



KAUNO JONO JABLONSKIO  
GIMNAZIJA

# Kaunas Jonas Jablonskis Gymnasium

**International Baccalaureate**

**(IB) Diploma Programme**

**Starting from 2020**



## **MISSION OF KAUNAS JONAS JABLONSKIS GYMNASIUM**

Kaunas Jonas Jablonskis Gymnasium functions according to the 2nd part of the primary education program, secondary education, non-formal education and International Baccalaureate programmes for Lithuanian and foreign citizens aged 15 to 19, and strives to educate people who would be able to critically think, would practice the lifelong learning principle, be conscious and creative, would respect cultural diversity and various attitudes and who would responsibly create the future of their country and the world.

## **IBO MISSION STATEMENT**

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.

## **KEY ELEMENTS OF AN IB EDUCATION**

International mindedness is the willingness to see beyond immediate situations and boundaries helping students reflect on their own perspective, culture and identities, as well as those of others. International-mindedness enhances the development of international-mindedness through multilingualism and it is also encouraged through a focus on global engagement and meaningful service with the community.



**The IB learner profile** places the student at the centre of an IB education. The development of these attributes is the foundation of developing internationally minded students who can help to build a better world.

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

**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 analyze and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

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

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

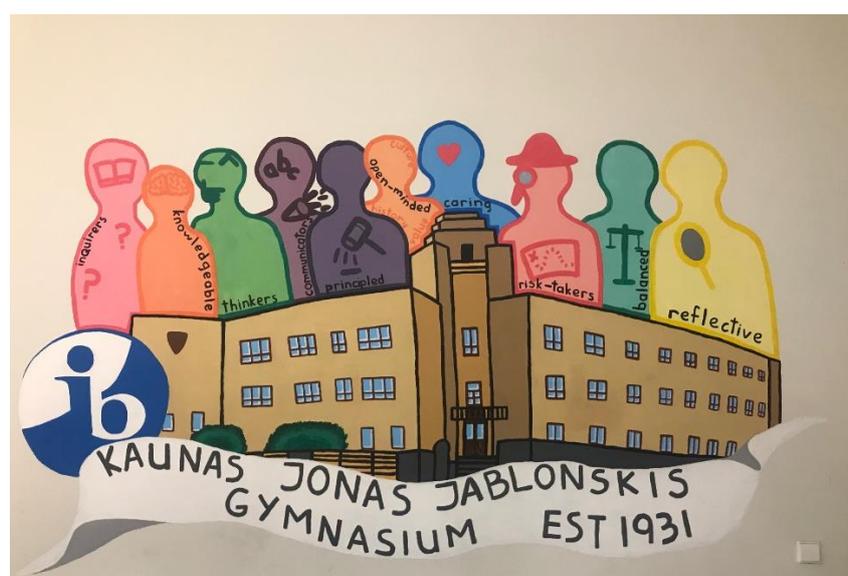
**Open-minded** We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

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

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

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

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



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## DIPLOMA PROGRAMME CURRICULUM



Kaunas Jonas Jablonskis Gymnasium offers the following subjects.

	<b>Subject Area</b>	<b>Subjects</b>
Group 1	Studies in language & literature	Lithuanian literature, English literature
Group 2	Language acquisition	English B, German ab initio, Russian ab initio
Group 3	Individuals & societies	History, Geography
Group 4	Sciences	Biology, Physics, Chemistry, Computer science
Group 5	Mathematics	Mathematics: applications and interpretation Mathematics: analyses and approaches
Group 6	Electives	Another subject from Groups 2-4*
Core	Creativity, activity service, Extended Essay, Theory of knowledge	

## DIPLOMA PROGRAMME COMPLETION REQUIREMENTS

Students are expected to:

- study one subject from each group and three of the subjects are taken in higher level (HL), at least 240 teaching hours; the others in standard level (SL), at least 150 teaching hours;
- complete an Extended Essay (EE);
- follow a Theory of Knowledge Course (TOK);
- participate in the process of creativity, action and service (CAS).

### Extended Essay (EE)

The EE is an in-depth study of a focused topic. Students choose their topic from the one of the student's six chosen subjects, the length of which is 4,000 words.

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.

### Theory of Knowledge TOK

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

The TOK curriculum is made up of three deeply interconnected parts.

- **The core theme—Knowledge and the Knower:** This theme encourages students to reflect on themselves as knowers and thinkers, and to consider the different communities of knowers to which we belong.
- **Optional themes:** The given themes all have a significant impact on the world today and play a key role in shaping people's perspectives and identities. The two optional themes from a choice of five are: Knowledge and Technology and Knowledge and Language.
- **Areas of knowledge:** The areas of knowledge (AOK) are specific branches of knowledge, each of which can be seen to have a distinct nature and sometimes use different methods of gaining knowledge. In TOK, students explore five compulsory areas of knowledge: History, the Human sciences, the Natural sciences, Mathematics and the Arts.

Students are expected to complete two formal assignments:

- **The TOK exhibition (33%)** Students are required to create an exhibition of three objects with accompanying commentaries that explores how TOK manifests in the world around us.

• **The TOK essay (67%)** engages students in a more formal and sustained piece of writing in response to a title focused on the areas of knowledge. The essay must be a maximum of 1,600 words and must be on one of the six prescribed titles issued by the IB for each examination session.

### **Creativity, action, service (CAS)**

Creativity, action, service is at the heart of the Diploma Programme. It is one of the three essential elements in every student's Diploma Programme experience. It involves students in a range of activities alongside their academic studies throughout the Diploma Programme. The three strands of CAS, which are often interwoven with particular activities, are characterized as follows.

**Creativity:** arts, and other experiences that involve creative thinking;

**Action:** physical exertion contributing to a healthy lifestyle, complementing academic work elsewhere in the Diploma Programme.

**Service:** an unpaid and voluntary exchange that has a learning benefit for the student. The rights, dignity and autonomy of all those involved are respected.

For student development to occur, CAS should involve:

1. real, purposeful activities, with significant outcomes;
2. personal challenge—tasks must extend the student and be achievable in scope;
3. thoughtful consideration, such as planning, reviewing progress, reporting;
4. reflection on outcomes and personal learning.

### **Receiving a bilingual diploma**

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

Students who gain a grade 3 or higher in studies in language and literature and a grade 3 or higher in an individuals and societies or science subject, completed in a different language, will also receive the bilingual diploma.

## **IB DIPLOMA ASSESSMENT**

In the DP, students receive grades ranging from 7 to 1, where 7 is the highest. Grades are awarded for oral and written activities, projects, experimental work, etc. in the course of a semester. At the end of each semester, students are given the grade average (or semester grade) in each subject. At the end of a school year, students are given final grades which are averages of semester and school exam grades. The IB uses both internal and external assessment in the DP.

### **Internal assessment**

In all subjects, at least some of the assessment is carried out following the requirements of the IB diploma programme. Internal assessment is conducted by teachers, who mark individual pieces of work produced as part of a course of study. The grading system is criterion based, and assessment criteria applied are established by the IBO. Internal assessment grades are externally moderated and

make up from 20 to 30 per cent of the final examination grade. Examples of this kind of assessment include oral exercises and class presentations (in language subjects), essays, portfolios, practical laboratory work, mathematical investigations, artistic performances, etc.

### **External assessment**

Some assessment tasks are conducted and supervised by teachers without the restrictions of examination conditions, but are then marked externally by examiners. Examples include written tasks for Languages A and B, an essay for Theory of Knowledge and an Extended Essay. It is externally marked examinations that form the greatest share of the assessment for each subject because of the greater degree of objectivity and reliability provided by the standard examination environment.

The grading system is criterion based with a scale from 1 (minimum) to 7 (maximum) points. The award of the Diploma requires a minimum total of 24 points, and a satisfactory completion of the Extended Essay, TOK and CAS.

# COURSE DESCRIPTIONS

## GROUP 1: STUDIES IN LANGUAGE AND LITERATURE

### LITHUANIAN LITERATURE (HL&SL)

#### Course description

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

#### Syllabus

The three core topics to be studied in the course are:

- Readers, writers and texts;
- Time and space;
- Intertextuality.

Students study between nine (SL) and thirteen (HL) literary texts by different authors from different ages and different continents.

The following ten literary pieces are to be studied in SL:

- (1) V. Šekspyras „Hamletas”
- (2) H. Radauskas (rinktiniai eilėraščiai)
- (3) A. Kamiu „Svetimas“
- (4) H. Murakami „Dramblys pradingsta” (pasirinkti apsakymai)
- (5) Sofoklis „Antigonė”
- (6) A. Škėma „Balta drobulė“
- (7) N. Ikstena „Motinos pienas”
- (8) V. Mačernis (pasirinkti sonetai ir „Vizijos”)
- (9) A. Mačernis (pasirinkti eilėraščiai)
- (10) D. Kalinauskaitė (pasirinkti apsakymai)

In addition to the ten literary works studies, the HL students also study these works of literature:

- (1) Dostojevskis „Nusikaltimas ir baudmė”
- (2) M. Ivaškevičius „Madagaskaras”
- (3) S. Parulskis „Tamsa ir partneriai“

#### Assessment

The external components contribute 70% to the final assessment at SL and 80% at HL.

#### External Assessment HL (4 hours)

Assessment component	Weighting
<b>Paper 1:</b> Guided literary analysis (2 hours 15 minutes)	35%
<b>Paper 2:</b> Comparative Essay (1 hour 45 minutes)	25%
<b>HL essay</b> (one work studied during the course, 1,200-1,500 words (1 hour 15 minutes))	20%

<b>Internal assessment:</b> Individual oral (15 minutes)	20%
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External Assessment SL (3 hours)

Assessment component	Weighting
<b>Paper 1:</b> Guided literary analysis (1 hour 15 minutes)	35%
<b>Paper 2:</b> Comparative essay (1 hour 45 minutes)	35%
<b>Internal assessment:</b> Individual oral (15 minutes)	30%

Internal assessment

Internal assessment is an integral part of the course and is compulsory for both standard level (SL) and higher level (HL) students. It consists of a task in the form of an individual oral. Both SL and HL students are required to deliver an individual oral in response to a prompt, using two extracts from two different works, one of which must be written originally in the language studied and the other of which must be a work studied in translation, to focus their analysis of how perspectives on a global issue are presented in them.

# GROUP 1: STUDIES IN LANGUAGE AND LITERATURE

## ENGLISH LITERATURE (HL&SL)

### Course description

The course in Language A: English (Literature) explores elements of language, literature and performance in order to provide students with a sound understanding of ways in which texts interact with the readers and what literature tells us about ourselves and others. The course focuses on three main aspects:

- the relationship between readers, writers and texts;
- the range and functions of texts across geographical space and historical time;
- aspects of intertextuality.

### Syllabus

The three core topics to be studied in the course are:

- Readers, writers and texts;
- Time and space;
- Intertextuality.

Students study between nine (SL) and thirteen (HL) literary texts by different authors from different ages and different continents.

The following ten literary pieces are to be studied in SL:

- (1) Oryx and Crake by Margaret Atwood;
- (2) Pygmalion by George Bernard Shaw;
- (3) Faust by Johann Wolfgang Goethe;
- (4) Selected Poems by Gwendolyn Brooks;
- (5) I Know Why the Caged Birds Sing by Maya Angelou;
- (6) Selected Poems by Leah Goldberg;
- (7) The Tempest by William Shakespeare;
- (8) Shtetl Love Song by Grigory Kanovich;
- (9) Eugene Onegin by Alexander Pushkin;
- (10) Selected Stories by Edgar Allan Poe.

In addition to the ten literary works studies, the HL students also study these works of literature:

- (1) Essays by George Orwell;
- (2) Captain Corelli's Mandolin by Louis de Bernieres;
- (3) Selected Poems by Langston Hughes.

### Assessment

The external components contribute 70% to the final assessment at SL and 80% at HL.

External Assessment HL (4 hours)

Assessment component	Weighting
Paper 1: Guided literary analysis (2 hours 15 minutes)	35%

<b>Paper 2</b> Comparative Essay (1 hour 45 minutes)	25%
<b>HL essay</b> (one work studied during the course (1,200-1,500 words) ((1 hour 15 minutes)	20%
<b>Internal assessment:</b> Individual oral (15 minutes)	20%

External Assessment SL (3 hours)

Assessment component	Weighting
<b>Paper 1:</b> Guided literary analysis (1 hour 15 minutes)	35%
<b>Paper 2</b> Comparative essay (1 hour 45 minutes)	35%
<b>Internal assessment:</b> Individual oral (externally moderated by the IB)	30%

**Internal assessment**

Internal assessment is an integral part of the course and is compulsory for both standard level (SL) and higher level (HL) students. It consists of a task in the form of an individual oral. Both SL and HL students are required to deliver an individual oral in response to a prompt, using two extracts from two different works, one of which must be written originally in the language studied and the other of which must be a work studied in translation, to focus their analysis of how perspectives on a global issue are presented in them.

## GROUP 2: LANGUAGE ACQUISITION

### ENGLISH B (HL)

#### Course description

English B is a language acquisition course designed for students with some previous experience of the target language. In the English 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.

#### Syllabus

Five prescribed themes are:

- Identities (Ex.: Lifestyles, Health and wellbeing, Beliefs and values etc.)
- Experiences (Ex.: Leisure activities, Holidays and travel, Life stories, Rites of passage etc.)
- Human ingenuity (Ex.: Entertainment, Artistic expressions, Communication and media etc.)
- Social organization (Ex.: Social relationships, Community, Social engagement etc.)
- Sharing the planet (Ex.: The environment, Human rights, Peace and conflict etc.)

#### Assessment

External Assessment HL (3 hours 30 minutes)

Assessment component	Weighting
<b>Paper 1:</b> writing task 450-600 words (1 hour 30 minutes)	25%
<b>Paper 2:</b> listening +reading comprehension (2 hours)	50% (25%+25%)
<b>Internal assessment</b> (individual oral)	25%

#### Internal assessment

Internal assessment is compulsory for HL students. HL students will respond to a literary extract. Students will then go on to engage in a one-to-one discussion with the teacher, firstly on the topic of the stimulus and then in general conversation across the range of themes listed in the syllabus.

## GROUP 2: LANGUAGE ACQUISITION

### GERMAN / RUSSIAN AB INITIO (SL)

#### Course description

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 order to ensure that the range of language and structures covered in language ab initio classes is manageable for all students, and so that they marry closely with the format and contents of final assessments, language-specific syllabuses have been provided and are available on the programme resource centre. At the language ab initio level, a student develops receptive, productive and interactive communicative skills. Students learn to communicate in the target language in familiar and unfamiliar contexts.

#### Syllabus

Five prescribed themes are:

- Identities (Ex.: Personal attributes, Relationships, Eating and drinking, Physical well-being etc.)
- Experiences (Ex.: Daily routine, Leisure, Holidays, Festivals and celebrations etc.)
- Human ingenuity (Ex.: Transport, Entertainment, Media, Technology etc.)
- Social organization (Ex.: Neighborhood, Education, The workplace, Social issues etc.)
- Sharing the planet (Ex.: Climate, Physical geography, Global issues etc.)

#### Assessment

The external components contribute 75% to the final assessment at SL.

#### External Assessment SL (2hours 45 minutes)

Assessment component	Weighting
<b>Paper 1:</b> writing task 250-400 words (1 hour)	25%
<b>Paper 2:</b> listening +reading comprehension (1 hour 45 minutes)	50% (25%+25%)
<b>Internal assessment:</b> (individual oral)	25%

#### Internal assessment

The internal assessment at language ab initio level consists of an interactive skills task in the form of an individual oral assessment. Students are required to make an individual presentation in response to a visual stimulus, before engaging in one-to-one discussion with the teacher, firstly on the topic of the stimulus, followed by general conversation based on topics from at least one additional theme listed in the syllabus.

## GROUP 3: INDIVIDUALS AND SOCIETY

### HISTORY (HL&SL)

#### Course description

IB History is a two-year course that focuses on 20th Century World History based upon the Diploma Program Course Syllabus. The course provides students with a broad comparative analysis of many countries' responses to the forces, events, and personalities of the 20th Century.

In the case to aware of the long-term consequences of human behavior on the on global society, using different resources (including primary and also secondary sources, literature, also information from newspapers and magazines of that time) students are encouraged to reflect on the role of the historian and compare solutions for the implementation of democracy and dictatorships through different world areas (Europe, America, Asia). Students analyze multiple views and solutions of the fight against the implementation of predatory policies and the impact of worldview and religion in the face of and against the imposed political systems during war crises.

Students who choose the Higher Level (HL) option will be exposed to an additional historical focus on the causes, practice, and effects of war in Europe and America.

#### Syllabus

##### For Standard (SL) and Higher Level (HL)

Prescribed Subject: **The move to global war**

Case studies: German, Italian and Japanese expansion.

##### World history topics:

<p><b>Causes and effects of 20th-century wars:</b></p> <ul style="list-style-type: none"><li>• Russian Civil War (1917–1922);</li><li>• Algerian War (1954-1962)</li><li>• Falkland/Malvinas War (1982)</li><li>• Spanish Civil War (1936-1939)</li><li>• Chinese Civil War ((1927–1937 and/or 1946–1949)</li><li>• Cross-regional wars: First World War (1914–1918); Second World War (1939–1945); Russo-Japanese War (1904–1905)</li></ul> <p><b>The Cold War: Superpowers and Rivalries (20<sup>th</sup> century)</b></p> <ul style="list-style-type: none"><li>• Stalin, Khrushchev, Brezhnev, Gorbachev, Reagan, Castro.</li><li>• Cold War crises: German (Berlin blockade - Berlin Wall);</li><li>• the Hungary autumn (1956);</li><li>• the Prague spring (1968);</li><li>• the USSR and Eastern Europe (1981–1989);</li><li>• Cuban Missile Crisis (1962);</li><li>• North Korean invasion of South Korea (1950);</li><li>• Soviet invasion of Afghanistan (1979)</li></ul>	<p><b>HL option and sections</b></p> <ul style="list-style-type: none"><li>• Europe and the First World War (1871 – 1918)</li><li>• Diplomacy in Europe (1919 – 1945)</li><li>• The Soviet Union and post- Soviet Russia (1924 – 2000)</li></ul>
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## Assessment

The external components contribute 75% to the final assessment at SL and 80% at HL.

### External Assessment HL (5 hours)

Assessment component	Weighting
<b>Paper 1:</b> Source-based paper, answer four structured questions.	20%
<b>Paper 2:</b> Essay paper based on the 12 world history topics. Answer two essay questions on two different topics (1 hour 30 minutes)	25%
<b>Paper 3:</b> Separate papers for each of the four regional options. For the selected region, answer three essay questions.	35%
<b>Internal assessment:</b> a historical investigation (20 hours)	20%

### External Assessment SL (2 hours 30 minutes)

Assessment component	Weighting
<b>Paper 1:</b> Source-based paper based on the five prescribed subjects. Choose <b>one</b> prescribed subject from a choice of five. Answer four structured questions. (1 hour 15 minutes)	30%
<b>Paper 2:</b> Essay paper based on the 12 world history topics. Answer two essay questions on two different topics. (1 hour 45 minutes)	45%
<b>Internal assessment:</b> a historical investigation (20 hours)	25%

### Internal assessment

Students are required to complete a historical investigation into a topic of their choice. The historical investigation is made of up three sections. (Identification and evaluation of sources; Investigation; Reflection). However, the topic must be historical, and therefore cannot be on an event that has happened in the last 10 years. Students can choose any historical topic of their interest to investigate and write. The word limit for the historical investigation is 2,200 words.

Investigation is based on academic honesty, especially authenticity and intellectual property.

## GROUP 3: INDIVIDUALS AND SOCIETY

### GEOGRAPHY (HL&SL)

#### Course description

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. Throughout this two-year course, students analyze the relationship between human activities and their impact on the environment. It also encourages the development of international awareness by examining contemporary issues such as poverty, sustainability and resource consumption. As the course progresses, students deepen their understanding of the challenges the world faces by exploring themes such as urbanization and the uneven access to health and food. While thinking globally, students act locally to build an awareness of their own responsibility to their community. Supporting this, the fieldwork component of the course will be on a local scale where students collect and analyze data then present their work in a written report.

#### Syllabus

High Level	Standard level
<ol style="list-style-type: none"> <li>1. Changing Population</li> <li>2. Global Climate, Vulnerability, Resistance</li> <li>3. Global Resource Consumption and Security</li> <li>4. Power, Places, Networks</li> <li>5. Human Development and Diversity</li> <li>6. Global Risk and Resilience</li> </ol> <p>C. Extreme environments G. Urban environments E. Leisure, tourism and sport</p>	<ol style="list-style-type: none"> <li>1. Changing Population</li> <li>2. Global Climate, Vulnerability, Resistance</li> <li>3. Global Resource Consumption and Security</li> </ol> <p>G. Urban environments E. Leisure, tourism and sport</p>

#### Assessment

The external components contribute 75% to the final assessment at SL and 80% at HL.

##### External Assessment HL (4hours 30 minutes)

Assessment component	Weighting
<b>Paper 1:</b> Geographic themes—three options (2 hours 15 minutes)	35%
<b>Paper 2:</b> Geographic perspectives—global change (1 hour 15 minutes)	25%
<b>Paper 3:</b> Geographic perspectives—global interactions (1 hour)	20%
<b>Internal assessment:</b> Written report (20 hours)	25%

##### External Assessment SL (2 hours 45 minutes)

Assessment component	Weighting
<b>Paper 1:</b> Geographic themes—two options (1 hour 30 minutes)	35%

<b>Paper 2:</b> Geographic perspectives—global change (1 hour 15 minutes)	40%
<b>Internal assessment:</b> Written report (20 hours)	25%

### **Internal assessment**

The internal assessment requirements at SL and at HL are the same. The time allowed is 20 hours, and the weightings are 25% at SL and 20% at HL. Students are required to undertake fieldwork collecting primary information and produce one written report that is based on a fieldwork question.

## GROUP 4: SCIENCES

### BIOLOGY (HL&SL)

#### Course description

The IB Diploma Programme biology course covers the living world at all levels. At the end of the scale is the cell, its molecular construction and complex metabolic reactions. At the other end of the scale biologist investigate the interactions that make whole ecosystem function. Students learn about cell theory, the chemistry of living things, human and plant science and genetics, among many other topics to further their understanding of and learning about biology. The sciences are taught practically. Students have opportunities to design investigations, collect data, develop manipulative skills, analyse results, collaborate with peers and evaluate and communicate their findings.

#### Syllabus

Core Material (HL/SL)	Additional Higher Material	Optional (HL/SL):
<ul style="list-style-type: none"><li>• Cell biology</li><li>• Molecular biology</li><li>• Genetics</li><li>• Ecology</li><li>• Evolution and biodiversity</li><li>• Human physiology</li></ul>	<ul style="list-style-type: none"><li>• Nucleic acid</li><li>• Metabolism, cell respiration and photosynthesis</li><li>• Plant biology</li><li>• Genetics and evolution</li><li>• Animal physiology</li></ul>	<ul style="list-style-type: none"><li>• Neurobiology and behaviour</li></ul>

#### Assessment

The external components contribute 80% to the final assessment at both SL and HL.

#### External Assessment HL (4hours 30 minutes)

Assessment component	Weighting
<b>Paper 1:</b> 40 multiple-choice questions (1 hour)	20%
<b>Paper 2:</b> Data-based, short answer and extended response questions (2 hours 15 minutes)	36%
<b>Paper 3:</b> Data-based, short answer and extended response questions (1 hour 15 minutes)	24%
<b>Internal assessment:</b> Individual investigation (10 hours)	20%

#### External Assessment SL (2 hours 45 minutes)

Assessment component	Weighting
<b>Paper 1:</b> 40 multiple-choice questions (45minutes)	20%
<b>Paper 2:</b> Data-based, short answer and extended response questions (1 hour 15 minutes)	40%
<b>Paper 3:</b> Data-based, short answer and extended response questions (1 hour)	20%
<b>Internal assessment:</b> Individual investigation (10 hours)	20%

### **Group 4 Project**

This project emphasizes the relationships between sciences. It can be experimental or theoretical. Students will take part in a collaborative project working with students from other science specialisms for over about 10 hours.

### **Internal assessment**

Biology is an experimental science. The ability to plan and execute an experimental project is part of students' assessment, which is where the internal assessment (IA) comes in. IA may include theoretical investigations and laboratory work. About 10 hours will be devoted to the IA, probably towards the end of the course.

## GROUP 4: SCIENCES

### CHEMISTRY (HL&SL)

#### Course description

This two-year course aims to balance the needs of a content-oriented syllabus with the development of the critical-thinking skills required by the experimental scientist. The course reflects the need to ensure that the qualifications will be met for students wishing to enter university study in the sciences; it will also develop students' investigational skills in the use of the scientific method, involving the formation, testing and modification of a hypothesis through observation and measurement, under the controlled conditions of an experiment. The course will also allow students to develop their problem-solving and analytical skills, as well as provide opportunities for students to become more aware of the moral, ethical, social, economic and environmental implications of using science and technology. Laboratory work forms an integral part of the course.

#### Syllabus

The syllabus content for the IB chemistry program consists of the core academic material (Topics 1-11), the Additional Higher-Level material (Topics 12-21) and the Option. Experimentation and Internal Assessment tasks will be carried out throughout the course.

<b>Core Material HL/SL</b> <ul style="list-style-type: none"><li>• Atomic structure</li><li>• Periodicity</li><li>• Chemical bonding and structure</li><li>• Stoichiometric relationships</li><li>• Redox processes</li><li>• Chemical kinetics</li><li>• Energetics/Thermochemistry</li><li>• Equilibrium</li><li>• Measurement and data processing</li><li>• Acids and bases</li><li>• Organic chemistry</li></ul>	<b>Additional Higher Material:</b> <ul style="list-style-type: none"><li>• Atomic structure</li><li>• The periodic table - the transition metals</li><li>• Chemical bonding and structure</li><li>• Redox processes</li><li>• Chemical kinetics</li><li>• Energetics/thermochemistry</li><li>• Equilibrium</li><li>• Acids and bases</li><li>• Organic chemistry</li><li>• Measurement and analysis</li></ul>	<b>One of the following 'Options':</b> <ul style="list-style-type: none"><li>• Biochemistry</li></ul>
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#### Assessment

The external components contribute 80% to the final assessment at both SL and HL.

#### External Assessment HL (4hours 30 minutes)

Assessment component	Weighting
<b>Paper 1:</b> 40 multiple-choice questions (1 hour)	20%
<b>Paper 2:</b> Data-based, short answer and extended response questions (2 hours 15 minutes)	36%
<b>Paper 3:</b> Data-based, short answer and extended response questions (1 hour 15 minutes)	24%

<b>Internal assessment:</b> Individual investigation (10 hours)	20%
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External Assessment SL (2 hours 45 minutes)

Assessment component	Weighting
<b>Paper 1:</b> 40 multiple-choice questions (45minutes)	20%
<b>Paper 2:</b> Data-based, short answer and extended response questions (1 hour 15 minutes)	40%
<b>Paper 3:</b> Data-based, short answer and extended response questions (1 hour)	20%
<b>Internal assessment:</b> Individual investigation (10 hours)	20%

**Group 4 Project**

This project emphasizes the relationships between sciences. It can be experimental or theoretical. Students will take part in a collaborative project working with students from other science specialisms for over about 10 hours.

**Internal assessment**

The Individual Investigation is an internal assessment task which is one practical scientific investigation taking about 10 hours and the write-up should be about 6 to 12 pages long. The task produced should be complex and it requires a purposeful research question and the scientific rationale for it.

## GROUP 4: SCIENCES

### PHYSICS (HL&SL)

#### Course description

The IB diploma Physics course is an intellectually stimulating and fascinating course, which is academically rigorous. The course includes a significant emphasis on the Nature of Science in the 21st century. Physics is an essential requirement for the study of the majority of engineering disciplines. It is extremely useful for those wishing to study mathematics and related subjects. The intellectual rigour of the course also develops a student intellectually in a manner that would give them advantages in the study of other areas of academia.

#### Syllabus

<b>Core Material HL/SL</b> <ul style="list-style-type: none"> <li>• Measurements and uncertainties</li> <li>• Mechanics</li> <li>• Thermal physics</li> <li>• Waves</li> <li>• Electricity and magnetism</li> <li>• Circular motion and gravitation</li> <li>• Atomic, nuclear and particle physics</li> <li>• Energy production</li> </ul>	<b>Additional Higher Material:</b> <ul style="list-style-type: none"> <li>• Wave phenomena</li> <li>• Fields</li> <li>• Electromagnetic induction</li> <li>• Quantum and nuclear physics</li> </ul>	<b>One of the following ‘Options’:</b> <ul style="list-style-type: none"> <li>• Relativity</li> <li>• Engineering Physics</li> <li>• Imaging</li> <li>• Astrophysics</li> </ul>
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#### Assessment

The external components contribute 80% to the final assessment at both SL and HL.

##### External Assessment HL (4hours 30 minutes)

Assessment component	Weighting
<b>Paper 1:</b> 40 multiple-choice questions (1 hour)	20%
<b>Paper 2:</b> Data-based, short answer and extended response questions (2 hours 15 minutes)	36%
<b>Paper 3:</b> Data-based, short answer and extended response questions (1 hour 15 minutes)	24%
<b>Internal assessment:</b> Individual investigation (10 hours)	20%

##### External Assessment SL (2 hours 45 minutes)

Assessment component	Weighting
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<b>Paper 1:</b> 40 multiple-choice questions (45minutes)	20%
<b>Paper 2:</b> Data-based, short answer and extended response questions (1 hour 15 minutes)	40%
<b>Paper 3:</b> Data-based, short answer and extended response questions (1 hour)	20%
<b>Internal assessment</b> - Individual investigation (10 hours)	20%

### **Group 4 Project**

This project emphasizes the relationships between sciences. It can be experimental or theoretical. Students will take part in a collaborative project working with students from other science specialisms for over about 10 hours.

### **Internal assessment**

The course also entails 40/60 hours of practical work in the laboratory. In the first year you will be given various tasks to investigate, and you will undertake a Group investigation of 10 hours duration. In the second year you will be asked to design and execute a longer individual investigation, which will be formally assessed.

Group 4 Project: Students will take part in a collaborative project working with students from other Science specialisms other a duration of 10 hours.

## GROUP 4: SCIENCES

### COMPUTER SCIENCE (HL&SL)

#### Course description

Computer science requires an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. Computer science itself is an international endeavour—the exchange of information and ideas across national boundaries has been essential to the progress of the subject. This exchange is not a new phenomenon but it has accelerated in recent times with the development of information and communication technologies.

#### Syllabus

<b>Core Material HL/SL</b> <ul style="list-style-type: none"> <li>• System fundamentals</li> <li>• Computer organization</li> <li>• Networks</li> <li>• Computational thinking, problem-solving and programming</li> </ul>	<b>Additional Higher Material:</b> <ul style="list-style-type: none"> <li>• Abstract data structures</li> <li>• Resource management</li> <li>• Control</li> <li>• Case study</li> </ul> Additional subject content introduced by the annually issued case study	<b>One of the following ‘Options’:</b> <ul style="list-style-type: none"> <li>• Option A: Databases</li> <li>• Option B: Modelling and simulation</li> <li>• Option C: Web science</li> <li>• Option D: Object-oriented programming (OOP)</li> </ul>
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#### Assessment

The external components contribute 70% to the final assessment at SL and 80% at HL.

#### External Assessment HL (4hours 30 minutes)

Assessment component	Weighting
<b>Paper 1:</b> compulsory short and structured answer questions (2 hours 10 minutes)	40%
<b>Paper 2:</b> answer all the questions for the option chosen (1 hour 20 minutes) Students will be expected to interpret and/or construct code in Java in the OOP option.	20%
<b>Paper 3:</b> case study; four structured questions, which assess the whole syllabus in an integrated way. (1 hour)	20%
<b>Internal assessment:</b> Solution (30 hours)	20%

#### External Assessment SL (2 hours 45 minutes)

Assessment component	Weighting
<b>Paper 1:</b> compulsory short and structured answer questions (1 hour 30 minutes)	45%
<b>Paper 2:</b> answer all the questions for the option chosen (1 hour) Students will be expected to interpret and/or construct code in Java in the OOP option.	25%
<b>Internal assessment:</b> Solution (30 hours)	30%

### **Group 4 Project**

This project emphasizes the relationships between sciences. It can be experimental or theoretical. Students will take part in a collaborative project working with students from other science specialisms for over about 10 hours.

### **Internal assessment**

The solution submitted for internal assessment must be the student's own work. The development of the solution must be undertaken by the student on an individual basis. Collaborative or group work may not be undertaken by students.

## GROUP 5: MATHEMATICS

MATHEMATICS: ANALYSIS AND APPROACHES (HL&SL)

MATHEMATICS: APPLICATIONS AND INTERPRETATION (HL&SL)

### Course description

Individual students have different needs, aspirations, interests and abilities. For this reason there are two different subjects in mathematics, each available at SL and HL. These courses are designed for different types of students: those who wish to study mathematics as a subject in its own right or to pursue their interests in areas related to mathematics, and those who wish to gain understanding and competence in how mathematics relates to the real world and to other subjects. Each course is designed to meet the needs of a particular group of students. Mathematics: analysis and approaches and Mathematics: applications and interpretation are both offered at SL and HL. Therefore, great care should be taken to select the course and level that is most appropriate for an individual student.

Students who choose **Mathematics: analysis and approaches at SL or HL** should be comfortable in the manipulation of algebraic expressions and enjoy the recognition of patterns and understand the mathematical generalization of these patterns. Students who wish to take Mathematics: analysis and approaches at higher level will have strong algebraic skills and the ability to understand simple proof. They will be students who enjoy spending time with problems and get pleasure and satisfaction from solving challenging problems.

Students who choose **Mathematics: applications and interpretation at SL or HL** should enjoy seeing mathematics used in real-world contexts and to solve real-world problems. Students who wish to take Mathematics: applications and interpretation at higher level will have good algebraic skills and experience of solving real-world problems. They will be students who get pleasure and satisfaction when exploring challenging problems and who are comfortable to undertake this exploration using technology.

### Syllabus

- Number and algebra,
- Functions
- Geometry and trigonometry
- Statistics and probability
- Calculus

### Assessment

The external components contribute 80% to the final assessment at both SL and HL.

#### External Assessment HL (5 hours)

Assessment component	Weighting
<b>Paper 1:</b> No technology allowed; compulsory short-response questions based on the syllabus, extended-response questions (2 hours)	30%
<b>Paper 2:</b> Technology required; compulsory extended-response questions based on the syllabus. (2 hours)	30%
	20%

<b>Paper 3:</b> Technology required; two compulsory extended response problem-solving questions. (1 hour) <b>Internal assessment:</b> Individual exploration (10-15 hours)	20%
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External Assessment SL (3 hours)

Assessment component	Weighting
<b>Paper 1:</b> No technology allowed; compulsory short-response questions based on the syllabus, extended-response questions (1 hour 30 minutes)	40%
<b>Paper 2:</b> Technology required; compulsory extended-response questions based on the syllabus. (1 hour 30 minutes)	40%
<b>Internal assessment:</b> Individual exploration (10-15 hours)	20%

**Internal assessment**

This component is internally assessed by the teacher and externally moderated by the IB at the end of the course. This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.

## ADMISSION TO UNIVERSITIES

International Baccalaureate (IB) students undertake one of the most challenging education programmes available to them. They are ambitious, and well-prepared for success — in further study, and in life beyond. By studying in the IB, students develop core skills for success at university. Through our programmes, students develop:

- an understanding of and appreciation for research
- presentation and communication skills
- critical thinking skills
- report writing skills
- a sense of international mindedness and cultural understanding
- time management skills.

Higher education institutions around the world admit students based on their IB credentials, and many have specific admissions policies and guidelines for IB students. Admissions criteria can vary widely across educational systems and selectivity of the institution.

Many national and state systems, as well as individual universities, have their own equivalencies for DP performance.

## FEES

The municipality covers the cost of the IBO membership fee. IB students, however, have to pay **examination fees** to the IBO (approximately 650 EUR). The fees are changed every year.

**TARPTAUTINIO BAKALAUREATO DIPLOMO PROGRAMOS BAIGIAMŲJŲ  
EGZAMINŲ ĮVERTINIMŲ IR BRANDOS EGZAMINŲ ĮVERTINIMŲ ATITIKMENYS  
LIETUVOJE:**

<https://bakalauras.lamabpo.lt/igijusiems-issilavinima-uzsienyje-ir-uzsienio-lietuviams/turintiems-tarptautinio-arba-europos-bakalaureato-diploma/>

**Requirements for admission to Lithuanian Universities:**

- ❖ Extra 0, 1, 2 or 3 points to one National Mature Exam for Extended Essay and TOK.

HL grade	Grade conversion into Lithuanian National Matura Exams	SL grade	Grade conversion into Lithuanian National Matura Exams	Language ab initio	Grade conversion into Lithuanian National Matura Exams
7	100	7	95	7	86
6	95	6	86	6	68
5	85	5	68	5	52
4	68	4	52	4	30
3	36	3	30	3	16
2	21	2	16		

Netherlands

<https://www.ibo.org/contentassets/5895a05412144fe890312bad52b17044/recognition-international-student-guide-nl-nov-16-en.pdf>

Germany

<https://www.ibo.org/contentassets/5895a05412144fe890312bad52b17044/recognition-international-student-guide-germany-17-en.pdf>

UK

<https://www.ibo.org/contentassets/5895a05412144fe890312bad52b17044/recognition---international-student-guide-uk--march2016---eng.pdf.pdf>

Denmark

[https://norreg.dk/sites/default/files/downloads/studyingindenmark\\_basicrulesforapplyingwithanib\\_2016.09.pdf](https://norreg.dk/sites/default/files/downloads/studyingindenmark_basicrulesforapplyingwithanib_2016.09.pdf)

TB Diplomo Programos dalykai			Dalykai, iš kurių sudaromas konkursinis balas Lietuvoje	
Grupės numeris	Grupės pavadinimas ir atitikmuo anglų kalba	Dalyko pavadinimas arba apibūdinimas ir atitikmuo anglų kalba	Brandos egzaminas	Metinis pažymys
1	Kalba A ( <i>Language A: Literature</i> )	Gimtoji kalba	Lietuvių kalba ir literatūra	Lietuvių kalba ir literatūra arba gimtoji kalba
2	Užsienio kalba ( <i>Language acquisition</i> )	<i>Language Ab Initio, Language B</i>	Užsienio kalba	Užsienio kalba
3	Individai ir visuomenė ( <i>Individuals and Societies</i> )	Istorija ( <i>History</i> ) Geografija ( <i>Geography</i> )	Istorija arba geografija	Istorija arba geografija
4	Gamtos mokslai ( <i>Sciences</i> )	Biologija ( <i>Biology</i> )	Biologija	Biologija
		Chemija ( <i>Chemistry</i> )	Chemija	Chemija
		Fizika ( <i>Physics</i> )	Fizika	Fizika
		Kompiuterių mokslas ( <i>Computer Science</i> )	Informacinės technologijos	Informacinės technologijos
5	Matematikos mokslai ( <i>Mathematics</i> )	Mathematics: applications and interpretation Mathematics: analyses and approaches	Matematika	Matematika
Kiti privalomi dalykai	Centriniai programos komponentai ( <i>Core Subjects</i> )	Kūryba, sportas ir visuomenei naudingas darbas ( <i>Creativity, Action, Service, santrumpa anglų kalba – CAS</i> )	–	Bendroji kūno kultūra

Nustatyti šie TB Diplomo Programos baigiamųjų egzaminų įvertinimų atitikmenys valstybinių brandos egzaminų įvertinimams:

TBD programos dalyko HL įvertinimas	Valstybinio brandos egzamino pasiekimų lygis	Valstybinio brandos egzamino įvertinimas
7	Aukštesnysis pasiekimų lygis	100
6		95
5	Pagrindinis pasiekimų lygis	85
4		68
3		36
2	Patenkinamas pasiekimų lygis	21
1	Nepatenkinamas pasiekimų lygis	nėra atitikmens

TBD programos dalyko SL įvertinimas	Valstybinio brandos egzamino pasiekimų lygis	Valstybinio brandos egzamino įvertinimas
7	Aukštesnysis pasiekimų lygis	95
6		86
5	Pagrindinis pasiekimų lygis	68
4		52
3	Patenkinamas pasiekimų lygis	30
2		16
1	Nepatenkinamas pasiekimų lygis	nėra atitikmens

Užsienio kalbos ( <i>Language Ab Initio</i> ) ir matematikos studijų ( <i>Mathematical Studies</i> ) SL įvertinimas	Valstybinio brandos egzamino pasiekimų lygis	Valstybinio brandos egzamino įvertinimas
7	Aukštesnysis pasiekimų lygis	86
6	Pagrindinis pasiekimų lygis	68
5		52
4	Patenkinamas pasiekimų lygis	30
3		16
1 – 2	Nepatenkinamas pasiekimų lygis	nėra atitikmens

# IB DIPLOMA PROGRAMME STUDENT CURRICULUM

## KAUNAS JONAS JABLONSKIS GYMNASIUM IB DIPLOMA PROGRAMME STUDENT CURRICULUM

I, ....., wish to enroll in the following IB courses as a IB DP candidate:

Group and Subject	Level and Hours	Notes
<b>Theory of Knowledge</b>	<input type="checkbox"/> (3)	Compulsory
<b>CAS</b>	<input type="checkbox"/> (2)	Compulsory
<b>1. Language A</b>		Lithuanian literature is compulsory
Lithuanian literature	<input type="checkbox"/> HL (5) <input type="checkbox"/> S (4)	
English literature	<input type="checkbox"/> H (5) <input type="checkbox"/> S (4)	
<b>2. Language B</b>		At least 1 subject from this group
English B	<input type="checkbox"/> H (5)	
German ab initio	<input type="checkbox"/> S (4)	
Russian ab initio	<input type="checkbox"/> S (4)	
<b>3. Individuals and Societies</b>		At least 1 subject from this group
History	<input type="checkbox"/> H (5) <input type="checkbox"/> S (4)	
Geography	<input type="checkbox"/> H (5) <input type="checkbox"/> S (4)	
<b>4. Experimental Science</b>		At least 1 subject from this group
Biology	<input type="checkbox"/> H (5) <input type="checkbox"/> S (4)	
Physics	<input type="checkbox"/> H (5) <input type="checkbox"/> S ( )	
Chemistry	<input type="checkbox"/> H (5) <input type="checkbox"/> S (4)	
Computer science	<input type="checkbox"/> H (5) <input type="checkbox"/> S (4)	
<b>5. Mathematics</b>		At least 1 subject from this group
Mathematics: applications and interpretation	<input type="checkbox"/> H (5) <input type="checkbox"/> S (4)	
Mathematics: analysis and approaches	<input type="checkbox"/> H (5) <input type="checkbox"/> S (4)	
<b>6. Another subject from Groups 2-4*</b>		The student may choose another subject from group 2 to 4.
<b>Total hours</b>		
<b>Total H (High Level)</b>		3 subjects
<b>Total S (Standard Level)</b>		3 subjects
<b>Total subjects</b>		No more 6 subjects