

International School Laren

Diploma Programme 2022-2023

Course Selection



Diploma Programme (IBDP) course selection

In the DP, the curriculum consists of six subject groups and the three elements of the DP core: theory of knowledge (TOK); extended essay (EE); and creativity, activity, service (CAS).

Whether students are enrolled in the IBDP or enrolling in several IBDP courses, it is important to know which course selections will help them achieve their goals and career aspirations.

The ISL career counsellor, Mr. Nguyen, can help students make course selections decisions. He can help to figure out what universities in different countries will look for and what combination of standard level (SL) and higher level (HL) courses you should take to be eligible for admission to university. Please also check admission requirements with individual universities, as admission requirements may vary.

SL and HL 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 higher level.

The ISL IBDP offers the following subjects:

| Language & Literature | Language acquisition | Individuals & Society | Sciences | Mathematics | Arts |
|--|----------------------|-----------------------|-----------|--|-------|
| English | Dutch | Economics | Biology | Math Analysis & Approaches | Film |
| Dutch | | Global Politics | Chemistry | Math (Application & Interpretation (SL only) | Music |
| Mother-tongue (self-taught, SL Literature only) | | | Physics | | |
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- Students take at least three (but not more than four) subjects at higher level, and the remaining at standard level.
- An Arts subject can be replaced by an individual and society subject or a science subject.

The following section in this booklet contains the IB course descriptions to help students understand the course content and enables IS Laren students to make a balanced decision for their IBDP subjects.

Questions can be asked to the student's mentor, the student counsellor (h.nguyen@atscholen.nl) or de DP coordinator (l.westgeest@atscholen.nl).



IB Diploma Programme courses at ISL

Source: https://www.ibo.org/university-admission/support-students-transition-to-higher-education/faqs-for-counsellors-students-and-parents/

The IBDP Core

Theory of Knowledge

Theory of Knowledge (TOK) plays a special role in the IBDP as one of the three components of the IBDP Core. Students cannot be awarded the IB diploma if they have not completed the TOK course, even if they have met all the other subject requirements.

In the course, students reflect on the central question how we know what we claim we know. Students learn to think critically about the nature of knowledge, reflect on the process of acquiring knowledge and the limitations in different areas, making connections in all subjects they study.

Tok consists of the following elements:

Core theme: knowledge and the knower

Optional themes: ISL students will focus on Knowledge and language and Knowledge and

politics.

Areas of knowledge: students are required to study the following five areas of knowledge: history, the human sciences, the natural sciences, the arts, mathematics.

Assessment overview:

| Type assessment | Format assessment | Hours | Weighting | | |
|---|--------------------------------|-------|-----------|--|--|
| External | Theory of Knowledge essay | 10 | 67% | | |
| Students write an essay in response to one of the six prescribed titles that are issued by the IB. It is marked by the IB | | | | | |
| Internal | Theory of Knowledge exhibition | 8 | 33% | | |
| Students create an exhibition of three objects with accompanying commentaries that explores how TOK manifests in the world around us. This component in internally assessed by the teacher and externally moderated by the IB | | | | | |

In TOK, assessment is criterion-based, and students receive grades from A (highest) to E (lowest). Students who fail to complete the assessment and subject requirements, or is awarded with a grade E, will not qualify for the IB diploma.



The Extended Essay

The Extended Essay (EE) is a compulsory 4,000 word research essay into a topic of special interest, chosen by the students. It is presented as a formal piece of academic writing and intends to promote high-level research and writing skills. The IB recommends students to devote a total of 40 hours study and writing time to the essay.

Topics may be chosen from a list of IBDP subjects and is normally one of the student's six chosen subjects. Each student is assigned a supervisor for support and guidance through the process.

The EE is entirely externally assessed. Students receive grades from A (highest) to E (lowest). Students awarded with an E, will not be awarded with the IB diploma.

Creativity, Activity and Service

Creativity, activity, service (CAS) is at the heart of the IBDP, as being the IB Learner Profile in action. It complements the academic demands of the IBDP and offers the students the opportunities for personal growth, embracing new challenges becoming more balanced by setting personal goals.

CAS is organized around three strands as follows:

- Creativity: arts, and other experiences that involve creative thinking
- Activity: physical exertion contributing to a healthy lifestyle
- Service: unpaid and voluntary exchange that has learning benefit for the student

The emphasis in CAS is on experimental learning by doing real-life tasks and reflecting on these experiences. Students will explore new possibilities and challenge themselves to understand that they are members of a local and global community with responsibilities towards each other and the environment.

Students provide evidence of their learning outcomes though their CAS portfolio.



The IBDP subjects

Group 1: Language A: Language and Literature

The language A subjects are designed for students who have experience using the language in an academic context.

Students will interpret, analyze, and evaluate a wide range of texts, literary and non-literary, a variety of media and forms, from different periods, styles, and cultures. Students will develop skills in listening, reading, writing, viewing, presenting, and performing. Students are enabled to. Develop skills in interpretation, analysis, and evaluation. Furthermore students develop sensitivity to the formal and aesthetic qualities of texts and an appreciation of how they contribute to international mindedness and multiple perspectives and meanings.

At ISL, we offer the following Language A courses:

- English Language and Literature, both SL and HL
- Dutch Language and Literature, both SL and HL
- School Supported Self-Taught Literature, SL only (SSST)

SSST is only an option for those students whose mother tongue language is not offered as subject at ISL and are fluent in reading, writing, and speaking in this mother tongue language. This means you do not have a teacher who guides you through the course. A SSST student requires very good organizational skills and independent learning skills because the student is responsible for their own course. You will have regular (group) meetings with the Language coordinator.

SSST students will need a language tutor, who helps you improve your language skills by giving advice, tasks, and feedback. This can be an adult family member, as long as they are native speaker of the language.

SSTT students will not be graded in DP1 and DP2 but will receive feedback on their progress.

Assessment overview:

| Type assessment | Format assessment | Hours | Hours | | hting |
|-----------------|----------------------------------|-------|-------|-----|-------|
| | | SL | HL | SL | HL |
| External | Paper 1: guided textual analysis | 1.25 | 2.25 | 35% | 35% |
| | Paper 2: Comparative essay | 1.75 | 1.75 | 35% | 25% |
| | HL 1,000-1,500 word essay | | | | 20% |
| Internal | Individual oral | | | 30% | 20% |



Group 2: Language B (language acquisition)

ISL offers Dutch as Language B course. Language B is designed for students with some experience of the target language. Therefore, students with the target language as their mother tongue, or with A level competency, may **not** take this as a language B course.

Students (SL and HL) will develop the necessary skills and intercultural understanding to be able to communicate successfully in that language in familiar and unfamiliar contexts using a range of written, spoken and multimedia material. They will learn to describe situations, narrate events, compare, explain problems, and formulate their opinion on various topics related to the course content.

SL and HL students will study 5 prescribed themes:

- Identities: exploring the nature of self and what it is to be human.
- Experiences: exploring and telling stories of events, experiences, and journeys that. Shape our lives.
- Human ingenuity: exploring the ways in which human creativity and innovation affect our world.
- Social organization: exploring ways in which groups of people organize themselves, or are organized, through common systems or interests.
- Sharing the planet: exploring challenges and opportunities faced by individuals and communities in the modern world.

Distinctions in SL and HL can be found in the level of competency that is expected. HL students are required to study two literary works and students are expected to use and understand more complex language than SL students.

Assessment overview:

| Type assessment | Format assessment | Weig | hting |
|-----------------|--|------------|------------|
| | | SL | HL |
| External | Paper 1: one written task from a choice of three | 25% | 25% |
| | Paper 2: - Listening - Reading | 25% 25% | 25% 25% |
| Internal | Individual oral | 25% | 25% |

The assessment outlines for SL and HL are the same, but the nature of the assessments differ: HL task paper 1 requires more complex language nd structures or higher-order thinking skills, therefore a higher word range has been provided. HL individual oral is an excerpt from one of the two literary works, while SL students use a visual image that is clearly relevant to (one of) the themes of the course.



Group 3: Individuals and societies

Courses in individuals and societies embrace the way people interact with each other and the world around them, how societies have changed and differ using past, local and global perspectives.

ISL offers the following group 3 courses, both at SL and HL:

- Economics
- Global politics

Economics

Economics is all about scarcity. In a rapid changing and expanding world, there are unlimited needs and wants, with limited resources. Choices must be made. The economics course uses economic theories, models, and key concepts to examine how these choices are made:

- At the level of producers and consumers in individual markets (microeconomics)
- At the level of the government and the national economy (macroeconomics)
- At an international level (the global economy)

Economics SL and HL aims to enable students to develop critical understanding of economic theories, models, ideas, and tools in microeconomics, macroeconomics, and the global economy. They will apply these models, theories, ideas, and tools to analyze economic data in real-world issues and develop conceptual understanding of choices, interactions, challenges, and consequences of economic decision-making.

HL economics differ in the amount and complexity of course content.

IBDP economics is for any student, as the course require no specific prior learning. However, it is necessary to be at home with graphs and data in written, numerical and graphical form. Students with less affinity with manipulation of percentages and index number may opt for SL rather than HL.

Students interested in further academic studies in economics should research specific university admission requirements as these might require a minimum level of mathematics.



| Type assessment | Format assessment | Hours | Hours | | hting |
|-----------------|---|-------|-------|-----|-------|
| | | SL | HL | SL | HL |
| External | Paper 1: extended response paper based on all units | 1.15 | 1.15 | 30% | 20% |
| | Paper 2: data response paper based on all units | 1.45 | 1.45 | 40% | 30% |
| | Paper 3: policy paper based on all units (HL only) | | 1.45 | | 30% |
| Internal | Portfolio with three commentaries based on different units and on published extracts from media | 20 | 20 | 30% | 20% |

Global politics

Global politics. Is an exciting, dynamic subject that draws on a variety of disciplines in the social sciences and humanities, reflecting the complex nature of many contemporary political issues. The study of global politics enables students to critically engage with different and new perspectives and approaches to politics to comprehend the challenges of the changing world and become aware of their role in it as active global citizens.

IBDP global politics explores fundamental political concepts: power, equality, sustainability, and peace in a. range of contexts. Students develop understanding of the. Local, national, international, and global dimensions of political activity in real-life examples and case studies, and how this may affect their own lives.

The course is made up of the following units:

- The foundation unit about power, sovereignty, and international relations
- Human rights
- Development
- Peace and conflict

In addition, the HL course also includes the research and presentation of two of the 6 global political challenges through case-studies, environment, poverty, health, identity, borders, and security.

The IBDP global politics course is suitable for those who have an interest in issues affecting the world today. Students will need to have advanced research and academic writing skills. HL students will also need presentation skills.



| Type assessment | Format assessment | Hours | ; | Weighting | |
|-----------------|--|-------|------|-----------|-----|
| | | SL | HL | SL | HL |
| External | Paper 1: stimulus-based paper based on a topic from one of the four core units | 1.25 | 1.25 | 30% | 20% |
| | Paper 2: Extended response paper based on the four core units | 1.75 | 2.75 | 45% | 40% |
| Internal | Engagement activity: a written report (2,000-word max) on a political issue explored through engagement and research | 20 | | 25% | 20% |
| | HL extension: global political challenges – two video-recorded oral presentations of the case studies chosen from two different extension topics | 90 | | | 20% |

Group 4: Sciences

By studying sciences students become aware of how scientist work and communicate with each other. The subject focusses on a practical approach through experimental work. Students will develop manipulative skills, design investigations, collect data, analyze results. And evaluate and communicate. Their findings.

Through the overarching theme of the nature of science, the aims of IBDP sciences are to enable student to:

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

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Mathematical and language competence are requirements for all these courses. In particular:

- Biology: use of statistics, spreadsheets, and many types of graphs. Strong literacy skills as there is a great deal of new vocabulary and students are expected to describe complex processes in detail.
- Chemistry: confidence with algebraic skills, scientific notation, logarithms and with ratios and proportions.
- Physics: confidence with algebraic skills and line graphs. The mathematics course applications and interpretations SL is not suitable for physics HL.

The group 4 project

The group 4 project is an interdisciplinary science project in which students from the different group 4 subjects work together. It allows students to appreciate the environmental, social, and ethical implications of science and mirrors the work of real scientists. It can be practically or theoretically based and. Aims to develop an understanding of the relationships between the scientific disciplines and their influence on other areas of knowledge.

Biology

Biology is the study of life. The vast diversity of species makes biology both an endless source of fascination and a considerable challenge. Biologists try to understand the living world at all levels from the micro to the macro using many different approaches and techniques.

Topics covered in the SL/HL course are cell biology, molecular biology, genetics, ecology, evolution and biodiversity, human physiology and one of the option topics. HL biology also includes these topics: nucleic acids, metabolism plant biology, genetics and evolution, animal physiology.

Biology is an excellent course for all students, especially those interested in continuing their career in a wide range of sciences, such as forestry, agricultural sciences, environmental sciences, microbiology, biochemistry, health related subjects (check specific university requirements!), veterinary sciences, nursing, physiotherapy, biophysical sciences).



| Type assessment | Format assessment | Hours | | Weig | hting |
|-----------------|---|-------|------|------|-------|
| | | SL | HL | SL | HL |
| External | Paper 1: 30 multiple choice questions (HL: 40 questions) | 0.75 | 1 | 20% | 20% |
| | Paper 2: data-based, short answer and extended response questions | 1.25 | 2.25 | 40% | 36% |
| | Paper 3: Data-based, short answer and extended response questions | 1 | 1.25 | 20% | 24% |
| Internal | Individual investigation: investigation and write-up. Of 6-12 pages | 10 | | 20% | 20% |

Chemistry

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

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

Topics covered in the SL/HL course are stoichiometric relationships, atomic structure, periodicity, chemical bonding and structure, energetics/thermochemistry, chemical kinetics, equilibrium, acids and bases, redox processes, organic chemistry, measurement and data processing, and one of the optional topics.

HL chemistry includes the same topics in greater depth.



| Type assessment | Format assessment | Hours | | Weighting | |
|-----------------|--|-------|------|-----------|-----|
| | | SL | HL | SL | HL |
| External | Paper 1: 30 multiple choice questions (HL: 40 questions) | 0.75 | 1 | 20% | 20% |
| | Paper 2: short answer and extended response questions. (core) (HL: core and AHL) | 1.25 | 2.25 | 40% | 36% |
| | Paper 3: Data- and practical-based, short answer and extended response questions on the option | 1 | 1.25 | 20% | 24% |
| Internal | Individual investigation: investigation and write-up. Of 6-12 pages | 10 | | 20% | 20% |

Physics

nuclear physics.

Physics is the most fundamental of the experimental sciences as it seeks to explain the universe itself, from the very smallest particles to the vast distances between galaxies. Despite the exciting and extraordinary development of ideas throughout the history of physics, observations remain essential to the very core of the subject. Models are developed to try to understand observations, and these themselves can become theories that attempt to explain the observations.

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

Topics covered in the SL/HL course are measurements and uncertainties, mechanics, thermal physics, waves, electricity and magnetism, circular motion and gravitation, atomic, nuclear and particle physics, energy production, and one of the optional topics.

HL physics include also: wave phenomena, fields, electromagnetic induction, quantum and



| Type assessment | Format assessment | | Hours | | hting |
|-----------------|--|------|-------|-----|-------|
| | | SL | HL | SL | HL |
| External | Paper 1: 30 multiple choice questions (HL: 40 questions) | 0.75 | 1 | 20% | 20% |
| | Paper 2: short answer and extended response questions. (core) (HL: core and AHL) | 1.25 | 2.25 | 40% | 36% |
| | Paper 3: Data- and practical-based, short answer and extended response questions on the option | 1 | 1.25 | 20% | 24% |
| Internal | Individual investigation: investigation and write-up. Of 6-12 pages | 10 | | 20% | 20% |

Group 5: mathematics

The IBDP mathematics courses are designed around the fact that different students have different needs, interests, motivation and abilities in the subject. Students develop their mathematics fluency, their mathematical thinking, skills to. Recognize mathematics around them an to use mathematics in either. Abstract or contextual settings.

Students choosing their mathematics are advised to consider the following factors:

- The recommendation of their grade 10 teacher (e.g. Math A&A HL is only accessible for students with extended math in grade 10)
- Their own mathematics abilities and the type of mathematics they can be successful in.
- Their own interest in mathematics
- Other subject choices in the IBDP
- Their future academic plans since university courses can have specific mathematics requirements

ISL offers mathematics analysis & approaches (SL and HL) and mathematics applications & interpretation (SL only).

Both courses share some of the same content, organized around the following topic: number and algebra, functions, geometry and trigonometry, statistics and probability, calculus.

The HL course will be more in depth than the SL course.

Mathematics applications and interpretation (SL only)





Mathematics applications and interpretations is designed for students who enjoy describing the real world and solving practical problems using mathematics or in mathematical modelling. The course will give students a firm base in understanding, also in topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. Besides that, this course is designed to build confidence and encourage an appreciation of mathematics.

This course is aimed at students who are interested in university studies such as social sciences, natural sciences, statistics, some economical courses, psychology, and design. It is recommended to be aware of general requirements of students' university choices.

Assessment overview:

| Type assessment | Format assessment | Hours | Weighting |
|-----------------|---|-------|-----------|
| External | Paper 1: compulsory short-response questions based on the syllabus (technology allowed) | 1.5 | 40% |
| | Paper 2: compulsory extended- response questions based on the syllabus (technology allowed) | 1.5 | 40% |
| Internal | Exploration | 15 | 20% |

Mathematics analysis and approaches (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 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.

This course is aimed at students who are interested in university studies such as mathematics or studies with a large mathematical content such as engineering, (business) economics, health related studies such as medicines or physics. It is recommended to be aware of general requirements of students' university choices.

The HL course caters students with a strong background in mathematics and who are competent in a range of analytical and technical skills. It is a demanding course, and therefore only accessible for students who have taken the extended mathematics in grade 10 and achieved an overall grade of at least a 5.



| Type assessment | Format assessment | Hours | ; | Weig | hting |
|-----------------|---|-------|----|------|-------|
| | | SL | HL | SL | HL |
| External | Paper 1 (no technology allowed): section A: compulsory short-response questions based on the syllabus. section B: compulsory extended- response questions based on the syllabus | 1.5 | 2 | 40% | 30% |
| | Paper 1 (technology allowed): section A: compulsory short-response questions based on the syllabus. section B: compulsory extended- response questions based on the syllabus | 1.5 | 2 | 40% | 30% |
| | Paper 3 (technology allowed): two compulsory extended-response questions based on the syllabus | | 1 | | 20% |
| Internal | Exploration | 15 | 15 | 20% | 20% |

Group 6: the arts

Studying arts requires a high level of cognitive activity, both intellectual and emotional. It develops creative critical thinking, technical skills and critical art appreciation which allows students to discover ways to interpret and comment critically on the human condition.

Engagement in the arts promotes a sense of identity and makes a unique contribution to the development of each student.

The ISL offers two arts subjects:

- Film (SL and HL)
- Music (SL and HL)

Film

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 practical exercises in film production, students develop critical abilities and appreciation of artistic, cultural, historical and global perspectives in film. They examine concepts, theories, practices and ideas from mul-tiple perspectives, challenging their own views to understand and value those of others. Students are challenged to acquire and develop critical thinking, reflective analysis and the imaginative synthesis through practical engagement in the art, craft and study of film.

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HL film allows for greater breadth and depth in teaching and learning through an additional assessment task, requiring HL students to reflect on the core syllabus areas to formulate their own intentions for a completed film. They work collaboratively as a core production team in order to effectively communicate on screen.

Students should keep in mind that IBDP film is the most theoretical courses of the. Group 6 courses.

Assessment overview:

| Type assessment | Format assessment | Hours | | Weig | ghting |
|-----------------|---|-------|----|------|--------|
| | | SL | HL | SL | HL |
| External | Textual analysis (max 1,750 words) of a prescribed film text based on a chosen extract (max 5 min.) and list of sources | | | 30% | 20% |
| | Comparative study: recorded multimedia comparative study (max. 10 min) and list of sources | | | 30% | 20% |
| Internal | Film portfolio: (max 9 pages: 3 pages per production role) and list of sources. A film reel (max 9 min: 3 min per production role, including 1 completed film) | | | 40% | 25% |
| | Collaborative film project (HL only): completed film (max 7 min). Project report (max 2,000 words) and a list of sources | | | | 35% |

Music

The course is grounded in the knowledge, skills and processes associated with the study of music and offers a strengthened approach to student creativity through practical, informed and purposeful explorations of diverse musical forms, practices and contexts. The course also ensures a holistic approach to learning, with the roles of performer, creator and researcher afforded equal importance in all course components.

Students will explore diverse musical material through the lenses of four areas of inquiry:

- Music for sociocultural and political expression
- Music for listening and performing
- Music for dramatic impact, movement, and entertainment
- Music technology in the electronic and digital age

Assessment overview:



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| Type assessment | Format assessment | Hours | | Weighting | |
|-----------------|--|-------|----|-----------|-----|
| | | SL | HL | SL | HL |
| External | Exploring music in context: portfolio including research about diverse musical material as well as examples of original creation and performance | | | 30% | 20% |
| | Presenting music: students submit a collection of works demonstrating engagement with diverse musical material | | | 40% | 30% |
| | | | | | |
| Internal | Experimenting with music: creating and performing examples of diverse context with research supporting process choices | | | 30% | 20% |
| | Contemporary music-maker (HL only): students submit a continuous multimedia presentations documenting a real-life project | | | | 30% |