "How does the context affect the way the text is written or read?" and "What is the purpose of the text? How is language used to achieve this goal?"
- Through the study of the Human ingenuity theme, technological innovations are evaluated and students discuss "To what extent can intelligence be defined?" and "How intelligent is Artificial Intelligence and is it more intelligent than human intelligence?"

### CAS links:

• Service: Students volunteer to help languages learners with the study of the target language or student's mother tongue through the Mother Tongue Enrichment programme

- Service: Students research and learn about the languages and dialects spoken in the region they will travel to during their service trips.
- Activity: Students raise awareness of global issues and create displays in the target language (mural, posters, drawings) and take part in Community events (World Culture week) and International significant days (Peace Day, International Migrants Day, U.N Day)

### Assessment:

ISD assessments will be completing both formative and summative assessments. Students' receptive skills (reading and listening comprehension) and productive skills (writing, speaking) are assessed, at least once per semester, and graded from 1 to 7. In Grade 11 and 12, assessments are all DP style assessments but assessments will be modified in Grade 11.

At the end of the course, the students will sit the following examinations:

	Assessment components	Weighting
	External assessment	75%
	Paper 1 (1 hour 30 minutes)	25%
	Productive skills—writing (30 marks)	
	One writing task of 450-600 words from a choice of three, each from a different	
	theme, choosing a text type from among those listed in the examination instructions.	
HL	Paper 2 (2 hours)	50%
	Receptive skills—separate sections for listening and reading (65 marks)	
	- Listening comprehension (1 hour) (25 marks)	
	- Reading comprehension (1 hour) (40 marks)	
	Comprehension exercises on three audio passages and three written texts, drawn	
	from all five themes.	

	Internal assessment	25%
	Individual oral assessment	25%
	A conversation with the teacher, 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. (30 marks)	
	External assessment	75%
	Paper 1 (1 hour 15 minutes)	25%
	Productive skills—writing (30 marks)	
	One writing task of 250-400 words from a choice of three, each from a different	
	theme, choosing a text type from among those listed in the examination instructions.	
	Paper 2 (1 hour 45 minutes)	50%
	Receptive skills — separate sections for listening and reading (65 marks)	
<b>CI</b>	- Listening comprehension (45 minutes) (25 marks)	
SL	- Reading comprehension (1 hour) (40 marks)	
	Comprehension exercises on three audio passages and three written texts, drawn	
	from all five themes.	
	Internal assessment	25%
	Individual oral assessment	25%
	A conversation with the teacher, based on a visual stimulus, followed by discussion	
	based on an additional theme. (30 marks)	

# International School of Dakar IBDP Spanish Ab Initio SL

Instructor: JulieAnne Edmond Rm: 109 Contact Information: julieannee@faculty.isd.sn

## **Course Description:**

DP1 is the first year in a two year introductory course in Spanish. By the end of the year, students will have sufficient grammatical knowledge to conjugate verbs in the present, past and imperfect tense. Topics covered include greetings, introductions, numbers, daily routines, food, family, and basic travel-related vocabulary. Students also start to develop their listening and speaking skills, engaging in simple conversations and discussions. Cultural awareness is introduced through topics such as Spanish-speaking countries, traditions, and holidays. DP1 serves as a crucial introductory phase where students lay the groundwork for more advanced language learning in DP2.

DP2 builds upon the knowledge and skills acquired in DP1, taking students to a higher level of proficiency in Spanish. In this year, students expand their vocabulary to cover a broader range of topics, including education, health, travel, and society. The study of more complex grammatical structures allows students to construct more sophisticated sentences and express themselves with greater accuracy. Listening and speaking skills are further developed through more in-depth conversations, presentations, and debates. DP2 also delves deeper into Spanish culture, exploring literature, art, cinema, and contemporary issues. By the end of DP2, students are expected to communicate comfortably in everyday situations and demonstrate a solid understanding of Spanish culture and society.

**Course Outline:** We are using the *Panorama hispanohablante* 1 and 2 textbooks as well as many additional resources presenting authentic texts and sources. The syllabus consists of five prescribed themes, which provide relevant contexts and opportunities for students to communicate about matters of personal, local or national, and global interest.

Theme	Guiding principle	Prescribed topics	Possible questions
Identities	Explore the nature of the self and	Personal attributes	How do I present myself to others?
	how we express who we are.	Personal relationships	How do I express my identity?
		<ul> <li>Eating and drinking</li> </ul>	<ul> <li>How do I achieve a balanced and healthy lifestyle?</li> </ul>
		Physical well-being	
Experiences	Explore and tell the stories of the	Daily routine	How does travel broaden our horizons?
	events, experiences and journeys	Leisure	How would my life be different if I lived in another culture?
	that shape our lives.	<ul> <li>Holidays</li> </ul>	<ul> <li>What are the challenges of being a teenager?</li> </ul>
		Festivals and celebrations	How are customs and traditions similar or different across cultures?
Human	Explore the ways in which human	<ul> <li>Transport</li> </ul>	<ul> <li>How do science and technology affect my life?</li> </ul>
ingenuity	creativity and innovation affect	Entertainment	<ul> <li>How do I use media in my daily life?</li> </ul>
	our world.	• Media	What can I learn about a culture through entertainment?
		<ul> <li>Technology</li> </ul>	
Social	Explore the ways in which groups	<ul> <li>Neighbourhood</li> </ul>	What purpose do rules and regulations have in society?
organization	of people organize themselves, or	Education	What is my role in society?
	are organized, through common systems or interests	<ul> <li>The workplace</li> </ul>	<ul> <li>What options do I have in the world of work?</li> </ul>
		<ul> <li>Social issues</li> </ul>	
Sharing the	Explore the challenges and	• Climate	What can I do to help the environment?
planet	opportunities faced by individuals	<ul> <li>Physical geography</li> </ul>	<ul> <li>How do my surroundings affect the way I live?</li> </ul>
	and communities in the modern	The environment	What can I do to make the world a better place?
		<ul> <li>Global issues</li> </ul>	

## Approaches to Learning (ATL) skills

<u>Communication Skills</u>: In DP1, students begin developing basic communication skills, focusing on greetings, introductions, and daily routines. As they progress to DP2, they build upon these skills to engage in more in-depth conversations, presentations, and debates.

**<u>Research and Study Skills:</u>** The use of authentic texts and sources, such as the *Panorama hispanohablante* textbook and additional resources, requires students to research and gather information from various materials. This involves extracting information, summarizing content, and synthesizing ideas from diverse sources. These skills are particularly relevant during assessments, where they must demonstrate comprehension and interpretation.

<u>Self-Management Skills</u>: The course involves a combination of formative and summative assessments, including external and internal assessments. Students must manage their time and workload effectively to meet assessment deadlines and prepare for examinations.

## **Connections Across Learning :**

By establishing these connections, students can see the interdisciplinary relevance of the Ab Initio Spanish course and how it complements their overall DP education. This holistic approach fosters a deeper understanding of the language and its cultural significance, enhancing their ability to engage with a wide range of subjects within the DP.

**Links with Language and Literature (Group 1):** The Ab Initio Spanish course helps students develop proficiency in Spanish language and cultural understanding. This proficiency can be valuable when analyzing and interpreting Spanish literature or exploring the linguistic nuances of literary texts.

Links with Individuals and Societies (Group 3): Spanish-speaking culture and society are integral components of the Ab Initio Spanish course. Students can examine the social, political, and historical aspects of the Spanish-speaking world, connecting their language skills to broader sociopolitical contexts studied in Individuals and Societies subjects like History and Geography.

Links with Arts (Group 6): Spanish culture has made significant contributions to the world of arts, including literature, visual arts, music, and cinema. Students can explore Spanish artistic expressions and connect them to their studies in Visual Arts, Music, or Film within the Arts group.

# **Theory of Knowledge Links:**

The Ab Initio Spanish course encourages critical thinking and communication skills.

**Knowledge and Language:** Students will be encouraged to think of the following possible questions: "To what extent language is part of our identity?" or "What is lost in translation from one language to another?" Students engage in conversations, read texts, and interpret cultural expressions in Spanish.

**Cultural Perspectives and Bias:** DP2 delves deeper into Spanish culture, exploring literature, art, cinema, and contemporary issues. Cultural perspectives and biases are inherent in these cultural expressions. Students will be encouraged to think about the following questions: "What are the artist's intentions?" Or "What are the artwork's aesthetic qualities or its beauty?" or "What is the reader/viewer's emotional response or interpretation?" or "Is art only about opinion or is it a human endeavor to discover a truth or reality?"

**The Nature of Knowledge:** Throughout DP1 and DP2, students gather information from authentic Spanish texts and sources, analyze them, and synthesize ideas. Students will be inquiring about societal issues such as Global warming or poverty. They will be encouraged to think about the following questions: "Can we solve the problem of poverty once and for all? Why/why not?" or "Is Global warming a matter of belief?"

# CAS Links (Creativity, Activity, Service):

Spanish language skills can be applied in service projects that involve working with Spanish-speaking communities or organizations. Additionally, participating in Spanish cultural activities or events can contribute to the Creativity and Activity components of CAS.

Service - Community Engagement: Students engage in service activities that involve using their Spanish language skills to benefit the local community

**Creativity - Cultural Exploration:** Students explore their creativity by participating in or organizing cultural events related to Spanish language and working with the Instituto Cervantes of Dakar.

Activity - Physical Well-being: Learning a new language, such as Spanish, also involves mental agility and focus. Students can link their language learning to maintaining overall physical and mental well-being. Example: Practicing Spanish language skills through physical activities like yoga, dance, or sports. They can engage in activities that enhance memory, concentration, and language retention.

### Assessment:

- **Formative assessments** are to monitor student learning and to provide ongoing feedback that can be used by myself to improve teaching and by students to improve their learning.
- Summative assessments measure student performance against criteria to determine achievement levels.

<b>Paper 1 (1 hour) -</b> 25%	External assessment Productive skills— writing (30 marks) 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.
<b>Paper 2 (1 hour 45 minutes) -</b> 50%	Receptive skills—separate sections for listening and reading Listening comprehension (45 minutes) (25 marks) - 25% Reading comprehension (1 hour) (40 marks) - 25% Comprehension exercises on three audio passages and three written texts, drawn from all five themes.
Internal assessment- 25%	This component is internally assessed by the teacher and externally moderated by the IB at the end of the course. Individual oral assessment A conversation with the teacher, based on a visual stimulus and at least one additional course theme. (30 marks)



# Group 3: Individuals and Societies

Economics History Psychology

## **Course Description:**

IBDP Economics involves an in-depth study of the fundamental economic principles which guide the world. A range of topics will be *researched* and covered from the classical economic canon including micro and macro as well as the more current look at the global economy. Students will become **knowledgeable** of key economic concepts and apply them to a range of current economic cases from around the globe (Open – **mindedness**).

Students will develop the economic skills to *analyze* economic policies and **communicate** the effectiveness of economic policies through constructive peer discussion in class (*social skills*). Higher level students, in addition to going deeper into topics, also learn how to make economic calculations to further their understanding of the allocation of resources.

There are nine key concepts in economics: scarcity, choice, efficiency, equity, economic well-being, sustainability, change, interdependence and intervention.

\* ATL skills in italics | Learner Profile Attributes in bold.

### **Course Outline:**

Section 1, Introduction to economics: 1.1 What is economics? 1.2 How do economists approach the world?

Section 2, Microeconomics:

- 2.1 Demand
- 2.2 Supply
- 2.3 Macroeconomic objectives
- 2.3 Competitive market equilibrium
- 2.4 Critique of the maximizing behavior of consumers and producers
- 2.5 Elasticity of demand
- 2.6 Elasticity of supply
- 2.7 Role of government in microeconomics
- 2.8 Market failure-externalities and common pool or common access resources
- 2.9 Market failure—public goods
- 2.10 Market failure—asymmetric information
- 2.11 Market failure-market power
- 2.12 The market's inability to achieve equity

Section 3, Macroeconomics:

- 3.1 Measuring economic activity and illustrating its variations
- 3.2 Variations in economic activity-aggregate demand and aggregate supply
- 3.3 Macroeconomic objectives
- 3.4 Economics of inequality and poverty
- 3.5 Demand management (demand side policies)-monetary policy
- 3.6 Demand management—fiscal policy
- 3.7 Supply-side policies

Section 4, The global economy:

- 4.1 Benefits of international trade
- 4.2 Types of trade protection
- 4.3 Arguments for and against trade control/protection
- 4.4 Economic integration
- 4.5 Exchange rates
- 4.6 Balance of payments
- 4.7 Sustainable development
- 4.8 Measuring development
- 4.9 Barriers to economic growth and/or economic development
- 4.10 Economic growth and/or economic development strategies
- 4.5 The role of foreign direct investment
- 4.6 The roles of foreign aid and multilateral development assistance
- 4.7 The role of international debt
- 4.8 The balance between markets and intervention

### **Connections Across Learning:**

Through the nine key concepts, the course provides many opportunities for students to make connections with other subjects to enhance interdisciplinary learning. Some opportunities include;

Mathematics

• Use of mathematical concepts in data analysis and interpreting economic phenomena.

Sciences

• Use of scientific methods in investigation of economic challenges.

Visual Arts/Film/Theatre

• Expression and application of economic concepts in aesthetic, musical and imagery representations.

Language and Literature:

• Analysis of real-life issues from multiple news websites in different languages.

# Theory of Knowledge Links:

Links to ToK are made explicitly throughout the course. Some of the knowledge questions that might be considered include the following:

• In the early part of the course, we will explore the question "Are there fundamental differences between economics and other disciplines or areas of knowledge? If so, are these differences more than just methodological differences?"

• On the topic of positive and normative statements, the class will explore the question "Do emotion and intuition have a role in economics?"

• In DP 2 when we start evaluating different economic theories, we will explore the question "What factors affect the reliability and validity of economic models/concepts?"

## CAS Links:

The economics course highlights many economic issues that have local, national and global manifestations. Through CAS, students can further extend their awareness and take valuable steps in working towards alleviating economic problems through their own actions and through motivating others to take action. Economics students might choose to engage with CAS in the following ways.

• Plan, participate and implement an activity to help raise awareness in the community about any number of the Sustainable Development Goals (SDGs).

• International Women's Day to highlight and promote the importance of gender equity in employment (8 March)

• World No Tobacco Day to highlight and raise awareness of the social costs of smoking (31 May)

• Earth Day to highlight and promote the role of responsible consumption in achieving sustainability (22 April).

### Assessment:

ISD assessments will be both formative and summative.

In Grade 11 and 12, assessments will be based on DP style paper 1, paper 2 and paper 3 assessments. In addition, one IA commentary on micro will be written in G11 and in G12 two commentaries, one on macro and one on the global economy, will be written in G12.

### **Standard Level**

**Paper 1 - 30%** Extended response paper (25 marks) Students answer one questions from a choice of three

Paper 2 - 40% Data response paper (40 marks) Students answer one question from a choice of two

### Internal assessment 30%

Students will write and submit one commentary for each major unit of study for their IB Portfolio. Commentaries will be based on published extracts from the news media. Maximum 800 words x 3 (45 marks)

### **Higher Level**

Paper 1 - 20% Extended response paper (25 marks) Students answer one questions from a choice of three

### Paper 2 - 30%

Data response paper (40 marks) Students answer one question from a choice of two

### Paper 3 - 30%

Policy paper (60 marks) Students answer both mandatory questions. (30 marks per question)

### Internal assessment - 20%

Students will write and submit one commentary for each major unit of study for their IB Portfolio. Commentaries will be based on published extracts from the news media. Maximum 800 words x 3 (45 marks)

# International School of Dakar IBDP History HL/SL

Instructor: Wendy Gifford Rm: DP Office, Teranga Centre Contact Information: wendyg@faculty.isd.sn

## **Course Description:**

IBDP History involves students in an in-depth study of twentieth century history. A range of topics will be covered at both HL/SL and HL students will also focus on Africa as their regional study. Students will also have the opportunity to engage in individual research on a topic of their choice.

Key historical skills will be honed such as evaluating sources, comparing and contrasting sources, synthesizing source material and own knowledge, constructing an argument from evidence, research skills and understanding historiographical developments. **Open-Minded**\*

Students will study key concepts such as cause and consequence, change, continuity, significance and perspectives. **Knowledgeable**\*

Students will be expected to further develop and become proficient/master the Approaches to Learning:

- Thinking skills (analyzing and evaluating sources, constructing arguments, making comparisons and contrasts, synthesis of source material and own knowledge) **Thinkers**\*
- Communication skills (constructing oral and written arguments, use of appropriate terminology) Communicators\*
- Research skills (individual research for the Internal Assessment) Inquirers\*
- Self-management skills (taking responsibility for roles within collaborative work, academic integrity, meeting deadlines) **Principled\* Balanced\* Risk-takers\***
- Social skills (working collaboratively, taking part in group discussions, seminars and debates) Caring\*

### \*IB Learner Profile Attributes

### **Course Outline:**

Study of a prescribed topic with emphasis on document interpretation - Paper 1 (HL/SL)

• Rights and Protest (US Civil Rights/Apartheid in South Africa)

World History Topics – Paper 2 (HL/SL)

- Causes and Effects of C20th Wars (World War II, Vietnamese War of Independence and Civil War, the Angolan Civil War)
- Independence Movements (Vietnam, African examples)

Aspects of African History – Paper 3 (HL only)

- Response to European Imperialism 1870-1920 (Ethiopia, The Mandinka, Herero and Nama, The Asante Wars, the Zulu, Khama and Lewinika, Mwanga and Apollo Kagwa)
- Twentieth Century Nationalism and Independence Movements (French West Africa, Gold Coast, Tanganyika, Kenya, South West Africa, Angola)
- South Africa 1880-1994

Internal Assessment

• 2,200-word research paper on a historical topic of the students' choice

# **Connections Across Learning:**

Language and Literature:

• Interpretation and analysis of non-literary texts (propaganda/colonial advertising)

- Language and Literature/Language B HL
- Comprehension of the historical background of literary texts (Purple Hibiscus, Frederick Douglas) Visual Arts/Film/Theatre
  - Comprehension of the historical background of works of art (dependent on student choice for research elements of these courses)

# Theory of Knowledge Links:

Links to ToK are made explicitly throughout the course.

- As part of the introduction to the course students discuss "Do we learn from history?" and "To what extent does studying history help us to better understand ourselves in the present?"
- When preparing for Paper 1 students discuss "How does the context within which historians live affect historical knowledge?" and "What is the difference between bias and selection?"
- For the Internal Assessment there is a major focus on the methods used by the historian and the role of the historian and students may also choose to discuss other questions such as: "Is it possible to describe historical events in an unbiased way?", "Who decides which events are historically significant?", "What is the role of individuals in history".

# CAS Links:

Examples of CAS experiences that have links to history include the following;

- Creativity: MUN Club where students use their historical knowledge to research the country they are representing and to understand the other countries they will be negotiating with.
- Creativity: Debate Club where students will use the skills practiced in History to construct arguments.
- Service: Service Trips where students research the historical background of the community they are serving in order to understand the present situation.

## Assessment:

ISD assessments will be both formative and summative.

In Grade 11 assessments will be written (essays/document analysis/short answers) and oral

(presentations/seminars/speeches)

In Grade 12 assessments will almost exclusively be DP style assessments, that is Internal Assessment, Paper 1 document analysis and essays

The final examinations are detailed below;

### Standard Level

Assessment component	Weighting
External assessment (2 hours 30 minutes)	75%
Paper 1 (1 hour)	30%
Source-based paper based on the five prescribed subjects. Choose one prescribed	
subject from a choice of five. Answer four structured questions. (24 marks)	
Paper 2 (1 hour 30 minutes)	45%
Essay paper based on the 12 world history topics. Answer two essay questions on two	
different topics. (30 marks)	
Internal assessment (20 hours)	25%
This component is internally assessed by the teacher and externally moderated by the IB	
at the end of the course.	
Historical investigation	
Students are required to complete a historical investigation into a topic of their choice.	
(25 marks)	

# Higher Level

Assessment component	Weighting
External assessment (5 hours)	80%
Paper 1 (1 hour)	20%
Source-based paper based on the five prescribed subjects. Choose <b>one</b> prescribed subject from a choice of five. Answer four structured questions. (24 marks)	
Paper 2 (1 hour 30 minutes) Essay paper based on the 12 world history topics. Answer two essay questions on two different topics. (30 marks)	25%
Paper 3 (2 hours 30 minutes) Separate papers for each of the four regional options. For the selected region, answer three essay questions. (45 marks)	35%
Internal assessment (20 hours) This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.	20%
Historical investigation Students are required to complete a historical investigation into a topic of their choice. (25 marks)	

(IBDP History Subject Guide 1st Examinations 2017)

# International School of Dakar IBDP Psychology HL/SL

Instructor: Gretchen Bade Rm: 308 Contact Information: <u>gretchenb@faculty.isd.sn</u>

## **Course Description:**

DP Psychology takes an integrated approach to the study of human behavior. Students will have the opportunity to study the way the social and cultural environment shapes behavior, mental processes including memory, thinking and decision making, and the brain. In the process, the course will require students to hone their analytical skills and critically think about research.

In Year 2, students will explore up to two (HL) Options of Applied Psychology. Students have the opportunity to learn about: Abnormal, Health, and Developmental Psychology, and the study of Human Relationships. For the Internal Assessment, students will be asked to demonstrate their knowledge of the research process through the replication of a simple experiment.

Students will be expected to further develop and the Approaches to Learning:

- Thinking skills (analyzing and evaluating theories, synthesis and application of research, identifying implications) KNOWLEDGEABLE, THINKERS and REFLECTIVE
- Communication skills (constructing written arguments, use of precise terminology) COMMUNICATORS
- Research skills (EE in psychology) INQUIRERS
- Self-management skills (taking responsibility self and others, meeting deadlines) PRINCIPLED
- Social skills (learning collaboratively, active listening and contributing) OPEN MINDEDNESS and RISK TAKERS

# **Course Outline:**

### Study of Research Methods and the Core Approaches to Psychology-Paper 1 (HL/SL)

- Research Methodology and Ethics, The Social and Cultural Approach, The Cognitive Approach, The Biological Approach
- HL Extensions: Globalization, Digital Cognition and Animal Research

### Study of Applied Psychology (The Options)-Paper 2 (HL/SL)

Abnormal Psychology, Health Psychology, Developmental Psychology and Human Relationships
 SL students will study one option and HL students will study two of the options

### Quantitative and Qualitative Research Methods-Paper 3 (HL only)

- Experiments
- Interviews, Observations and Case Studies

### Internal Assessment (HL/SL)

• Replication of a simple experiment: 2,200 word Report: Introduction, Exploration, Analysis, Evaluation

# **Connections Across Learning:**

Natural Sciences, emphasizing Biology:

• Psychologists aim to apply the Scientific Method and the role of biological factors (the brain, genes and evolution) in behavior is examined.

History:

• The study of the Individual and the Group (example: SIT) and Group Dynamics help to understand leaders and conflict in History.

Visual Arts/Film/Theatre:

• The way in which we learn our culture, how stereotypes form and are perpetuated through media is explored.

Comprehensive:

• The Cognitive Approach explores how we learn and remember.

## Theory of Knowledge Links:

Links to ToK are made explicitly throughout the course.

- In the Social and Cultural Approach the relationship between culture and knowledge is explored. In addition, the emic vs etic approach to research is a link to knowledge and inductive and deductive ways in which we know (in this case about ourselves and others).
- In the Cognitive Approach we question the reliability of memory, considering the role of schema and reconstructive memory. We also assess the extent to which we can know what is happening in the mind.
- In the Biological Approach we examine how new knowledge gained through research can change attitudes in society. In learning about genetics, we consider the implications of genetic arguments for behavior. The interaction between biology and the social sciences, two Areas of Knowledge, is fundamental to understanding the field.
- Year 2 focuses on areas of knowledge particularly how the biological, psychological, and sociocultural approaches explain human behavior.
- In Paper 3 and the Internal Assessment the focus is on the methods used by psychologists.

# CAS Links:

Examples of CAS that link to psychology include the following;

- Based on the study of the formation and effect of stereotypes, culture, etc. students may choose to facilitate a DEIJ PD workshop for teachers.
- Examining the stigma surrounding mental health may lead to more empathy and inspire CAS-related activities.
- The knowledge and understanding gained with regard to memory and how we learn may inspire a CAS project that student tutors.
- Alllport's "contact hypothesis" could be used to improve the relationship within the larger school community and between the school and local community.
- A CAS project could be based on educating the community about the effects of stress on learning.

## Assessment:

ISD assessments are both formative and summative.

In Grade 11 and 12 assessments are primarily written (SAQs and ERQs) in line with the exam expectations.

### The final IB examination will comprise the following: (From the Subject Guide, First Examination 2019)

### Standard Level

Assessment component	Weighting
External assessment (3 hours)	75%
Paper 1 (2 hours)	50%
Section A: Three short-answer questions on the core approaches to psychology (27 marks) Section B: One essay from a choice of three on the biological, cognitive and sociocultural approaches to behaviour (22 marks) (Total 49 marks)	
Paper 2 (1 hour)	25%
One question from a choice of three on one option (22 marks)	
Internal assessment (20 hours)	25%
This component is internally assessed by the teacher and externally moderated by the IB at the end of the course. Experimental study	
A report on an experimental study undertaken by the student (22 marks)	

# Higher Level

Assessment component	Weighting
External assessment (5 hours)	80%
Paper 1 (2 hours)	40%
Section A: Three short-answer questions on the core approaches to psychology (27 marks) Section B: One essay from a choice of three on the biological, cognitive and sociocultural approaches to behaviour. <b>One, two or all</b> of the essays will reference the additional HL topic (22 marks) (Total 49 marks)	
Paper 2 (2 hours)	20%
Two questions; one from a choice of three on each of two options (Total 44 marks)	
Paper 3 (1 hour)	20%
Three short-answer questions from a list of six static questions on approaches to research (24 marks)	
Internal assessment (20 hours)	20%
This component is internally assessed by the teacher and externally moderated by the IB at the end of the course. Experimental study	
A report on an experimental study undertaken by the student (22 marks)	



# Group 4: Experimental Sciences

Biology Chemistry Environmental Systems and Society Physics Sports, Exercise & Health science

# International School of Dakar IBDP Biology HL/SL

Instructor: Vicky Meredith Rm: 303 Contact Information: vickym@faculty.isd.sn

## **Course Description:**

IBDP Biology requires students to develop thorough conceptual knowledge and understanding of a wide range of topics. IBDP Biology also develops strong analytical and critical thinking. **Thinkers**\* Students will develop their communication skills through applying knowledge to familiar and unfamiliar concepts to explain observations and concepts. **Communicators**\*

Students will study key concepts such as form fits function, adaptation, cell theory and biodiversity. **Knowledgeable\*** 

Students will be expected to further develop and become proficient/master the Approaches to Learning:

- Thinking skills (being curious about the natural world, designing procedures, evaluating ethical problems, applying key ideas, reflecting) **Thinkers**\*
- Communication skills (active listening skills, evaluating extended writing, applying interpretive techniques, clearly communicating complex ideas, using digital media to communicate information ) Communicators\*
- Research skills (evaluating information sources, discussing academic integrity, using a standard method for referencing and citation, using sources effectively) **Inquirers\***
- Self-management skills (breaking major tasks into a sequence of stages, meeting deadlines, taking risks, improving academic work, setting and adjusting goals) **Principled\* Balanced\* Risk-takers\* Reflective\***
- Social skills (working collaboratively, appreciating the talents of others, resolving conflicts, considering perspectives of others, reflecting on personal behaviour) **Reflective\* Caring\***

### \*IB Learner Profile Attributes

## **Course Outline:**

IBDP Biology has SL and HL. The syllabus is divided into four themes with four levels of organisation that apply to each them:

	A - Unity and diversity		1. Molecules
Themes	B - Form and function	Levels of organisation	2. Cells
	C - Interaction and interdependence		3. Organisms
	D - Continuity and change		4. Ecosystems

Internal Assessment

- The internal assessment is a scientific investigation that is worth 20% of the total mark.
- Students are required to formulate a research question, gather and analyse data to reach a conclusion and evaluate their scientific investigation
- A written report with maximum 3,000 words is prepared for assessment
- Assessment of the internal assessment uses four equally weighted criteria:
  - Research design
  - Data analysis
  - Conclusion
  - Evaluation

### **Connections Across Learning:**

Language and Literature:

- The importance of clear communication and making connections between knowledge and concepts
- The importance of a common language for effective communication

Math

• Identifying patterns and analysing data

Environmental systems and societies

- Importance of biodiversity
- Interconnectedness of organisms and organisms and their environment
- Sustainability is essential for conservation of biodiversity

# Theory of Knowledge Links:

Links to ToK are made explicitly throughout the course.

- Learning about how scientists have contributed to knowledge and how scientists approach research and data
- Understanding that knowledge can be limited by previous knowledge, misconceptions and technological limitations
- Evaluating knowledge claims by exploring validity, reliability, credibility and certainty, as well as individual and cultural perspectives between them
- Exploring knowledge questions in the natural sciences

## CAS Links:

Examples of CAS experiences that have links to history include the following;

- Creativity: Environment Club where students look at examples of the interconnectedness of organisms and the environment and projects to improve the environment of the campus.
- Service: Gardening Club where students will complete projects in the campus garden.

### Assessment:

In Grade 11 assessments will be research-based, groupwork, data analysis and formative and summative tests. All assessments will use past paper or past paper style questions.

In Grade 12 assessments will continue as in Grade 11 but with increased emphasis on exam paper questions and practice.

The final examinations are detailed below;

### Standard Level

Assessment component	Weighting
External assessment (3 hours)	80%
Paper 1 (1 hour and 30 minutes)	36%
Paper 1A—Multiple-choice questions	
Paper 1B—Data-based questions (four questions that are syllabus related, addressing all themes)	
(Total 55 marks)	
Paper 2 (1 hour and 30 minutes)	44%
Section A—Data-based and short answer questions	
Section B—Extended-response questions	
(Total 50 marks)	
Internal assessment (10 hours)	20%
The internal assessment consists of one task: the scientific investigation.	
This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.	
(Total 24 marks)	

# Higher Level

Assessment component	Weighting
External assessment (4 hours 30 minutes)	80%
Paper 1 (2 hours)	36%
Paper 1A—Multiple-choice questions	
Paper 1B—Data-based questions (four questions that are syllabus related, addressing all themes)	
(Total 75 marks)	
Paper 2 (2 hour and 30 minutes)	44%
Section A—Data-based and short answer questions	
Section B—Extended-response questions	
(Total 80 marks)	
Internal assessment (10 hours)	20%
The internal assessment consists of one task: the scientific investigation.	
This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.	
(Total 24 marks)	

(IBDP Biology Subject Guide 1st Examinations 2025)

# International School of Dakar IB DP Chemistry SL/HL

Instructor: Dr. Kiyra B. Holt Rm 301 Contact Information: <u>kiyrah@faculty.isd.sn</u>

## **Course Description:**

DP Chemistry begins with a review of atomic structure, the periodic table and chemical bonding. Students dig deeper into the content and its applications to modern science, including understanding in depth the nature of bond formation and why there are more covalent compounds than ionic. With this knowledge in place, students learn how to draw and identify the different classes of organic compounds and the kinds of reactions that can take place. Semester 2 of Year 1 covers stoichiometric relationships, thermochemistry and energetics. Students are encouraged to find an IA topic and begin a literature review. Year 1 ends with the Group 4 Project.

Year 2 of the DP Chemistry program begins with learning about equilibrium and the factors that affect it. Equilibrium is one of the more difficult topics in chemistry, but it is significant because it is used in acid-base chemistry and oxidation-reduction processes. We end the course content with spectroscopy. During Year 2, students complete the practical portion of their IA. After all of the topics are covered, students begin preparing for the external exams by reviewing past papers and taking practice tests.

Students will be expected to further develop and become proficient/master the Approaches to Learning:

- Thinking skills (analyzing and evaluating sources, making comparisons and contrasts, synthesis of source material and own knowledge) **Thinkers**\*
- Communication skills (use of appropriate terminology) Communicators\*
- Research skills (individual research for the Internal Assessment) Inquirers\*
- Self-management skills (taking responsibility for roles within collaborative work, academic integrity, meeting deadlines) **Principled\* Balanced\* Risk-takers\***
- Social skills (working collaboratively, taking part in group discussions,) Caring\*

### \*IB Learner Profile Attributes

### **Course Outline:**

Atomic Structure Periodic Table Chemical Bonding Organic Chemistry Stoichiometry Energetics & Thermochemistry Kinetics Equilibrium Acids & Bases Redox Processes Spectroscopy

## **Connections Across Learning:**

Language and Literature:

- The importance of clear communication and making connections between knowledge and concepts
- The importance of a common language for effective communication

Math

• Identifying patterns and analyzing data

### CAS

- Organizing a science club for students in lower years
- Implementing environmental initiatives within the school or local community, such as recycling, composting and roof gardens
- Organizing or participating in a social media outreach or advocacy campaign

Learning Opportunities	Knowledge Question
Chemical Equations	Can all knowledge be expressed in words or symbols?
Atomic Theory	How can it be that scientific knowledge changes over time?
Acids & Bases	To what extent do the classification systems we use in the pursuit of knowledge affect the conclusions we reach?
Analytic Techniques	How do the tools that we use shape the knowledge that we produce?

### **Theory of Knowledge**

### **In-class Assessment:**

Practical Work: 40%

Unit Tests: 40%

Final Exam: 20%

Unit tests are a combination of Paper 1 and Paper 2 questions. Standard level students are allowed 45 minutes to complete a unit test, and Higher level students are allowed 1 hour. The grade boundaries are below:

Total Score	0 - 9	10 - 24	25 - 39	40 - 54	55 - 69	70 - 84	85 - 100
Overall DP Grade	1	2	3	4	5	6	7

# **SL Assessment Outline:**

First assessment 2025			
Assessment component	Weighting		
External assessment (3 hours)	80%		
Paper 1 (1 hour and 30 minutes)	36%		
Paper 1A—Multiple-choice questions			
Paper 1B—Data-based questions			
(Total 55 marks)			
Paper 2 (1 hour and 30 minutes)	44%		
Short-answer and extended-response questions			
(Total 50 marks)			
Internal assessment (10 hours)	20%		
The internal assessment consists of one task: the scientific investigation.			
This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.			
(Total 24 marks)			

# HL Assessment Outline:

First assessment 2025		
Assessment component	Weighting	
External assessment (4 hours and 30 minutes)	80%	
Paper 1 (2 hours)	36%	
Paper 1A—Multiple-choice questions		
Paper 1B—Data-based questions		
(Total 75 marks)		
Paper 2 (2 hours and 30 minutes)	44%	
Short-answer and extended-response questions		
(Total 90 marks)		
Internal assessment (10 hours)	20%	
The internal assessment consists of one task: the scientific investigation.		
This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.		
(Total 24 marks)		

# International School of Dakar IBDP Environmental Systems and Societies SL

Instructors: DP1- Imogen Tabor, DP2- Tim Armstrong Rm: 302, 401 Contact Information: imogent@faculty.isd.sn, tim@faculty.isd.sn

## **Course Description:**

IB Environmental Systems and Societies (ESS) is a Diploma Program course that explores environmental topics in a scientific, social, political and historical perspective. Lectures, student-centered discussions, activities, projects, computer software field study and classroom laboratory activities will be used to explore the topics.

The ESS course engages students and teachers with a conceptual approach. All students are encouraged to integrate the three key concepts of perspectives, systems and sustainability throughout the course. These concepts are given special focus within the first foundation topic and then are applied to subsequent topics. For the first time in August 2024, ESS will be offered as both a Standard Level (SL) and a Higher Level (HL) course.

The SL course provides students with a fundamental understanding of environmental studies and experience of the associated concepts and skills. The HL course requires students to extend their knowledge and understanding, exploring the complexity of issues with additional breadth and depth. Hence, topics 2-8 contain additional content for HL students. The HL course forms a fantastic foundation to build upon with any Environmental Science course at University.

HL students also deepen their critical evaluation of environmental issues by adopting three lenses - environmental law, environmental and ecological economics, and environmental ethics. This can be understood using the table below:

### Course Outline:

Topic 1 Foundation	Topic 6 Atmosphere and climate change
1.1 Perspectives 1.2 Systems	Topic 7 Natural resources
1.3 Sustainability	
Topic 2 Ecology	<b>Topic 8</b> Human populations and urban systems
	Higher level (HL) lenses
<b>Topic 3</b> Biodiversity and conservation	HL.a Environmental law HL.b Environmental and ecological economics
Topic 4 Water	HL.c Environmental ethics
Topic 5 Land	

Students will be expected to further develop and become proficient/master the Approaches to Learning:

• Thinking skills (understanding the key concepts and understanding of ESS, adopting a systems approach, making comparisons and contrasts, analyzing case studies)

- Communication skills (use of appropriate terminology, writing a full report for the IA, constructing responses to questions using aforementioned case studies to support viewpoints)
- Research skills (individual research for the Internal Assessment, collecting either primary or secondary data)
- Self-management skills (taking responsibility for roles within collaborative work, academic integrity, meeting deadlines)
- Social skills (working collaboratively during class, especially during laboratory work)

## **Connections Across Learning:**

As mentioned above, ESS is a course that strives to build a holistic understanding of how the living and nonliving parts of our world work together. To ensure this, students must make links between different subject areas:

Within Science, they will gain an understanding of Chemistry, Physics, Biology, and Earth Science content, such as Biogeochemical cycles, Energy Conservation, Ecology, and Weather systems. The course also explores the social aspect of the world- namely, how humans interact and influence the content outlined above. As well as this content, students will gain and practice skills that are important in these subjects too, such as: collecting and analyzing data, evaluating data and models, and constructing written discussions using case studies.

## **Theory of Knowledge Links:**

Links to ToK are made explicitly throughout the course. While ESS traditionally relies on scientific methods, it also incorporates approaches from the human sciences, aligning with TOK's emphasis on multiple ways of knowing. Teachers bridge the two subjects by introducing open-ended "knowledge questions" related to environmental systems, scientific integrity, and the role of emotion and intuition in understanding complex issues. This interconnected learning experience enables students to deepen their comprehension of environmental subjects through the lens of epistemology.

## CAS Links:

Examples of CAS experiences that have links to Environmental Systems and Societies include the following;

- Creativity: MUN Club where students use their understanding of environmental and human systems to deepen their understanding of the country they are representing and to understand the other countries they will be negotiating with.
- Creativity: Debate Club where students will use the skills practiced in Environmental Systems and Societies to construct arguments from different perspectives.
- Action: Students could set up environmental clubs, initiatives, and events to raise awareness or take action on the school campus, locally or for more international organizations.
- Service: Service Trips where students research the environmental and societal context of the community they are serving in order to better understand the present situation.

### Assessment:

ISD assessments will be both formative and summative.

ESS assessments will include regular written tests (Paper 1 and Paper 2 Style Questions) and IA-style investigation reports).

The formal IB examinations are detailed below.

# **IB** Assessment

Assessment Component		Description	Time (hours)	Weight (%)
		Students will be provided with data in a variety of forms	SL- 1	SL- 25
	Paper 1	relating to a specific, previously unseen case study.	HL- 2	HL- 30
		Questions will be based on the analysis and evaluation of		
External		the data in the case study.		
Assessment		All questions are compulsory		
		Section A is made up of short-answer and data-based	SL- 2	50
		questions.	HL- 2.5	
	Paper 2	Section B requires students to answer structured		
	_	essay questions. There is a limited amount of choice.		
		The individual investigation is an open-ended task in which	10	SL- 25
		the student gathers and analyzes data to answer their own		HL- 20
Internal Assess	ment	formulated research question.		
(IA)				
		The outcome of the Individual investigation will be		
Individual Investigation		assessed through the form of a written report. The		
		maximum overall word count for the report is 3,000 words.		

# International School of Dakar IBDP Physics HL/SL

Instructor: Aine QUINN Rm: 304a Contact Information: aineq@faculty.isd.sn

### Challenge....Create....Change

# **Course Description:**

IBDP Physics requires students to develop thorough conceptual knowledge and understanding of a wide range of topics. IBDP Physics also develops strong problem-solving skills and critical thinking. **Thinkers\*** Students will develop their communication skills through applying knowledge to familiar and unfamiliar concepts to explain, using appropriate scientific terminology, observations, phenomena and concepts. **Communicators\*** Students will study key concepts such as mechanics, waves, thermal physics, fields, electromagnetic induction and nuclear physics. **Knowledgeable\*** 

Students will be expected to further develop and become proficient/master the Approaches to Learning:

- Thinking skills (being curious about the physical world, designing procedures, evaluating problems, applying key ideas, reflecting) **Thinkers**\*
- Communication skills (active listening skills, evaluating extended writing, applying interpretive techniques, clearly communicating complex ideas, using digital media to communicate information ) **Communicators**\*
- Research skills (evaluating information sources, discussing academic integrity, using a standard method for referencing and citation, using sources effectively) **Inquirers**\*
- Self-management skills (breaking major tasks into a sequence of stages, meeting deadlines, taking risks, improving academic work, setting and adjusting goals) **Principled\* Balanced\* Risk-takers\* Reflective\***
- Social skills (working collaboratively, appreciating the talents of others, resolving conflicts, considering perspectives of others, reflecting on personal behavior) **Reflective\* Caring\***

### \*IB Learner Profile Attributes

## **Course Outline:**

IBDP Physics is read at either higher or standard level.

The structure of this physics syllabus is intended to promote concept-based learning and teaching that can be connected through three concepts: energy, particles and forces.

These three concepts appear throughout the physics syllabus in each of the themes.

Themes	Concepts	Topics
A. Space, time and motion	Energy	A1: kinetics, A2: forces & momentum, A3: work, energy & power, A4: rigid body mechanics, A5: Galilean and special relativity.
B. The particulate nature of matter	Particles	B1:Thermal energy transfers, B2: Greenhouse effect, B3: Gas laws, B4: thermodynamics, B5: current and circuits
C. Wave behavior	Forces	C1: simple harmonic motion, C2: wave model, C3: wave phenomena, C4: describing waves, C5:Doppler effect
D. Fields		D1: gravitational fields, D2: electric and magnetic fields, D3: motion in electromagnetic fields, D4: Induction.

E. Nuclear and quantum physics		E1: structure of the atom, E2: quantum physics, E3: radioactive decay, E4: fission, E5: astrophysics, fusion and stars
--------------------------------	--	--

# **Connections Across Learning:**

Maths

- Algebra, trigonometry, vectors, patterns analysis are but some of the mathematical concepts our physicists will employ on a regular basis.
- The scientific method relies heavily on the use of mathematics to make supported claims related to variables, from the simple proportional relationships to the more complex tracking of galaxies to deduce black holes at their cores.

Languages

- The importance of clear communication and making connections between knowledge and concepts, posing scientific arguments and explaining phenomena.
- The importance of a common language for effective communication, the international system plays a vital role in scientific and technological research and development.

Environmental systems and societies

• The enhanced greenhouse effect is read in both physics and ESS and considers how human actions have increased the level of greenhouse gasses in the atmosphere.

Chemistry

• Chemistry and physics are not strictly separate from each other, the atom, spectroscopy, kinetic modeling, application of the mole concept quantifying the energy produced in a nuclear fission are just common of the common elements of these two connected disciplines.

# Theory of Knowledge Links:

During the teaching and learning of the physics course, teachers and students evaluate knowledge claims by exploring questions concerning their validity, reliability, credibility and certainty, as well as individual and cultural perspectives on them. Links to ToK are made explicitly throughout the course.

- Learning about how scientists have contributed to knowledge and how scientists approach research and data
- Understanding that knowledge can be limited by previous knowledge, misconceptions and technological limitations
- Evaluating knowledge claims by exploring validity, reliability, credibility and certainty, as well as individual and cultural perspectives between them
- Exploring knowledge questions in the natural sciences

## CAS Links:

Examples of CAS experiences that have links to physics include the following;

- Action: Personal fitness: students often engage in physical activities such as attending a gym, bicycling, roller-skating, team-sports, swimming, or strength conditioning. What all of these CAS activities have in common is their underlying link to motion, doing work when a force is applied, converting energy. There are also links to the importance of engineering when designing sporting safety equipment, from reflections on bikes improving visibility, to bicycle helmets reducing the impact in a collision. Physics is at the heart of it all.
- Service: Environmental club: never before has a generation had such a huge amount of work to do to reduce the impact of energy consumption, the detrimental impact of fossil fuels and the race to develop sustainable practices and renewable energy, and limit climate change.

### Assessment:

Assessment is based on a 1-7 scale, in accordance with the IB DP grading system, where a 1 is the lowest grade, and a 7 is the highest grade. Students' summative grades are based on progress tests which consist of past examination questions graded authentically. Scores are translated to a percentage score, with grade boundaries adjusted to match the type and difficulty of the questions set. Students are given frequent feedback from formative assessments done in-class and at home.

The learners' final summative grade from the IB is based on two examinations (Paper 1 and Paper 2) taken in May of Grade 12 and one piece of Internal Assessment (an Individual Investigation). The examinations cover knowledge, application, analysis and evaluative skills, whereas the internal assessment addresses *all* skills.

Component	Description	HL	SL	Weight
Paper 1	Paper 1A - Multiple choice Paper 1B - Data based questions	60 marks 2 hours	45 marks 1.5 hours	36%
Paper 2	Short answer and extended response	90 marks 2.5 hours	50 marks 1.5 hours	44%
ΙΑ	Internal assessment (individual investigation)	24 marks 10 hours	24 marks 10 hours	20%

## **IBDP Physics Examination Breakdown**

(IBDP Physics Subject Guide 1<sup>st</sup> Examination 2025)

# IB scores will depend on the work submitted to the IB only.

# Our 2 year program outline:

# Year 1

### **STANDARD LEVEL (all students)**

### HIGHER LEVEL STUDENTS ONLY

Introduction - T3 Mathematical tools	
A.1: Motion & Kinematics (9 hrs)	
A.2: Forces & momentum (10 hrs)	
A.3: Work, Energy & power (8 hrs)	A.4: Rigid body mechanics (7 hrs)
A.2, D.1: Circular Motion & Orbits (5 hrs)	D1: Gravitational fields AHL (5 hrs)
C.1: Simple Harmonic Motion (3 hrs)	C.1: Simple Harmonic Motion (4 hrs)
C.2, C.3, C.4: Describing Waves (3, 5, 4 hrs)	C.3: Describing Waves (6 hrs)
C.5: Doppler effect (2 hrs)	C.5: Doppler effect (2 hrs)
D.2: Electric and magnetic fields (8 hrs)	D.2: Electric and magnetic fields (6 hrs)
B.5: Electric Current & Circuits (6hr)	
D.3: Motion in electromagnetic fields (6 hrs)	D4: Induction (6 hrs)
Group 4 Project	

# Year 2

### STANDARD LEVEL (all students)

### HIGHER LEVEL STUDENTS ONLY

B.1, B.2, B.3: Thermodynamics (6, 6, 6hrs)	B.4: Thermodynamics (8hr)
Individual investigation (Internal assessment)	
E.1: Structure of the atom (6 hrs)	E.1, E.2: Quantum physics (3, 8 hrs)
E.3: Radioactive decay (7 hrs)	E.3 Radioactive decay (5 hrs)
E.4: Fission (4 hrs)	
E.5: Astrophysics, Fusion and stars (6 hrs)	A.5: Relativity (8hr)

# International School of Dakar IBDP Sports, Exercise and Health Science HL/SL

Instructor: Ruben Lima Rm: Athletics & PHE office Contact Information: rubenl@faculty.isd.sn

## **Course Description:**

As one of the sciences subjects in the IB Diploma Programme, sports, exercise and health science (SEHS) is primarily concerned with the scientific study of human physiology, biomechanics and psychology. Scientists working in these fields attempt to make sense of human physical and mental health and performance through a variety of approaches and techniques, controlled experimentation, and collaboration with other researchers. DP SEHS enables students to engage constructively with topical scientific issues. As an example, students will have the opportunity to conduct a scientific investigation within a SEHS topic of their choice.

Key scientist skills will be honed such as the ability to:

- analyse, evaluate and synthesize scientific information and claims. Thinker\*
- approach unfamiliar situations with creativity and resilience. **Open-minded**\*
- design and model solutions to local and global problems in a scientific context. Risk-takers\*
- evaluate the ethical, environmental, economic, cultural and social impact of science, developing an appreciation of the possibilities and limitations of science. **Principled**\*

Students will develop conceptual understanding that allows connections to be made between different areas of the subject, and to other DP sciences subjects. They will develop conceptual understanding through the lenses of key concepts such as systems, relationships and change. **Knowledgeable**\*

Students will be expected to further develop and become proficient/master the Approaches to Learning:

- Thinking skills (analyzing and evaluating sources, processing and analysing data, constructing arguments, making comparisons and contrasts, synthesis of source material and own knowledge) Thinkers\*
- Communication skills (constructing oral and written arguments, use of appropriate terminology) Communicators\*
- Research skills (evaluating scientific studies, conduct an individual scientific investigation for the Internal Assessment) **Inquirers**\*
- Self-management skills (taking responsibility for roles within collaborative work, academic integrity, meeting deadlines) **Principled\* Balanced\* Risk-takers\***
- Social skills (working collaboratively, taking part in group discussions and debates) Caring\*

### **\*IB Learner Profile Attributes**

# **Course Outline:**

The SEHS curriculum explores three themes:

- A. Exercise physiology and nutrition of the human body
  - Communication
  - Hydration and Nutrition
  - Response
- **B.** Biomechanics
  - Generating movement in the body
  - Forces, motion and movement
  - Injury
- **C.** Sports psychology and motor learning
  - Individual differences
  - Motor learning
  - Motivation
  - Stress and coping
  - Psychological Skills

Through these, SEHS students will develop long-enduring knowledge and understanding of the science at play in human physiology, biomechanics and psychology. The study of their interconnections will provide students opportunities to explore different perspectives and conceptual frameworks.

In the IB exam, all themes are covered through:

- Multiple Choice questions (Paper 1)
- Data based questions and questions on experimental work (Paper 1)
- Short answer and extended-response questions (Paper 2)

Internal Assessment

• 3,200-word laboratory report. Students conduct a SEHS investigation, formulating a research question, gathering and analysing data to answer this question.

## **Connections Across Learning:**

**Biomechanics and Physics:** 

• Understanding muscle contraction and the forces within and on the body, and the effects of these forces in day to day activities, and within the sporting environment.

Motor Learning and Psychology:

• Understanding the factors that influence skill learning, performance and theories of skill learning such as selective attention, memory, practice, feedback.

Anatomy and Biology

• Understanding how the bones, muscles and joints of the body are connected and how these connections guide our movement.
### Theory of Knowledge Links:

Links to ToK are made explicitly throughout the course. Some examples include

- When students are asked to describe current recommendations for a healthy balanced diet, they are also asked to justify how a balanced diet is defined.
- When students are prompted to define the concept of ability, they are encouraged to incorporate current research findings that emphasize the dynamic nature of abilities, acknowledging that they can evolve and transform over time. Students are asked to discuss genetics, life experience and/or coaching as critical factors for this change.
- When conducting scientific investigations and processing data, students are asked to discuss who defines an objective standard by which claims about data can be made.

### CAS Links:

Examples of CAS experiences that have links to history include the following;

- <u>Creativity</u>: creating a campaign to encourage healthy eating at school.
- <u>Action:</u> regularly taking part in sports, either as a competitive athlete/team member, or participating regularly in a fitness activity working towards a given health or fitness objective.
- <u>Service</u>: working alongside a community organization as a coach, mentor or facilitator to provide sporting opportunities for children in the local community.

### Assessment:

ISD assessments will be both formative and summative, through a variety of assessment tasks such as teacher questions during class time, presentations, quizzes, labs, projects, and DP style assessments such as Paper 1 and Paper 2.

The final examinations are detailed below:

Tupo of		Time (hours)		Weighting of	
assessment	Format of assessment	SL	HL	final grade	
External		3	4.25	76	
Paper 1	Paper 1A: Multiple-choice questions Paper 1B: Data-based questions and questions on experimental work		1.75	36	
Paper 2	Short answer and extended-response questions	1.5	2.5	40	
Internal			10	24	
Scientific investigation	The scientific investigation is an open-ended task in which the student gathers and analyses data in order to answer their own formulated research question. The outcome of the scientific investigation will be assessed through the form of a written report. The maximum overall word count for the report is 3,200 words.	10		24	

(IBDP SEHS Subject Guide 1st Examinations 2026)



# **Group 5: Mathematics**

Mathematics Analysis and Approaches HL Mathematics Applications and Interpretation HL Mathematics Analysis and Approaches SL Mathematics Applications and Interpretation SL

### International School of Dakar Mathematics Analysis and Approaches HL

Instructor: Vivienne Verschuren Room: 210 Contact Information: <u>viviennev@faculty.isd.sn</u>

#### Reference: International Baccalaureate Diploma Programme Subject Brief and Mathematics Guides

### **Course Description:**

The IB DP Mathematics: analysis and approaches course recognizes the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. The focus is on developing important mathematical concepts in a comprehensible, coherent and rigorous way, achieved by a carefully balanced approach. Students are encouraged to apply their mathematical knowledge to solve abstract problems as well as those set in a variety of meaningful contexts. Mathematics: analysis and approaches has a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments.

Students should expect to develop insight into mathematical form and structure, and should be intellectually equipped to appreciate the links between concepts in different topic areas. Students are also encouraged to develop the skills needed to continue their mathematical growth in other learning environments.

#### Approaches to Learning and IB Learner Profile Attributes\* in Mathematics

*Thinking skills* (Thinkers\*), and particularly critical thinking, are developed continuously in mathematics; students are challenged to apply their knowledge (Knowledgeable\*) and skills to unfamiliar contexts or to abstract problems. Thinking skills are further developed through the emphasis on conceptual understanding and making the links between different topics.

*Communication skills* (Communicators\*) are practiced in a number of different ways; as a subject it invites approaches to teaching that encourage dialogue and discussion, but also requires a reflective engagement with the way in which mathematics is expressed both verbally and in writing.

There are strong correlations between *social skills* (**Principled**, **Caring**, **Open-Minded**\*), affective skills and the ability to reflect (**Reflective**\*). These all play a very important role in mathematics. Students will be challenged to think about the relationship between the learner profile attributes and mathematics. For example, how do the attributes of caring and being principled relate to what they are learning in mathematics?

*Self-management skills* (Balanced\*) are required for students to learn to persevere through problem solving. The internal assessment exploration task also requires students to plan and organize their time, to ensure they have appropriate research techniques and the tenacity to engage with mathematics, to reflect upon this and monitor their own progress.

*Research skills* (Inquirers, Risk-takers\*) in mathematics are closely aligned with approaches to learning, focused on conceptual understanding and inquiry. The internal assessment exploration gives them the opportunity to demonstrate their own engagement and understanding of an area of mathematics of interest to them. The aim of this task is to give students the experience of doing mathematics and the opportunity to reflect on this practice.

### **Course Outline:**

Mathematics: applications and interpretation and Mathematics: analysis and approaches share 60 hours of common content.

	Recom teachin	mended g hours
Syllabus component	SL	HL
<ul> <li>Number and algebra</li> </ul>	19	39
Functions	21	32
<ul> <li>Geometry and trigonometry</li> </ul>	25	51
<ul> <li>Statistics and probability</li> </ul>	27	33
Calculus	28	55
Development of investigational, problem-solving and modelling skills and the exploration of an area of mathematics	30	30
Total teaching hours	150	240

### **Connections Across Learning:**

*Multiple Disciplines:* Descriptive statistics and random samples, presentation of data, normally distributed reallife measurements, sketching and interpreting graphs, data collection in field work

Sciences: graphical analysis in experimental work, uncertainty and precision of measurement, modelling, curves of best fit, correlation and causation

*Chemistry*: Avogadro's number, pH, buffer calculations and finding activation energy from experimental data, equilibrium equations, interpreting the gradient of a curve, first order reactions

*Physics*: Order of magnitude, radioactive decay and half-life, cooling of a liquid, nuclear physics, charging and discharging capacitors, vectors, scalars, forces and dynamics, projectile motion, circular motion, simple harmonic motion, volume of stars and inverse square law, kinematics, velocity-time and acceleration-time graphs

*Biology*: Microscopic measurements, growth curves, theoretical genetics and Punnett squares, population growth, spread of a virus

*Economics and Business Management:* Loans and repayments, compound interest, depreciation, exchange rates and price and income elasticity, demand and supply curves, currency conversions and cost functions, production possibilities curve model, market equilibrium, consumer price index, marginal cost, marginal revenue, marginal profit, market structures, price elasticity, allocative efficiency, stochastic processes, stock market values and trends

Psychology: Research methodologies

### **Theory of Knowledge Links:**

As part of their theory of knowledge course, students are encouraged to explore tensions relating to knowledge in mathematics. As an area of knowledge, mathematics seems to supply a certainty perhaps impossible in other disciplines and in many instances provides us with tools to debate these certainties. This may be related to the "purity" of the subject, something that can sometimes make it seem divorced from reality. Yet mathematics has also provided important knowledge about the world and the use of mathematics in science and technology has been one of the driving forces for scientific advances.

Despite all its undoubted power for understanding and change, mathematics is in the end a puzzling phenomenon. A fundamental question for all knowers is whether mathematical knowledge really exists independently of our thinking about it. Is it there, "waiting to be discovered", or is it a human creation? Indeed, the philosophy of mathematics is an area of study in its own right.

#### **Examples of Knowledge Questions**

- Why is mathematics so important in other areas of knowledge, particularly the natural sciences? (Scope)
- If mathematics is created by humans, is it still possible to accept mathematical truths as objective facts about the world? (Perspectives)
- What is meant by the term "proof" in mathematics, and how is this similar to, or different from what is meant by this term in other areas of knowledge? (Methods and Tools)
- If mathematical knowledge is highly valued, does this place special ethical responsibilities on mathematicians when they are making claims? (Ethics)

### CAS Links:

CAS and mathematics can complement each other in a number of ways. Mathematical knowledge provides an important key to understanding the world in which we live, and the mathematical skills and techniques students learn in the mathematics courses will allow them to evaluate the world around them which will help them to develop, plan and deliver CAS experiences or projects.

The challenge and enjoyment of CAS can often have a profound effect on mathematics students, who might choose, for example, to engage with CAS in the following ways:

- plan, write and implement a "mathematics scavenger hunt" where younger students tour the school answering interesting mathematics questions as part of their introduction to a new school.
- plan and carry out a survey, create a database and analyze the results, and make suggestions to resolve a problem in the students' local area.
- taking an element of world culture that interests students and designing a miniature Earth (if the world were 100 people) to express the trend(s) numerically.

### Assessment:

Problem-solving is central to learning mathematics and involves the acquisition of mathematical skills and concepts in a wide range of situations, including non-routine, open-ended and real-world problems.

The assessment objectives are common to Mathematics: analysis and approaches and to Mathematics: applications and interpretation.

- Knowledge and understanding: Recall, select and use their knowledge of mathematical facts, concepts and techniques in a variety of familiar and unfamiliar contexts.
- **Problem solving:** Recall, select and use their knowledge of mathematical skills, results and models in both abstract and real-world contexts to solve problems.
- **Communication and interpretation:** Transform common realistic contexts into mathematics; comment on the context; sketch or draw mathematical diagrams, graphs or constructions both on paper and using technology; record methods, solutions and conclusions using standardized notation; use appropriate notation and terminology.
- **Technology:** Use technology accurately, appropriately and efficiently both to explore new ideas and to solve problems.
- **Reasoning:** Construct mathematical arguments through use of precise statements, logical deduction and inference and by the manipulation of mathematical expressions.
- **Inquiry approaches:** Investigate unfamiliar situations, both abstract and from the real world, involving organizing and analyzing information, making conjectures, drawing conclusions, and testing their validity.

#### **Final Examinations**

Type of	Time (hour		ne urs)	Weightin of fina s) grade (9		
assessment	Format of assessment	SL	HL	SL	HL	
External						
Paper 1	No technology allowed.	1.5	2	40	30	
	Section A: compulsory short-response questions based on the syllabus.					
	Section B: compulsory extended-response questions based on the syllabus.					
Paper 2	Technology allowed.	1.5	2	40	30	
	Section A: compulsory short-response questions based on the syllabus.					
	Section B: compulsory extended-response questions based on the syllabus.					
Paper 3	Technology allowed.		1		20	
	extended-response problem-solving questions.					
Internal						
Exploration		15	15	20	20	

The exploration is an integral part of the course and its assessment and is compulsory for both SL and HL students. The internally assessed exploration allows students to develop independence in mathematical learning. It enables students to demonstrate the application of their skills and knowledge, and to pursue their personal interests, without the time limitations and other constraints that are associated with written examinations.

### International School of Dakar Mathematics Applications and Interpretation HL

Instructor: Vivienne Verschuren Room: 210 Contact Information: <u>viviennev@faculty.isd.sn</u>

#### Reference: International Baccalaureate Diploma Programme Subject Brief and Mathematics Guides

### **Course Description:**

The IB DP Mathematics: applications and interpretation 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. To give this understanding a firm base, this course includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. Students are encouraged to solve real-world problems, construct and communicate this mathematically and interpret the conclusions or generalizations.

Students should expect to develop strong technology skills and will be intellectually equipped to appreciate the links between the theoretical and the practical concepts in mathematics. All external assessments involve the use of technology. Students are also encouraged to develop the skills needed to continue their mathematical growth in other learning environments.

#### Approaches to Learning and IB Learner Profile Attributes\* in Mathematics

**Thinking skills** (**Thinkers**<sup>\*</sup>), and particularly critical thinking, are developed continuously in mathematics; students are challenged to apply their knowledge (**Knowledgeable**<sup>\*</sup>) and skills to unfamiliar contexts or to abstract problems. Thinking skills are further developed through the emphasis on conceptual understanding and making the links between different topics.

*Communication skills* (Communicators\*) are practiced in a number of different ways; as a subject it invites approaches to teaching that encourage dialogue and discussion, but also requires a reflective engagement with the way in which mathematics is expressed both verbally and in writing.

There are strong correlations between *social skills* (**Principled**, **Caring**, **Open-Minded**\*), affective skills and the ability to reflect (**Reflective**\*). These all play a very important role in mathematics. Students will be challenged to think about the relationship between the learner profile attributes and mathematics. For example, how do the attributes of caring and being principled relate to what they are learning in mathematics?

*Self-management skills* (Balanced\*) are required for students to learn to persevere through problem solving. The internal assessment exploration task also requires students to plan and organize their time, to ensure they have appropriate research techniques and the tenacity to engage with mathematics, to reflect upon this and monitor their own progress.

*Research skills* (Inquirers, Risk-takers\*) in mathematics are closely aligned with approaches to learning, focused on conceptual understanding and inquiry. The internal assessment exploration gives them the opportunity to demonstrate their own engagement and understanding of an area of mathematics of interest to them. The aim of this task is to give students the experience of doing mathematics and the opportunity to reflect on this practice.

### **Course Outline:**

Mathematics: applications and interpretation and Mathematics: analysis and approaches share 60 hours of common content.

	Recom teachin	mended g hours
Syllabus component	SL	HL
<ul> <li>Number and algebra</li> </ul>	16	29
Functions	31	42
<ul> <li>Geometry and trigonometry</li> </ul>	18	46
<ul> <li>Statistics and probability</li> </ul>	36	52
Calculus	19	41
Development of investigational, problem-solving and modelling skills and the exploration of an area of mathematics	30	30
Total teaching hours	150	240

### **Connections Across Learning**:

*Multiple Disciplines:* Descriptive statistics and random samples, presentation of data, normally distributed reallife measurements, sketching and interpreting graphs, data collection in field work

*Sciences*: graphical analysis in experimental work, uncertainty and precision of measurement, modelling, curves of best fit, correlation and causation, evaluation of  $R^2$  in graphical analysis

*Chemistry*: Avogadro's number, pH semi-log curves, buffer calculations and finding activation energy from experimental data, equilibrium equations, interpreting the gradient of a curve, first order reactions,

*Physics*: Order of magnitude, radioactive decay and half-life, cooling of a liquid, nuclear physics, charging and discharging capacitors, vectors, scalars, resultants, forces and dynamics, projectile motion, circular motion, simple harmonic motion, volume of stars and inverse square law, kinematics, velocity-time and acceleration-time graphs, electromagnetic induction, diffraction patterns

*Biology*: Microscopic measurements, growth curves, theoretical genetics and Punnett squares, population growth, spread of a virus

*Economics and Business Management:* Loans and repayments, compound interest, depreciation, exchange rates and price and income elasticity, demand and supply curves, currency conversions and cost functions, production possibilities curve model, market equilibrium, consumer price index, marginal cost, marginal revenue, marginal profit, market structures, price elasticity, allocative efficiency, stochastic processes, stock market values and trends, the Gini coefficient and the Lorenz curve, and progressive, regressive and proportional taxes, the J-curve

Psychology: Research methodologies

### **Theory of Knowledge Links:**

As part of their theory of knowledge course, students are encouraged to explore tensions relating to knowledge in mathematics. As an area of knowledge, mathematics seems to supply a certainty perhaps impossible in other disciplines and in many instances provides us with tools to debate these certainties. This may be related to the "purity" of the subject, something that can sometimes make it seem divorced from reality. Yet mathematics has also provided important knowledge about the world and the use of mathematics in science and technology has been one of the driving forces for scientific advances.

Despite all its undoubted power for understanding and change, mathematics is in the end a puzzling phenomenon. A fundamental question for all knowers is whether mathematical knowledge really exists independently of our thinking about it. Is it there, "waiting to be discovered", or is it a human creation? Indeed, the philosophy of mathematics is an area of study in its own right.

#### **Examples of Knowledge Questions**

- Why is mathematics so important in other areas of knowledge, particularly the natural sciences? (Scope)
- If mathematics is created by humans, is it still possible to accept mathematical truths as objective facts about the world? (Perspectives)
- What is meant by the term "proof" in mathematics, and how is this similar to, or different from what is meant by this term in other areas of knowledge? (Methods and Tools)
- If mathematical knowledge is highly valued, does this place special ethical responsibilities on mathematicians when they are making claims? (Ethics)

### CAS Links:

CAS and mathematics can complement each other in a number of ways. Mathematical knowledge provides an important key to understanding the world in which we live, and the mathematical skills and techniques students learn in the mathematics courses will allow them to evaluate the world around them which will help them to develop, plan and deliver CAS experiences or projects.

The challenge and enjoyment of CAS can often have a profound effect on mathematics students, who might choose, for example, to engage with CAS in the following ways:

- plan, write and implement a "mathematics scavenger hunt" where younger students tour the school answering interesting mathematics questions as part of their introduction to a new school.
- plan and carry out a survey, create a database and analyse the results, and make suggestions to resolve a problem in the students' local area.
- taking an element of world culture that interests students and designing a miniature Earth (if the world were 100 people) to express the trend(s) numerically.

### Assessment:

Problem-solving is central to learning mathematics and involves the acquisition of mathematical skills and concepts in a wide range of situations, including non-routine, open-ended and real-world problems.

The assessment objectives are common to Mathematics: analysis and approaches and to Mathematics: applications and interpretation.

- Knowledge and understanding: Recall, select and use their knowledge of mathematical facts, concepts and techniques in a variety of familiar and unfamiliar contexts.
- **Problem solving:** Recall, select and use their knowledge of mathematical skills, results and models in both abstract and real-world contexts to solve problems.
- **Communication and interpretation:** Transform common realistic contexts into mathematics; comment on the context; sketch or draw mathematical diagrams, graphs or constructions both on paper and using technology; record methods, solutions and conclusions using standardized notation; use appropriate notation and terminology.
- **Technology:** Use technology accurately, appropriately and efficiently both to explore new ideas and to solve problems.
- **Reasoning:** Construct mathematical arguments through use of precise statements, logical deduction and inference and by the manipulation of mathematical expressions.
- **Inquiry approaches:** Investigate unfamiliar situations, both abstract and from the real world, involving organizing and analyzing information, making conjectures, drawing conclusions, and testing their validity.

#### **Final Examinations**

Type of		Time (hours)		Weighting of final grade (%)	
assessment	Format of assessment	SL	HL	SL	HL
External					
Paper 1	Technology allowed.	1.5	2	40	30
	Compulsory short-response questions based on the syllabus.				
Paper 2	Technology allowed.	1.5	2	40	30
	Compulsory extended-response questions based on the syllabus.				
Paper 3	Technology allowed.		1		20
	Two compulsory extended-response problem-solving questions.				
Internal					
Exploration		15	15	20	20

The exploration is an integral part of the course and its assessment and is compulsory for both SL and HL students. The internally assessed exploration allows students to develop independence in mathematical learning. It enables students to demonstrate the application of their skills and knowledge, and to pursue their personal interests, without the time limitations and other constraints that are associated with written examinations.

### International School of Dakar Mathematics Analysis and Approaches SL

Course Instructors: Laila Nabil - Souleymane Diallo

Contact Information: lailae@faculty.isd.sn

souleymaned@faculty.isd.sn

### **Course Description:**

Individual students have different needs, aspirations, interests and abilities. For this reason there are two different DP subjects in mathematics, Mathematics: analysis and approaches and Mathematics: applications and interpretation. Each course is designed to meet the needs of a particular group of students. Both courses are offered at SL and HL.

The IB DP Mathematics: analysis and approaches course recognizes the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. The focus is on developing important mathematical concepts in a comprehensible, coherent and rigorous way, achieved by a carefully balanced approach. Students are encouraged to apply their mathematical knowledge to solve abstract problems as well as those set in a variety of meaningful contexts. Mathematics: analysis and approaches have a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments. The internally assessed exploration allows students to develop independence in mathematical learning. Throughout the course students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas.

Students will be expected to further develop and become proficient/master the Approaches to Learning:

#### • Thinking skills and mathematics

Thinking skills, and particularly critical thinking, are developed and practiced continuously in mathematics; students are challenged to apply their knowledge and skills to unfamiliar contexts or to abstract problems. Thinking skills are further developed through the emphasis in the teaching on conceptual understanding and making the links between different topics. Students of mathematics are encouraged to engage with the approaches or interpretations of problems critically.

#### • Communication skills and mathematics

In mathematics, communication skills are practiced in a number of different ways; as a subject it invites approaches to teaching that encourage dialogue and discussion, but also requires a reflective engagement with the way in which mathematics is expressed both verbally and in writing. This discussion can reveal alternative perspectives to problem solving.

#### • Social skills and mathematics

There are strong correlations between social skills, affective skills and the ability to reflect. These all play a very important role in mathematics. Much of the content and skills students develop will provoke students to consider their own understandings and how these are expressed to others. Students should be challenged to think about the relationship between the learner profile attributes and mathematics. For example, how do the attributes of caring and being principled relate to what they are learning in mathematics? The structure of the DP mathematics guides provides students with opportunities to appreciate the contributions that other cultures have made to the understanding of mathematics. This, and the section in the guide referring to international-mindedness, can be used to provoke class discussions in which students will reflect on their own views and those of others.

#### • Self-management skills and mathematics

IB learners also need to learn to persevere and be emotionally stable as individuals. Learning to manage themselves is important for students in a demanding educational programme like the Diploma Programme, as well as a highly desirable competency for their later studies and employment.

### **Course Outline:**

- Topic 1: Number and Algebra
- Topic 2: Functions
- Topic 3: Geometry and Trigonometry
- Topic 4: Statistics and Probability
- Topic 5: Calculus

### **Connection Across Learning:**

*Individuals and Societies* - many of the foundations of modern mathematics were laid many centuries ago by diverse civilisations – Arabic, Greek, Indian and Chinese among others. Mathematics can transcend politics, religion and nationality, and throughout history great civilizations have owed their success in part to their mathematicians being able to create and maintain complex social and architectural structures. Politics has dominated the development of mathematics, to develop ballistics, navigation and trade, and land ownership, often influenced by governments and leaders. Many early mathematicians were political and military advisers and today mathematicians are integral members of teams who advise governments on where money and resources should be allocated.

Sciences - Science and technology are of significant importance in today's world. As the language of science, mathematics is an essential component of most technological innovation and underpins developments in science and technology, although the contribution of mathematics may not always be visible. Examples of this include the role of the binary number system, matrix algebra, network theory and probability theory in the digital revolution, or the use of mathematical simulations to predict future climate change or spread of disease. These examples highlight the key role mathematics can play in transforming the world around us.

#### Other useful links -

*Economics* - Loans and repayments, exchange rates, demand and supply curves, currency conversions and market equilibrium.

### **Theory of Knowledge Links:**

As part of their theory of knowledge course, students are encouraged to explore tensions relating to knowledge in mathematics. As an area of knowledge, mathematics seems to supply a certainty perhaps impossible in other disciplines and in many instances provides us with tools to debate these certainties. This may be related to the "purity" of the subject, something that can sometimes make it seem divorced from reality. Yet mathematics has also provided important knowledge about the world and the use of mathematics in science and technology has been one of the driving forces for scientific advances.

### **CAS Links:**

CAS and mathematics can complement each other in a number of ways. Mathematical knowledge provides an important key to understanding the world in which we live, and the mathematical skills and techniques students learn in the mathematics courses will allow them to evaluate the world around them which will help them to develop, plan and deliver CAS experiences or projects.

The challenge and enjoyment of CAS can often have a profound effect on mathematics students, who might choose, for example, to engage with CAS in the following ways:

- plan, write and implement a "mathematics scavenger hunt" where younger students tour the school answering interesting mathematics questions as part of their introduction to a new school.
- plan and carry out a survey, create a database and analyse the results, and make suggestions to resolve a problem in the students' local area. This might be, for example, surveying the availability of fresh fruit and vegetables within a community, preparing an action plan with suggestions of how to increase availability or access, and presenting this to a local charity or community group.
- taking an element of world culture that interests students and designing a miniature Earth (if the world were 100 people) to express the trend(s) numerically.

#### Assessment:

Problem solving is central to learning mathematics and involves the acquisition of mathematical skills and concepts in a wide range of situations, including non-routine, open-ended and real-world problems. Having followed a DP mathematics course, students will be expected to demonstrate the following:

- Knowledge and understanding: Recall, select and use their knowledge of mathematical facts, concepts, and techniques in a variety of familiar and unfamiliar contexts.
- **Problem solving:** Recall, select and use their knowledge of mathematical skills, results and models in both abstract and real-world contexts to solve problems.
- Communication and interpretation: Transform common realistic contexts into mathematics; comment on the context; sketch or draw mathematical diagrams, graphs or constructions both on paper and using technology; record methods, solutions and conclusions using standardized notation; use appropriate notation and terminology.
- **Technology**: Use technology accurately, appropriately and efficiently both to explore new ideas and to solve problems.
- **Reasoning:** Construct mathematical arguments through use of precise statements, logical deduction and inference and by the manipulation of mathematical expressions.
- Inquiry approaches: Investigate unfamiliar situations, both abstract and from the real world,

involving organizing and analyzing information, making conjectures, drawing conclusions, and testing their validity.

#### **Final Examinations**

Assessment component	Weighting
External assessment (3 hours)	80%
Paper 1 (90 minutes)	
No technology allowed. (80 marks)	40%
Section A	
Compulsory short-response questions based on the syllabus.	
Section B	
Compulsory extended-response questions based on the syllabus.	
Paper 2 (90 minutes)	40%
Technology required. (80 marks)	
Section A	
Compulsory short-response questions based on the syllabus.	
Section B	
Compulsory extended-response questions based on the syllabus	
Internal assessment	20%
This component is internally assessed by the teacher and externally moderated by the IB at	
the end of the course.	
Mathematical exploration	
Internal assessment in mathematics is an individual exploration. This is a piece of written work that involves investigating an area of mathematics. (20 marks)	

### International School of Dakar DP Mathematics Applications & Interpretations

Instructors: Mr. Tom Matthews - Mr. Denrol Carayol Contact Information: <u>thomasm@faculty.isd.sn</u> <u>denrolc@faculty.isd.sn</u>

### **Course Description:**

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 emphasises the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course also includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. The course makes extensive use of technology to allow students to explore and construct mathematical models. The course will also develop mathematical thinking, often in the context of a practical problem and using technology to justify conjectures. Students who choose this course should enjoy seeing mathematics used in real-world contexts and to solve real-world problems.

### **Approaches to Learning in Mathematics**

*Thinking skills*, and particularly critical thinking, are developed continuously in mathematics; students are challenged to apply their knowledge and skills to unfamiliar contexts or to abstract problems. Thinking skills are further developed through the emphasis in the teaching on conceptual understanding and making the links between different topics.

*Communication skills* are practised in a number of different ways; as a subject it invites approaches to teaching that encourage dialogue and discussion, but also requires a reflective engagement with the way in which mathematics is expressed both verbally and in writing.

There are strong correlations between *social skills*, affective skills and the ability to reflect. These all play a very important role in mathematics. Students will be challenged to think about the relationship between the learner profile attributes and mathematics. For example, how do the attributes of caring and being principled relate to what they are learning in mathematics?

*Self-management skills* are required for students to learn to persevere through problem solving. The internal assessment exploration task also requires students to plan and organise their time, to ensure they have appropriate research techniques and the tenacity to engage with mathematics, to reflect upon this and monitor their own progress.

*Research skills* in mathematics are closely aligned with approaches to learning, focused on conceptual understanding and inquiry. The internal assessment exploration gives them the opportunity to demonstrate their own engagement and understanding of an area of mathematics of interest to them. The aim of this task is to give students the experience of doing mathematics and the opportunity to reflect on this practice.

### **Course Outline:**

Unit 1: Functions (4 weeks)

• Content: Relations, domain and range, graphing relations, function definition, inverse function, linear models, piecewise functions, simultaneous equations and solving polynomials

Unit 2: Sequences & Finance (5 weeks)

• Content: Arithmetic and geometric sequences and series, simple and compound interest, annuities and amortization

Unit 3: Accuracy (3 weeks)

• Content: Laws of exponents, exponential form and logarithms

Unit 4: Geometry (5 weeks)

• Content: Lengths of arc and sectors, sine and cosine rule, bearings and area

Unit 5: Statistics (7 weeks)

• Content: Types of data, averages, frequency tables, grouped data, measures of dispersion, outliers, coding, types of sampling techniques, frequency histograms, box plots, cumulative frequency and the normal distribution

Unit 6: Hypothesis Testing (5 weeks)

• Content: Contingency tables, chi-squared test for independence, chi-squared goodness of fit test and the T-test

Unit 7: Bivariate Data (3 weeks)

- Content: Linear correlation, Pearson's coefficient, least squares regression, interpolation and extrapolation and Spearman's rank correlation coefficient
- Unit 8: Sinusoidal Models (2 weeks)
  - Content: Graphing and transforming the sine and cosine functions, and applying these functions to real life situations
- Unit 9: Power Functions (5 weeks)
  - Content: Quadratics, finding zeros, maximums and minimums, optimization problems, cubics, exponential functions, intersecting graphs, and direct and inverse variation

Unit 10: Probability (10 weeks)

- Content: Relative frequency, Venn diagrams, addition law, sample spaces, conditional probability, discrete random variables, probability distributions, binomial distribution, continuous random variables.
- Unit 11: Coordinate & 3D Geometry (5 weeks)

• Content: Equation of a line, perpendicular bisectors, Voronoi diagrams, surface area and volume Unit 12: Introduction to Calculus (6 weeks)

• Content: Gradient function, differentiation, tangents and normals, optimisation problems, integration, definite and indefinite integrals, trapezium rule

### **Connection Across Learning:**

*Individuals and Societies* - many of the foundations of modern mathematics were laid many centuries ago by diverse civilisations – Arabic, Greek, Indian and Chinese among others. Mathematics can transcend politics, religion and nationality, and throughout history great civilizations have owed their success in part to their mathematicians being able to create and maintain complex social and architectural structures. Politics has dominated the development of mathematics, to develop ballistics, navigation and trade, and land ownership, often influenced by governments and leaders.

*Sciences* - Science and technology are of significant importance in today's world. As the language of science, mathematics is an essential component of most technological innovation and underpins developments in science and technology, although the contribution of mathematics may not always be visible. Examples of this include probability theory in the digital revolution, or the use of mathematical simulations to predict future climate change or spread of disease.

### Other useful links -

*Economics* - Loans and repayments, exchange rates, demand and supply curves, currency conversions and market equilibrium

### Theory of Knowledge Links:

As part of their theory of knowledge course, students are encouraged to explore tensions relating to knowledge in mathematics. As an area of knowledge, mathematics seems to supply a certainty perhaps impossible in other disciplines and in many instances provides us with tools to debate these certainties. This may be related to the "purity" of the subject, something that can sometimes make it seem divorced from reality. Yet mathematics has also provided important knowledge about the world and the use of mathematics

in science and technology has been one of the driving forces for scientific advances.

Despite all its undoubted power for understanding and change, mathematics is in the end a puzzling phenomenon. A fundamental question for all knowers is whether mathematical knowledge really exists independently of our thinking about it. Is it there, "waiting to be discovered", or is it a human creation? Indeed, the philosophy of mathematics is an area of study in its own right.

### CAS Links:

CAS and mathematics can complement each other in a number of ways. Mathematical knowledge provides an important key to understanding the world in which we live, and the mathematical skills and techniques students learn in the mathematics courses will allow them to evaluate the world around them which will help them to develop, plan and deliver CAS experiences or projects.

The challenge and enjoyment of CAS can often have a profound effect on mathematics students, who might choose, for example, to engage with CAS in the following ways:

- plan, write and implement a "mathematics scavenger hunt" where younger students tour the school answering interesting mathematics questions as part of their introduction to a new school.
- plan and carry out a survey, create a database and analyse the results, and make suggestions to resolve a problem in the students' local area. This might be, for example, surveying the availability of fresh fruit and vegetables within a community, preparing an action plan with suggestions of how to increase availability or access, and presenting this to a local charity or community group.
- taking an element of world culture that interests students and designing a miniature Earth (if the world were 100 people) to express the trend(s) numerically.

### Assessment:

As teachers we use multiple formative assessment techniques, such as classwork activities, homework, quizzes and carefully chosen questions, which help to monitor student learning and provide ongoing feedback. Summative assessments, mainly in the form of a test, will also be given throughout the year (at least once per quarter), to evaluate student learning and compare this against the Diploma Programme grades.

The final examinations are detailed below:

Assessment component	Weighting		
External assessment (3 hours)	80%		
Paper 1 (90 minutes)	40%		
Technology required. (80 marks)			
Compulsory short-response questions based on the syllabus. (80 marks)			
Paper 2 (90 minutes)			
Technology required. (80 marks)			
Compulsory extended-response questions based on the syllabus. (80 marks)			
Internal assessment	20%		
This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.			
Mathematical exploration			
Internal assessment in mathematics is an individual exploration. This is a piece of written work that involves investigating an area of mathematics. (20 marks)			



# **Group 6: The Arts**

Film Theatre Visual Arts

### International School of Dakar IBDP Film HL/SL

Instructor: Catrina Walters Rm: 204 Contact Information: catrinaw@faculty.isd.sn

### **Course Description:**

The DP film course aims to develop students as proficient interpreters and makers of film texts. Through the study and analysis of film texts, and through practical exercises in film production, the film course develops students' critical abilities and their appreciation of artistic, cultural, historical and global perspectives in film. Students examine film concepts, theories, practices and ideas from multiple perspectives, challenging their own viewpoints and biases in order to understand and value those of others.

Students will be expected to further develop and become proficient/master the Approaches to Learning:

- Thinking skills. Thinking creatively and developing curiosity, and purposefully exploring challenges and boundaries. Thinkers
- Communication skills constructing and writing reflections, use of appropriate terminology, creation of films with meaning/message Communicators\*
- Research skills analyzing and evaluating sources, constructing arguments, making comparisons and contrasts, synthesis of source material and own knowledge Inquirers\*
- Self-management skills (taking responsibility for roles within collaborative work, academic integrity, meeting deadlines) Principled\* Balanced\* Risk-takers\*
- Social skills working collaboratively, taking part in group discussions, seminars Caring, Risk Takers\*

#### \*IB Learner Profile Attributes

### **Course Outline:**

DP1

- Exploring Film Production Roles (Production Portfolio and Reel)
- Film Analysis & Cultural Context
- Genre and Genre Theory
- Narrative and Scriptwriting
- Textual Analysis

DP2

- Collaborative Film and Report
- Exploring Film Production Roles (Production Portfolio and Reel)
- Comparative Study

### **Production Portfolio and Reel:**

This task accounts for 40% of the assessment for Standard Level and 25% for Higher Level students. It is unique in being the only task that is internally assessed. It is a comprehensive task aimed at exploring three different production roles such as scriptwriting, directing, cinematography, editing or sound design. Students at SL and HL undertake a variety of film-making exercises in three **film production roles**, led by clearly defined **filmmaker intentions**. They acquire and develop practical skills and techniques through participation in film exercises, experiments and the creation of at least one completed film.

Students submit the following.

- 1. Portfolio pages (9 pages maximum: 3 pages maximum per film production role) and a list of sources used.
- 2. A film reel (9 minutes maximum: 3 minutes maximum per film production role, including one completed film).

### **Textual Analysis:**

The task accounts for 30% of the assessment for Standard Level and 20% for Higher Level students. It is externally assessed. Students at SL and HL demonstrate their knowledge and understanding of how meaning is constructed in film. They do this through a

written analysis of a prescribed film text based on a chosen extract (lasting no more than five minutes) from that film. Students consider the **cultural context** of the film and a variety of **film elements.** 

Students submit the following.

1. A textual analysis (1750 words maximum) and a list of all sources used.

### **Comparative Study:**

The task accounts for 30% of the assessment for Standard Level and 20% for Higher Level students. It is externally assessed. Students at SL and HL carry out research into a chosen area of **film focus**, identifying and comparing two films from within that area and presenting their discoveries as a recorded multimedia comparative study.

Students submit the following.

- 1. A recorded multimedia comparative study (10 minutes maximum).
- 2. A list of all sources used.

### **Collaborative Project (HL Only):**

This task accounts for 35% of the assessment for Higher Level students. It is externally assessed and is comprised of two essential components: written work and a creation of a 7 minute film. Making clear links to films and filmmakers they have encountered, and skills and techniques acquired, students at HL work collaboratively in a core production team to plan and create an original completed film.

Students submit the following.

- **1.** A project report (2,000 words maximum) and a list of all sources used.
- 2. A completed film (7 minutes maximum).

#### **Connections Across Learning:**

English and Literature (Language A):

- Analyzing films as texts: Film can be studied as a form of literature, with a focus on narrative structure, character development, and themes.
- Comparative analysis: Students can compare a film adaptation of a literary work with the original text, exploring how the story is conveyed differently through these mediums.

Visual Arts:

- Cinematography and composition: Film as an art form involves visual storytelling, and students can explore the principles of visual design, such as framing, color, and composition.
- Students can create their own short films or video art pieces as part of their visual arts coursework.

History:

- Historical context in film: Films often reflect the time periods in which they are set or made. Students can analyze how historical events and social issues are portrayed in films.
- Propaganda and documentary films: The study of propaganda and documentary films can intersect with history to understand how media has influenced public opinion and documented historical events.

#### Psychology:

- Film and psychology: Explore the portrayal of psychological concepts, such as identity, motivation, and behavior, in films.
- Film analysis through a psychological lens: Analyze characters and their development, as well as the impact of film techniques on audience emotions and perceptions.

Mathematics:

- Film and math: Analyze the use of mathematical concepts in special effects, animation, and computer-generated imagery (CGI) in film production.
- Budgeting and financing: Study the financial aspects of filmmaking, including budgeting and cost analysis.

#### Science:

• Scientific accuracy in film: Examine how science is depicted in films, including the use of scientific principles in science

fiction or the portrayal of real-life scientific discoveries.

Language Acquisition (Language B):

• Language in film: Study foreign-language films to improve language skills and cultural understanding.

### Theory of Knowledge Links:

Links to ToK are made explicitly throughout the course.

- Ways of Knowing (WOKs): IB Film involves various ways of knowing, such as perception, emotion, reason, and language. Students analyze how these WOKs are used in film production and how they shape our understanding of the world. For example, they explore how camera angles, lighting, and editing influence our perception of characters and events in a film.
- Art as a Way of Knowing: Film is a form of artistic expression, and students investigate how art can be a way of knowing. They discuss the role of emotion and intuition in filmmaking and how filmmakers communicate ideas and emotions through visuals and storytelling.
- Explore how language is used in film through dialogue, subtitles, and voiceovers. They can examine how language can shape our understanding of characters and themes in a film and how translation and interpretation can introduce ambiguity.

### CAS Links:

Examples of CAS experiences that have links to history include the following;

Creativity:

- Film Production: Students can participate in film production as a creative endeavor. This involves brainstorming ideas, writing scripts, directing, acting, and editing films. This creative process can contribute to their CAS requirements, especially when they work on independent film projects.
- Film Screenings and Exhibitions: Organizing film screenings or exhibitions of student-made films is a creative way to share their work with the school community or a wider audience. This can also involve planning and promoting the event, which contributes to the creative aspect of CAS.

Activity:

• On-Set Roles: If students take on roles like cinematographer, gaffer, or boom operator during film production, these roles require physical activity and can be counted as CAS activities.

Service:

• Community Outreach: Students can use their filmmaking skills to serve their community. This might include creating promotional videos for local nonprofit organizations, documenting community events, or producing educational videos. These activities demonstrate a commitment to service and contribute to CAS requirements.

#### Assessment:

ISD assessments will be both formative and summative.

In Grade 11 assessments will be essays/reflections/production work and oral presentations.

In Grade 12 assessments will almost exclusively be DP style assessments, in the form of film production pieces and the comparative study.

The final assessments are detailed below;

		SL	HL
Textual analysis	External	30%	20%

Comparative study	External	30%	20%
Film Portfolio	Internal	40%	25%
Collaborative film project (HL only)	External		35%

(IBDP Film Guide 1st Examinations 2022)

### International School of Dakar IBDP Theatre HL/SL

Instructor: Siobhan Reddick Rm: Black Box Theatre, PAC Contact Information: siobhanr@faculty.isd.sn

### Course Description: \*IB Learner Profile Attributes

The IBDP Theatre course for both HL and SL students encompasses four interconnected areas: Inquiry (\*Inquirers, Knowledgeable, Communicators), Development (\*Thinkers, Communicators, Open-Minded, Caring, Principled), Presentation (\*Communicators, Risk-Takers), and Evaluation (\*Reflective, Communicators). Students will explore these aspects from the perspectives of Creators, Designers, Directors, and Performers, using journals as tools for brainstorming, sketching, and reflection. To demonstrate their learning and skills, all DP Theatre students will complete the following three tasks: Research Presentation, Collaborative Project, and Production Proposal. The HL students will complete a fourth task entitled the Solo Piece. The Research Presentation will be completed in DP1, with the rest of year one is dedicated to equipping students with the necessary tools to complete their DP assessments in year two by refining reflection, research, performance, and analysis skills . Year two is dedicated to completing the last three DP assessments. Each of the tasks are broken down into sections, with strict deadlines for feedback and final work, to help guide the students through the process of completing the Collaborative Project, Production Proposal, and Solo Piece (*HL only*).

### **Course Outline:**

DP1

- Unit 1: Introduction to DP Theatre
- Unit 2: "The Woodsman"
- Unit 3: "A Monster Calls"
- Unit 4: Research Presentation
- Unit 5: Theatre Exposure
- Unit 6: Prep for DP2

#### **Research Presentation:**

This task accounts for 30% of the assessment for Standard Level and 20% for Higher Level students. It is externally assessed and requires the creation of a recorded presentation consisting of three videos, each addressing specific criteria, with a maximum total duration of 15 minutes (\**Communicators*). Alongside the videos, a slideshow presentation with images, text, videos, and a comprehensive work cited are essential.

In summary, the IB DP Theatre Research Presentation is a comprehensive assessment that combines research (\**Inquirers*), practical exploration (\**Thinkers, Risk-Takers, Open-Minded*)), and self-reflection (\**Reflective*).

#### **Collaborative Project:**

This task accounts for 40% of the assessment for Standard Level and 25% for Higher Level students. It is externally assessed and is comprised of two essential components: written work (\*Knowledgeable, Thinkers, Communicators, Reflective) and a live performance (\*Risk-Takers, Principled, Communicators, Open Minded, Caring, Reflective).

The written portion of the project can span up to 10 pages but must not exceed 4000 words. Using written explanations and images from the process and final production, students are required to describe how significant instances within the collaborative process contributed to the overall development of the project and must also evaluate the effectiveness of the final performance concerning the original intentions of the ensemble. The live performance component (7-10 minutes) assesses students' performance skills and their individual artistic contribution as creators, designers, and/or directors.

In essence, the Collaborative Project in IB DP Theatre demands a comprehensive approach, evaluating students on their capacity to collaborate effectively, apply performance skills, make meaningful individual contributions, and communicate their insights through written work and a live performance.

#### **Production Proposal:**

- DP2
  - Unit 1: Collaborative Project
  - Unit 2: Production Proposal
  - Unit 3: Solo Theatre Piece (HL only)

This task accounts for 30% of the assessment for Standard Level and 20% for Higher Level students. It is unique in being the only task that is internally assessed. It is a comprehensive task aimed at exploring and presenting the creative vision for staging a play. The entire proposal, including written text and images, must not exceed a maximum of 12 pages, with the written text not surpassing 4,000 words (*\*Knowledgeable, Thinkers, Communicators, Reflective*). Throughout the Production Proposal, students are encouraged to incorporate carefully selected visuals, including mind maps, storyboards, diagrams, and designs, along with relevant photographs and images.

In summary, the IB DP Theatre Production Proposal is a detailed document that showcases students' creative ideas, interpretation of the text, and the integration of performance and production elements to bring the play to life in alignment with their artistic intentions.

#### Solo Piece:

This task is designated for Higher Level (HL) students only, constituting 35% of their overall grade. It is externally assessed and is comprised of two essential components: written work (\*Inquirers, Knowledgeable, Thinkers, Communicators, Reflective) and a live performance (\*Risk-Takers, Principled, Communicators, Open Minded, Reflective).

In this task, students research a theatre theorist they have not previously studied. Their objective is to identify a specific aspect(s) of this theorist's theory and subsequently create, stage, and present in front of an audience, a solo theatre piece that vividly demonstrates the practical application of the identified aspect(s) of theory.

The written portion of this task must not exceed 2500 words and should encompass their research on the chosen theatre theorist, outline the identified aspect(s) of theory, and provide a comprehensive description of how they have integrated and applied this aspect(s) in their solo theatre piece. All primary and secondary sources must be cited in their report.

The performance is submitted in the form of an uninterrupted and unedited video recording of the entire solo theatre piece and must be between 4 to 7 minutes.

Fundamentally, the IB DP Theatre Solo Piece is a distinctive task that encourages HL students to engage deeply with theatre theory, transform their understanding into practical application, and present a solo performance that showcases their creative interpretation and execution of theory.

### **Approaches to Learning:**

<u>Thinking Skills:</u>

0

- Analysis of Scripts
  - Theatre students engage in critical analysis of scripts, characters, and themes, developing their analytical thinking skills.
  - Creative Interpretation
    - Exploring various interpretations of a play encourages creative thinking and problem-solving.
    - Create original works and ideas; use existing works and ideas in new ways
- Directorial Choices
  - Directors make decisions based on critical analysis of a play's themes and characters, honing their decisionmaking and evaluative skills.
- <u>Communication Skills:</u>
  - Acting and Performance
    - Theatre students enhance their verbal and non-verbal communication skills through acting and portraying characters.
    - Give and receive meaningful feedback
  - Audience Engagement
    - Effective communication with the audience is essential for a successful performance, promoting clear expression.
  - Collaboration
     Thea
    - Theatre is a collaborative art, requiring effective communication and teamwork among cast and crew.
- Social Skills:
  - Ensemble Building
    - Theatre fosters a sense of community and teamwork, promoting positive social interactions.
  - Conflict Resolution
    - Collaborative projects may involve conflicts that require resolution, nurturing conflict resolution skills.
  - Audience Interaction

- Engaging with an audience encourages empathy and adaptability in social interactions.
- Self-Management Skills:
  - Time Management
    - Theatre students must balance rehearsal schedules and the written assignments required in IBDP Theatre, which aids in developing time management skills.
  - Goal Setting
    - Setting performance goals and working toward them promotes self-motivation and goal-oriented behaviour.
  - $\circ$  Responsibility
    - Students take on responsibilities within the production, enhancing their sense of ownership and accountability.
  - Self-Assessment
    - Reflecting on personal learning strategies and identifying strengths and weaknesses is a form of selfassessment. It involves evaluating one's own approaches to learning, study habits, and time management skills.
- Research Skills:
  - Character and Play Research
    - Theatre students research the historical and cultural context of plays and characters, improving their research and information literacy skills.
  - Production Planning
    - Designers and directors research production elements such as costumes, sets, and lighting, applying their research skills to the creative process.
  - Citation and Documentation
    - Properly citing sources in production proposals and research papers reinforces research and information organisation skills.

### **Connections Across Learning:**

- Language and Literature :
  - Explore plays from different cultures and time periods, enhancing their understanding of literature.
  - Analysing scripts and dialogues can improve language and literary analysis skills.
- Visual Arts:
  - The study of production design in theatre can align with visual arts principles, such as composition, colour theory, and perspective.
  - Students can create visual artworks inspired by theatre productions they study.
- History:
  - Theatrical productions often reflect the historical context in which they were created. History students can examine how theatre reflects societal changes and values.
  - Studying historical theatre movements can provide context for historical events studied in the history course.
- Film:
  - Film studies and theatre share many elements, such as cinematography and storytelling techniques.
  - Analysing film adaptations of plays or comparing live theatre to filmed productions.
- Psychology:
  - Studying theatre can enhance students' understanding of character development and psychology, helping them analyse characters' motivations and behaviours.
  - Exploring the psychology of actors, directors, and audiences can provide insights into human behaviour.
- Environmental Systems and Societies:
  - Theatre productions often address environmental and societal issues. Students can explore how theatre raises awareness of these topics.
  - Examining the environmental impact of theatre productions can align with this course's focus on sustainability.
- Mathematics:
  - In technical theatre, students may need to calculate measurements, proportions, and angles for set design and construction.
  - Budgeting and financial management skills are essential when organising and producing theatre performances.

### **Theory of Knowledge Links:**

• Theatre can be a rich source of examples and case studies for TOK discussions about knowledge, perception, and the arts.

• Analysing how different cultures perceive and value theatre can contribute to TOK exploration.

### CAS Links:

- Theatrical Productions and Performances (Creativity):
  - Students involved in school or community theatre productions can count their participation as a CAS creativity activity.
  - Organising and performing in drama or theatre workshops for younger students or community groups can fulfil both creativity and service requirements.
- Theatre Outreach and Workshops (Service and Creativity):
  - Organising and conducting theatre-related workshops or performances for underserved communities or charitable organisations can fulfil CAS service requirements while showcasing creativity.
  - Collaborative theatre projects with local schools or organisations can promote cultural exchange and community engagement.
- Technical Theatre and Set Design (Creativity and Activity):
  - Involvement in technical theatre aspects, such as set design, lighting, or sound, can be considered a CAS creativity activity.
  - Participating in physically demanding theatre tasks, like building sets or operating stage equipment, aligns with the CAS activity category.
- Theatre-related Fundraising and Charity Events (Service and Creativity):
  - Organising theatre productions or events to raise funds for a charitable cause aligns with both service and creativity.
  - Initiating and leading theatre-based initiatives to support social or environmental causes can be a meaningful CAS project.
- Theatre Mentorship and Leadership (Service and Activity):
  - Taking on leadership roles within theatre productions, such as directing, stage managing, or mentoring younger actors, contributes to both service and activity requirements in CAS.
  - Organising and leading theatre-related workshops or clubs within the school community can fulfil CAS activity and service components.
- Theatre-related Cultural Exchanges (Service and Creativity):
  - Organising or participating in theatre-related cultural exchange programs or international theatre festivals can count as CAS service and creativity activities.
  - Collaborating with students from different cultural backgrounds on theatrical projects fosters intercultural understanding.
- Reflection and Documentation (Service and Creativity):
  - Students can document their theatre-related CAS experiences through journals, blogs, or video logs, demonstrating their creativity in communication.
  - Reflecting on the impact of theatre involvement on personal growth and community engagement fulfils the CAS reflection component.

### Assessment:

At ISD, assessments in the IBDP Theatre program will encompass both formative and summative elements.

In Grade 11, students will encounter various assessments designed to simulate the requirements of the four DP Theatre tasks. These assessments will take the form of written analyses, verbal reflections, and performances. Throughout the preparation of these assessments, students will receive ongoing formative feedback to replicate the assessment process outlined by IB. Additionally, the Research Presentation will be completed in Grade 11.

In Grade 12, assessments will exclusively consist of DP tasks, and once again, students will benefit from continuous formative feedback throughout the process.

#### DP Theatre Tasks

• Collaborative Project SL = 40% HL = 25% *(external assessment)* 

- Production Proposal: SL = 30% HL = 20% *(internal assessment)*
- Research Presentation: SL = 30% HL = 20% *(external assessment)*
- Solo Theatre Piece SL = N/A HL = 35% *(external assessment)*

(IBDP Theatre Guide 1st Examinations 2024)

### International School of Dakar IBDP Visual Art HL/SL

Instructor:Dr Momar SECK room 105 Contact Information: momars@faculty.isd.sn

### **Course Description:**

The IB Diploma Programme visual arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to study visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts.

**ATLs**The aims of the arts subjects are to also enable students to develop and become proficient in the five approaches to learning (developing thinking skills, social skills, communication skills, self- management skills and research skills). They are expected to enjoy lifelong engagement with the arts, to become informed, reflective and critical practitioners in the arts, to understand the dynamic and changing nature of the arts, to explore and value the diversity of the arts across time, place and cultures, to express ideas with confidence and competence, to develop perceptual and analytical skills. In addition, the aims of the visual arts course at SL and HL are to enable students: to make artwork that is influenced by personal and cultural contexts, to become informed and critical observers and makers of visual culture and media and to develop skills, techniques and processes in order to *communicate* concepts and ideas

### Course Outline: DP1 and DP2

The general course is base on: Theoretical practice, art making practice and curatorial practice

#### A- theoretical practice

#### >Visual arts in context (artist and why they make art)

>Students examine and compare the work of artists from different cultural contexts.

>Students consider the contexts influencing their own work and the work of others.

#### . Visual arts methods (ways of making art)

>Students look at different techniques for making art.

>Students investigate and compare how and why different techniques have evolved and the processes involved.

#### >Communicating visual arts(ways of presenting)

>Students explore ways of communicating through visual and written means.

>Students make artistic choices about how to most effectively communicate knowledge and understanding

#### B-art making practice

#### >Visual arts in context

>Students make art through a process of investigation, thinking critically and experimenting with techniques.

>Students apply identified techniques to their own developing work.

#### >Visual arts methods

>Students experiment with diverse media and explore techniques for making art.

>Students develop concepts through processes that are informed by skills, techniques and media.

#### >Communicating visual arts

>Students produce a body of artwork through a process of reflection and evaluation, showing a synthesis of skill, media and concept.

#### **C- curatorial practice**

#### >Visual arts in context

>Students develop an informed response to work and exhibitions they have seen and experienced.

>Students begin to formulate personal intentions for creating and displaying their own artworks.

#### >Visual arts methods

>Students evaluate how their ongoing work communicates meaning and purpose.

>Students consider the nature of "exhibition" and think about the process of selection and the potential impact of their work on different audiences.

#### >Communicating visual arts

>Students select and present resolved works for exhibition.

>Students explain the ways in which the works are connected.

>Students discuss how artistic judgments impact the overall presentation.

### **Connections Across Learning:**

Visual must contribute to strengthening students' ability to think and learn for themselves. It must create the conditions that enable young students to become aware of their potential, accept it, master it and then learn to use it through different subjects. For example

> Throughout the arts , film , music and theatre

Explore image, stage settings, composition, production, principles of visual design, colors study ,principles of visual design, animation, proportions, storyboards, drawings, etc...

> History:

Exploration of art through differents periods and times

>Language and Literature :

- . Animation
- . Illustration
- . comparison , writing skills

> Mathematique

- . Calculation
- . Geometry, perspective of observation

> desigm

. Production

. Making and decorating, colours , shapes , forms drawing

>I&S

. Art, culture and society

### **Theory of Knowledge Links:**

• Knowledge, experience and practice, the role of the arts.

- The expression of knowledge through the art
- Meaning of artwork and awareness of the artist.
- Production of enjoyment and ethical constraints

### **CAS Links:**

#### Art project :

>Production of group work , mural , sculpture

>Decoration project.

> Personnel expression and creation

#### Club

>Contribution to visual art Club

> helping primary school students to develop their skills in drawing, painting.

> graffiti club

> Art plus programm

>Contribution and participation in theatre stage design, or film scenery and setting.

#### Assessment:

Combining all they have learned from visual arts in context, visual arts methods and communicating visual arts :

#### >Comparative study 20%

Students analyse and compare different artworks by different artists. This independent critical and contextual investigation explores artworks, objects and artefacts from differing cultural contexts.

•SL: Compare at least 3 different artworks, by at least 2 different artists, with commentary over 10–15 screens.

• HL: As SL plus a reflection on the extent to which their work and practices have been influenced by any of the art/ artists examined (3–5 screens).

#### >Process portfolio 40%

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

At SL: 9-18 screens. The submitted work should be in at least two different art-making forms.

At HL: 13-25 screens. The submitted work should be in at least three different art- making forms

#### >Exhibition 40%

Students submit for assessment a selection of resolved artworks from 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.

•At SL: 4-7 pieces with exhibition text for each. A curatorial rationale (400 words maximum).

•At HL: 8-11 pieces with exhibition text for each. A curatorial rationale (700 words maximum)

### International School of Dakar IBDP Theory of Knowledge

Instructors: Gretchen Bade Room 308, Tyson Lazzaro Room 307, Oumar Thiam Room 309, Vivienne Verschuren Room 210 Contact Information: <u>gretchenb@faculty.isd.sn</u>, <u>tysonl@faculty.isd.sn</u>, <u>oumart@faculty.isd.sn</u>, <u>viviennev@faculty.isd.sn</u>

### **Course Description:**

The Theory of Knowledge (TOK) course provides students with an opportunity to explore and reflect on the nature of knowledge and the process of knowing. 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. The course centres on the exploration of knowledge questions, which are a key tool for both teachers and students. These are contestable questions about knowledge itself, such as: "What counts as good evidence for a claim?", "Are some types of knowledge less open to interpretation than others?", or "What constraints should there be on the pursuit of knowledge?"

The aims of the TOK course are:

- to encourage students to reflect on the central question, "How do we know that?", and to recognize the value of asking that question
- to expose students to ambiguity, uncertainty and questions with multiple plausible answers
- to equip students to effectively navigate and make sense of the world, and help prepare them to encounter novel and complex situations
- to encourage students to be more aware of their own perspectives and to reflect critically on their own beliefs and assumptions
- to engage students with multiple perspectives, foster open-mindedness and develop intercultural understanding
- to encourage students to make connections between academic disciplines by exploring underlying concepts and by identifying similarities and differences in the methods of inquiry used in different areas of knowledge
- to prompt students to consider the importance of values, responsibilities and ethical concerns relating to the production, acquisition, application and communication of knowledge.

The TOK 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.
- 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. Students 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.
- 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.

(IBO, International Baccalaureate Diploma Programme Theory of knowledge Guide, Published Feb 2020)

### Approaches to Learning and The IB Learner Profile Attributes\*

- *Thinking skills* analyzing and evaluating sources, constructing arguments, making comparisons and contrasts (**Thinkers\***, **Reflective\***, **Knowledgeable\***)
- *Communication skills* constructing oral and written arguments, use of appropriate terminology (Communicators\*)
- *Research skills* individual research for the TOK Exhibition and TOK Essay (Inquirers\*)
- *Self-management skills* taking responsibility for roles within collaborative work, academic integrity, meeting deadlines (**Principled\***, **Balanced\***, **Risk-takers\***)
- *Social skills* working collaboratively, taking part in group discussions, seminars and debates (**Caring\***, **Open-Minded**)

### **Course Outline:**

Course elements	Minimum teaching hours
Core theme: Knowledge and the knower	32
This theme provides an opportunity for students to reflect on themselves as knowers and thinkers, and on the different communities of knowers to which we belong.	
Optional themes	
Students are required to study <b>two</b> optional themes from the following five options.	
Knowledge and technology	
Knowledge and language	
Knowledge and politics	
Knowledge and religion	
<ul> <li>Knowledge and indigenous societies</li> </ul>	
Areas of knowledge	50
Students are required to study the following <b>five</b> areas of knowledge.	
History	
The human sciences	
The natural sciences	
The arts	
Mathematics	
Assessment	18
Students are required to complete <b>two</b> assessment tasks.	
TOK exhibition (internally assessed)	
<ul> <li>TOK essay on a prescribed title (externally assessed)</li> </ul>	
Total minimum teaching hours	100

(IBO, International Baccalaureate Diploma Programme Theory of knowledge Guide, Published Feb 2020)

### CAS Links:

The core (TOK, CAS, EE) strives to make a difference to the lives of students. It should provide opportunities for students to think about their own values and actions, to deepen their understanding of their place in the world and to sensitively consider the contexts and views of others.

- Theory of knowledge (TOK) explores questions about knowledge and the process of knowing. TOK emphasizes comparisons and connections between areas of knowledge and encourages students to become more aware of their own perspectives and the perspectives of others.
- Creativity, activity, service (CAS) provides students with the chance to participate in a range of experiences alongside their academic studies. The three strands of CAS are creativity (arts, and other experiences that involve creative thinking), activity (physical exertion contributing to a healthy lifestyle) and service (an unpaid collaborative and reciprocal engagement with the community).

(IBO, International Baccalaureate Diploma Programme Theory of Knowledge Guide, Published Feb 2020)

#### Examples

When participating in service or creativity activities, students are encouraged to consider different perspectives, both their own as well as that of others. TOK provides students with opportunities to consider the ethics of service. How can knowledge in TOK be applied when reflecting on one of the CAS learning outcomes: "Consider the ethics of choices and decisions"?

### Assessment:

ISD assessments are both formative and summative. Formative assessments include classwork, reflections, practice exhibitions, and short essays.

There are two summative assessments, one internally assessed, the other externally.

#### Internal Assessment

The TOK exhibition assesses the ability of the student to show how TOK manifests in the world around us. The commentary is a maximum of 950 words and must address one of 35 prompts. It is completed in Grade 11 and worth <sup>1</sup>/<sub>3</sub> of the final TOK grade. It is marked by the teacher and is externally moderated by the IB.

#### External Assessment

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 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. It is done in Grade 12 and is worth  $\frac{2}{3}$  of the final TOK grade. It is marked by IB examiners.

# ASSESSMENT

The International Baccalaureate uses both internally and externally assessed components to assess student performance.

For most courses, written examinations at the end of the DP form the basis of the assessment. This is because these examinations have high levels of objectivity and reliability.

Externally assessed coursework, completed by students over an extended period under authenticated teacher supervision, forms part of the assessment for several programme areas, including the Theory of Knowledge essay and the Extended Essay.

In most subjects, students also complete in-school assessment tasks. These are either externally assessed or marked by teachers and then moderated by the IB. In the DP, students receive grades ranging from 7 to 1, with 7 being highest. Students receive a grade for each DP course attempted.

A student's final diploma result score is made up of the combined scores for each subject. The diploma is awarded to students who gain at least 24 points, subject to certain minimum levels of performance including successful completion of the three essential elements of the DP core.

The theory of knowledge (TOK) and extended essay (EE) components are awarded individual grades and, collectively, can contribute up to 3 additional points towards the overall diploma score (see next page).

Creativity, activity, service (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.

### Higher level and standard level courses

The IB awards the same number of points for higher level (HL) and standard level (SL) courses, reflecting the IB's belief in the importance of achievement across a broad range of academic disciplines.

HL and SL courses differ in scope but are assessed against the same grade descriptors, with HL candidates expected to demonstrate the various elements of the grade descriptors across a greater body of knowledge, understanding and skills.

### **Receiving a bilingual diploma**

A bilingual diploma is awarded to candidates who complete and receive a grade 3 or higher in two languages selected from the DP course studies in language and literature.

## THE DIPLOMA POINTS MATRIX ToK and Extended Essay

		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	0	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 condition

# **PREDICTED GRADES**

### Overview

Predicted IBDP grades are typically used by students in Grade 12 when they apply to university. While an important metric in a student's life, predicted IBDP grades should never be a surprise as they are a direct reflection of academic achievement in class. As such, students should see the grades noted on their report cards over the course of Year 1 in the IBDP as effectively "predicted grades to date." Further, as an IB school offering the IBMYP, students' academic grades moving through Years 4 and 5 of the MYP should be seen as being strong estimates of the grades that will be earned in the IBDP.

In order to help ensure that the IBDP grades used to apply for university are not a surprise, the school takes several steps to manage the process as well as proactively educate students, parents, and teachers.

### **Predicted Grades**

While predicted IBDP grades essentially reflect academic progress to date as noted on ISD report cards, there are some differences. First, grades reported on internal ISD report cards reflect past learning and are grounded in previous student work. As such, internal ISD grades reflect what students have **already demonstrated**. On the other hand, **predicted grades** are forward-looking projections of an academic level students are expected to achieve, based on past performance. As such, predicted grades don't include course content and skills not yet learned. Further, predicted grades must also factor in projections of student effort and growth over time.

As a school, we believe that students must take ownership of their learning. A key part of this is ensuring openness and transparency of students' academic levels of achievement – that is, students must clearly know where they are, and where they are not, in order to best learn. Therefore, predicted grades are shared with full transparency with students and their families. Further, we believe that in order to learn students must fully understand why their level of academic achievement is where it is. Therefore, we always encourage students and families to engage in conversations with teachers to understand fully how a student could improve.

### **Determining Predicted Grades**

All predictions are the grades the teachers believe the student will earn on their IB exams based on academic evidence. Teachers will use all data collected to date to inform their best professional judgment of the level a student will attain.

### Predicted Grades will be issued at the following times:

DP 1	End of school year*	To students and parents
DP 2	Early November	To students, parents and colleges
DP 2	Post mock exams	To students and parents
DP 2	April	To students, parents and IB

\*Students are invited to reflect on their predicted grades and devise strategies to address any weaknesses.

#### International School of Dakar

# WHAT HAPPENS NEXT?

DP/CP Course Selection Timeline Class of 2026

Date	Event	People Involved	Time/Venue
Sept/Oct	Careers Planning	Counselors/Students	Advisory
Early Nov	DP/CP Course Selection Guide available	DP Co/Communications Office	Website/Email/Coordinator's Google Classroom
Nov 3rd	DP Intro for Students	DPCo/Students/Selected G12 students	10:10-11:30 PAC
Nov 6th, 7th, 8th	DP Subject intros for students	Teachers	In classes
Nov 21st (evening event)	DP Intro for Parents	DP Co/HoDs/DP Teachers/Parents/Students	PAC - short presentation and reception 18:00-19:30
Early Dec	Language/Math Placements	Language/Math teachers	Letters/Emails to parents
Dec 13th	Preliminary Choices	Students/Parents/DP Co	Google Form
Jan	Individual interviews for students with choices issues	Students/DP Co/Counselors/ Principal/AP	Offices
Jan/Feb	Careers Planning	Counselors/Students	Advisory
Feb	Subject reviews	Teachers/Students	Lunch forum
March 6th	Final Subject Choices	Students/Parents/Teachers	Paper form - student, teacher, parent sign off

## **FURTHER INFORMATION**



International Baccalaureate Organization

🦻 <u>Pamoja</u>



What is an IB Education?





















ISD

