"Shirakatsy Lyceum" **International Scientific-Educational Complex**





HANDBOOK IB DIPLOMA PROGRAMME









Shirakatsy Lyceum Mission

Our mission is to develop future leaders, intellectuals, and citizens possessing and respecting national and global human values.

Shirakatsy Lyceum Vision

To be a leading international educational institution that inspires and empowers the community to achieve academic excellence, personal development, and active participation in a global society.

The IB Mission

The International Baccalaureate® 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 todevelop 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.

Source: www.ibo.org



IB LEARNER PROFILE

The aim of all IB programs is to develop internationally minded people who, recognize their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.

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

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

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

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

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

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

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

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

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

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

Source: IB Learner Profile, IBO

Values of the Shirakatsy Lyceum

· Integrity

We uphold honesty, fairness, and ethical behavior in all endeavors and interactions. We are principled.

· Excellence

We are striving for the highest standards in academics, personal growth, and leadership through increased participation and agency.

· Respect

We value diversity, cultural heritage, patriotism, and the unique contributions of everyone. We ensure inclusivity and equal opportunities for all, fostering fairness in every aspect of the institution.

· Responsibility

We take ownership of actions and decisions while contributing positively to society and the environment.

· Gratitude

We are thankful and ready to show appreciation, we return kindness.

Objectives of the Shirakatsy Lyceum

At Shirakatsy Lyceum, we are dedicated to fostering a dynamic and inclusive learning environment that empowers the community to achieve academic excellence, cultivate critical thinking skills, and embrace a lifelong love of learning. Guided by principles of integrity, respect, and innovation, we aim to inspire a community of curious and compassionate individuals who are equipped to

navigate the challenges of a rapidly evolving world and make meaningful contributions to society. Through a holistic approach to education, we strive to nurture the intellectual, physical, emotional, and social development of each learner, preparing them to become responsible global citizens and leaders.

Our objectives are:

- To provide a rigorous and comprehensive curriculum that integrates national and international educational standards, including the International Baccalaureate programs. We cultivate growth mindset and agency through inclusivity.
- To foster the intellectual, physical, emotional, and social development and wellbeing of learners, also supported through diverse extracurricular activities and support services.
- To encourage learners to engage with local and global issues, promoting patriotism, internationalism and respect for cultural diversity.
- To develop leadership skills and a commitment to community service, preparing the community to contribute positively to society.
- To promote a culture of inquiry and innovation, encouraging the community to pursue research and creative problem-solving.

Shirakatsy Lyceum Quality Education Statement

High-quality education at Shirakatsy Lyceum is based on steadfast commitment to excellence, innovation, and learning-centered education. This approach transcends the mere transmission of information, focusing on cultivating deep understanding, critical thinking, and the practical application of knowledge. High-quality education at Shirakatsy Lyceum is characterized by the following principles:

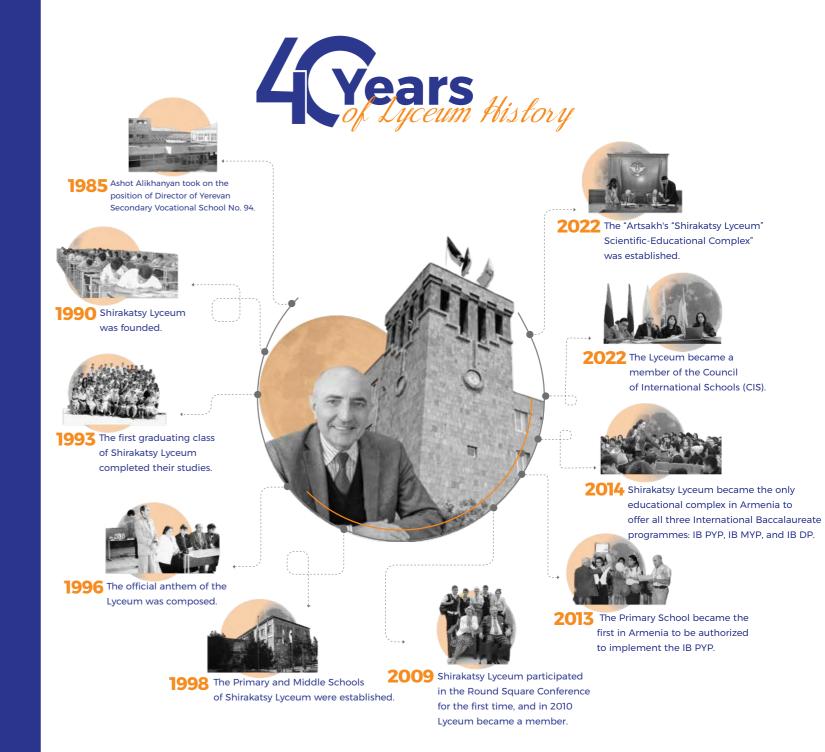
- 1. Universal Ethical Values: Integrity, respect, equity, and responsibility are foundational to the learning process, shaping learners into ethical, principled leaders committed to making a positive impact on society.
- 2. Holistic Development: Education at Shirakatsy Lyceum extends beyond academics, prioritizing also the social, emotional, ethical, physical growth of learners and their wellbeing. This balanced development prepares learners for meaningful and fulfilling lives.
- 3. Agency: Learners are active participants in their learning journey, encouraged to show responsibility and initiative towards their actions and achievements. This approach nurtures curiosity, a passion for knowledge, and a lifelong love of learning.
- 4. Critical and Creative Thinking: Analytical and problem-solving skills are at the core of the educational experience, equipping learners to approach challenges with discernment, creativity, and confidence.
- **5. Innovation:** The curriculum and teaching methodologies are dynamic and forward-looking, integrating cutting-edge educational technologies and practices. This fosters adaptability, creativity, and a spirit of innovation in learners.
- **6. Inclusivity:** An inclusive and diverse learning environment ensures that every learner feels respected, valued, and supported. This approach promotes cultural understanding and a strong sense of belonging.
- 7. Feedback and Reflection: Continuous feedback empowers learners and educators to reflect, adapt, and improve. This iterative process fosters a culture of self-reflection, resilience, and personal growth.
- **8. Community Collaboration:** Learning bridges the gap between classroom and real-world experiences. Through community engagement and practical applications, learners connect theoretical knowledge to societal challenges and opportunities.

Global citizenship

At Shirakatsy Lyceum, we nurture a culture of care and love, recognizing our shared humanity while embracing our differences. Through understanding and respect, we build bridges across cultures, fostering compassion and collaboration. Committed to a sustainable future, we empower our community to protect the environment and promote peace, creating a just and thriving world for generations to come.

TABLE OF CONTENTS

About Shirakatsy Lyceum	4
■ What is an IB education?	5
Diploma Programme	5
IB Diploma Programme Structure	6
DP Subject Groups	
The Curriculum	7
Assessment & Qualifications	8
Award of the IB Diploma	8
Success stories	9-10
School Results	9
University Progression, 2016-2020	10
The Components of the Diploma Programme	11-16
Extended Essay	11-12
Theory of Knowledge	13-14
The CAS programme	15-16
Group 1-Language A: Literature	17-18
Group 2 - Language B.	19-22
Language AB Initio	21-22
Group 3	23-30
History	23-24
Economics	25-26
Business Management	27-28
Geography	29-30
— Group 4	
Physics	31-32
Biology	
Chemistry	
Computer Science	
Design Technology	
Collaborative Science Project	41-42
Group 5.	43-44
Mathematics:Analysis and Approaches	43-44
School Policies	45-46



About Shirakatsy Lyceum

Founded in 1985 by Ashot Alikhanyan, Shirakatsy Lyceum has grown into a respected international scientific-educational complex, serving over 1,500 students from Armenia and abroad. Since its early years, the Lyceum has combined national values with forward-looking educational models, placing strong emphasis on academic integrity, scientific inquiry, and global awareness. It is the only school in Armenia authorized to offer all three International Baccalaureate programmes — PYP, MYP, and DP—and is an active member of international networks including IB, Round Square, and CIS. These affiliations are not symbolic; they reflect our everyday practice of collaborative, inquiry-based learning and international engagement. Our approach is holistic: education at Shirakatsy addresses academic growth, social and emotional wellbeing, and civic responsibility. The school campus includes purpose-built spaces for Kindergarten, Primary, Middle, and High school, alongside science laboratories, library, sports facilities, and a dedicated psychological center.

A rich after-school program, including a long-standing summer camp in Hankavan, extends learning beyond the classroom.

In the Diploma Programme (DP), instruction is delivered entirely in English. Our educators are experienced and mission-driven; their work is reflected in the achievements of our graduates, many of whom receive competitive scholarships and pursue studies at top universities worldwide.

Shirakatsy Lyceum has consistently charted its own course, grounded in principles and sustained by quality. We educate curious, capable, and responsible young people — ready to lead, serve, and contribute in a changing world.

What is an IB education?

The International Baccalaureate (IB) offers a continuum of education for students aged 3 to 19, defined by both academic depth and personal growth. The IB develops learners who think critically, act ethically, and engage with the world around them. Its programs emphasize curiosity, resilience, and responsibility, encouraging students to approach challenges with confidence and empathy. IB graduates are grounded in their identities, equipped to collaborate across cultures, and prepared to apply their learning in complex, real-world contexts.

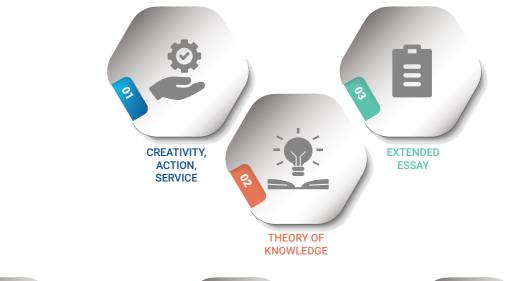
Diploma Programme

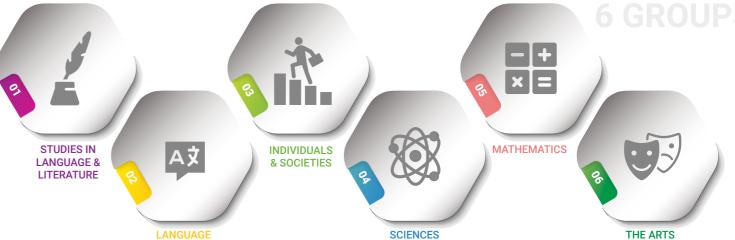
The IB Diploma Programme (DP) is a two-year course of study for students aged 16–19. Recognized for its academic rigor and balanced approach, the DP prepares students for success in higher education and beyond. It combines depth of subject knowledge with interdisciplinary learning, personal development, and global awareness.

Over 2,000 universities worldwide value the DP for its comprehensive and forward-thinking curriculum. As a result, DP graduates consistently receive competitive offers from leading universities.

Each DP curriculum undergoes a thorough review every seven years, ensuring that it reflects current research, best practices, and evolving global needs. The review process is collaborative, involving educators and experts from around the world. This ensures the DP remains relevant, academically strong, and aligned with the IB's mission to develop principled, knowledgeable, and internationally minded young people—ready to navigate and contribute meaningfully to the 21st century.

IB Diploma Programme Structure





DP Subject Groups

ACQUISITION

Group I

Studies in language and literature Language A: Literature in

- English
- Armenian
- Russian

Group II

Language Acquisition Language B in

- English
- Russian
- Spanish
- French

Language ab initio

- Spanish
- French

Group III

Individuals and Societies

- Geography
- History
- Business Management
- Economics

Group IV

Sciences

Experimental Sciences:

- Biology
- Chemistry
- Physics
- Computer Science
- Design Technology

Group V

Mathematics

 Mathematics: Analysis and Approaches (SL/HL)

Group VI

The Arts
• Dance*

5

^{*}This academic year we do not offer any subjects form group 6. Instead of the sixth group, students can choose one subject from the rest of five subject groups

The Curriculum

In the International Baccalaureate Diploma Programme (IBDP), students study six subjects to ensure both breadth and depth: one from each of the five groups-(1) Studies in Language and Literature, (2) Language Acquisition, (3) Individuals and Societies, (4) Sciences, and (5) Mathematics-plus either a course from (6) The Arts or an additional subject from groups 1–4. At least three and no more than four subjects must be taken at Higher Level (HL, 240 teaching hours), with the remainder at Standard Level (SL, 150 teaching hours). Both HL and SL are equally rigorous, assessed through a combination of external examinations and internal assessments moderated by the IB. Alongside these subjects, all students complete the DP Core-Theory of Knowledge (TOK), the Extended Essay (EE), and Creativity, Activity, Service (CAS)-which fosters critical reflection, independent research, and experiential learning. Together, the six subjects and the Core form a coherent curriculum that develops academic breadth and intellectual depth, while equipping students with the knowledge, skills, and values needed for university and lifelong learning.



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Assessment & Qualifications

In the International Baccalaureate Diploma Programme (IBDP), students are assessed through a combination of **external examinations**—set and marked by IB examiners—and **internal assessments** that are conducted by teachers and externally moderated by the IB. This ensures fairness, consistency, and alignment with international standards. Assessment is **criterion-related**, meaning performance is measured against subject-specific criteria rather than compared to other candidates.

For students who hold **Republic of Armenia (RA) citizenship**, obtaining **the national high school diploma (Atestat)** is **mandatory** in addition to the IB Diploma. To meet this requirement, students must study the compulsory subjects of **Armenian Language**, **Armenian History**, and **Military Service Training**, and successfully pass the **RA state graduation examinations**, which are administered in **January and/or June** of the second academic year.

Award of the IB Diploma

To be awarded the International Baccalaureate Diploma, candidates must successfully complete six subjects and the three Core components-the Extended Essay (EE), Theory of Knowledge (TOK), and Creativity, Activity, Service (CAS). A minimum of 24 points is required, subject to specific grade stipulations and conditions, all of which must be met within a maximum of three examination sessions.

Each subject is graded on a scale of 1 (lowest) to 7 (highest), and these grades are converted directly into diploma points. TOK and the EE are graded separately on a scale of A (highest) to E (lowest), and their combined performance contributes between 0 and 3 additional points to the total, according to the IB points matrix. CAS is not formally assessed but must be fully completed to satisfy diploma requirements. The maximum achievable score is therefore 45 points (6 subjects \times 7 = 42, plus up to 3 Core points). The minimum threshold for the award of the diploma is 24 points; candidates scoring fewer than 24 points are not awarded the diploma. Students who successfully complete the diploma in more than one language may be eligible for a bilingual diploma.

Additional Requirements

In addition to point totals, the following conditions must be met:

- CAS requirements have been completed.
- No "N" (no grade awarded) for TOK, the EE, or any subject.
- No grade **E** in TOK or the EE.
- No grade 1 in any subject.
- No more than two grades of 2 (at HL or SL).
- No more than three grades of 3 or below (at HL or SL).
- A minimum of **12 points in HL subjects** (the three highest grades count if four HL subjects are taken).
- A minimum of 9 points in SL subjects (candidates taking only two SL subjects must achieve at least 5 points at SL).
- No penalty for **academic misconduct** issued by the Final Award Committee.

Meeting these requirements demonstrates successful performance across all elements of the Diploma Programme.

SUCCESS STORIES

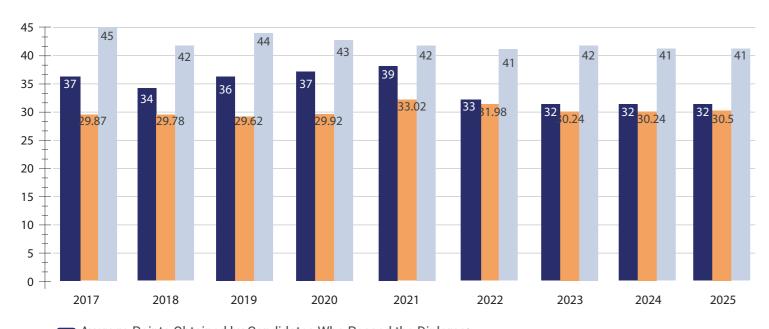
The IB Diploma Programme (DP) is widely recognized as a passport to higher education. More than 2,000 universities worldwide officially recognize the IB Diploma, and many consider successful ticipation in the programme to be one of the strongest predictors of academic success at the university level. DP graduates routinely gain admission to leading universities across the globe, many of which have established clear and supportive IB recognition policies.

Admission requirements vary between institutions and countries, and it is the responsibility of students to research the specific criteria of the universities to which they are applying. Recognition statements for individual countries and universities can be accessed through the IB's official resources.

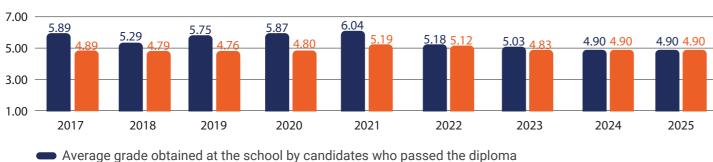
In addition to holding the IB Diploma, students should be aware that some universities require proof of English language proficiency, often through the IELTS or TOEFL examinations. However, many institutions grant waivers for this requirement if students have successfully studied in English through the IBDP. Furthermore, a significant number of universities, particularly in North America and Europe, award university credits or advanced standing for high achievement in IB subjects, allowing students to skip introductory courses or shorten the duration of their degree studies.

The IB Diploma not only opens doors to higher education but also equips graduates with the academic skills, international outlook, and personal attributes that universities highly value, ensuring a strong foundation for success in higher education and beyond.

SCHOOL RESULTS



- Average Points Obtained by Candidates Who Passed the Diploma:
- Diploma World Average Total Points
- Highest diploma points awarded to a candidate

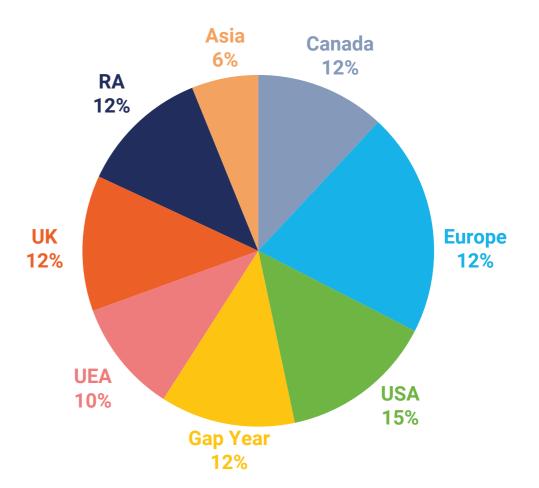


Diploma World mean grade

DP STUDENTS' UNIVERSITY CHOICES

International Universities _2025			
Universities	Country		
Politecnico di Milano, NUACA	EUROPE		
KU Leuven- Business Administration	EUROPE		
LMU München	EUROPE		
Università Commerciale Luigi Bocconi	EUROPE		
WU Vienna	EUROPE		
Hochshule Saälandes	EUROPE		
University of Toronto	Canada		
Columbia University	USA		
University of Melbourne	USA		
King's College London	UK		
University of Warwick	UK		
New York University Abu Dhabi	UAE		
American University in Dubai	UAE		
American University of Armenia	RA		
Université Française en Arménie	RA		
European University of Armenia	RA		
Armenian State University of Economics	RA		
Yerevan State University	RA		
National University of Architecture and Construction of Armenia	RA		
Yerevan State Medical University	RA		

IBDP UNIVERSITY ADMISSION 2025



The Components of the Diploma Programme

The extended essay (EE) is the centrepiece of the IB Diploma Programme. It is an integral and valuable learning experience for all Diploma Programme students.

The Diploma Programme core

Extended essay:

Key features of the EE

- The EE is compulsory for all students taking the Diploma and is an option for course students.
- A student must achieve a D grade or higher to be awarded the Diploma.
- The EE is externally assessed. Together with the grade for Theory of knowledge, it contributes up to three points to the total score for the diploma.
- The EE process helps prepare students for university and other pathways beyond the Diploma Programme.
- Students must choose a subject for their essay from the list of Diploma Programme subjects in the Diploma Programme.
- The EE is a piece of independent research on a topic chosen by the student in consultation with a supervisor in the school.
- It is presented as a formal piece of sustained academic writing (4,000 words maximum) accompanied by a reflection form (500 words maximum).
- It is the result of approximately 40 hours of work by the student.
- Students are supported by a supervision process recommended to last three to five hours in total, which includes three mandatory reflection sessions.
- The third and final mandatory reflection session is the viva voce, which is a concluding interview with the supervising teacher after the essay is completed.

The aims of the EE are for students to

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



The assessment criteria of the extended essay are considered holistically across the whole essay.

Criterion A: focus and method	Criterion B: knowledge and understanding	Criterion C: critical thinking	Criterion D: presentation	Criterion E: engagement
Research questionResearch methodsStructure	 Knowledge Understanding - Terminology Understanding - Concepts 	AnalysisLine of argumentation	DiscussionEvaluation	Experiences and insightsLearned skills
Marks	Marks	Marks	Marks	Marks
6	6	6	8	4

The Extended Essay will be assessed externally according to an approved grading scale and criteria. The final assessment – which is based on a pre-approved diploma points matrix – will take in account the grades received from both the EE and the ToK essay, resulting in a combined score that will determine the DP student's progress and status within the Diploma Programme (see the chart below). Students who have received a low score equivalent to 'failing condition' will not receive their diploma.

EE and TOK Grade Combination Matrix (Core Points)

EE \ TOK	A	В	С	D	E
A	3	3	2	2	Failing condition
В	3	2	2	1	Failing condition
С	2	2	1	0	Failing condition
D	2	1	0	0	Failing condition
E	Failing condition				

Explanation for Students & Parents

- The maximum 3 bonus points are awarded for excellent combined performance in TOK and the EE.
- A grade E in either TOK or EE is a failing condition, regardless of points total.
- These bonus points are added to the subject total (max 42), bringing the overall maximum to 45 points.

Source: Extended Essay, IBO

Theory of Knowledge:

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 this way, the main focus of TOK is not on students acquiring new knowledge but on helping students to reflect on, and put into perspective, what they already know. TOK underpins and helps to unite the subjects that students encounter in the rest of their DP studies. It engages students in explicit reflection on how knowledge is arrived at in different disciplines and areas of knowledge, on what these areas have in common and the differences between them.

The following 12 concepts have particular prominence within, and thread throughout, the TOK course: evidence, certainty, truth, interpretation, power, justification, explanation, objectivity, perspective, culture, values and responsibility. Exploration of the relationship between knowledge and these concepts can help students to deepen their understanding and can facilitate the transfer of their learning to new and different contexts.

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.

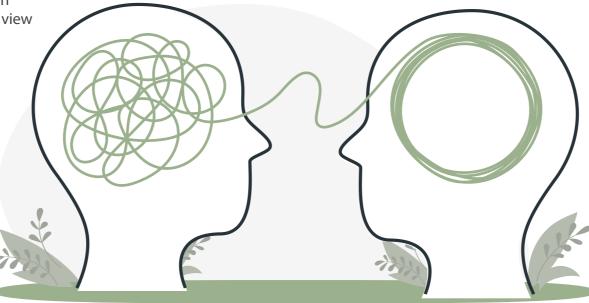
Having completed the TOK course, students should be able to:

- demonstrate TOK thinking through the critical examination of knowledge questions
- identify and explore links between knowledge questions and the world around us
- identify and explore links between knowledge questions and areas of knowledge
- develop relevant, clear and coherent arguments
- use examples and evidence effectively to support a discussiondemonstrate awareness and evaluation of different points of view

• consider the implications of arguments and conclusions.

Assessment outline

External assessment	SL	HL	Weighting SL HL
TOK Essay on a prescribed title (10 marks)	For this component, students are required to write an essay in response to one of the six prescribed titles that are issued by the IB for each examination session. These titles take the form of knowledge questions that are focused on the areas of knowledge: History The human sciences The natural sciences The arts Mathematics As an external assessment component, it is marked by IB examiners.		2/3 (67%)
Internal assessment			
Theory of knowledge exhibition (10 marks)	For this component, students a exhibition that explores how To around us. it is strongly recom their exhibition on one of the T •Knowledge and the knower •Knowledge and technology • Knowledge and language • Knowledge and politics This component is internally as externally moderated by the IB	OK manifests in the world mended that students base OK themes:	1/3 33%



Source: Theory of Knowledge (first assessment 2022), IBO

The CAS programme

CAS (Creativity, Activity, Service) is a core component of the IB Diploma Programme. It enables students to live the IB learner profile in real, practical and meaningful ways, evolve as unique individuals, and to recognize their roles in relation to others. It is intended to complement the academic disciplines of the curriculum by extending learning beyond the classroom and engaging students in purposeful experiences that promote personal growth, collaboration, and reflection. The CAS programme formally begins at the start of the Diploma Programme and continues regularly, ideally on a weekly basis, for at least 18 months with a reasonable balance between Creativity, Activity, and Service. Students participate in both experiences (short-term or ongoing activities) and a CAS project of at least one month's duration that requires initiative, perseverance, collaboration, and problem-solving.

Throughout the programme, students use the CAS stages: Investigation, Preparation, Action, Reflection, and Demonstration, as a framework for their engagement. Reflection is central to CAS, allowing students to explore strengths, limitations, and areas for growth, and to connect learning to new contexts.

All CAS students are expected to maintain and complete a CAS portfolio, which documents their experiences, reflections, and evidence of achieving the seven CAS learning outcomes. Three formal interviews with the CAS coordinator/adviser (at the beginning, middle, and end of the programme) support and monitor this journey.

CAS is organized around the three strands of Creativity, Activity and Service.

Strand	Description	Example of our students
Creativity	encourages students to explore and extends ideas to create a certain product or performance	 Taking dance classes Learning to play the guitar, Learning a new language and much more
Activity	seeks to develop a healthy lifestyle through physical activity	Learning to swimPlaying big tennisRunning, visiting gym and many other sports
Service	provides collaborative engagement with the community in response to an authentic need	 volunteering at school events Mentorship programmes for schools in the regions volunteering at Yerevan Zoo, at Habitat Armenia and many other big events and NGO projects

CAS Learning Outcomes

CAS is a journey of self-development and discovery which aims to challenge and extend students both individually and with others. Successful completion of CAS is based on achieving the seven learning outcomes.

- LO1: Identify own strengths and develop areas for growth
- LO2: Demonstrate that challenges have been undertaken, developing new skills in theprocess



- LO3: Demonstrate how to initiate and plan a CAS experience
- LO4: Show commitment to and perseverance in CAS experiences
- LO5: Demonstrate the skills and recognize the benefits of working collaboratively
- LO6: Demonstrate engagement with issues of global significance
- LO7: Recognize and consider the ethics of choices and actions

Students are expected to:

- set personal goals for what they hope to achieve through their CAS program
- plan, act/do and reflect
- show evidence of achievement of the CAS seven Learning Outcomes

Student Experiences at Shirakatsy Lyceum

Our students engage in both individual experiences and collaborative projects. Experiences are short-term or ongoing activities, while projects require sustained collaboration and initiative, lasting at least one month.

	Experience	Project
Local	 Flower Gathering at Tsitsernakaberd-participating in community remembrance. Habitat for Humanity Armenia-assisting with housing construction for families in need. Aurora Forum volunteering- Supporting logistics and guests during humanitarian forum. Sevan Startup Summit volunteering-contributing to the organization of a youth entrepreneurship forum. Yerevan Zoo Volunteering- Supporting animal care and visitor engagement 	 Shirakatsy Parliament (ShiP)- Student-led parliament model fostering leadership and governance. Mentorship programme- DP students mentoring younger peers, as well as students from regions. DP Charity concert- organizing performances to raise funds for charitable causes. FLASH 365- leading a year-long initiative for creativity and community service.
Global / International	 European Youth Parliament (EYP)-debating and collaborating with international peers on European/global issues. Yale Young Global Scholars-engaging in international academic collaboration Aurora Humanitarian Forum (International delegations)- supporting an international humanitarian event. 	 #MyFreedomDay (CNN initiative)-leading awareness campaigns on human rights and modern slavery/ UNODC conference- sustained engagement in global discussions on crime prevention and justice. Shirakatsy Model United Nations (MUN)-organizing international debates on global issues.

CAS Expectations

When selecting and planning their CAS activities, students must ensure that all experiences are in the "spirit of CAS", involving:

- Real, purposeful activities with significant outcomes
- Personal challenge (projects must extend students and be achievable in scope)
- Thoughtful consideration (i.e. planning, reviewing individual progress, reporting, reflecting on learning)
- Consideration of the ethical implications of choices and actions.

Reflection on outcomes and personal learning

Awareness of being members of a global community, responsible for each other

IBO Creativity, Activity, Service Guide: For students graduating in 2017 and after.

Source: Creativity, activity, service, IBO

GROUP 1 - LANGUAGE A:LITERATURE (ARMENIAN, RUSSIAN, ENGLISH)

About the course:

The Language A: literature course is designed for students from a wide variety of linguistic and cultural backgrounds who have experience of using the language of the course in an educational context. More specifically, it is intended to meet the needs of students for whom English, Armenian, or Russian language is the first language or who speak the language to native-speaker standard.

Throughout this course, students will focus exclusively on literary texts, adopting a variety of approaches conducting textual analysis. They will explore the nature of literature, the aesthetic function of literary language and textuality, and, more importantly, they will discover the relationship between literature and the world. In frames of this course, students will study literary works of great value, which are written both in the original language of instruction and translated into the language of the instructions. The selected literary works will be from a variety of literary genres, such as fiction prose, non-fiction prose, drama, poetry, and new textiles (graphic novels). All of this will provide students a focus for understanding howmeaning is constructed within belief or value systems and how it is negotiated across multiple perspectives generated by single or multiple readers. The instructional model for this course is the same both at SL and HL, but there are significant quantitative and qualitative differences between the levels. At SL, students will study in a total 7 and at HL 10 literary works.

Aims

The aims of the language A: literature course both at HL and SL are to enable students to:

- 1.engage with a range of literary texts from different periods, genre, and cultures
- 2.develop skills in interpretation, analysis and evaluation of literary texts and an appreciation of how they contribute to diverse responses and open up multiple meanings
- 3.develop an understanding of relationships between texts and a variety of perspectives, local and global issues
- 4. develop an understanding of the relationships between literature and other disciplines
- 5.communicate and collaborate in a confident and creative way
- 6.foster a lifelong interest in and enjoyment of literature.



Assessment outline

External assessment	SL	HL	Weighting SL HL
Paper 1	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. As an external assessment component, it is marked by IB examiners.	The paper consists of two literary passages, from two different literary forms, each accompanied by a question. Students write an analysis of each of the passages.	35% 35%
Paper 2	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.	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.	35% 25%
HL essay		Students submit an essay on one literary text or work studied during the course. The essay must be 1,200–1,500 words in length.	20%
Internal assessment			
Individual Oral	Supported by an extract from one work written originally in the language studied and one from a work studied in translation, students will examine how the global issue is presented through the content and form.	Supported by an extract from one work written originally in the language studied and one from a work studied in translation, students will examine how the global issue is presented through the content and form.	30% 20%

Source: Language A: literature SL & HL (first assessment 2021), IBO

GROUP 2: LANGUAGE B (RUSSIAN / ENGLISH / FRENCH / SPANISH (SL / HL)

Language acquisition consists of two modern language courses—language ab initio and language B. These courses are 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. This process allows the learner to go beyond the confines of the classroom, expanding their awareness of the world and fostering respect for cultural diversity.

They develop students' linguistic abilities through the development of receptive, productive and interactive skills .

Language B (SL/HL) is a language acquisition course designed for students with some previous experience of the target language. In the language B course, 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.

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

Five prescribed themes are common to the syllabuses of language ab initio and language B; the themes provide relevant contexts for study at all levels of language acquisition in the DP, and opportunities for students to communicate about matters of personal, local or national, and global interest.

The five prescribed themes are:

• identities, experiences, human ingenuity, social organization, sharing the planet.

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.

Aims

The following aims are common to both language ab initio and language B.

- 1. Develop international-mindedness through the study of languages, cultures, and ideas and issues of global significance.
- 2. Enable students to communicate in the language they have studied in a range of contexts and for a variety of purposes.
- 3. Encourage, through the study of texts and through social interaction, an awareness and appreciation of a variety of perspectives of people from diverse cultures.
- 4. Develop students' understanding of the relationship between the languages and cultures with which they are familiar.
- 5. Develop students' awareness of the importance of language in relation to other areas of knowledge.
- 6. Provide students, through language learning and the process of inquiry, with opportunities for intellectual engagement and the development of critical- and creative-thinking skills.
- 7. Provide students with a basis for further study, work and leisure through the use of an additional language.
- 8. Foster curiosity, creativity and a lifelong enjoyment of language learning.

Assessment outline

Assessment component SL	Assessment component HL	Weighting SL & HL
External assessment (3 hours)	External assessment (3 hours 30 minutes)	75%
Paper 1 (1 hour 15 minutes) Productive skills—writing (30 marks)	Paper 1 (1 hour 30 minutes) Productive skills—writing (30 marks)	25%
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.	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.	
Paper 2 (1 hour 45 minutes) Receptive skills—separate sections for listening and reading (65 marks)	Paper 2 (2 hours) Receptive skills—separate sections for listening and read- ing (65 marks)	50%
Listening comprehension (45 minutes) (25 marks) Reading comprehension (1 hour) (40 marks) Comprehension exercises on three audio passages and three written texts, drawn from all five themes.	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 This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.	Internal assessment This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.	25%
Individual oral assessment A conversation with the teacher, based on a visual stimulus, followed by discussion based on an additional theme. (30 marks)	Individual oral assessment 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)	

Source: Language B SL/HL, IBO

GROUPE 2: LANGUAGE AB INITIO FRENCH/SPANISH (SL)

Language ab initio is a language acquisition course designed for students with no prior experience of the target language, or for those students with very limited previous exposure. It should be noted that language ab initio is offered at SL only.

In the language ab initio course, students develop the 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. Communication is evidenced through receptive, productive and interactive skills across a range of contexts and purposes that are appropriate to the level of the course.

Five prescribed themes are common to the syllabuses of language ab initio and language B; the themes provide relevant contexts for study at all levels of language acquisition in the DP, and opportunities for students to communicate about matters of personal, local or national, and global interest.

The five prescribed themes are:

• identities, • experiences, • human ingenuity, • social organization, • sharing the planet.

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.

Aims

The following aims are common to both language ab initio and language B.

- 1. Develop international-mindedness through the study of languages, cultures, and ideas and issues of global significance.
- 2. Enable students to communicate in the language they have studied in a range of contexts and for a variety of purposes.
- 3. Encourage, through the study of texts and through social interaction, an awareness and appreciation of a variety of perspectives of people from diverse cultures.
- 4. Develop students' understanding of the relationship between the languages and cultures with which they are familiar.
- 5. Develop students' awareness of the importance of language in relation to other areas of knowledge.
- 6. Provide students, through language learning and the process of inquiry, with opportunities for intellectual engagement and the development of critical- and creative-thinking skills.
- 7. Provide students with a basis for further study, work and leisure through the use of an additional language.
- 8. Foster curiosity, creativity and a lifelong enjoyment of language learning.



Assessment outline

Assessment component	Weighting
External assessment (2 hours 45 minutes)	75%
Paper 1 (1 hour) Productive skills—writing (30 marks)	25%
Two written tasks of 70–150 words each from a choice of three tasks, choosing a text type for each task from among those listed in the examination instructions.	
Paper 2 (1 hour 45 minutes) Receptive skills—separate sections for listening and reading (65 marks)	50%
Listening comprehension (45 minutes) (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 This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.	25%
Individual oral assessment A conversation with the teacher, based on a visual stimulus and at least one additional course theme. (30 marks)	

Source: Language ab initio SL, IBO

GROUP 3 - HISTORY

About the course:

History is a rigorous intellectual discipline, focused around key historical concepts such as change, causation and significance. It is an exploratory subject that allows opportunity for engagement with multiple perspectives and a plurality of opinions. By studying history students develop an understanding of the past, which leads to a deeper understanding of the nature of humans and of the world today. It involves the study of a variety of types of history, including political, economic, social and cultural, and provides a balance of structure and flexibility. The course puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. Thus, the DP history course is designed in such a way as to explicitly reinforce the emphasis on the development of international-mindedness.

Throughout the DP history course, students have the opportunity to explore historical events that have played a key role in shaping the world today, deepening their understanding of the complex and interconnected nature of past and present events. This helps to meet one of the central aims of the course—to increase students' understanding of themselves and of contemporary society by encouraging reflection on the past.

Aims

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



Assessment outline

External assessment	SL	HL	Weighting SL HL
Paper 1(1 hour)	Source-based paper based on the prescribed subject. Students must answer all four structured questions. (24 marks)	Source-based paper based on the prescribed subject. Students must answer all four structured questions. (24 marks)	30% 20%
Paper 2(1h30 m)	Paper 2 is an essay paper based on the 12 world history topics. The paper consists of two questions for each of the 12 topics. Students must answer two questions, each selected from a different topic. Some comparative questions on this paper require that examples be drawn from more than one region. The maximum mark for this paper is 30.	Paper 2 is an essay paper based on the 12 world history topics. The paper consists of two questions for each of the 12 topics. Students must answer two questions, each selected from a different topic. Some comparative questions on this paper require that examples be drawn from more than one region. The maximum mark for this paper is 30.	45% 25%
Paper 3(2h 30m)		The paper 3 examination paper I consists of 36 questions, consisting of two essay questions on each of the 18 sections specified for the regional option. Students must answer three questions. The maximum mark for this paper is 45.	35%
Internal assessment			
Historical investigation	Students are required to complete a historical investigation into a topic of their choice. (25 marks)	Students are required to complete a historical investigation into a topic of their choice. (25 marks)	25% 20%

Source: History SL/HL, IBO

GROUP 3 - ECONOMICS

Economics is an exciting, dynamic subject that allows students to develop an understanding of the complexities and interdependence of economic activities in a rapidly changing world. At the heart of economic theory is the problem of scarcity. While the world's population has unlimited needs and wants, there are limited resources to satisfy these needs and wants. As a result of this scarcity, choices have to be made.

The economics course, at both SL and HL, uses economic theories to examine the ways in which these choices are made:

- Microeconomics at the level of producers and consumers in individual markets,
- Macroeconomics at the level of the government and the national economy,
- Global economy at an international level where countries are becoming increasingly interdependent through international trade and the movement of labour and capital.

As a social science, economics examines these choices through the use of models and theories. The DP Economics course allows students to explore these models and theories, and apply them using empirical data, through the examination of different real-world issues.

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

AIMS

The aims of Economics course both at HL and SL are to enable students to:

- •develop a critical understanding of a range of economic theories, models, ideas and tools in the areas of microeconomics, macroeconomics and the global economy,
- apply economic theories, models, ideas and tools and analyse economic data to understand and engage with real-world economic issues and problems facing individuals and societies,
- •develop a conceptual understanding of individuals' and societies' economic choices, interactions, challenges and consequences of economic decision-making.



Assessment outline

External assessment	Description	Weighting SL HL
Paper 1	An extended Response paper. Students answer one question from a choice of three.	30% 20%
Paper 2	A data response paper. Students answer one question from a choice of two. Includes some quantitative tasks.	40% 30%
Paper 3 (only HL)	A policy paper. Students answer two compulsory questions. Includes both quantitative and qualitative tasks.	30%
Internal assessment		
Article Commentary	This component is internally assessed by the teacher and externally moderated by the IB at the end of the course. Students produce a portfolio of three commentaries, based on different units of the syllabus (excluding the introductory unit) and on published extracts from the news media. Each of the three commentaries should use a different key concept as a lens through which to analyse the published extracts. Maximum 800 words for each commentary.	30% 20%

Source: Economics SL/HL (first assessment 2022), IBO

GROUP 3 - BUSINESS MANAGEMENT

About the course:

The Diploma Programme business management course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques. Students learn to analyse, discuss and evaluate business activities at local, national and international levels. The course covers a range of organizations from all sectors, as well as the socio-cultural and economic contexts in which those organizations operate.

Business management studies business functions, management processes and decision-making in contemporary contexts of strategic uncertainty. It examines how business decisions are influenced by factors internal and external to an organization, and how these decisions impact upon its stakeholders, both internally and externally.

The Business management course, at both SL and HL covers the following units:

- Business organization and environment
- Human resource management
- Finance and accounts
- Marketins

Operations management

Aims:

- 1. encourage a holistic view of the world of business
- 2. empower students to think critically and strategically about individual and organizational behaviour
- 3. promote the importance of exploring business issues from different cultural perspectives
- 4. enable the student to appreciate the nature and significance of change in a local, regional and global

context

- 5. promote awareness of the importance of environmental, social and ethical factors in the actions of individuals and organizations
- 6. develop an understanding of the importance of innovation in a business environment.



Assessment outline

External assessment	SL	HL	Weighting SL HL
Paper 1	The paper consists of two sections. Based on a pre-released statement that specifies the context and background for the unseen case study.	The paper consists of two sections. Based on a pre-released statement that specifies the context and background for the unseen case study.	35% 25%
Paper 2	The paper consists of two sections. Based on unseen stimulus material with a quantitative focus.	The paper consists of two sections. Based on unseen stimulus material with a quantitative focus.	35% 30%
Paper 3		Based on unseen stimulus material about a social enterprise. Students answer one compulsory question based on the unseen stimulus material	25%
Internal assessment			
Business Research Project	Students produce a research project about a real business issue or problem facing a particular organization using a conceptual lens. Maximum 1,800 words. (25 marks)	Students produce a research project about a real business issue or problem facing a particular organization using a conceptual lens. Maximum 1,800 words. (25 marks)	30% 20%

Source: Business management SL/HL, IBO

GROUP 3 - GEOGRAPHY

About the course:

Geography is a dynamic subject that is firmly grounded in the real world and focuses on the interactions between individuals, societies and physical processes in both time and space. It seeks to identify trends and patterns in these interactions. It also investigates the way in which people adapt and respond to change, and evaluates actual and possible management strategies associated with such change. Geography describes and helps to explain the similarities and differences between different places. These may be defined on a variety of scales and from the perspectives of a different range of actors, with varying powers over decision making processes.

IB Geography Concepts

The "Geography concepts" model shows the six main concepts of the course, with the four key concepts of place, process, power, and possibility at the centre and the organizing concepts of scale and spatial interactions connecting them. Scale has both temporal and spatial perspectives.

Aims

- 1.develop an understanding of the dynamic interrelationships between people, places, spaces and the environment at different scales
- 2.develop a critical awareness and consider complexity thinking in the context of the nexus of geographic issues, including:
- a.acquiring an in-depth understanding of how geographic issues, or wicked problems, have been shaped by powerful human and physical processes
- b.synthesizing diverse geographic knowledge in order to form viewpoints about how these issues could be resolved
- 3.understand and evaluate the need for planning and sustainable development through the management of resources at varying scales.



Content and Assessment outline

External assessment	SL	HL	Weighting SL HL		
Paper 1 SL-1h 30m HL-2h15m	Two options are studied from the following: •Freshwater - drainage basins •Oceans and coastal margins • Extreme environments •Geophysical hazards •Leisure, tourism and sport •Food and health •Urban environments 45 minutes per option question Each option has a structured question [10 marks] and one extended answer question [10 marks] from a choice of two. Total 40 marks	Three options are studied from the following: Freshwater - drainage basins Oceans and coastal margins Extreme environments Geophysical hazards Leisure, tourism and sport Food and health Urban environments 45 minutes per option question Each option has a structured question [10 marks] and one extended answer question [10 marks] from a choice of two. Total 60 marks	30% 20%		
Paper 2 (1h15 m.)	The following units are studied SL and HL core Geographic perspectives— global change •Population distribution— changing population •Global climate— vulnerability and resilience •Global resource consumption and security Section A - 30 marks Three structured questions, one for each unit. Section B - 10 marks Infographic or visual stimulus, with structured questions. Section C - 10 marks One extended answer question from a choice of two. Total 50 marks	The following units are studied SL and HL core Geographic perspectives— global change •Population distribution— changing population •Global climate— vulnerability and resilience • Global resource consumption and security Section A - 30 marks Three structured questions, one for each unit. Section B - 10 marks Infographic or visual stimulus, with structured questions. Section C - 10 marks One extended answer question from a choice of two. Total 50 marks	40% 25%		
Paper 3 (1hour)		The following units are studied: •Power, places and networks •Human development and diversity •Global risks and resilience Choice of three extended answer questions, with two parts, based on each HL core unit Part A—12 marks Part B—16 marks Total28 marks	20%		
Internal assessment					
Fieldwork	Fieldwork, leading to one 2,500 word written report based on a fieldwork question, information collection and analysis with evaluation. Fieldwork question to be based on any suitable topic from the syllabus Total 25 marks	Fieldwork, leading to one 2,500 word written report based on a fieldwork question, information collection and analysis with evaluation. Fieldwork question to be based on any suitable topic from the syllabus Total 25 marks	25% 20%		

Source: Geography SL & HL, IBO

GROUP 4 - PHYSICS

About the course:

About the course: As one of the three natural sciences in the IB Diploma Programme, physics is concerned with an attempt to understand the natural world; from determining the nature of the atom to finding patterns in the structure of the universe. It is the search for answers from how the universe exploded into life to the nature of time itself. Observations are essential to the very core of the subject. Models are developed to try to understand observations, and these themselves can become theories that attempt to explain the observations. Besides leading to a better understanding of the natural world, physics gives us the ability to alter our environments.

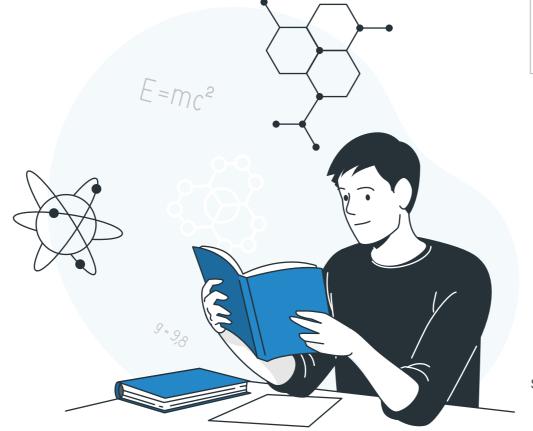
DP physics enables students to constructively engage with topical scientific issues. Students examine scientific knowledge claims in a real-world context, fostering interest and curiosity. By exploring the subject, they develop understandings, skills and techniques which can be applied across their studies and beyond. Integral to the student experience of the DP physics course is the learning that takes place through scientific inquiry both in the classroom and the laboratory.

Aims:

Through studying biology, chemistry or physics, students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes these subjects.

The aims enable students, through the overarching theme of the Nature of science, to:

- 1. develop conceptual understanding that allows connections to be made between different areas of the subject, and to other DP sciences subjects
- 2. acquire and apply a body of knowledge, methods, tools and techniques that characterize science
- 3. develop the ability to analyse, evaluate and synthesize scientific information and claims
- 4. develop the ability to approach unfamiliar situations with creativity and resilience
- 5. design and model solutions to local and global problems in a scientific context
- 6. develop an appreciation of the possibilities and limitations of science
- 7. develop technology skills in a scientific context
- 8. develop the ability to communicate and collaborate effectively
- 9. develop awareness of the ethical, environmental, economic, cultural and social impact of science.



Assessment outline

External assessment	SL	HL	Weig SL	hting HL
Paper 1 SL- 1h 30min HL- 2h	Paper 1 (1 hour and 30 minutes) Paper 1A— Multiple-choice questions Paper 1B—Data-based questions A calculator is required for this paper. A physics data booklet is provided. The maximum mark for paper 1A is 25 marks. The maximum mark for paper 1A and paper 1B is 45 marks. Total 45 marks	Paper 1 (2 hours) Paper 1A— Multiple-choice questions Paper 1B—Data-based questions A calculator is required for this paper. A physics data booklet is provided. The maximum mark for paper 1A is 40 marks. The maximum mark for paper 1A and paper 1B is 60 marks. Total 60 marks	36%	36%
Paper 2 SL-1h 30min HL-2h 30min	Paper 2 (1 hour and 30 minutes) Short-answer and extended-response questions on standard level material only. A calculator is required for this paper. A physics data booklet is provided. Total 50 marks	Paper 2 (2 hour and 30 minutes) Short-answer and extended-response questions on standard level and additional higher level material. A calculator is required for this paper. A physics data booklet is provided. Total 90 marks	44%	44%
The scientific The IA requirement is the same for biology, chemistry and physics. The IA, 20% 20%				
investigation	worth 20% of the final assessment, consists of one task—the 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 3,000 words. Student work is internally assessed by the teacher and externally moderated by the IB. The performance in scientific investigation at both SL and HL is marked against common assessment criteria, with a total mark out of 24.			

Source: Physics SL/HL, IBO

GROUP 4 - BIOLOGY

About the course: Biology course is one of the three life science subjects in IB Diploma Programme. It is constructed in a way to develop conceptual understanding of biological structures and processes starting from molecules, progressing through cellular and organismal levels, and ultimately culminating on environment level of life.

Throughout this course students will focus on an in-depth understanding of biological principles, concepts, and theories also through involvement in practical laboratory work and investigations. Designing investigations, gathering data, and drawing evidence-based conclusions help the students to develop experimental skills that are integral to scientific critical thinking, problem-solving, and application of scientific knowledge in real-world context.

The IB DP biology course prepares the learners for future study in fields like medicine, environmental science, genetics and biotechnology.

The course is divided into two levels: Standard Level (SL) and Higher Level (HL). Both levels share a core curriculum, with HL students covering additional topics in greater depth and more width.

The aims enable students, through the overarching theme of the Nature of science, to:

- 1. develop conceptual understanding that allows connections to be made between different areas of the subject, and to other DP sciences subjects
- 2. acquire and apply a body of knowledge, methods, tools and techniques that characterize science
- 3. develop the ability to analyse, evaluate and synthesize scientific information and claims
- 4. develop the ability to approach unfamiliar situations with creativity and resilience
- 5. design and model solutions to local and global problems in a scientific context
- 6. develop an appreciation of the possibilities and limitations of science
- 7. develop technology skills in a scientific context
- 8. develop the ability to communicate and collaborate effectively
- 9. develop awareness of the ethical, environmental, economic, cultural and social impact of science.



Assessment outline

External assessment	SL - 3 hours	HL – 4 hours and 30 minutes	Weighting in final assessment
Paper 1	1 hour and 30 minutes Paper 1A—Multiple-choice questions Paper 1B—Data-based questions (four questions that are syllabus related, addressing all themes) Total 55 marks	2 hour and 30 minutes Section A – Data-based and short answer questions Section B – Extended-response questions Total 80 marks	36%
Paper 2	1 hour and 30 min Section A – Data-based and short answer questions Section B – Extended-response questions Total 50 marks	2 hour and 30 minutes Section A – Data-based and short answer questions Section B – Extended-response questions Total 80 marks	44%
Internal assessment – IA	SL - 10 hours	HL - 10 hours	20%
Scientific investigation	The IA requirement is the same for bioloconsists of one task—the scientific investing the scientific investing the scientific investing and analyses data in order to answer the The outcome of the scientific investing to a written report with an overall word of Student work is internally assessed by the IB. The performance in scientific investing against common assessment criteria. Total mark 24		

GROUP 4 - CHEMISTRY

The IB Chemistry SL and HL courses, based on the updated syllabus for first assessment in 2025, are designed to develop students' understanding of chemistry through a balanced mix of theoretical concepts and practical applications.

Purpose of Chemistry SL and HL:

- 1. **Conceptual Understanding and Connections:** Both courses focus on fostering a deep understanding of chemical principles, emphasizing connections across topics and other sciences.
- 2. **Practical Skills Development:** Students learn to apply experimental methods, use technology, and analyze data to enhance their scientific inquiry and problem-solving abilities.
- 3. **Critical and Ethical Thinking:** The courses encourage students to reflect on the ethical, social, and environmental impacts of scientific advancements.
- 4. Preparation for Further Studies: SL provides foundational knowledge and skills, while HL offers a deeper exploration of chemistry with additional mathematical components, preparing students for university-level science courses.

The courses include an experimental program, collaborative projects, and inquiry-based learning to engage students actively in the learning process and promote global-mindedness. The main distinction between SL and HL lies in the breadth and depth of topics covered, with HL students required to study more advanced content.



Assessment outline

	external		1.01	Weig	hting
a	ssessment	SL	HL	SL	HL
S 3	Paper 1 GL- 1 hour and O minutes Paper 2 GL- (2 hours)	Paper 1A—Multi- ple-choice questions Paper 1B—Data-based questions (Total 55 marks) Paper 1A—Multi- ple-choice questions Paper 1B—Data-based questions (Total 75 marks)	Paper 1 is presented as two separate booklets. Paper 1A—30 marks • 30 multiple-choice questions on standard level material only No marks are deducted for incorrect answers. Paper 1B—25 marks • Data-based questions • Questions on experimental work Paper 1A and Paper 1B are to be completed together without interruptions. The questions on paper 1 test assessment objectives 1, 2 and 3. The use of calculators is permitted. See the Resource Centre. Each student must have access to a clean copy of the Chemistry data booklet during the examination. Paper 1 is presented as two separate booklets. Paper 1A—40 marks • 40 multiple-choice questions on standard level and additional higher level material No marks are deducted for incorrect answers. Paper 1B—35 marks • Data-based questions • Questions on experimental work Paper 1A and Paper 1B are to be completed together without interruptions. The questions on paper 1 test assessment objectives 1, 2 and 3. The use of calculators is permitted. Each student must have access to a clean copy of the Chemistry data booklet during the examination.	36%	36%
P S	Paper 3 Paper 2 SL-1h 30m HL- 2 hours and 30 minutes)	Paper 2 (1 hour and 30 minutes) Short-answer and extended-response questions (Total 50 marks) Paper 2 Short-answer and extended-response questions (Total 90 marks)	Short-answer and extended-response questions on standard level material only The questions on paper 2 test assessment objectives 1, 2 and 3. The use of calculators is permitted. See the Resource Centre. Each student must have access to a clean copy of the Chemistry data booklet during the examination. Short-answer and extended-response questions on standard level and additional higher level material. The questions on paper 2 test assessment objectives 1, 2 and 3. The use of calculators is permitted. Resource Centre. Each student must have access to a clean copy of the Chemistry data booklet during the examination.	44%	44%
lr	nternal assess	sment			
a (1	nternal ssessment 10 hours) SL/HL		nt consists of one task: the scientific investigation. rnally assessed by the teacher and externally	20%	20%

Source: Chemistry SL/HL, IBO

GROUP 4 - COMPUTER SCIENCE

About the course:

Course description and aims

The DP computer science course requires an understanding of the fundamental concepts of computing systems and the ability to apply the computational thinking process to solve problems in the real world. The course also requires students to develop skills in algorithmic thinking and computer programming. DP computer science is engaging, accessible, inspiring and rigorous, and has the following characteristics.

The course:

- draws on a wide spectrum of knowledge of computer systems
- develops skills in algorithmic thinking and computer programming
- is underpinned by the computational thinking process
- enables and empowers innovation, exploration and the acquisition of further knowledge
- includes the study of machine learning
- raises ethical issues.

Computational thinking involves the ability to:

- specify problems in terms of their computational context and determine success criteria
- decompose complex real-world problems into more manageable problems
- abstract problems and generalize them to enable algorithmic thinking and to develop solutions
- test and evaluate solutions for improvements.

During the course, students will develop a computational solution. This will develop their ability to identify a problem or unanswered question, and design, develop and evaluate a proposed solution.

The course enables students to:

- develop conceptual understanding that allows connections to be made between different areas of the subject, and to other DP subjects
- acquire and apply a body of knowledge, methods, tools and techniques that characterize computer science
- analyse and evaluate solutions developed through computational thinking in a range of contexts
- approach unfamiliar situations with creativity and resilience
- use computational thinking to design and implement solutions to local and global problems
- develop an appreciation of the possibilities and limitations of computer science
- evaluate the impact of emerging technologies in computer science
- communicate and collaborate effectively
- develop awareness of the environmental, economic, cultural and social impact of computer science, its applications and ethical implications.

Curriculum model overview

The DP computer science course is organized into two key themes:

- Theme A: Concepts in computer science
- Theme B: Computational thinking and problem-solving

Theme A focuses on how computing systems work. Theme B focuses on how we can use computing systems to solve real-world problems.



The course also has a practical dimension, comprising the computational solution (internal assessment) and the collaborative sciences project.

The course can be studied in either the Python or Java programming languages.

There are four assessment objectives for the DP computer science course. At the end of the course, students are expected to have met the following objectives:

Assessment Objective 1—Demonstrate knowledge and understanding of:

- facts, concepts, principles and terminology in computer science
- appropriate methods, techniques and skills to solve problems using computational thinking. Assessment Objective 2—Apply and use:
- facts, concepts, principles and terminology in computer science
- appropriate methods, techniques and skills to solve problems using computational thinking
- appropriate methods to present information in computer science.

Assessment Objective 3—Construct, synthesize, analyse and evaluate:

- problem specifications, system requirements, success criteria, testing strategies, and programs
- appropriate techniques to the solution of a problem
- relevant data, information and technological explanations for solutions.

Assessment Objective 4—Demonstrate the application of computational thinking skills to solve real-world problems using computer science solutions.

Assessment outline

External	SL/HL		Weighting	
assessment			HL	
Paper 1	 Questions focused on the four topics in theme A, "Concepts of computer science". The paper also consists of three questions related to the case study. 	2 hours 30 minutes (70%)	4 hours (80%)	
Paper 2	 Questions for SL and HL focused on the three topics in theme B, "Computational thinking and problem-solving". Additional questions for HL, focused on OOP and abstract data types. Students can answer questions in either Java or Python. 	1 hour 15 minutes (35%)	2 hours (40%)	
Internal assessment				
The computational solution	Students develop a computational solution to a real-world problem of their own choosing. The solution should use the concepts, skills and tools acquired in the course and the computational thinking process.	35 hours (30%)	35 hours (20%)	

Programming is required to answer some of the questions on Paper 2. Questions that require programming will have equivalent versions for students to choose from, one in Java and the other in Python, according to the programming language they have studied.

Source: Computer Science SL/HL, IBO

GROUP 4 - DESIGN TECHNOLOGY

About the course:

Diploma Programme (DP) design technology aims to develop internationally minded people whose enhanced understanding of design and the technological world can facilitate our shared guardianship of the planet and create a better world. The DP design technology course is engaging, accessible, inspiring and rigorous. The course draws on a wide spectrum of knowledge, and enables and empowers innovation, exploration and the acquisition of further knowledge. It actively promotes the act of learning by experience through topics designed for practical exploration, and raises ethical issues in design.

Aims:

The course aims to enable students to:

- 1. develop conceptual understanding that allows connections to be made between different areas of the subject, and to other DP science subjects
- 2. acquire and apply a body of knowledge, methods, tools and techniques that characterize design technology
- 3. develop the ability to analyse, evaluate and synthesize information and claims relating to technological systems
- 4. develop the ability to approach unfamiliar situations and wicked problems with creativity and resilience
- 5. design, model and implement solutions to local and global problems to meet the require ments of clients, users and systems
- 6. develop an appreciation of the possibilities and limitations of design, technology and engineering systems
- 7. develop the ability to evaluate the impact of products and technologies on a range of stake holders
- 8. develop the ability to communicate and collaborate effectively
- 9. develop awareness of the ethical, environmental, economic, cultural and social impact of design technology
- 10. develop an understanding of the role of the designer when engaging with changing prod ucts, processes, systems and technologies.



Assessment outline

External assessment	SL	HL	Weighting SL H	
Paper 1	Duration: 1 hour Multiple-choice questions on the core material.	Duration: 1½ hours Multiple-choice questions on the core and HL extension material.	20% 25	%
Paper 2	Duration: 1½ hours Short answer and extended-response questions	Duration: 2½ hours Short answer and extended-response questions	40% 45	;%
Internal assessment				
	Individual design project. An open-ended task in which a student must identify, analyse, evaluate and redesign an existing product to meet the needs of an intended user(s).	Individual design project. An open-ended task in which a student must identify, analyse, evaluate and redesign an existing product to meet the needs of an intended user(s).	40% 30	1%

Collaborative Science Project

The project is a collaborative and multidisciplinary activity, which promotes IB Diploma Progamme (DP) science students to comprehend the environmental, social and ethical connections of science, allowing for concepts, skills and perceptions from across the disciplines to be shared. All students are expected to take part in a field trip/expedition in Grade 11 in order to complete the Group 4 Project requirement.ing nature of the scientific method.



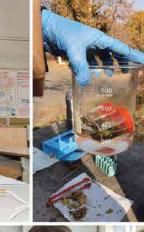






































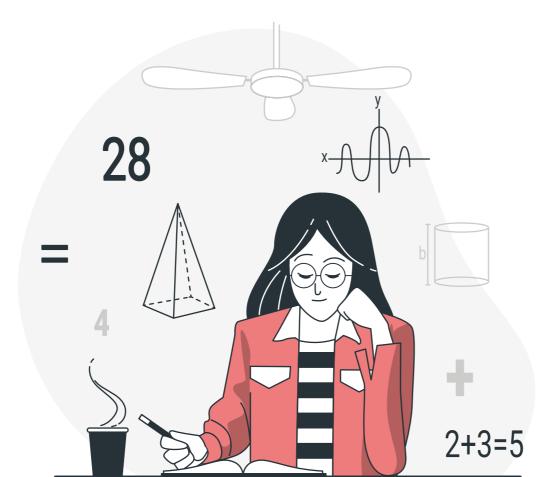
GROUP 5 - MATHEMATICS: ANALYSIS AND APPROACHES

From measures and calculations to natural and man-made phenomena, to new means of communication and new perception of beauty: this is what is included in DP mathematics p rogram. During the two years program students learn to see mathematics as a part of different disciplines as well as a discipline of its own, appreciate its elegance and beauty, apply key concepts in life and shape their thinking through mathematical problem-solving.

Aims

The aims of all DP mathematics courses are to enable students to:

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



Assessment outline

External assessment	SL	HL	Weighting SL HL	
Paper 1	Duration: 90 minutes	Duration: 120 minutes	40% 30%	
(Calculators not allowed)	Marks: 80	Marks: 110		
	Section A: Short response questions based on sylla- bus Section B: Extended response questions based on syllabus	Section A: Short response questions based on syllabus Section B: Extended response questions based on syllabus		
Paper 2 (Graphic calculators	Duration: 90 minutes Marks: 80	Duration: 120 minutes Marks: 110	40% 30%	
required)	Section A: Short response questions based on syllabus Section B: Extended response questions based on syllabus	Section A: Short response questions based on syllabus Section B: Extended response questions based on syllabus		
Paper 3 (Graphic calculators		Duration: 75 minutes Marks: 55	20%	
required)		Two extended response problem-solving questions		
Internal assessment				
Mathematical exploration	Students are required to conduct mathematical exploration by choosing topics of their interest, posing relevant questions and administer mathematical research. (20 marks)	Students are required to conduct mathematical exploration by choosing topics of their interest, posing relevant questions and administer mathematical research. (20 marks)	20% 20%	

Source: Mathematics: analysis and approaches <u>SL & HL</u> (first assessment 2021), IBO

School policies

- Academic Integrity Policy
- Inclusive Education Policy
- Language Policy
- IBDP Assessment Policy
- IBDP Admission Policy
- IBDP General Regulation
- Parent or Legal Guardian and Student Complaints Policy

See policies above by accessing the link:

https://drive.google.com/drive/folders/1z7zN05yZX3PMk2Q2i7ndQ5PceB3pY_Hw?usp=sharing



The insertable parts of the educational process are:

- Various extracurricular activities (concerts, meetings with famous people, trainings, seminars, visits to different organizations for professional orientation)
- Volunteer activities
- Learners' council (each year a board of high school students is formed and the Co-Chairs a re elected by democratic principles. Council actively participates in the Lyceum process)
- Exchange programs
- Participation in international conferences
- •University Counseling Service (students get detailed information about different Armenian and foreign universities, advice on admission procedures, and support for higher education institutions' admission procedures).

School Facilities

The resources & facilities offered by the Lyceum include:

- Subject departments
- Laboratories (Chemistry, Physics, Biology)
- •Multimedia Center, including the Conference Hall with Internet access
- •Library with 27.000 eBooks, and 15.000 hard copies
- •State-of-the-a rt cafeteria, where the lyceum provides healthy lunch for students
- Transportation service buses to transport students to the Lyceum and back
- Concert Hall
- Gymnasium
- Dance Hall
- Sports Ground/ Tennis tent
- Psychological Center & Counseling

Services

- Medical Services
- Summer Camp

