



International Baccalaureate Diploma Programme

Parent and Student Guide  
Examination Session 2019

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# Klosterneuburg International School

## Mission Statement

Klosterneuburg International School (KIS) is an integral part of the long-established, local community state school Bundesgymnasium and Bundesrealgymnasium Klosterneuburg. KIS came into being in 2010 as an authorised IB World School.

In addition to providing full teaching of the Austrian National Curriculum, KIS offers pupils the opportunity to complete the International Baccalaureate Diploma Programme (IBDP).

The world we live in is one of increased international cooperation, where cities, federal states, countries and even entire continents move closer together. Further and sustainable development of our school, answering the call of a united Europe and ready to take up the challenges of the world, has therefore become indispensable. The IB Diploma, with its central focus on intercultural competences, achieved ideally together with the "Matura" at the end of the pupil's final school year, decisively boosts our pupil's career opportunities in an increasingly internationalised professional world.

## The International Baccalaureate Organization

The educational philosophy of the Organization is found in its mission statement and states that

"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 to develop challenging programmes of international education and rigorous assessment.

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

The International Baccalaureate Organization (IBO), a non-profit educational foundation based in Switzerland, offers the Diploma Programme for pupils in the final two years of secondary school.

As a membership organisation, the IB provides curriculum and assessment development, teacher training and information seminars, electronic networking and other educational services to many schools around the world.

## The IB Diploma Programme (IBDP)

The International Baccalaureate Diploma is an internationally recognised school-leaving certificate. An academically rigorous programme – the IB Diploma Programme – taught in the last two years of school, provides the necessary preparation for final assessments.

Pupils learn more than a collection of facts. The Diploma Programme prepares pupils ideally for university and encourages them to:

- ask challenging questions
- develop a strong sense of their own identity and culture
- become active, compassionate and lifelong learners
- develop the ability to communicate with and understand people from other countries and cultures.

The IBDP's educational aims are embodied in the structure and content of the Programme itself. The IBDP curriculum model, illustrated below, contains six academic areas or subject groups surrounding a core of diploma requirements.



The core requirements aim to teach students how to conduct research, how to ask questions about the world, and to contribute to their own physical, social and creative development.

## IB Diploma Courses Offered at KIS

Group 1: Studies in Language and Literature  (Your first language)	Group 2: Language Acquisition  (Your choice of foreign languages)	Group 3: Individuals and Societies	Group 4: Sciences	Group 5: Mathematics	Group 6: The Arts
English A Literature SL/HL  German A Literature SL/HL  Self-taught Language A Literature SL	English B HL  French B SL/HL  Spanish B SL  German ab initio SL  Spanish ab initio SL	Economics SL/HL  History SL/HL  Psychology SL/HL  World Religions SL	Biology SL/HL  Chemistry SL/HL  Computer Science SL/HL  Physics SL/HL  Sports, Exercise and Health Science SL	Mathematics SL	Film SL/HL  Music SL  Visual Arts SL

Diploma candidates are required to select one subject from each of the six subject groups which correspond to the principal domains of knowledge. (N.B. – instead of a Group 6 subject, an additional subject from Groups 2 to 4 may be selected). By studying a subject from one of each of the subject groups, pupils are exposed to the two great traditions of learning: the humanities and the sciences. Three subjects are taken at higher level (HL), the others at standard level (SL).

HL courses represent a recommended 240 teaching hours, SL courses 150 hours. By arranging work in this fashion, pupils are able to achieve depth of study in the context of a broad and coherent curriculum over the two-year period.

The IB pattern is a deliberate compromise between the early specialisation preferred in some national systems and the greater breadth found in others. In each area of the curriculum, care is taken to foster active citizenship and global perspectives. Distribution requirements ensure that the science-oriented pupil is challenged to study modern languages and that the natural linguist becomes familiar with laboratory procedures.

## GROUP 1 - Language A: Literature

English A: Literature (SL/HL)

German A: Literature (SL/HL)

Self-taught language A: Literature (SL)

### WHAT WILL I STUDY?

The Language A Literature course is not only a pre-university literature course, but also a study of how literature reflects and is reflected by the world. One of the main objectives of the course is to raise awareness of literature as art and of writers as craftsmen. Emphasis is placed on analysing, interpreting and discussing literature on various levels. In this light, the course encourages you to think independently and draw your own conclusions, always based on the tools of literary analysis. Aware of the fact that literature opens up the mind to different cultures and different opinions, we pursue a global, international and fraternal perspective, which gives you an insight into the cultures, traditions and literary achievements of world literature.

You will be introduced to a range of texts from different periods, styles and genres, with the aim of the course being that you develop your ability to analyse individual texts in detail and make relevant connections between them.

Also important is acknowledging that the study of texts permits an appreciation of the varying perspectives of people from different cultures and the way this impacts upon the construction of meaning.

Another goal is to develop your power of expression, both in oral and written communication. And of course, to encourage a lasting joy of and interest in literature and language.

### TOPICS

The HL and SL syllabi are divided into four compulsory parts:

#### Part 1: Works in translation (2 SL / 3 HL)

This part of the course is a literary study of works in translation, based on close reading of the works themselves. Each work must have originally been written in a language different to the language A studied, and each work must be written by a different author.

#### Part 2: Detailed Study (2 SL / 3 HL)

Here the focus is on detailed analysis of a work, both in terms of content and technique. Detailed study is best achieved through approaches that ensure close reading and in-depth analysis of the significant elements of the works involved.

#### Part 3: Literary genres (3 SL / 4 HL)

A group of works selected from the same literary genre is studied in depth. Each genre has recognizable techniques, referred to as literary conventions, and writers use these conventions, as well as other features, to achieve particular artistic ends. The grouping of works by genre is intended to provide a framework for the comparative study of the selected works through an exploration of the literary conventions and features associated with that genre. The German A course is likely to focus on drama and the English A course on poetry. Both courses will combine the study of classic works with more modern works.

#### Part 4: Options (3 SL / 4 HL)

This part of the course is designed to give teachers the opportunity to include in their courses works that reflect their own interests, or that meet the specific needs of their pupils. These books form the basis for the individual oral presentation before the class.

#### HOW WILL I BE ASSESSED?

##### External Assessment (70%)

- Paper 1: (20%)  
You will analyse an unseen passage of either poetry or prose.
- Paper 2: (25%)  
You will write one literary essay from a choice of three questions in your genre from part 3.
- Written assignment: (25%)  
You will submit a reflective statement (300–400 words) and literary essay (1200–1500 words) on one work studied in part 1.

##### Internal assessment (30%)

- Individual oral commentary: (15%)  
You will present a formal oral commentary (10mins) on an extract from a work studied in part 2. At HL you will also participate in a literary discussion on another work from part 2 with your teacher (10mins).
- Individual oral presentation: (15%)  
You will give a presentation (10–15mins) in front of the class, based on the works chosen for part 4.

#### WHO IS THIS COURSE FOR?

In the IB Diploma Programme, you must choose a Language A course in either your mother tongue or your language of education.

## GROUP 2 - Language Acquisition

Language B: English (HL)  
Language B: French (SL/HL)  
Language B: Spanish (SL)

### WHAT WILL I STUDY?

The focus of this course is on language acquisition and development in the four primary language skills: listening, speaking, reading and writing. You will learn how to communicate effectively in a number of situations within the culture(s) in which the language is spoken. The course promotes intercultural understanding.

Language B is a highly stimulating language course that offers the training ground necessary to refine your language skills, in order to correctly interpret and produce various texts, e.g. articles, adverts, diary entries, interviews, news reports, speeches, and formal letters. The course is not intended solely for the study of specific subject matter or content.

### HOW WILL I BE ASSESSED?

External assessment: Written component (70%)

- Paper 1: text handling (25%)  
Questions based on one of four written texts (five for HL) from the core curriculum, testing receptive skills.
- Paper 2: written production (25%)  
SL: Testing productive skills in five different text types, based on one of the five curriculum options; HL: Two exercises, one testing productive skills based on the five options, the other responding to a stimulus text.
- Writing assignment: receptive and written skills (20%)  
SL: Inter-textual reading activity, followed by a writing task and a rationale: in order to test your understanding of the relevant culture through the language, you will choose three text sources linked by a common theme, based on which you will produce a 300-400-word text linked to one of the three core topics. This is followed by a 150-200 word reflection on your intentions and motivations in producing the specific text type.  
HL: Creative writing of 500 to 600 words, with a 150-250 word rationale, based on one or both of the literary texts studied.

Internal assessment: Oral component (30%)

Two oral activities will be internally assessed by the teacher and externally moderated by the IB:

- Individual Oral: (20%)  
Based on a photograph stimulus of one of the two options studied and chosen by the teacher, you will prepare a presentation of 10 minutes maximum to relate the stimulus to the option and the culture in question. The individual orals are recorded and sent to the IB for moderation.
- Interactive Oral Activity: (10%)  
Three interactive classroom oral activities (one of which must be a listening activity) linked to the core and carried out during the course in class.

### WHO IS THIS COURSE FOR?

You must choose at least one foreign language at "B" level if by the time the Diploma Programme starts you have received two years or more of teaching in that language.

N.B. English B HL / French B HL / Spanish B SL will be acknowledged as one of your three written examinations for the Austrian "Reifeprüfung".

German ab initio (SL)  
Spanish ab initio (SL)

#### WHAT WILL I STUDY?

This course is intended for beginners. The main topics covered will centre around your immediate environment, which includes, amongst other topics: family, social relationships, the most important traditions and customs in German-speaking/Spanish-speaking countries, but also topics such as the media and global issues.

The main aim of the course is to enable you to reflect on your own native traditions in comparison with those of German-speaking/Spanish-speaking countries.

The course is only offered at standard level.

#### HOW WILL I BE ASSESSED?

At the end of year two you will sit two final papers as well as a written assignment.

External assessment: Written component (75%)

- Paper 1: Receptive skills (30%) – text-handling exercises
- Paper 2: Productive skills (25%) – two compulsory writing exercises
- Written assignment (20%) – a piece of writing of 200–350 words, demonstrating intercultural understanding and written in the target language.

Internal assessment: Oral component (25%)

- Individual Oral (25%)  
The oral comprises three different parts:  
Supervised preparation time: The student receives two previously unseen stimuli and selects one for presentation. Working notes can be made at this stage.  
Part 1 – Presentation: Presentation of a visual stimulus by the student.  
Part 2 – Questions: Follow-up questions on the stimulus.  
Part 3 – Conversation: At least two questions on the written assignment followed by general conversation on a broad range of topics.

#### WHO IS THIS COURSE FOR?

German or Spanish ab initio are strongly recommended to all our international students who on commencing the Diploma Programme in the last two years of school, do not have enough years of language learning to attempt their foreign language at "B" level.

Spanish ab initio is also an exciting opportunity for pupils in "Langform-Französisch" to add Spanish to their language portfolio. The course is taught exclusively in the afternoon and requires no "Schularbeiten".

## GROUP 3 – Individuals and Societies

### Economics (SL/HL)

#### WHAT WILL I STUDY?

Why does Apple produce smartphones in China? Why does the price of petrol always change? Why are airline tickets generally more expensive in August than in February? Economic principles are useful in attempting to answer any of these questions. The course is designed to give you a basic understanding of the economic theories that drive our personal economic decisions, national economic decisions, and many of the decisions made by our international neighbours. Politics and economics are connected; we cannot fully discuss the science of economics without acknowledging the political systems that house the world's economies.

You will learn about:

#### Microeconomics

Competitive markets: demand and supply, elasticity, government intervention. HL pupils will additionally study theory of the firm and market structures.

#### Macroeconomics

The level of overall economic activity, aggregate demand and aggregate supply, macroeconomic objectives, fiscal policy, monetary policy, supply-side policies.

#### International economics

International trade, exchange rates, the balance of payments, economic integration. HL pupils will additionally study terms of trade.

#### Development economics

Economic development, measuring development, the role of domestic factors, the role of international trade, the role of foreign direct investment, the roles of foreign aid and multilateral development assistance, the role of international debt, the balance between markets and intervention.

#### HOW WILL I BE ASSESSED?

##### External assessment (80%)

The final exams consist of two papers at SL and three papers at HL.

- Paper 1 (40% SL / 30% HL): Extended response paper.
- Paper 2 (40% SL / 30% HL): Data response paper.
- HL only: Paper 3 (20%) tests topics from across the whole syllabus, including HL extension material.

##### Internal assessment (20%)

You will keep a portfolio to include three commentaries of current news items involving the use of economic concepts and terminology (650–750 words each).

#### WHO IS THIS COURSE FOR?

If you are interested in economics and problems concerning our world, you are welcome to solve them! Whilst our study will be of economics, the course will take into consideration the various political systems and current political situations existing today as well as the historical development of national and international economies.

Possible career paths requiring economics include: accounting and finance, business, project management, public policy, consulting, law, investment banking, market research.

## History (SL/HL)

### WHAT WILL I STUDY?

IB history is a world history course based on a comparative and multi-perspective approach to history. The course focuses around key historical concepts such as change, causation and significance.

Both standard and higher levels share a common core:

- The move to global war

Japanese expansion in East Asia (1931–1941)

German and Italian expansion (1933–1940)

The focus of this prescribed subject is on the causes of expansion, key events, and international responses to that expansion.

- Authoritarian states (20<sup>th</sup> century)

The conditions that facilitated the rise of authoritarian states in the 20<sup>th</sup> century, as well as the methods used by parties and leaders to take and maintain power are explored as are the impact of the leaders' policies, both domestic and foreign, upon the maintenance of power.

- The Cold War: Superpower tensions and rivalries

This topic focuses on how superpower rivalries changed according to styles of leadership, strength of ideological beliefs, economic factors and crises involving client states. An international perspective is promoted by requiring the study of leaders, countries and crises from more than one region of the world.

In addition, students at HL are required to undertake an in-depth study of the following sections:

- Europe and the First World War (1871–1918)
- European States in the inter-war years (1918–1939)
- Versailles to Berlin: Diplomacy in Europe (1919–1945)

### HOW WILL I BE ASSESSED?

#### External assessment

- Paper 1: Source analysis paper (30% SL / 20% HL)  
Written answers to structured source-based questions.
- Paper 2: Essay paper (45% SL / 25% HL) Two historical essays.
- HL only: Paper 3: Essay paper (35%) Three historical essays.

#### Internal assessment (25% SL / 20% HL)

Each student undertakes a historical investigation into a topic of their choice made up of:

A detailed analysis of two sources (500 words)

An investigation (1300 words)

A reflection on what undertaking the investigation highlighted to them about the methods used by, and the challenges facing, the historian. (400 words)

### WHO IS THIS COURSE FOR?

History is for you if you're interested in learning about contemporary European and World history and enjoy analysing and evaluating historical evidence from the 20th century. The course will help you strengthen your critical thinking skills, your ability to conduct an academic argument based on evidence and to achieve an extremely proficient level of essay writing in English.

Possible career paths requiring history include: international relations, law, civil service, politics, and management. The ability to evaluate evidence, debate, think critically and argue a case persuasively is essential in many other careers.

## Psychology (SL/HL)

### WHAT WILL I STUDY?

In general, psychology may be defined as the systematic study of behaviour and mental processes. IB Psychology provides you with a critical understanding of human behaviour and mental processes, as seen from three different levels of analysis.

Throughout the course you will therefore have a look at human behaviour from three different perspectives, called levels of analysis. The biological level of analysis (considers biological determinants of behaviour, such as hormones), the cognitive level of analysis (considers mental processes as determinants of behaviour, such as the memory) and the sociocultural level of analysis (considers sociocultural influences on behaviour, such as group norms). In addition to these three levels of analysis which build up the core curriculum, we will also deal with health psychology (and abnormal psychology for HL) as the optional part of the syllabus. In year two, you will need to conduct your own research, in the form of replicating an existing psychological experiment. Additionally, the course gives you an overview of what psychology is in general, with an introduction to the different scientific research methods used in psychology and the natural sciences in general.

Another purpose of the course is to draw connections to Theory of Knowledge (TOK), which is at the core of the IB Diploma Programme. You will be encouraged to develop skills of critical thinking and analysis.

### HOW WILL I BE ASSESSED?

At the end of year two you will have to sit two exam papers (three for HL), as listed below. These are externally assessed. In addition to that you will have to replicate a simple experimental study based on an original psychological study that has already been carried out by a researcher. This will count as your internal assessment.

#### External Assessment

- Paper 1 (50% SL / 35% HL): Assessment on Part 1 of the syllabus (3 levels of analysis)
- Paper 2 (25%): Assessment on one chapter of the optional syllabus (SL: health psychology, HL: health psychology and abnormal psychology)
- HL only: Paper 3 (20%): Assessment on Part 4 of the syllabus (Research methodology)

Internal assessment (25% SL / 20% HL) - A report of a simple experimental study operated in class

### WHO IS THIS COURSE FOR?

This course is designed for those who are particularly interested in human behaviour and its determinants. It is for pupils who want to learn more about behaviour and mental processes in order to understand each other better in terms of how individuals interpret meanings, relationships and health.

Possible career paths requiring psychology include: health psychology, criminal psychology, experimental psychology, occupational psychology, human resources.

## World Religions (SL)

### WHAT WILL I STUDY?

In the IB World Religions course, you will develop a systematic, analytical yet empathetic study of the variety of beliefs and practices encountered in a selection of the major religions of the world.

You will be introduced to five of the major world religions, reflecting different traditions, beliefs and practices: Christianity, Islam, Buddhism, Judaism and Taoism. You will then study two of these religions (Christianity and Buddhism) in-depth.

Moreover, you will be encouraged to look at contemporary national and international issues regarding religion and how these may impact on ethical and legal issues.

Finally, you will reflect on the following questions:

- What is religion?
- To what extent is religion distinguishable from culture or ideology?
- Are religions created, discovered or revealed?
- In what ways does religious language differ from everyday language? What does this tell us about religious knowledge?
- How far can language express the religious experience?
- What is the place of music, dance and singing in the religious experience?

### HOW WILL I BE ASSESSED?

#### External Assessment

- Paper 1 (30%): Introduction to world religions  
You will answer five stimulus response questions, one from each religion studied.
- Paper 2 (45%): In-depth studies of world religions  
You will write one essay on each of the two religions studied in-depth.

#### Internal assessment (25%)

The internal assessment in World Religions is an investigative study of one aspect of the religious experience, practice or belief of a group and/or individual adherents. The focus for the study can be a visit to a sacred place, building or a museum, a study of artefacts, attendance at an act of worship, an interview or interviews with religious adherents, or a study using a range of sources. Any religion can be the focus of your investigative study (1500-1800 words).

### WHO IS THIS COURSE FOR?

This course is ideal if you are considering a career as a diplomat, or in one of the humanitarian or political organisations (e.g. EU institutions, UNESCO, OSCE, peace keeping), and/or if you are considering further studies in anthropology, sociology, philosophy, psychology and theology.

## GROUP 4 - Sciences

### Biology (SL/HL)

#### WHAT WILL I STUDY?

The main aim of the course is to raise your awareness of biological connections and interrelations in providing you with a wide range of general biological knowledge. The focus should not be on the competence to rehearse facts but on the improvement of the ability to draw conclusions, understand biological processes and apply existing knowledge onto new problem definitions. Higher order thinking skills will be trained through task-based teaching strategies, which will also increase your communicative and cooperative skills.

Core: basic general biological knowledge. Topics: cell biology, molecular biology, genetics, ecology, evolution and biodiversity, human physiology, nucleic acids, metabolism, plant biology, genetics and evolution, animal physiology.

Option: additional in-depth study of neurobiology and behaviour

All sections include theoretical and practical work.

#### HOW WILL I BE ASSESSED?

##### Internal assessment (20%)

The internal assessment consists of one individual investigation which you will carry out and write up independently. You will design a hands-on experiment of your own, or collect results from data banks, models or simulations to answer a research question of your own choice.

##### External assessment (80%)

- Paper 1 (20%): multiple choice questions
- Paper 2 (40% SL / 36% HL): data-based questions, short-answer and extended-response questions.
- Paper 3 (20% SL / 24% HL): tests knowledge of the options in short-answer questions.

#### WHO IS THIS COURSE FOR?

This course is ideal for you if you want to get an insight into scientific research by performing numerous practical experiments in which you can try out different outdoor equipment and laboratory technologies, e.g. microscopes, data-loggers, dissecting instruments, etc. It will also enable you to build up a basic repertoire of scientific methods and teach you to design your own experiments that can evolve from a biological question or might express or prove a known fact. Additionally, you will learn to evaluate, analyse and read scientific data deriving from your own experiments and also from authentic scientific research.

Higher Level Biology is a rigorous course aimed at pupils who have a preference for sciences and intend to do further study in the field of biology, medicine or chemistry.

Possible career paths requiring biology are: medicine, pharmacy, biochemistry, organic chemistry, forensic science, biomedical research, veterinary medicine, and of course all branches of biology (anthropology, botany, genetics, microbiology, neuroscience, ecology, evolutionary biology, zoology).

N.B. Biology HL is an essential requirement for entrance to most medical schools worldwide.

## Chemistry (SL/HL)

### WHAT WILL I STUDY?

In IB Chemistry you will be working with models and concepts to describe the characteristics of matter's smallest particles. You will learn why substances undergo chemical reactions – sometimes even spontaneously. Typical chemical reaction types like acid-base or redox reactions will be introduced, and a lot of time will be spent doing hands-on experimental work. You will also learn the basics of organic chemistry, which deals with the large diversity of carbon compounds and their unique chemical reactions. Further topics are environmental chemistry and human biochemistry.

The IB Chemistry curriculum requires you to work quantitatively as well, which means that you will calculate substance and energy amounts and collect experimental data for further processing and interpretation. For example, you might be asked to determine the mass percentage of a certain substance within a food sample. Therefore you will practice your mathematical and practical lab skills in order to get good laboratory results.

### HOW WILL I BE ASSESSED?

You will be assessed both internally by your teacher and externally through final written exams.

#### Internal assessment (20%)

The internal assessment consists of one individual investigation which you will carry out and write up independently. You will design a hands-on experiment of your own, or collect results from data banks, models or simulations to answer a research question of your own choice.

#### External assessment (80%)

- Paper 1 (20%): multiple choice questions
- Paper 2 (40% SL / 36% HL): data-based questions, short-answer questions and extended-response questions.
- Paper 3 (20% SL / 24% HL): tests knowledge of the options in short-answer questions.

### WHO IS THIS COURSE FOR?

Chemistry SL aims to impart the skills and knowledge required to get an overview of basic chemistry, including the Austrian curriculum. The amount of factual knowledge might be smaller than in other science subjects, but logical and mathematical skills are necessary more often. The course could suit you if you have profound thinking skills and enjoy pursuing a topic until you have fully understood it.

Chemistry HL broadens all topics in content, as it pursues an in-depth involvement with chemistry. The course emphasises the practice of scientific method and inquiry. Therefore it poses challenges that require creativity and independence in learning. It is a good basis for students wishing to study a natural science subject at university.

Possible career paths requiring chemistry include: medicine, chemical engineering, biomedical science, ecology, analytical chemistry, food science, environmental science, marine biology, mining engineering, forensic science, geology, pharmacy, veterinary medicine.

N.B. Chemistry HL is an essential requirement for entrance to most medical schools worldwide.

## Computer Science (SL/HL)

### WHAT WILL I STUDY?

You will study seven topics in total. The first four topics are: system fundamentals, computer organization, networks, computational thinking, problem-solving and programming.

For topic 5 you will concentrate on one of the following four options: databases, modelling and simulation, web science or object-oriented programming (OOP).

Topic 6 is a practical application, documenting an ICT product, and topic 7 is a project.

Throughout the IB Computer Science course you will learn to demonstrate and understand the techniques and systems of computing, to apply and use the concepts of computing, to analyse and evaluate terminology, concepts and processes of computing, and to construct computing programs.

### HOW WILL I BE ASSESSED?

#### External assessment

- Paper 1 (45% SL / 40% HL):  
Short answer and structured questions on the SL/HL core and on the HL extension material. Some questions are common to HL and SL.
- Paper 2 (25% SL / 20% HL):  
Questions based on the option studied. HL candidates will answer questions based on both the core and on extension materials studied under the option.
- HL only: Paper 3 (20%):  
4 compulsory questions based on a known case study.

#### Internal assessment (30%)

This is composed of a practical application (topic 6), which is assessed by your teacher, and a project. The practical application is the development of a computational solution. Students must produce:

- a cover page that follows the prescribed format
- a product
- supporting documentation (word limit 2,000 words).

Within the Group 4 Project, you will be engaged in one of the projects under the "European Schoolnet", working together with European partners. Your work will be assessed by your teacher.

### WHO IS THIS COURSE FOR?

If you are interested in computing and/or plan a technical or economic course of study, the Computer Science course will prepare you ideally for this.

Possible career paths requiring computer science include: database administration, programming, systems analysis, web/software design, IT product development, multimedia design, technical support, telecommunications.

The HL extension prepares you for the programming basics required in the first year of an undergraduate degree in Computer Science.

## Physics (SL/HL)

### WHAT WILL I STUDY?

Physics is an attempt to understand the world around us, challenging our imagination with concepts such as relativity. Physics leads to discoveries, such as computers, satellites and GPS. Physicists study the largest galaxies and the smallest subatomic particles and everything in between. They are problem solvers; they make mathematics practical. And, even when the job market is slow, physicists can find well-paying jobs.

The syllabus for the IB Physics course is divided into two parts: the core and the options.

#### Core:

- Physics and physical measurement: no calculation without measurement
- Mechanics: movement, forces and celestial mechanics
- Thermal physics: from ice to plasma, what happens?
- Oscillations and waves: acoustic waves, radio waves, micro waves, light, x-rays ...
- Electric currents: transformer, resistor, motor—calculation and construction
- Fields and forces: gravity – electricity – magnetism, what is common to them all?
- Atomic and nuclear physics: half life, mass defect, binding energy and radiation
- Energy, power and climate change: global warming – issues ahead of us

#### Options:

Additional material, to be chosen by the teacher from the following: Relativity, Engineering Physics, Imaging or Astrophysics.

### HOW WILL I BE ASSESSED?

#### External assessment (80%)

- Paper 1 (20%): multiple choice questions
- Paper 2 (40% SL / 36% HL): data-based questions, short-answer questions and extended-response questions.
- Paper 3 (20% SL / 24% HL): tests knowledge of the options in short-answer questions.

#### Internal assessment (20%)

The internal assessment consists of an interdisciplinary project and a mixture of short- and long-term investigations conducted by you. Modern computer software will be available. You will come up with your own ideas to approaching and solving scientific problems.

### WHO IS THIS COURSE FOR?

The IB Diploma in Physics meets the admission requirements for engineering and technological studies at international universities. Physics is also the basis for many other sciences such as oceanography, seismology, and astronomy and is applied in all natural sciences. Since many mathematical concepts were developed by physicists, learning physics will help you master them and facilitate your understanding of mathematics.

Possible career paths requiring physics include: engineering, architecture, maths.

## Sports, Exercise and Health Science (SL)

### WHAT WILL I STUDY

The Sports, Exercise and Health course aims to increase your background knowledge and understanding of health and human performance in relation to sport and exercise. It involves the study of the science that underpins physical performance.

The course is divided into two sections:

Core: basic general sport theory

- Topic 1: Anatomy
- Topic 2: Exercise physiology
- Topic 3: Energy systems
- Topic 4: Movement analysis
- Topic 5: Skill in sport
- Topic 6: Measurement and evaluation of human performance

Options: more detailed material on two specific areas, which will be chosen by the teacher: e.g. Psychology of Sport, Nutrition, Health, Training.

All sections include theoretical and practical work, e.g. training programmes, investigation of factors affecting physical performance (cardiovascular response, range of joints, trajectory characteristics of thrown objects, etc.)

### HOW WILL I BE ASSESSED?

Internal assessment (20%)

You will complete a portfolio of 40 hours of practical work. This is composed of a mixture of short- and long-term investigations covering the topics studied. Additionally, all pupils will take part in an interdisciplinary Group 4 project, in which they analyse a common topic or problem.

External assessment (80%)

- Paper 1 (20%): tests knowledge of the core in the form of multiple choice questions.
- Paper 2 (40%): consists of data-based questions, short-answer questions and extended-response questions about the core.
- Paper 3 (20%): tests knowledge of the options in short-answer questions.

### WHO IS THIS COURSE FOR?

If you are interested in sport, physiology, anatomy and nutrition and want to learn more about the science behind the body and physical activity, this course will interest you.

Possible career paths requiring sports, exercise and health science include: sports management, sports psychology, teaching, physical therapy.

## GROUP 5 - Mathematics (SL)

### WHAT WILL I STUDY?

The topics studied in IB Mathematics (SL) allow a deeper understanding of what maths is and how it can be useful in real-life situations.

- Algebra: Basic algebraic concepts and applications are introduced to students.
- Functions and equations: Applying functional methods to a variety of mathematical situations.
- Circular functions and trigonometry
- Vectors: Algebraic and geometric approaches
- Statistics and probability: descriptive statistics, basic probability concepts, modelling data, binomial and normal distribution
- Calculus: Differential and integral calculus and their application
- Regression and correlation

A GDC (graphic display calculator) is obligatory.

### HOW WILL I BE ASSESSED?

#### External assessment (80%)

The external assessment is divided into two papers, both based on the whole syllabus. Both papers are divided into a short response part and an extended-response part.

- Paper 1: No calculators allowed
- Paper 2: Graphic display calculator required

#### Internal assessment (20%)

You must complete a mathematical exploration project. The topic of the portfolio will be chosen by you. The emphasis lies on mathematical communication.

### WHO IS THIS COURSE FOR?

The IB Mathematics Standard Level course is meant for pupils with a basic knowledge of mathematical concepts who might need a mathematical background in their future studies.

Possible career paths requiring maths include: statistics, research science, computer science, economy, robotics engineering, civil engineering.

## GROUP 6 - The Arts

### Film (SL/HL)

#### WHAT WILL I STUDY?

This course will help you understand how stories are told in films and to get a basic knowledge of filmmaking traditions. You will also learn how to formulate stories in film terms and how to produce your own movies.

Part 1: Textual analysis: You will learn to understand how meanings are constructed within and through film texts. (Why and how does a movie make me react in the way I do?) We will analyse film scenes and whole movies in a detailed way (construction, cinematography, editing, etc.).

Part 2: Film theory and history: You will watch films and study filmmaking traditions from various countries. This way you will get a deeper understanding of your own culture's filmmaking history as well as intercultural exchange and interdependence in filmmaking.

Part 3: Creative process – techniques and organisation of production: You will have the opportunity to develop skills in film production, ranging from initial planning, developing and negotiating proposals; to technical planning and physical production. You will have to maintain an individual journal recording the entire production process.

#### HOW WILL I BE ASSESSED?

##### External assessment (50%)

- Independent Study (25%): Produce a rationale and script for a short documentary on an aspect of film history or theory based on a study of films from different countries (At least two films must be studied for SL and at least four for HL).
- Presentation (25%): An oral presentation of a detailed critical analysis and interpretation of an extract from a prescribed film. This has to be in free speech (notes allowed) and will be recorded and sent to your external examiner (At SL, the presentation lasts for 10 minutes, at HL 15 minutes).

##### Internal assessment (50%)

- Practical Production: One completed film project on DVD accompanied by a written documentation (must be individually produced) about the filmmaking process. (SL: 4-5 minutes / HL: 6-7 minutes + a trailer). You can either do this entirely on your own or work in a group of up to four pupils. You will be graded on one of four roles within the filmmaking process: scriptwriter, cinematographer, director, editor. The choice of role is up to you. We provide all the necessary equipment for your work, i.e. camera, tripod, dolly, lighting equipment, editing software.

#### WHO IS THIS COURSE FOR?

You are the right pupil for this course if you

- love to watch movies;
- want to know more about the people who made film history;
- are interested in how stories are narrated in films;
- are willing to overcome an attitude towards films that is limited to the terms of "does or does not please/entertain me";
- like to tell stories and want to learn how to tell these stories in your own movies;
- want to become involved in the film or media business following school

## Music (SL)

### WHAT WILL I STUDY?

Joseph Haydn said: "My language is understood throughout the world."

Everything started with the "Big Bang", an overwhelming kaleidoscope of sound, the first timpani stroke of an eternal composition. Humans listened to all those vibes and started interpreting, orchestrating, enriching and co-composing an everlasting masterpiece. First it was just dancing, stamping and beating our bodies accompanying rudimentary singing. Later, we constructed more and more complex instruments, and finally we invented the computer to express our acoustic creativity. All human individuals are unique channels for music, even you!

We are very pleased to offer a course in Music that adds two rewarding and complementary competences to the advanced instrumental skills many of our pupils already have.

These competences are composition and musical perception.

You will write and create your own music (75 hours) and you will study and examine pieces of existing music from distinct musical cultures (75 hours).

### HOW WILL I BE ASSESSED?

Musical perception (50%):

In one final externally-marked "listening paper" you will answer 5 questions:

2 questions refer to works you have studied in class and require you to discuss them with reference to the provided scores and short audio files.

3 further questions on this paper refer to unidentified pieces meaning short excerpts from music that you have not studied or possibly even heard before. You must analyse, examine and discuss in detail what you hear in each extract.

You will also submit a written assignment (2000 words) investigating the significant musical links between two pieces from distinct musical cultures. This is a supervised piece of writing done as part of your coursework.

Creating (50%):

You will submit in written and recorded form, two pieces of your own creation. They may be original compositions or arrangements of existing music. You can select from 5 options:

- composing – creating of original music through the manipulation of musical elements
- music technology composing – using computers together with a variety of software and hardware
- arranging – manipulating an existing piece of music for a variety of instruments, electronic media
- improvising – a spontaneous musical expression in response to a musical or non-musical stimulus.
- stylistic techniques – the study and imitating of the compositional styles of others.

### WHO IS THIS COURSE FOR?

IB Music is ideal for you if your goal is to become an informed, reflective and critical practitioner of music. You will increase your potential as a musician by working on your perceptive skills, giving you a deeper insight into the variety of languages and dialects of music. You will also be encouraged to enhance your creative skills through exploration, control and development of your own music. Creativity demands curiosity, self-discipline and focus as you shape and assemble the musical elements to express a particular mood, character or other intended meaning.

While prior music experience is not mandatory at SL, it is recommended.

## Visual Arts (SL)

### WHAT WILL I STUDY?

The Visual Arts core syllabus consists of three equal interrelated areas (Visual Arts in context/ Visual Arts methods/ communicating Visual Arts) which will be investigated through theoretical practice, art-making practice, and curatorial practice.

You will explore various media and techniques (drawing, painting, three-dimensional design, printmaking, photography, etc.). Activities are selected from the fine arts, popular arts (i.e. posters, commercial art, photos, motion pictures) and design (product design, graphic design, textile design or fashion design).

You will be encouraged to develop your own unique style of visual language, and there will be many possibilities for the creation, reproduction and dissemination of your specific visual messages.

Through studio-based classroom activities you will develop your creative and imaginative skills. You will also develop your capacity to analyse art works and make personal responses to art works.

Throughout the course students are required to maintain a visual arts journal.

### HOW WILL I BE ASSESSED?

There are no written papers in Visual Arts. Assessment consists of an evaluation of your body of work as a whole, both the finished artworks and the processes of artistic investigation and development.

You will be assessed both externally (Comparative study, weighting 20%, and Process Portfolio, weighting 40%) and internally (Exhibition, weighting 40%).

### WHO IS THIS COURSE FOR?

This course is for you if you enjoy expressing yourself by drawing, painting, sculpting, new media and others, and if you like analysing and interpreting works of art from different periods and cultures.

This course is also for you if you are interested in visual experiences and activities and in a flexible programme, where you can develop and produce works of art with imagination and creativity.

Possible career paths requiring Visual Arts include: architecture, web design, graphic design, stage/interior design, fashion design, textile design, conservation/restoration, digital media design, photography.

*Investigate old Borders*

*Invent new Boundaries*

*International Baccalaureate*

## The Diploma Core

The IB programme offers three special features in addition to the traditional strengths of a broad liberal arts curriculum. These elements are referred to as *diploma requirements* since every diploma candidate is *required* to participate. They are: Theory of Knowledge, CAS, and an Extended Essay.

### Theory of Knowledge (TOK)

#### WHAT WILL I STUDY?

In Theory of Knowledge (TOK), you will be encouraged to think critically about the nature of knowledge and to challenge knowledge claims which you will learn to identify in the knowledge acquired in other IB subjects but also in the fabric of your own personal thought and prejudice.

In terms of content, the TOK course is built around an investigation of some of the eight ways of knowing (sense perception; language; reason; emotion; faith; imagination; intuition) and a selected number of the areas of knowledge (mathematics; natural sciences; human sciences; history; the arts; ethics; religious knowledge; indigenous knowledge). One of the major goals of the course is to explore the historical and methodical "knowledge framework" which forms the foundation of each area of knowledge. Consequently students will learn to both appreciate the qualities of some of the areas of knowledge but also their shortcomings and "blind spots".

Since the course aims at building on students' own experience and promoting critical, independent thinking, the main focus in terms of methods is on discussion and debate. In class, but also through minor reading and writing tasks they will learn to challenge their own biases, to clarify their values and to develop a fascination with the richness of knowledge as a human endeavour.

The TOK class is an obligatory course which reflects some of the core elements of the IB learner profile, like independent critical and creative thought, "intellectual risk-taking" and "international-mindedness". No matter what direction your future studies and personal experiences in life will take you, the TOK course will accompany you and help fulfil the ideal of a curious, critical and creative human-being.

#### HOW WILL I BE ASSESSED?

In class, you will be assessed on the standard of your contribution to class discussions and minor written assignments.

Additionally you will need to meet two major Diploma requirements:

1. Presentation in class (33 %):

During the first year, you give a presentation on a topic of your choice. You will have to derive a knowledge question from a real-life situation of your choice and explore it, using convincing arguments and investigating different perspectives. The presentation is assessed internally by your TOK teacher.

2. Essay (max. 1600 words; 67%):

During the second year, you choose your essay title from a list of six prescribed options. Though guidance and assistance are offered by the TOK teacher throughout the writing process, assessment is eventually done externally, according to the two main criteria in the TOK subject guide:

- Understanding knowledge questions
- Quality of analysis of knowledge issues

## The Extended Essay (EE)

IBDP candidates are required to undertake original research and write an Extended Essay of about 4000 words. This aspect of the programme offers the opportunity to investigate a topic of special interest and to become acquainted with the kind of independent research and writing skills expected at university level. A total of about 40 hours of private study and writing time is recommended. You may choose to write on a topic in one of the subjects available in the IB Diploma curriculum. Throughout the entire process you will be closely guided by a supervisor.

Reflection is an important aspect of the Diploma Programme core and you will be required to reflect in written form on your progress as you complete your research work for the Extended Essay. A Viva Voce which is a short interview lasting about 15 to 20 minutes, will conclude your Extended Essay process.

## CAS (Creativity, Action, Service)

In our school-system, emphasis is very often placed on gaining factual knowledge, whereas attention to developing your own personality is limited. An all-round education should offer you a balance between cognitive and personal development. CAS encourages you to develop your social abilities, your physical well-being and your creative talents. As such, CAS is an opportunity to educate you as a whole. In order to have the full benefit of this course, you should experience all three "strands" of CAS in a balanced way:

- Creativity: This includes experiences in the arts, depending on the personal abilities of each student. It also includes any other experiences that involve critical thinking, such as planning activities or problem solving.
- Activity: This includes any physical exertion that contributes to a healthy lifestyle.
- Service: This includes all unpaid and voluntary activities that are dedicated to the well-being of others and teach you to respect the rights, dignity and autonomy of all those involved.

Your CAS programme begins at the start of the Diploma Programme (in September of 7. Klasse) and continues regularly, ideally on a weekly basis, for at least 18 months with a reasonable balance between creativity, activity, and service. You also have to undertake a CAS project of at least one month's duration that challenges you to show initiative, demonstrate perseverance, and develop skills such as collaboration, problem-solving, and decision-making.

Examples of possible CAS activities (having been carried out by our students so far):

Within our school:

- Being part of the Mediation team, taking part in Drama class, writing for the School newspaper, filming and photographing of school events, being a delegate to the Model European Parliament, leading guided tours on our school Open Day or participating in our School's sports club.

Outside our school:

- Stage and costume design for local theatre groups, helping at various social institutions in and around Klosterneuburg: Gruft, SOMA, Red Cross, Kindergartens or Homes for the Elderly.

Of course there are almost no limits to your personal ideas for other activities!

## Which IB courses match my career plans?

Choosing the right IB combinations for the career you are interested in is important.

Here are some examples of IB subject choices for you to consider.

Architecture/Urban planning	Higher Level: Language B, Physics, History Standard Level: Maths, Language A, Visual Arts
Business management/ Economics/ Marketing	Higher Level: Language B, Psychology, Economics Standard Level: Maths, Language A, Computer Science
Engineering	Higher Level: Language B, Physics, Computer Science Standard Level: Maths, Language A, Economics
Diplomacy /NGO / International Relations/ Anthropology	Higher Level: Language A, English B, History Standard Level: Maths, World religions and a science from Block A or C
IT/Technician	Higher Level: Language B, Computer Science, Physics. Standard Level: Maths, Economics, Language A
Medicine / Veterinary medicine / drug discovery / neuroscience / pharmacy / dentistry	Higher Level: Language B, Chemistry, Biology Standard Level: Maths, Language A, Psychology
Music /Theatre /Arts Management	Higher Level: Language A, Language B, History Standard Level: Maths, Music and a science from Block A or C
Nutrition / Sports management	Higher Level: Language B, Chemistry, Psychology Standard Level: Maths, Language A and Sports, Exercise and Health Science
PR management /Consultancy /Trainer	Higher Level: Language A, Language B, Psychology Standard Level: Maths, Economics and a science from Block B
Publishing /Journalism /Translation / Media studies	Higher Level: Language A, Language B, History Standard Level: Maths, 2nd Language B and a science from Block A or C
Web design / Graphic design	Higher Level: Language B, Computer Science , Economics Standard Level: Maths, Language A, Visual Arts

N.B. Universities in the UK are very specific about the HL IB subject combinations they require. If you are considering studying in the UK, please make an appointment with the UK university counsellor (Mrs Kmentt) to discuss your individual IB course selections.

## IB course selection form Exam session 2019

### Group 1

German A Literature
English A Literature
Self-taught Language A (SL only)

### Group 2

English B (HL only)
French B
Spanish B (SL only)
Spanish ab initio (SL only)
German ab initio (SL only)

### Groups 3, 4 and 6

Only one subject in a block can be chosen!

Block A	Block B	Block C	Block D
Economics	History	Psychology	Music (SL only)
Biology	Chemistry	Physics	Visual Arts (SL only)
Sports, Exercise and Health (SL only)	Computer Science		Film
			World Religions (SL only)

### Key

Group 3	
Group 4	
Group 6	

### Group 5

Maths (SL only)
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### My IB Diploma

These three higher level subjects represent my academic focus and interests and fulfil the requirements of my university course:

Higher level \_\_\_\_\_

Higher level \_\_\_\_\_

Higher level \_\_\_\_\_

These are my three standard levels:

Standard level \_\_\_\_\_

Standard level \_\_\_\_\_

Standard level \_\_\_\_\_ Maths \_\_\_\_\_

I have chosen at least one subject from Groups 1 - 5

Wahl für den österreichischen Regelunterricht (7. & 8. Klasse)

Musikerziehung

Bildnerische Erziehung

Pupil's signature: \_\_\_\_\_ (please print name) \_\_\_\_\_

Parent's signature: \_\_\_\_\_ Date: \_\_\_\_\_