

ISF
International
Baccalaureate®
(IB) Diploma
Programme
Courses

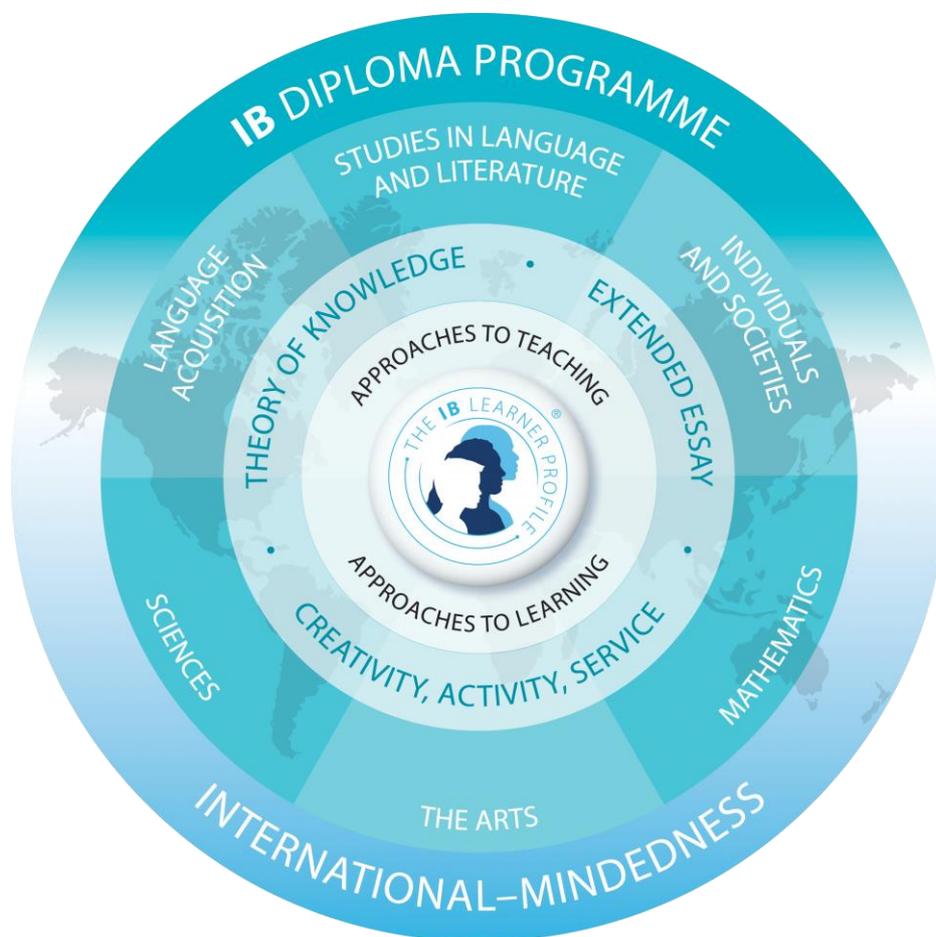
Group 1
Studies in Language and Literature:
English, German, Korean, Japanese

Group 2
Language Acquisition:
*English
 German
 French
 Spanish*

Group 4
Sciences:
*Biology
 Chemistry
 Physics*

Group 3
Individuals and Societies:
*Economics
 Geography
 History*

Group 5
Mathematics:
*Maths
 Maths Studies*



Group 6
The Arts / Electives*:
Music, Visual Arts / Computer Science,
 Another subject from Groups 1-4**

Basic requirements

- Six subjects studied concurrently
- One subject from each of the six groups
- **Three** taken at higher level (HL)
- **Three** taken at standard level (SL)
- Minimum score of 24 points
- Creativity, Activity, Service ; Extended Essay and Theory of Knowledge

Additional requirements for study in Germany

- First language: Literature or Language and Literature
- Second language: minimum Language B at HL or another language from Group 1
- One of the HL subjects must be Mathematics or a Group 4 Science

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Introduction

The International Baccalaureate Diploma Programme is administered by the International Baccalaureate Organization, based in Geneva, Switzerland. The IB Diploma programme is a two-year programme and usually begins in the eleventh grade, continuing through the end of the twelfth grade. The IB Diploma is an internationally recognized University qualification in the USA. Students pursuing the IB courses have the possibility to earn college credit in selected subjects depending upon universities' policies.

IB courses are given final, cumulative scores on a scale of 0-7. Scores are the sum of all internal and external assessments; the percentage of weight given to each component of a course depends on each subject. Internal assessments will count for anywhere from 20% to 30% of a final subject score.

Diploma candidates must earn a minimum score of 24 points for six courses in order to earn the IB Diploma. IB Diploma candidates must take at least three Higher Level (HL) courses and no more than three Standard Level (SL) courses. If a student pursues three HL courses, the total for those three must equal 12 with no one subject score below 3. Final scores for IB courses are provided by International Baccalaureate® Curriculum and Assessment Centre (IBCA) via website in early July after the relevant courses have been completed. Official university transcripts for IB coursework must be obtained via email from IBO directly.

All students taking IB level classes will need to complete all IBO assessments relevant to each course. The students enrolled in the International Baccalaureate® Diploma Programme study five-core IB subject areas (language and literature, language acquisition, individuals and societies, sciences, mathematics) for two years. Students must choose an additional sixth subject either from the offered core subjects or from group 6 and must study the Theory of Knowledge (TOK) course, complete an Extended Essay, and document the required CAS projects. Minimum passing scores in Theory of Knowledge assessments and on the externally assessed Extended Essay are required for the Diploma. Additionally, all students must fulfil seven CAS outcomes through involvement in a number of projects to be completed under the three categories of Creativity, Activity & Service. These projects must be appropriately documented and filed at the school. Successful candidates may earn the IB Diploma in addition to the ISF High School Diploma. Students who demonstrate above-average work on Theory of Knowledge assessments and with their Extended Essays may earn up to 3 bonus points toward the IB Diploma.

The distinction between Higher Level and Standard Level courses deals primarily with the depth of content for which the student is responsible. HL courses are covered in more periods per week. HL courses typically have more assessments associated with them when compared to SL courses, and HL assessments tend to be more rigorous.

Each year, schools provide IBCA with Predicted Grades. The purpose of Predicted Grades is to provide IBCA with a system of checks and balances to ensure that examiner and moderator scores are consistent.

Course Descriptions

Group 1: Studies in Language and Literature

Course: English Literature HL / SL

Course Description

This is an IB, Group 1 course offered at both Higher and Standard Levels. It is designed for students who have English as their mother-tongue or native speaker ability. The syllabus consists of works chosen from an IB prescribed list of authors (PLA), an IB prescribed literature in translation list (PLT), and works chosen freely by the school. The study of these works is divided into four parts, each having a particular focus:

- Part 1: Works in Translation
- Part 2: Detailed Study
- Part 3: Literary Genres
- Part 4: Options

Students are required to read 10 works at the Standard Level and 13 at Higher Level.

Assessment

Assessment occurs both internally (externally moderated) and externally and consists of:

- A written literary analysis on a Part 1 work (1,200 – 1,500 words) with a reflective statement for each work in translation from Part 1 (300 – 400 words) and supervised writing for each work in translation from Part 1 25%
- an individual oral commentary on a Part 2 work 15%
- an individual oral presentation on a Part 4 work 15%

Exams

- Paper 1: Essay on an unseen passage 20%
- Paper 2: Comparative analysis of at least 2 works from Part 3 25%

Course: English Language & Literature HL / SL

Course Description

This is an IB, Group 1 course offered at both Higher and Standard Levels. The language & literature course comprises four parts – two relate to the study of language and two to the study of literature. Students who take this course have varied language profiles and may be multilingual. The syllabus consists of works chosen from an IB prescribed list of authors (PLA), an IB prescribed literature in translation list (PLT), and texts chosen from a variety of sources, genres and media by the school.

The four parts are:

- Parts 1 & 2: Language and Culture Context,
Language and Mass Communication
- Part 3: Literature – Texts and Contexts
- Part 4: Literature – Critical Analysis

Students are required to read 4 works of literature at the Standard Level and 6 at Higher Level.

Assessment

Assessment occurs both internally (externally moderated) and externally and consists of:

- Written Tasks (each task between 800 – 1,000 words plus a rationale between 200 – 300 words). 4 at HL, 3 at SL 20%
- Individual Oral Commentary - based on the texts studied in part 4: Literature – Critical Analysis 15%
- Further Oral Activity (2 oral activities, one based on Part 1 and one on Part 2) 15%

Exams

- Paper 1 – Comparative Textual Analysis at HL (Analysis of one text at SL) 25%
- Paper 2 – Essay based on the texts studied in part 3: Literature – Texts and Contexts 25%

Course: German Literature HL / SL

Course Description

This is an IB, Group 1 course offered at both Higher and Standard Levels. It is designed for students who have German as their mother-tongue or native speaker ability. The syllabus consists of works chosen from an IB prescribed list of authors (PLA), an IB prescribed literature in translation list (PLT), and works chosen freely by the school. The study of these works is divided into four parts, each having a particular focus:

- Part 1: Works in Translation
- Part 2: Detailed Study
- Part 3: Literary Genres
- Part 4: Options

Students are required to read 10 works at the standard level and 13 at higher level.

Assessment

Assessment occurs both internally (externally moderated) and externally and consists of:

- a written literary analysis on a Part 1 work (1,200 – 1,500 words) with a reflective statement for each work in translation from Part 1 (300 – 400 words) and supervised writing for each work in translation from Part 1 25%
- an individual oral commentary on a Part 2 work 15%
- an individual oral presentation on a Part 4 work 15%

Exams

- Paper 1: Essay on an unseen passage 20%
- Paper 2: Comparative analysis of at least 2 works from Part 3 25%

Course: German Language & Literature HL / SL

Course Description

This is an IB, Group 1 course offered at both Higher and Standard Levels. The language & literature course comprises four parts – two relate to the study of language and two to the study of literature. Students who take this course have varied language profiles and may be multilingual. The syllabus consists of works chosen from an IB prescribed list of authors (PLA), an IB prescribed literature in translation list (PLT), and texts chosen from a variety of sources, genres and media by the school.

The four parts are;

- Parts 1 & 2: Language and Culture Context,
Language and Mass Communication
- Part 3: Literature – Texts and Contexts
- Part 4: Literature – Critical Analysis

Students are required to read 4 works of literature at the standard level and 6 at higher level.

Assessment

Assessment occurs both internally (externally moderated) and externally and consists of:

- Written Tasks (each task between 800 – 1,000 words plus a rationale between 200 – 300 words). 4 at HL, 3 at SL 20%
- Individual Oral Commentary - based on the texts studied in part 4: Literature – Critical Analysis 15%
- Further Oral Activity (2 oral activities, one based on Part 1 and one on Part 2) 15%

Exams

- Paper 1 – Comparative Textual Analysis at HL (Analysis of one text at SL) 25%
- Paper 2 – Essay based on the texts studied in Part 3: Literature – Texts and Contexts 25%

Course: Korean Literature HL

Course Description

In a two-year course, students learn to analyze, criticize and write about masterpieces of Korean and works in translation. Students' skills in oral and written communication are developed through the study of selected novels, plays, poems and short stories from different periods, genres and styles. The course aims to promote a lifelong appreciation and enjoyment of literature.

Topics

The course will be divided into the four assessment parts described below:

Term	Assessment Parts	IB Activity
Year 1 Term One	Part 4	Individual oral presentation (Part 4)
Year 1 Term Two	Part 2	Practice oral commentary
Year 1 Term Three	Part 1	Introduce Works in translation
Year 2 Term One	Part 1 Part 3	Complete Works in translation Examination Text 1, Final oral commentary (Part 2)
Year 2 Term Two	Part 3	Examination Texts 2 and 3, Mock examinations
Year 2 Term Three	Part 3	Examination Text 4, Revision, Final examinations

Assessment

- Part 1 (25%): Study of three works in translation, assessed by one written assignment with a reflective statement marked externally:
 - a. reflective statement: 300 – 400 words
 - b. essay: 1200 – 1500 words
- Part 2 (15%): Detailed study of three texts assessed by internal formal oral and commentary assignments and externally moderated
- Part 3 (45%): A thematic study of four texts assessed by two external written examinations
- Part 4 (15%): A study of three texts linked by genre, theme or period, providing the basis for a variety of internal oral coursework

Course: Korean Literature SL

Course Description

In a two-year course, students learn to analyze, criticize and write about masterpieces of Korean and works in translation. Students' skills in oral and written communication are developed through the study of selected novels, plays, poems and short stories from different periods, genres and styles. The course aims to promote a lifelong appreciation and enjoyment of literature.

Topics

The course will be divided into the four assessment parts described below:

Term	Assessment parts	IB Activity
Year 1 Term One	Part 4	Individual oral presentation (Part 4)
Year 1 Term Two	Part 2	Practice oral commentary
Year 1 Term Three	Part 1	Introduce Works in translation
Year 2 Term One	Part 1 Part 3	Complete Works in translation Examination Text 1, Final oral commentary (Part 2)
Year 2 Term Two	Part 3	Examination Texts 2 and 3, Mock examinations
Year 2 Term Three	Part 3	Examination Text 4, Revision, Final examinations

Assessment

- Part 1 (25%): Study of two works in translation, assessed by one written assignment with a reflective statement marked externally:
 - a. reflective statement: 300 – 400 words
 - b. essay: 1200 – 1500 words
- Part 2 (15%): Detailed study of two texts assessed by internal formal oral and commentary assignments and externally moderated
- Part 3 (45%): A thematic study of three texts assessed by two external written examinations
- Part 4 (15%): A study of three texts linked by genre, theme or period, providing the basis for a variety of internal oral coursework

Course: Japanese Literature HL / SL

Course Description

This is a two-year course offered at both Higher and Standard Levels. It is designed for students who have Japanese as their mother-tongue or native speaker ability. The syllabus consists of works chosen from an IB prescribed list of authors (PLA), an IB prescribed literature in translation list (PLT), and works chosen freely by the school. The study of these works is divided into four parts, each having a particular focus:

- Part 1: Works in Translation
- Part 2: Detailed Study
- Part 3: Literary Genres
- Part 4: Options

Students are required to read 10 works at the Standard Level and 13 at Higher Level. The works are selected from different genres, periods and styles. Through a thorough analysis of texts, students are expected to acquire skills in critical reading, cultural understanding and appreciation of literature, as well as effective oral and written communication skills.

Assessment

Assessment occurs both internally (externally moderated) and externally and consists of:

- a reflective statement for each work in translation from Part 1 (600 - 800 words)
- supervised writing for each work in translation from Part 1
- a written literary analysis on a Part 1 work (2,400 - 3,000 words)
- an individual oral commentary on a Part 2 work
- an individual oral presentation on a Part 4 work
- Paper 1: Essay on an unseen passage
- Paper 2: Comparative analysis of at least 2 works from Part 3

Course: School Supported Self-taught (Literature only) SL

Course Description

Self-taught students may study literature at the standard level only. They are expected to meet the same syllabus requirements for SL students with the exception that Part 4 is not a free choice. Students (school guided) must choose three works from the PLA. The same works must be selected by all students in that section regardless of language.

Assessment

Assessment for self-taught students is all external and there is no interactive oral as in the English Literature course. In lieu of this the students are required to keep a writing journal for both the works in translation studied in Part 1 of the course. The students write their personal response to the following questions:

- In what way do time and place matter to this work?
- What was easy to understand and what was difficult in relation to social and cultural context and issues?
- What connections did you find between issues in the work and your own culture(s) and experience?
- What aspects of technique are interesting in the work?

A second difference between English literature assessment and the self-taught course is the alternative oral examination. Self-taught students prepare for their oral examination using guiding questions supplied by IB and then choose extracts, with the guidance from their tutor and self-taught teacher.

Group 2: Language Acquisition

Course: English Language B HL / SL

Course Description

Language B is a two year language acquisition course for students with some background in the target language. While acquiring the language, students will explore the culture(s) connected to it. Students study a core curriculum plus options in addition to two literary works to build the necessary skills to reach the assessment objectives of the course. Listening, speaking, reading and writing skills will be developed through analysis of moderately complex written and spoken material.

English Language B - HL

The course comprises five topics: three core topics and two optional topics. At least two aspects must be covered in each of the five topics that make up the course. Additionally, at HL students must read two works of literature.

Topics

1. The core is divided into three areas and is a required area of study:

- Communication and media
- Global issues
- Social relationships

2. In addition teachers select from two of the following five options:

- Cultural diversity
- Customs and traditions
- Health
- Leisure
- Science and Technology

Assessment

External Assessment	70%
• Paper 1 (1 hour 30 minutes): Receptive skills	
Text-handling exercises on five written texts, based on the core.	25%
• Paper 2 (1 hour 30 minutes): Written productive skills	
Two compulsory writing exercises:	
Section A: One task of 250 – 400 words, based on the options, to be selected from a choice of five.	
Section B: Response of 150 – 250 words to a stimulus text, based on the core.	25%
• Written assignment: Receptive and written productive skills	
Creative writing of 500 – 600 words plus a 150 – 250 word rationale, based on one or two of the literary texts read.	20%
Internal Assessment	30%
(Internally assessed by the teacher and externally moderated by the IB)	
• Individual oral (8–10 minutes)	
Based on the options: 15 minutes' preparation time and a 10 minute (max.) presentation and discussion with the teacher.	20%
• Interactive oral activity	
Based on the core: Three classroom activities assessed by the teacher.	10%

English Language B - SL

The course comprises five topics: three core topics and two optional topics. At least two aspects must be covered in each of the five topics that make up the course. Unlike higher level, this course does not require students to study any works of literature.

Topics

1. The core is divided into three areas and is a required area of study:

- Communication and media
- Global issues
- Social relationships

2. In addition teachers select from two of the following five options:

- Cultural diversity
- Customs and traditions
- Health
- Leisure
- Science and Technology

Assessment

External Assessment **70%**

- **Paper 1 (1 hour 30 minutes): Receptive skills**
Text-handling exercises on four written texts, based on the core. 25%
- **Paper 2 (1 hour 30 minutes): Written productive skills**
One writing exercise of 250 – 400 words from a choice of five, based on the options. 25%
- **Written assignment: Receptive and written productive skills**
Inter-textual reading followed by a written task of 300 – 400 words plus a 150 – 200 word rationale, based on the core. 20%

Internal Assessment **30%**

(Internally assessed by the teacher and externally moderated by the IB)

- **Individual oral (8–10 minutes)**
Based on the options: 15 minutes preparation time and a 10 minute (max.) presentation and discussion with the teacher. 20%
- **Interactive oral activity**
Based on the core: Three classroom activities assessed by the teacher. 10%

Course: German Language B HL / SL

Course Description

German Language B is a language acquisition course developed at two levels—Standard Level (SL) and Higher Level (HL) — for students with some background in the target language. While acquiring a language, students will explore the culture(s) connected to it. The focus of these courses is language acquisition and intercultural understanding.

The language B syllabus approaches the learning of language through meaning. Through the study of the core and the options at SL and HL, plus at least two literary works at HL, students build the necessary skills to reach the assessment objectives of

the Language B course through the expansion of their receptive, productive and interactive skills.

SL and HL are differentiated by the recommended number of teaching hours, the depth of syllabus coverage, the study of literature at HL, the nature of the written assignment, and the level of difficulty and demands of assessment and assessment criteria.

German Language B - HL

The course comprises five topics: three core topics and two optional topics. At least two aspects must be covered in each of the five topics that make up the course. Additionally, at HL students must read two works of literature.

Topics in Year I

Communication and media

Aspects include:

- Advertising
- Bias in media
- Censorship
- Internet
- Mail
- Press
- Radio and television
- Sensationalism in media
- Telephone

Global issues

Aspects include:

- Drugs
- Energy reserves
- Food and water
- Global warming, climate change, natural disasters
- Globalization
- International economy
- Migration (rural–urban, or international)
- Poverty and famine
- Racism, prejudice, discrimination
- The effect of man on nature
- The environment and sustainability.

Social relationships

Aspects include:

- Celebrations, social and religious events
- Educational system
- Language and cultural identity, or self-identity
- Minorities
- Multilingualism
- Nationalism, patriotism, fanaticism
- Relationships (friendship, work, family)
- Social and/or political structures
- Social behaviors and stances
- Taboos versus what is socially acceptable

Works of Literature

Thomas Brussig: *Am kürzeren Ende der Sonnenallee* (Fischer)

Gudrun Pausewang: *Die Wolke* (Ravensburger)

Topics in Year II

Health

Aspects include:

- Concepts of beauty and health
- Diet and nutrition
- Drug abuse
- Health services
- Illnesses, symptoms of good/ill health
- Physical exercise
- Surgery
- Traditional and alternative medicine

Leisure

Aspects include:

- Entertainment
- Exhibitions and shows
- Games
- Hobbies
- Recreation
- Social interaction through leisure
- Sports
- Travelling

Work of Literature: Friedrich Dürrenmatt: *Der Besuch der alten Dame* (Diogenes)

Assessment

External Assessment	70%
• Paper 1 (1 hour 30 minutes): Receptive skills	25%
Text-handling exercises on five written texts, based on the core.	
• Paper 2 (1 hour 30 minutes): Written productive skills	25%
Two compulsory writing exercises.	
<u>Section A:</u> One task of 250 – 400 words, based on the options, to be selected from a choice of five.	
<u>Section B:</u> Response of 150 – 250 words to a stimulus text, based on the core.	
• Written assignment: Receptive and written productive skills	20%
Creative writing of 500–600 words plus a 150–250 word rationale, based on one or two of the literary texts read.	
Internal Assessment	30%
(Internally assessed by the teacher and externally moderated by the IB)	
• Individual oral (8–10 minutes)	20%
Based on the options: 15 minutes' preparation time and a 10 minute (max.) presentation and discussion with the teacher.	
• Interactive oral activity	10%
Based on the core: Three classroom activities assessed by the teacher.	

German Language B - SL

The course comprises five topics: three core topics and two optional topics. At least two aspects must be covered in each of the five topics that make up the course. Unlike higher level, this course does not require students to study any works of literature.

Topics in Year I

Communication and media

Aspects include:

- Advertising
- Bias in media
- Censorship
- Internet
- Mail
- Press
- Radio and television
- Sensationalism in media
- Telephone

Global issues

Aspects include:

- Drugs
- Energy reserves
- Food and water
- Global warming, climate change, natural disasters
- Globalization
- International economy
- Migration (rural–urban, or international)
- Poverty and famine
- Racism, prejudice, discrimination
- The effect of man on nature
- The environment and sustainability.

Social relationships

Aspects include:

- Celebrations, social and religious events
- Educational system
- Language and cultural identity, or self-identity
- Minorities
- Multilingualism
- Nationalism, patriotism, fanaticism
- Relationships (friendship, work, family)
- Social and/or political structures
- Social behaviors and stances
- Taboos versus what is socially acceptable

Topics in Year II

Health

Aspects include:

- Concepts of beauty and health
- Diet and nutrition
- Drug abuse

- Health services
- Illnesses, symptoms of good/ill health
- Physical exercise
- Surgery
- Traditional and alternative medicine

Leisure

Aspects include:

- Entertainment
- Exhibitions and shows
- Games
- Hobbies
- Recreation
- Social interaction through leisure
- Sports
- Travelling

Assessment

External Assessment	70%
<ul style="list-style-type: none"> • Paper 1 (1 hour 30 minutes): Receptive skills Text-handling exercises on four written texts, based on the core. 	25%
<ul style="list-style-type: none"> • Paper 2 (1 hour 30 minutes): Written productive skills One writing exercise of 250–400 words from a choice of five, based on the options. 	25%
<ul style="list-style-type: none"> • Written assignment: Receptive and written productive skills Inter-textual reading followed by a written task of 300–400 words plus a 150 – 200 word rationale, based on the core. 	20%
Internal Assessment	30%
(Internally assessed by the teacher and externally moderated by the IB)	
<ul style="list-style-type: none"> • Individual oral (8–10 minutes) Based on the options: 15 minutes preparation time and a 10 minute (max.) presentation and discussion with the teacher. 	20%
<ul style="list-style-type: none"> • Interactive oral activity Based on the core: Three classroom activities assessed by the teacher. 	10%

Course: French Language B - HL

Course Description

Students continue to develop an appreciation of French-speaking cultures, and further develop their knowledge to enhance their communication skills. The course is designed for students who have some background in French but are not native speakers in the language.

Students will use increasing sophisticated language in a variety of activities that will enable them to speak and write with clarity and accuracy. Students will also enhance their thinking skills through the critical study of literature and continue explore aspects of the culture of countries where the language is spoken through a variety of resources.

The IB French B HL meets five times a week. Students can work individually, in pairs, in small groups or as a whole class. Instruction is delivered in French through a variety of approaches such as oral and written exercises, writing activities, group and pair

work and use of audio materials. Their course also includes some elements of TOK as required by the IBO.

Topics

- Core:
 - Communication and media
 - Global issues
 - Social relationships
- Options:
 - Cultural diversity
 - Customs and traditions
 - Health
 - Leisure
 - Science and technology
- Literature:
 - 2 works of literature
 - or 5 short stories
 - or 20 poems
- Grammar:
 - Articles, prepositions, adverbs, idiomatic expressions, adjectival agreements, direct and indirect complements, proverbs and colloquial expressions, all tenses, regular and irregular verbs, passive voice, relative clauses, etc.

Assessment

External Assessment

- | | |
|--|------------|
| | 70% |
| • Paper 1: Text-handling exercises on 5 texts based on the core (1h30) | 25% |
| • Paper 2: 2 compulsory writing exercises (1h30) | 25% |
| Section A: one task of 250 - 400 words, based on the options, to be selected from a choice of 5. | |
| Section B: response of 150-250 words to a stimulus text, based on the core. | |
| • Written assignment: this is a word processed creative writing during the second term of the second year of the IB programme. 500 - 600 words plus a 150 - 250 word rationale, based on one of the literary books read. | 20% |

Internal Assessment:

- | | |
|---|------------|
| | 30% |
| • Individual oral based on the options (8-10 minutes) | 20% |
| • 3 interactive oral activities based on the core | 10% |

Course: French Language B - SL

Course Description

Students continue to develop an appreciation of French-speaking cultures, and further develop their knowledge to enhance their communication skills. The course is designed for students who have some background in French but are not native speakers in the language.

Students will use increasing sophisticated language in a variety of activities that will enable them to speak and write with clarity and accuracy. Students will also enhance their thinking skills through the critical study of texts and continue explore aspects of the culture of countries where the language is spoken through a variety of resources.

The IB French B SL meets three times a week. Students can work individually, in pairs, in small groups or as a whole class. Instruction is delivered in French through a variety of approaches such as oral and written exercises, writing activities, group and pair work and use of audio materials. Their course also includes some elements of TOK as required by the IBO.

Topics

- Core:
 - Communication and media
 - Global issues
 - Social relationships
- Options:
 - Cultural diversity
 - Customs and traditions
 - Health
 - Leisure
 - Science and technology
- Literature:
 - 2 works of literature
 - or 5 short stories
 - or 20 poems
- Grammar:
 - Articles, prepositions, adverbs, idiomatic expressions, adjectival agreements, direct and indirect complements, proverbs and colloquial expressions, all tenses, regular and irregular verbs, passive voice, relative clauses, etc.

Assessment

External Assessment:	70%
<ul style="list-style-type: none"> • Paper 1: Text-handling exercises on 5 texts based on the core (1h30) • Paper 2: 2 compulsory writing exercises (1h30) 	25% 25%
<ul style="list-style-type: none"> • One task of 250-400 words, based on the options, to be selected from a choice of 5. • Written assignment: this is a word processed creative writing during the second term of the second year of the IB programme. The students write 300 - 400 words plus a 150 - 200 word rationale, based on 3 texts they have previously selected with the help of the teacher. The theme of the texts need to come from the core topics studied in class. 	20%
Internal Assessment:	30%
<ul style="list-style-type: none"> • Individual oral based on the options (8-10 minutes) • 3 interactive oral activities based on the core 	20% 10%

Course: Spanish Language B - HL

Course Description

Students continue to develop an appreciation of Spanish-speaking cultures, and further develop their knowledge to enhance their communication skills. The course is designed for students who have some background in Spanish but are not native speakers in the language.

Students will use increasingly sophisticated language in a variety of activities that will enable them to speak and write with clarity and accuracy. Students will also enhance

their thinking skills through the critical study of literature and continue to explore aspects of the culture of countries where the language is spoken through a variety of resources.

The IB Spanish B HL meets five times a week. Students can work individually, in pairs, in small groups or as a whole class. Instruction is delivered in Spanish through a variety of approaches such as oral and written exercises, writing activities, group and pair work and use of audio materials. Their course also includes some elements of TOK as required by the IBO.

Topics

- Core:
 - Communication and media
 - Global issues
 - Social relationships
- Options:
 - Cultural diversity
 - Customs and traditions
 - Health
 - Leisure
 - Science and technology
- Literature:
 - 2 works of literature
 - or 5 short stories
 - or 20 poems
- Grammar:
 - Articles, prepositions, adverbs, idiomatic expressions, adjectival agreements, direct and indirect complements, proverbs and colloquial expressions, all tenses, regular and irregular verbs, passive voice, relative clauses, etc.

Assessment

External Assessment:

- | | |
|---|------------|
| | 70% |
| • Paper 1: Text-handling exercises on 5 texts based on the core (1h30) | 25% |
| • Paper 2: 2 compulsory writing exercises (1h30) | 25% |
| Section A: one task of 250 -400 words, based on the options, to be selected from a choice of 5. | |
| Section B: response of 150-250 words to a stimulus text, based on the core. | |
| • Written assignment: this is a word processed creative writing during the second term of the second year of the IB programme. The students write 500 - 600 words plus a 150 - 250 word rationale, based on one of the literary books read. | 20% |

Internal Assessment:

- | | |
|---|------------|
| | 30% |
| • Individual oral based on the options (8-10 minutes) | 20% |
| • 3 interactive oral activities based on the core | 10% |

Course: Spanish Language B - SL

Course Description

Students continue to develop an appreciation of Spanish-speaking cultures, and further develop their knowledge to enhance their communication skills. The course is designed

for students who have some background in Spanish but are not native speakers in the language.

Students will use increasingly sophisticated language in a variety of activities that will enable them to speak and write with clarity and accuracy. Students will also enhance their thinking skills through the critical study of texts and continue to explore aspects of the culture of countries where the language is spoken through a variety of resources.

The IB Spanish B SL meets three times a week. Students can work individually, in pairs, in small groups or as a whole class. Instruction is delivered in Spanish through a variety of approaches such as oral and written exercises, writing activities, group and pair work and use of audio materials. Their course also includes some elements of TOK as required by the IBO.

Topics

- Core:
 - Communication and media
 - Global issues
 - Social relationships
- Options:
 - Cultural diversity
 - Customs and traditions
 - Health
 - Leisure
 - Science and technology
- Literature:
 - 2 works of literature
 - or 5 short stories
 - or 20 poems
- Grammar:
 - Articles, prepositions, adverbs, idiomatic expressions, adjectival agreements, direct and indirect complements, proverbs and colloquial expressions, all tenses, regular and irregular verbs, passive voice, relative clauses, etc.

Assessment

External Assessment:	70%
• Paper 1: Text-handling exercises on 5 texts based on the core (1h30)	25%
• Paper 2: 2 compulsory writing exercises (1h30) One task of 250-400 words, based on the options, to be selected from a choice of 5.	25%
• Written assignment: this is a word processed creative writing during the second term of the second year of the IB programme. The students write 300 - 400 words plus a 150 - 200 word rationale, based on 3 texts they have previously selected with the help of the teacher. The theme of the texts need to come from the core topics studied in class.	20%
Internal Assessment:	30%
• Individual oral based on the options (8-10 minutes)	20%
• 3 interactive oral activities based on the core	10%

Course: German ab initio SL

Course Description

Students develop an appreciation of German-speaking cultures, and develop their knowledge to improve their communication skills. The course is designed for students who have had some or no background at all of German and who are not native speakers in the language.

Students will build up their language in a variety of topics and activities that will enable them to speak and write with clarity and accuracy. The course is divided into three broad themes which are suited to foster an international perspective and understanding.

The IB German ab initio meets three times a week. Students can work individually, in pairs, in small groups or as a whole class. Instruction is delivered in German through a variety of approaches such as oral and written exercises, writing activities, group and pair work and use of audio materials. Their course also includes some elements of TOK as required by the IBO.

Topics

- People
- Education and Working Life
- City and Community Service
- Eating and Drinking
- Hobbies and Traveling
- Environment
- Health and Accidents
- Life in Germany
- Social Issues

Assessment

External Assessment: 75%

- Paper 1: Text-handling exercises on 4 written texts (1h30) 30%
- Paper 2: 2 compulsory writing exercises (1h00) 25%
Section A: one question to be answered from a choice of two.
Section B: one question to be answered from a choice of three.
- Written assignment: this is a word processed creative writing which is done during the second term of the second year of the IB programme. The students do some independent research on one of the prescribed topics of the language ab initio course. Then responding to a set of guiding questions, they identify the differences and/or similarities between their own culture(s) and the target culture(s), reflect on those and write 200 - 350 words about it. 20%

Internal Assessment: 25%

- A 3-part oral: (10 minutes) 25%
Part 1: presentation of a visual stimulus. (from a choice of 2)
Part 2: Follow-up questions on the visual stimulus.
Part 3: General conversation including at least two questions on the written assignment.

Course: French ab initio SL

Course Description

Students develop an appreciation of French-speaking cultures, and develop their knowledge to improve their communication skills. The course is designed for students who have had some or no background at all of French and who are not native speakers in the language.

Students will build up their language in a variety of topics and activities that will enable them to speak and write with clarity and accuracy. The course is divided into three broad themes which are suited to foster an international perspective and understanding.

The IB French ab initio meets three times a week. Students can work individually, in pairs, in small groups or as a whole class. Instruction is delivered in French through a variety of approaches such as oral and written exercises, writing activities, group and pair work and use of audio materials. Their course also includes some elements of TOK as required by the IBO.

Topics

- Individual and society
- Leisure and work
- Urban and rural environment

Grammar

Articles, prepositions, adverbs, adjectival agreements, direct and indirect complements, all tenses, regular and irregular verbs, relative clauses, etc.

Assessment

External Assessment: 75%

- Paper 1: Text-handling exercises on 4 written texts (1h30) 30%
- Paper 2: 2 compulsory writing exercises (1h00) 25%
- Section A: one question to be answered from a choice of two.
- Section B: one question to be answered from a choice of three.
- Written assignment: this is a word processed creative writing which is done during the second term of the second year of the IB programme. The students do some independent research on one of the prescribed topics of the language ab initio course. Then responding to a set of guiding questions, they identify the differences and/or similarities between their own culture(s) and the target culture(s), reflect on those and write 200 - 350 words about it. 20%

Internal Assessment: 25%

- A 3-part oral: (10 minutes) 25%
- Part 1: presentation of a visual stimulus. (from a choice of 2)
- Part 2: Follow-up questions on the visual stimulus.
- Part 3: General conversation including at least two questions on the written assignment.

Course: Spanish ab initio SL

Course Description

Students develop an appreciation of Spanish-speaking cultures, and develop their knowledge to improve their communication skills. The course is designed for students who have had some or no background at all of Spanish and who are not native speakers in the language.

Students will build up their language in a variety of topics and activities that will enable them to speak and write with clarity and accuracy. The course is divided into three broad themes which are suited to foster an international perspective and understanding.

The IB Spanish ab initio meets three times a week. Students can work individually, in pairs, in small groups or as a whole class. Instruction is delivered in Spanish through a variety of approaches such as oral and written exercises, writing activities, group and pair work and use of audio materials. Their course also includes some elements of TOK as required by the IBO.

Topics

- Individual and society
- Leisure and work
- Urban and rural environment

Grammar

Articles, prepositions, adverbs, adjectival agreements, direct and indirect complement, all tenses, regular and irregular verbs, relative clauses, etc.

Assessment

External Assessment:

- | | |
|--|-------------------|
| • Paper 1: Text-handling exercises on 4 written texts (1h30) | 75%
30% |
| • Paper 2: 2 compulsory writing exercises (1h00) | 25% |
| <u>Section A</u> : one question to be answered from a choice of two. | |
| <u>Section B</u> : one question to be answered from a choice of three. | |
| • Written assignment: this is a word processed creative writing which is done during the second term of the second year of the IB programme. The students do some independent research on one of the prescribed topics of the language ab initio course. Then responding to a set of guiding questions, they identify the differences and/or similarities between their own culture(s) and the target culture(s), reflect on those and write 200 - 350 words about it. | 20% |

Internal Assessment:

- | | |
|--|-------------------|
| • A 3-part oral: (10 minutes) | 25%
25% |
| <u>Part 1</u> : presentation of a visual stimulus. (from a choice of 2) | |
| <u>Part 2</u> : Follow-up questions on the visual stimulus. | |
| <u>Part 3</u> : General conversation including at least two questions on the written assignment. | |

Group 3: Individuals and Societies

Course: Economics HL / SL

Course Description

Standard Level Economics is a general introduction to the subject. Higher Level Economics is designed to extend the depth and content within the 5 major models while employing the same skills. SL/HL economics introduces students to the use of basic tools of economic reasoning. It provides an understanding of major contemporary economic problems through use of examples drawn from past, current and proposed economic situations. The course has a strong focus on international relationships and uses comparisons to reinforce concepts. Thorough comparative economic system analysis reinforces internationalism. This course is of particular importance for those who intend to study Social Sciences. Internal and external assessments will be given to those students who successfully complete this course.

Topics

- Quantitative Methodology as a foundation.
- Foundation of economics
- Resource allocation in the market
- Market failure and government response
- Alternatives to the market system
- Elasticity of demand and supply
- Aims and objectives of firms
- Economic efficiency
- Concepts, uses and limitations of National Income Accounts
- Macroeconomic policy objectives
- Macroeconomic models
- Unemployment and inflation
- Gains from trade
- Protectionism
- Balance and payments, main definitions
- Exchange rates
- Balance of payments and exchange rates
- Distinction between economic growth and development
- Characteristics of economic growth
- Indicators of economic development
- Sources of economic development
- Development strategies
- Barriers to economic development
- Negative aspects of development
- Sustainable development

Assessment

External Assessment

80%

- Paper 1 – 1.5 hours 30% HL, 40% SL. Students are required to answer 1 question from both sections A and B.
Objective test paper based on the subject core (and HL extension).
- Paper 2 – 1.5 hours 30% HL, 40% SL. Candidates are required to answer 1 of 2 questions in both sections A and B.
- Paper 3 - 1 hours 20%. HL only
Quantitative Economics: Candidates answer 2 of 3 questions.

Internal Assessment

20%

1. Portfolio consists of three commentaries each with a 750 word maximum.
2. On-going internal assessment is critical component of the syllabus.

SL differentiates from HL in that:

Paper 1 accounts for 40%

Paper 2 accounts for 40%. HL and SL are each data response questions.

Coursework accounts for 20% of the mark in both HL and SL.

Course: History HL / SL

Course Description

History is concerned with the study of individuals and societies: political, social, economic, religious, technological and cultural. The acquisition of historical knowledge lays primary and secondary evidence, and judgment, all derived from sources. Historical knowledge comes from quantitative and qualitative analysis. To be successful, students must grasp a working understanding of historical methodology and employ this methodology to gain a comprehensive understanding of how individuals fit into a myriad of societies and how individuals affect society and societies affect individuals. The course is taught topically and chronologically. Upon successful completion of the course students will sit the external exams.

Topics

- Paper 1: "Rights and Protest"
- Paper 2:
Origins, development and impact of industrialization (1750-2005)
Evolution and development of democratic states (1848-2000)
- Paper 3 (History of Europe):
The Reformation (1517-1572)
Imperial Russia, revolution and establishment of the Soviet Union (1855-1924)
European States in the inter-war period (1918-1939)

Assessment

- - Paper 1 (Section A) Structured questions and source evaluation
HL 20% / SL 30%
- - Paper 2 (Section B) Essay writing
HL 25% / SL 45%
- - Paper 3 (section 3) Essay writing
only HL 35%
- - Course work: Internally assessed
HL 20%/ SL 25%

- SL: no regional topic required

Course: Geography HL / SL

Course Description

In our modern, globalized world, issues such as urbanization, population, development and sustainability have become increasingly important. The human response to these issues is paramount to the study of Geography. IB Geography conducts an analysis at the local, regional, national and international levels. This analysis aims to uncover the relationship between humans and their created and natural environments.

All students cover four core topics for paper 1:

- Populations in transition
- Disparities in wealth and development
- Patterns in environmental sustainability
- Patterns in resource consumption

All students cover two topics for paper 2:

- The geography of food and health
- Urban Environments

In addition to this, HL students gain a deeper international understanding and perspective of various cultures by studying the paper 3 theme of 'global interactions'. HL students also study an additional paper 2 topic – Leisure, Sport and Tourism.

All students partake in an educational fieldtrip into Frankfurt to collect the data required to write the Internal Assessment.

Assessment

Higher Level:

External assessment:	Paper 1	25%
	Paper 2	35%
	Paper 3	20%
Internal assessment:	Fieldwork, leading to one written report (2,500 words)	20%

Standard Level:

External assessment:	Paper 1	40%
	Paper 2	35%
Internal assessment:	Fieldwork, leading to one written report (2,500 words)	25%

Group 4: Sciences

Course: Biology HL / SL

Course Description

An interest in life is natural for humans; not only are we living organisms ourselves, but we depend on many species for our survival, are threatened by some and co-exist with many more. From the earliest cave paintings to the modern wildlife documentary, this interest is as obvious as it is ubiquitous, as biology continues to fascinate young and old all over the world.

Biologists attempt to understand the living world at all levels using many different approaches and techniques. At one end of the scale is the cell, its molecular construction and complex metabolic reactions. At the other end of the scale biologists investigate the interactions that make whole ecosystems function.

Many areas of research in biology are extremely challenging and many discoveries remain to be made. Biology is still a young science and great progress is expected in the 21st century. This progress is sorely needed at a time when the growing human population is placing ever greater pressure on food supplies and on the habitats of other species, and is threatening the very planet we occupy.

Topics

The syllabus for the Diploma Programme Biology course is divided into three parts: the core, the additional higher level (AHL) material and the options.

Core Topics (SL & HL)

- 1) Cell biology
- 2) Molecular biology
- 3) Genetics
- 4) Ecology
- 5) Evolution and biodiversity
- 6) Human physiology

Additional Higher Level Topics (HL only)

- 7) Nucleic acids
- 8) Metabolism, cell respiration and photosynthesis
- 9) Plant biology
- 10) Genetics and evolution
- 11) Animal physiology

Options Topics (SL & HL)

- A) Neurobiology and behaviour
- B) Biotechnology and bioinformatics
- C) Ecology and conservation
- D) Animal physiology

Assessment

External Assessment:

The external assessment consists of three written papers:

- Paper 1: Paper 1 is made up of multiple-choice questions which test the knowledge of the core and additional higher level (AHL) material for HL students and the core only for SL students. Calculators are not permitted.
- Paper 2: Paper 2 tests the knowledge of the core and AHL material for HL students and core only for SL students. The questions address objectives 1, 2 and 3, and the paper is divided into two sections. Section A consists of a data based question which requires students to analyse a given set of data. The remainder of section A is made up of short-answer questions. In section B students are expected to answer two questions from a choice four at HL or one question from a choice of three at SL. These extended response questions may involve writing a number of paragraphs, solving a substantial problem, or carrying out a substantial piece of analysis or evaluation. A calculator is required for this paper.
- Paper 3: Paper 3 tests the knowledge of the options and addresses objectives 1, 2 and 3. At HL, students will answer several short-answer questions and an extended response question in each of the two options studied. At SL, students answer short-answer questions in each of the two options studied. A calculator is required for this paper.

Internal Assessment:

Investigations and group 4 project: HL students are required to spend 60 hours and SL students 40 hours on practical/investigative work. This includes 10 to 15 hours of group 4 project. Student work is internally assessed by the teacher and externally moderated by the IBO. The internal assessment (IA), worth 20% of the final assessment consists of an interdisciplinary project, a mixture of short and long-term investigations such as practicals and subject-specific projects.

Course: Chemistry HL / SL

Course Description

Chemistry is an experimental science that combines academic study with the acquisition of practical and investigational skills. It is often called the central science, as chemical principles underpin both the physical environment in which we live and all biological systems. Apart from being a subject worthy of study in its own right, Chemistry is a prerequisite for many other courses in higher education, such as medicine, biological science and environmental science, and serves as useful preparation for employment.

The Diploma Programme Chemistry course includes the essential principles of the subject but also, through selection of an option, allows teachers some flexibility to tailor the course to meet the needs of their students. The course is available at both Standard Level (SL) and Higher Level (HL), and therefore accommodates students who wish to study Chemistry as their major subject in higher education and those who do not.

Topics

The syllabus for the Diploma Programme Chemistry course is divided into three parts: the core, the additional higher level (AHL) material and the options.

Core Topics (SL & HL)

- 1) Stoichiometric relationships
- 2) Atomic structure
- 3) Periodicity

- 4) Chemical bonding and structure
- 5) Energetics/thermochemistry
- 6) Chemical kinetics
- 7) Equilibrium
- 8) Acids and bases
- 9) Redox processes
- 10) Organic chemistry
- 11) Measurement and data processing

Additional Higher Level Topics (HL only)

- 12) Atomic structure
- 13) The periodic table – the transition metals
- 14) Chemical bonding and structure
- 15) Energetics/thermochemistry
- 16) Chemical kinetics
- 17) Equilibrium
- 18) Acids and bases
- 19) Redox processes
- 20) Organic chemistry
- 21) Measurement and analysis

Options Topics (SL & HL)

- A) Materials
- B) Biochemistry
- C) Energy
- D) Medicinal chemistry

Assessment

External Assessment:

The external assessment consists of three written papers:

- Paper 1: Paper 1 is made up of multiple-choice questions which test the knowledge of the core and additional higher level (AHL) material for HL students and the core only for SL students. Calculators are not permitted.
- Paper 2: Paper 2 tests the knowledge of the core and AHL material for HL students and core only for SL students. The questions address objectives 1, 2 and 3 and the paper is divided into two sections. Section A consists of a data based question which requires students to analyse a given set of data. The remainder of section A is made up of short-answer questions. In section B students are expected to answer two questions from a choice four at HL or one question from a choice of three at SL. These extended response questions may involve writing a number of paragraphs, solving a substantial problem, or carrying out a substantial piece of analysis or evaluation. A calculator is required for this paper.
- Paper 3: Paper 3 tests the knowledge of the options and addresses objectives 1, 2 and 3. At HL, students will answer several short-answer questions and an extended response question in each of the two options studied. At SL, students answer short-answer questions in each of the two options studied. A calculator is required for this paper.

Internal Assessment:

Investigations and group 4 project: HL students are required to spend 60 hours and SL students 40 hours on practical/investigative work. This includes 10 to 15 hours of group 4 project. Student work is internally assessed by the teacher and externally moderated by the IBO. The internal assessment (IA), worth 20% of the final assessment consists

of an interdisciplinary project, a mixture of short- and long-term investigations such as practicals and subject-specific projects.

Course: Physics HL / SL

Course Description

Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself from the very smallest particles to the vast distances between galaxies.

At the school level both theory and experiments should complement one another naturally, as they do in the wider scientific community. The Diploma Programme Physics course allows students to develop traditional practical skills and techniques and increase their abilities in the use of Mathematics, which is the language of Physics. It also allows students to develop interpersonal and digital communication skills which are essential in modern scientific endeavour and are important life-enhancing, transferable skills in their own right.

Physics is, above all, a human activity, and students need to be aware of the context in which physicists work. Illuminating its historical development places the knowledge and the process of Physics in a context of dynamic change, in contrast to the static context in which Physics has sometimes been presented. This can give students insights into the human side of Physics: the individuals; their personalities, times and social milieu; their challenges, disappointments and triumphs.

The Diploma Programme Physics course includes the essential principles of the subject but also, through selection of an option, allows teachers some flexibility to tailor the course to meet the needs of their students. The course is available at both SL and HL, and therefore accommodates students who wish to study Physics as their major subject in higher education and those who do not.

Topics

The syllabus for the Diploma Programme Physics course is divided into three parts:

- Core topics, studied by Standard Level (SL) and Higher Level (HL) students
- Additional higher level (AHL) material studied by HL students only
- One optional topic studied by the whole class

Core Topics (HL & SL)

- 1) Measurements and uncertainties
- 2) Mechanics
- 3) Thermal physics
- 4) Waves
- 5) Electricity and magnetism
- 6) Circular motion and gravitation
- 7) Atomic, nuclear and particle physics
- 8) Energy production

Additional Higher Level Topics (AHL)

- 9) Motion in fields
- 10) Thermal physics (thermodynamics)
- 11) Wave phenomena
- 12) Electromagnetic induction
- 13) Quantum physics and nuclear physics

14) Digital technology

Options Topics (HL & SL)

- A) Relativity
- B) Engineering physics
- C) Imaging
- D) Astrophysics

Practical Work:

The practical work for the Diploma Programme Physics course is also divided into three parts:

- An internally assessed individual investigation, sometimes called the IA (internal assessment), chosen in consultation with the class teacher
- The Practical Scheme of Work (PSOW), a compulsory programme of additional practical activities reflecting the subject topics studied, as detailed above
- The group 4 project

Assessment

External Assessment:

The external assessment for SL and HL students consists of three written papers:

- Paper 1 (20%) consists of multiple-choice questions. Students receive a physics data booklet containing key equations and physical constants, but calculators are not permitted.
- Paper 2 (40% SL, 36% HL) consists of questions requiring a written response. These will include short-answer and extended-response questions. The extended response questions may involve writing a number of paragraphs, solving a substantial problem, or carrying out a substantial piece of analysis or evaluation. Students receive a physics data booklet containing key equations and physical constants, and a calculator is required.
- Paper 3 (20% SL, 24% HL) consists of two sections, both containing questions requiring a written response. In section A students answer one data-based question and several short-answer questions on experimental work, and in section B students answer several short-answer and extended-response questions from one option. Students receive a physics data booklet containing key equations and physical constants, and a calculator is required.

Internal Assessment:

The internal assessment task will be one scientific investigation, taking about 10 hours, and a write-up of about 2000 words. The requirements are the same at SL and HL. Work is assessed under the categories of personal engagement (8%), exploration (25%), analysis (25%), evaluation (25%) and communication (17%).

Possible tasks include: a hands-on laboratory investigation, using a spreadsheet for analysis and modelling, extracting data from a database and analysing it graphically, a hybrid of spreadsheet/database work and hands-on investigation or using an interactive and open-ended simulation. Some tasks may consist of relevant and appropriate qualitative work combined with quantitative work.

Additional practical work:

Students at SL are also required to spend an additional 20 hours, and students at HL an additional 40 hours, on a practical course of experimental work reflecting the content of the subject syllabus, and students will be expected to submit a formal write-up of each piece of their experimental work. Although assessment of this work does not contribute to the final grade, this is a compulsory part of the course, and details of

all the investigative activities carried out by a student must be submitted to the examining body, along with the samples of internally assessed work.

The group 4 project:

Group 4 is the group of IB subjects containing the sciences. The group 4 project is an interdisciplinary activity in which all Diploma Programme science students must participate. The exercise should be a collaborative experience, in which students from the different Group 4 subjects analyse a common topic or problem. The emphasis is on the processes involved in, rather than the products of, the activity.

The students will be given an open ended topic with a scientific slant, and will spend approximately 10 hours researching and preparing a presentation related to that topic in small mixed-subject and mixed-level groups.

Mathematical Requirements:

This course requires an ability to use mathematical techniques, though not all the following will be required from the very beginning of the course. Students taking the course must be able to perform the basic arithmetic functions, carry out calculations involving means, decimals, fractions, percentages, ratios, approximations and reciprocals, carry out manipulations with trigonometric functions, carry out manipulations with logarithmic and exponential functions (HL only), use standard notation, understand direct and inverse proportion, solve simple algebraic equations and linear simultaneous equations, plot and interpret graphs and understand the significance of gradients, changes in gradients, intercepts and areas, draw lines of best and maximum and minimum gradients with relative accuracy (by eye) taking into account all uncertainty bars, interpret data presented in various forms (including various graphical forms), represent arithmetic mean using \bar{x} notation and express uncertainties to one or two significant figures, with justification.

Group 5: Mathematics

Course: Mathematics HL

Course Description

This course caters for students with a good background in mathematics who are competent in a range of analytical and technical skills. The majority of these students will be expecting to include mathematics as a major component of their university studies, either as a subject in its own right or within courses such as physics, engineering and technology. Others may take this subject because they have a strong interest in mathematics and enjoy meeting its challenges and engaging with its problems. Summer assignments are required.

Topics

- Topic 1 - Algebra
- Topic 2 - Functions and equations
- Topic 3 - Circular functions and trigonometry
- Topic 4 - Vectors
- Topic 5 - Statistics and probability
- Topic 6 - Calculus

Students must study all the sub-topics in one of the following options:

- Topic 7 - Statistics and probability
- Topic 8 - Sets, relations and groups
- **Topic 9 - Calculus***
- Topic 10 - Discrete mathematics

*Topic 9 (Calculus) is the optional part chosen in our school

Assessment

External assessment: three exams, two of 120 minutes –30% each - and one of 60 minutes, 20%, account for 80% of the grade.

Internal assessment: A project assessment consisting of one individual mathematical exploration, a piece of written work that involves investigating an area of mathematics, accounts for 20% of the grade. This last component is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Course: Mathematics SL

Course Description

This course caters for students who already possess knowledge of basic mathematical concepts, and who are equipped with the skills needed to apply simple mathematical techniques correctly. The majority of these students will expect to need a sound mathematical background as they prepare for future studies in subjects such as Chemistry, Economics, Psychology and Business Administration. IB Mathematics SL requires college-level performance and work habits. Summer assignments are required.

Topics

- Topic 1 - Algebra
- Topic 2 - Functions and equations
- Topic 3 - Circular functions and trigonometry
- Topic 4 - Vectors
- Topic 5 - Statistics and probability
- Topic 6 - Calculus

Assessment

External assessment: two exams, each worth 40% of the final grade.

Internal assessment:

A project consisting of one individual mathematical exploration, piece of written work that involves investigating an area of mathematics, accounts for 20% of the final grade. This last component is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Course: Mathematical Studies SL

Course Description

This course is available at SL only. It caters for students with varied backgrounds and abilities. More specifically, it is designed to build confidence and encourage an appreciation of mathematics in students who do not anticipate a need for mathematics in their future studies. Students taking this course need to be already equipped with fundamental skills and a rudimentary knowledge of basic processes. Summer assignments are required.

Topics

- Topic 1 - Number and algebra
- Topic 2 - Descriptive statistics
- Topic 3 - Logic, sets and probability
- Topic 4 - Statistical applications
- Topic 5 - Geometry and trigonometry
- Topic 6 - Mathematical models
- Topic 7 - Introduction to differential calculus

Assessment

The project: The project is an individual piece of work involving the collection of information or the generation of measurements, and the analysis and evaluation of the information or measurements. This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Mathematical Studies SL is assessed by external examinations (two examinations of 90 minutes each), comprising 80% of the final grade and the above project, which contributes to 20% of the final grade.

Group 6: The Arts and Electives*

Course: Music HL / SL

Course Description

This course is designed for music students with a background in solo music performance or composition. The aim of the IB music programme is to give students the opportunity to develop their knowledge, abilities and understanding through the detailed academic study of music in the full range of styles, as well as to develop higher-level performance and composition skills. In addition to the primarily academic course content, students will be expected to demonstrate their understanding of music through both solo performance and composition at the HL course, while they will choose a practical focus in either solo performance or music composition for the SL course. The academic components of the course will give students a thorough knowledge of western music history and musical style, as well as allowing them to delve deeply into musical analysis in the IB1 year. This will aid students in using appropriate musical terminology and in analyzing musical works from many cultures and periods. By contrast, the academic components of the IB2 year are deeply focused on detailed study and analysis of two set works designated by the IB as well as on making analytical connections between music of different cultures.

Topics

Music History, Theory, & Musicianship:

Basics	(prerequisite): Review chords, scales, rhythms, keys & intervals
Tonal Harmony	Chordal function
Ear Training	Aural skills directed towards stylistic identification
Music analysis	(prerequisite) Review basics of major & minor chord analysis Additional analysis of themes, form, and advanced harmonic analysis to be learned (including modulations), 12-tone analysis
Music literacy	Notation Study of Western music & non-Western music
Music Investigation	Using media, internet, newspaper, books and concerts.
Performance	If chosen as SL focus, solo level must be at least Grade 5 ABRSM Standard. (Private instrumental teacher/lesson required)
Composition	Create a portfolio of compositions showing development. HL: 3 Pieces, SL: 2 Pieces. (Sibelius or Finale Notepad Software used.)

Assessment

Higher Level:

External Assessments of Listening Paper and Musical Investigation (an analytical paper) constitute 50% of the grade. Internal Assessment by the classroom teacher in both performance and composition fulfill the remaining 50% of the grade.

Standard Level:

Identical to HL, except that Internal Assessment by the classroom teacher in the areas of performance or composition fulfills the remaining 50% of the grade.

Course: IB Visual Arts HL

Course description

This course is designed to develop a student's artistic sensibility in terms of research, experimentation, and self-discovery. During the two year course of study the student will undertake a substantial visual project that will include a series of work accompanied by a workbook. The student will enrich this exploration through historical and contemporary investigations in various cultures and epochs. Students will record and document their relevant findings while enhancing a group of works. The assessment will be based on the quality and depth as well as the visual communication of the work.

Topics

The course will cover a variety of aspects relating to the growth of the creative learner:

- Studio production. Students will develop a group of works based on exploration and experience. Continual experimentation with media, techniques and concepts will be recorded in the workbook. Implementation of experiments will be encouraged during the learner's development.
- Historical research. Learners will conduct an ongoing investigation of selected artists, epochs and genres. These findings will be recorded in the workbook. Students will be encouraged to visit museums independently and also with the instructor. Writing, sketching, and recording findings will be documented in the workbook.
- Cultural and contemporary research. Students will conduct ongoing investigations of various cultures, contemporary trends and imagery while documenting their findings in the workbook. These developments will be integrated with and responded to in the production of work.
- Experimentation. Students will be encouraged to explore media of their choice relevant to the selected topic. Experiments are documented in the investigation workbook while discoveries are applied to final work.
- Final Work. Students will be expected to produce a series of work based on their research and ideas. These works are based on the topic or topics that the student has investigated. During the course students will be expected to develop ideas attempting a variety of solutions and possibilities. The growth and development of the work should be evident throughout the course.

Assessment

Each student's work and research will be examined according to the research workbook and the final work. The final work will be 40% of the grade with research being 40% of the overall grade. Additionally a Critical Study will make up the remaining 20% of the score. This study develops historical and contemporary artistic research. Higher level students must make relevant connections with their own work. A mock exam will take place at the beginning of Term 2 in Year 2 in both Standard and Higher Level courses.

Course: Visual Arts SL

Course Description

This course is designed to develop a student's artistic sensibility in terms of research, experimentation, and self-discovery. During the two year course of study the student will undertake a substantial visual project that will include a series of work accompanied by a workbook. The student will enrich this exploration through historical and contemporary investigations in various cultures and epochs. Each learner will investigate and develop a comparative study using self-selected historical work. Students will record and document their relevant findings while enhancing a group of works. The assessment will be based on the quality and depth as well as the visual communication of the work.

Topics

The course will cover a variety of aspects relating the growth of the creative learner:

- **Studio production (40%):** Students will develop a group of works based on exploration and experience. Continual experimentation with media, techniques and concepts will be recorded in the workbook. Implementation of experiments will be encouraged during the learner's development.
- **Historical research (20%):** Learners will conduct an ongoing investigation of selected artists, epochs and genres. These findings will be recorded in the workbook. Students will be encouraged to visit museums independently and also with the instructor. Writing, sketching, and recording findings will be documented in the workbook.
- **Cultural and contemporary research:** Students will conduct ongoing investigations of various cultures, contemporary trends and imagery while documenting their findings in the workbook. These developments will be integrated with and responded to in the production of work.
- **Experimentation and preparation portfolio (20%):** Students will be encouraged to explore media of their choice relevant to the selected topic. Experiments are documented in the investigation workbook while discoveries are applied to final work.
- **Final Work:** Student will be expected to produce a series of work based on their research and ideas. These works are based on the topic or topics that the student has investigated. During the course students will be expected to develop ideas attempting a variety of solutions and possibilities. The growth and development of the work should be evident throughout the course.

Assessment

Each student's work and research will be examined according to the research workbook and the final work. The final work will be 40% of the grade with the research and preparation portfolio being 40% of the overall grade. A mock exam will take place at the beginning of Term 2 in Year 2 in both Standard and Higher Level courses.

Course: Computer Science HL*

Course Description

This course will involve solving problems using computers. A full understanding of logical problem solving will be required as well as a detailed knowledge of how computers operate. Students will be guided by problem solving strategies that will be continually reinforced in their coursework. The emphasis will be put on the use of a logical approach and analytical thinking while using a computer to solve problems.

Students are expected to acquire an advanced understanding of computational thinking using the Java programming language as part of the additional course option. The core course focuses on software development, fundamentals of computer systems, and the development of networks, as well as computational thinking, problem-solving and programming. The HL aspect is extended to include advanced data structures and algorithms, computer resource management and the integration and application of control systems.

Higher level syllabus content

HL Core: The topics that will be studied are:

- Topic 1: System fundamentals
- Topic 2: Computer organization
- Topic 3: Networks
- Topic 4: Computational thinking, problem-solving and programming

HL extension: The topics that will be studied are:

- Topic 5: Abstract data structures
- Topic 6: Resource management
- Topic 7: Control

Case study: Additional subject content introduced by the annually issued case study. Students will research the concepts discussed in the case study in detail through project work.

Option: Students will study Option D: Object-oriented programming (OOP). This will cover practical and theoretical concepts of object oriented programming in the Java programming language.

Internal assessment: Practical application of skills through the development of a product and associated documentation. This product will be a working programme developed in the Java programming language.

Group 4 Project: A collaborative activity where students from different Group 4 subjects work together on a scientific or technological topic.

Assessment

Assessment is divided into the following parts:

External assessment is conducted at the end of the second year. It consists of three papers, Paper 1 is worth 40% and Paper 2 is worth 20% of the overall mark and covers

Standard and Higher Level core theory and the OOP option extension. Paper 3 is worth 20% of the final mark and examines the case study aspect of the course.

Internal assessment is an individual piece of work completed during the course. The analysis, design and production of the final programmed solution with accompanying documentation are worth 20% of the final mark.

Course: Computer Science SL*

Course Description

This course will involve solving problems using computers. A full understanding of logical problem solving will be required as a detailed knowledge of how computers operate. Students will be guided by problems solving strategies that will be continually reinforced in their coursework. The emphasis will be put on the use of a logical approach and analytical thinking while using a computer to solve problems.

Students are expected to acquire an advanced understanding of computational thinking using the Java programming language as part of the additional course option. The core course focuses on software development, fundamentals of computer systems, and the development of networks, as well as computational thinking, problem-solving and programming.

Standard Level syllabus content

SL Core: The topics that will be studied are:

- Topic 1: System fundamentals
- Topic 2: Computer organization
- Topic 3: Networks
- Topic 4: Computational thinking, problem-solving and programming

Option: Students will study Option D: Object-oriented programming (OOP). This will cover practical and theoretical concepts of object oriented programming in the Java programming language.

Internal assessment: Practical application of skills through the development of a product and associated documentation. This product will be a working programme developed in the Java programming language.

Group 4 Project: A collaborative activity where students from different Group 4 subjects work together on a scientific or technological topic.

Assessment

Assessment is divided into the following parts:

External assessment is conducted at the end the second year. It consists of two papers, Paper 1 is worth 45% and Paper 2 is worth 25% of the overall mark and covers standard core theory and the OOP option extension.

Internal assessment is an individual piece of work completed during the course. The analysis, design and production of the final programmed solution with accompanying documentation are worth 30% of the final mark.

***Electives:**

In addition to the courses listed in Group 6, students may select any other course offered in the ISF IB programme in accordance with ISF and IBO policies and guidelines.

Diploma Programme Core

In addition to their subjects in Groups 1 to 6, students seeking the full IB Diploma are also required to successfully complete the three elements of the IB Diploma Program Core: CAS, the Extended Essay and Theory of Knowledge.

Creativity, Activity, Service (CAS)

CAS Description

The letters CAS form the acronym commonly used for the DP component “creativity, activity, and service”. It is a non-examined component of the DP which emphasizes experiential learning, designed to involve students in new roles. The emphasis is on learning by doing real tasks that have real consequences.

“CAS: The heart of the IB Diploma put into action” – María Piaggio, member of the CAS review committee

Over the full two-year programme all students must engage in activities outside of the classroom in each of the three components: creativity, activity and service and fulfill the seven learner outcomes involved in the programme. The three CAS components are not mutually exclusive; in fact it is fully within the spirit of CAS if an activity encompasses two or all three components, and the IBO actively encourages this.

“It is an inside vibration, it is how and not how much” – María Piaggio

Students must document their programme in a CAS diary (sometimes called the CAS journal), and hand it in to the CAS coordinator at the end of the diploma course. The primary objective of this document is to make the CAS programme a reflective process, and not merely a record of hours clocked – a very important distinction. Students must understand that CAS is the spirit of the IB diploma. It is about taking risks, exploring, challenging oneself, and personal development, and the diary must contain evidence of this.

“Service is not simply an emotional impulse, it is a demonstration of attitudes and values” – María Piaggio

This process of doing and reflecting on *the doing* provides an excellent opportunity to extend what is learned in the classroom to a form of service, such as applying science (from, for example, Biology or environmental systems) to the environment. It is highly encouraged to connect CAS to all aspects of the IB Programme. Students should discuss how their CAS activities are related to their regular course material, including TOK, and they may choose to link their CAS activities to their Extended Essay.

The Extended Essay (EE)

One of the three core requirements of the IB diploma is the extended essay, which trains the IB candidate to:

- Develop individual research and investigation skills.
- Develop skills of analysis, evaluation and reasoning and to communicate ideas and information logically.
- Develop invaluable skills for university and later life.

The essay is a maximum of 4000 words, in one IB subject of the students' choice. The student chooses a teacher to give guidance. It is meant to take 40 hours of student time.

The Extended Essay is assessed by examiners appointed by the IBO on a scale of 0 to 36. There are "general" and "subject-specific" criteria, at a point ratio of 2:1 (24 possible points for the general criteria and 12 for the subject-specific one).

Course: Theory of Knowledge (TOK)

Course Description

Having accumulated a vast amount of knowledge, beliefs, and opinions from academic studies and life outside the classroom, TOK offers students an opportunity to step back from this relentless academic pursuit in order to consider knowledge questions, such as:

- What counts as knowledge?
- How do I gain knowledge?
- What knowledge do I have?
- How do I use this knowledge?
- What do I really know and what do I only think I know?

At the center of this course is the *Knower*, who has to respond to *Knowledge Questions* concerning *Areas of Knowledge* and *Ways of Knowing*. By the end of this five term course, the student / *Knower* should:

- Have awareness of different perspectives and the ideological and personal assumptions that underlay human knowledge, including one's own.
- Think critically by analyzing causes and limitations of knowledge.
- Develop an appropriate framework and take responsibility for constructing a personal response to different knowledge questions.

Theory of Knowledge activities and discussions aim to help students discover and express their views on knowledge questions. The course encourages students to share ideas with others and to listen to and learn from what others think. In this process students' thinking and their understanding of knowledge as a human construction are shaped, enriched and deepened. Connections may be made between knowledge encountered in different Diploma Programme subjects, in CAS experience or in Extended Essay research; distinctions between different kinds of knowledge may be clarified. Because the subject matter of the course is defined in terms of knowledge questions, there is no end to the valid questions that may arise in a TOK course. There are many different ways to approach TOK.

Aims:

The aims of the TOK course are to:

- Develop a fascination with the richness of knowledge as a human endeavor, and an understanding of the empowerment that follows from reflecting upon it.
- Develop an awareness of how knowledge is constructed, critically examined, evaluated and renewed, by communities and individuals.
- Encourage students to reflect on their experiences as learners, in everyday life and in the Diploma Programme, and to make connections between academic disciplines and between thoughts, feelings and actions.
- Encourage an interest in the diversity of ways of thinking and ways of living of individuals and communities, and an awareness of personal and ideological assumptions, including participants' own.
- Encourage consideration of the responsibilities originating from the relationship between knowledge, the community and the individual as a citizen of the world.

Objectives:

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

- Analyze critically knowledge claims, their underlying assumptions and their implications.
- Generate questions, explanations, conjectures, hypotheses, alternative ideas and possible solutions in response to knowledge questions concerning areas of knowledge, ways of knowing and students' own experience as learners.
- Demonstrate an understanding of different perspectives on knowledge questions.
- Draw links and make effective comparisons between different approaches to knowledge questions that derive from areas of knowledge, ways of knowing, knowledge frameworks, theoretical positions and cultural values.
- Demonstrate an ability to give a personal, self-aware response to a knowledge question.
- Formulate and communicate ideas clearly with due regard for accuracy and academic honesty.

Topics to be covered:

- The problem and nature of knowledge
- Ways of knowing: Language, Sense Perception, Reason, Emotion, Imagination, Faith, Memory, Intuition.
- Areas of knowledge: The Arts, Mathematics, Natural and Human Sciences, Ethics, History, Religious Knowledge Systems, Indigenous Knowledge Systems.

Time:

The course is designed for 100 teaching periods over the two years of the Diploma Programme. While the focus of IB 1 is the introduction of the above topics, IB 2 focuses on the internal and external assessment of the course.

Resources:

Students will be provided with specific materials on topics from their instructor. A selection of Theory of Knowledge course companion books is also available in the school library.

Assessment

In order to complete their official IB TOK requirement, students will need to complete two formal IBO TOK assessments by the end of the course:

External Assessment:

The external assessment is weighted at 67%, and consists of a 1200-1600 word essay, in which students show their TOK thinking skills in the discussion of one of a choice of six IB prescribed titles. This essay is uploaded to the IBO for E-marking.

Internal Assessment:

The internal assessment is weighted at 33% and consists of a presentation to the class, demonstrating an understanding of knowledge at work in the world, in which students should identify and explore the knowledge questions raised by a substantive real-life situation that is of interest to them.

Admission to Universities

The IB diploma is a passport to higher education. Universities around the world welcome the IB Diploma Programme students and recognize the way in which the programme helps to prepare students for university level education.

Requirements for admission to German Universities:

- 4+ required on each exam
- 2 languages (2nd language may not be below language B HL level)
- One science (Biology, Chemistry, Physics)
- Math (Math Studies is NOT accepted)
- One social study (History, Economics, Geography)
- 6th Subject chosen from group 6 (only the combinations offered by ISF)
- Math or Science must be HL
- All final exams in ONE sitting
- No changes in course selections during the programme

German Foreign Language Examinations at ISF

As the leading German foreign language school in the Rhein-Main area, we are constantly looking for new options to offer to our students. During the past few years, we have noticed a significant increase in demand for external foreign language exams on every language level. We would like to point out that our foreign language courses at ISF already provide a solid basis for all external exams at the corresponding level.

As we have experienced and certified teachers on our staff, we are in the fortunate position of being able to prepare students for exams individually, based on the appropriate language level. We currently prepare students for external language exams offered by the Goethe Institute, TestDaF, DSH, and many more.

Below are details on the ISF courses leading to external exams and the corresponding language levels according to the *Common European Framework of Reference for Languages* ("Gemeinsamer Europäischer Referenzrahmen"):

ISF non-IB courses	IB courses offered at ISF	Language Level according to CEFR ¹	Goethe-Institute exam	TestDaF
10-12 German 7 / AP		C2.2	Goethe-Zertifikat C2	
10-12 German 6		C2.1		
9-12 German 5	German B HL	C1.2	Goethe-Zertifikat C1	TestDaF 4/5
8-12 German 4	German B SL	B2	Goethe-Zertifikat B2	TestDaF 3/4
7-12 German 3	German ab initio	A2 / B1	Goethe-Zertifikat B1	

Please contact Dr. Solies (Head of Department for German as a Foreign Language grades 7-12) for more information.

¹ CEFR: Common European Framework of Reference for Languages ("Gemeinsamer Europäischer Referenzrahmen")