Leipzig International School

IB Diploma Programme

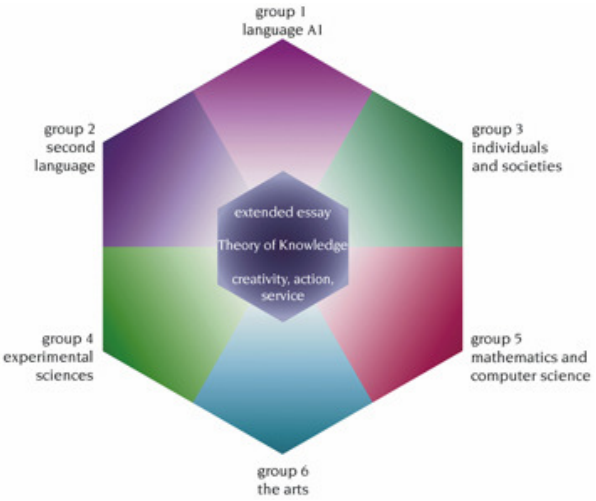
Student Course Booklet

2009-2011

Contents

The Curriculum

The International Baccalaureate Diploma Programme is a rigorous pre-university course of studies leading to examinations set by IBO examiners that meets the needs of **highly motivated** secondary school students in the last two years of their secondary education.



The diploma curriculum is displayed in the shape of a hexagon with six academic areas (subject groupings) surrounding the core. Subjects are studied concurrently and students are exposed to the two great traditions of learning: the humanities and the sciences.

Diploma candidates are required to select **one** subject from each of the six subject groups. **Three** of these subjects are taken at Higher Level (HL) and **three** at Standard Level (SL). By arranging work in this fashion, students are able to explore some subjects in great depth and some more broadly over the **two-year** period for which the programme runs.

Subject distribution requirements ensure that the science-oriented student is challenged to learn a foreign language and that the natural linguist becomes familiar with laboratory procedures. While overall balance is maintained, a degree of flexibility in choosing higher level courses allows the student to pursue areas of personal interest and to meet special requirements for university entrance.

The Diploma Programme

The programme offers the following special features in addition to the traditional strengths of a liberal arts curriculum.

- **Theory of Knowledge (ToK) course**
  This is a required interdisciplinary course intended to stimulate critical reflection upon the knowledge and experience gained inside and outside the classroom. ToK challenges students to question the bases of knowledge, to become aware of subjective and ideological biases, and to develop a coherent approach to learning which transcends and unifies the academic subjects and encourages an appreciation of cultural perspectives.

- **The Extended Essay (EE)**
  Diploma candidates are required to undertake original research and write an extended essay of some 4000 words. This project offers the opportunity to investigate a topic of special interest and acquaints students with the kind of independent research and writing skills expected at university.

- **Creativity, Action and Service (CAS)**
  This is a fundamental and required part of the diploma curriculum. The CAS requirement takes seriously the importance of life outside the world of scholarship, providing a refreshing counterbalance to the academic self-absorption some may feel within a demanding school programme.

Each student's performance is measured against well-defined levels of achievement consistent from one examination session to the next. Top grades are not simply awarded "on a curve" to a certain percentage of candidates but rather reflect attainment of knowledge and skills relative to set standards equally applied to all authorised schools.

Examination Fees

External Examination Fees are charged by the IBO. The fees are not included in the LIS tuition fees. After the final registration deadline in November of Grade 12 candidates will be invoiced.

The following table is a guideline of fees levied by the IBO.

F10 The scale of fees

Scale of fees (1 September 2008 to 31 August 2009)		Currency			
		US$	SFr	UK£	C$
1	**Annual fee (per school)**	9150	11895	5225	10980
2	**Registration fee (per candidate)**				
•	Before the first registration deadline	129	167	73	154
•	Between the first and final registration deadline	173	226	99	208
•	After the final registration deadline	371	482	212	445
The fee for six-month retake candidates is the fee payable before the first registration deadline of 15 November/15 May.					
3	**Subject fee (per candidate)**				
•	Fee for each subject (including theory of knowledge and extended essay when taken as retake subjects) a candidate is registered for	88	114	50	105
4	**Registration amendments (per candidate)**				
The fee is for the addition of a new subject, each amendment to a registration category, subject, level or response language, including theory of knowledge and the extended essay.					
•	Between the first and final registration deadline	28	37	16	34
•	After the final registration deadline	111	145	64	134
5	**Enquiry upon results**				
•	Category 1: per candidate/subject/level	92	120	53	110
•	Category 2: per subject component (photocopies)	66	86	38	79
•	Category 2: per subject component (electronic format when available)	41	53	23	49
•	Category 3: per moderation sample	140	182	80	168
•	Review of a category 1 re-mark	157	204	90	188
6	**Other by-request services**				
•	Legalization of diploma results (per candidate)	101	132	58	122
•	Replacement diploma or certificate (per diploma or certificate)	61	79	35	73
•	Results to universities (per candidate: no charge for first six universities)	13	17	8	15
7	**Appeals (per candidate)**				
•	Fee for an appeal under article 29 of the *General Regulations: Diploma Programme*	209	272	119	251

Subject Choices

At Leipzig International School we currently offer the following IB courses:

Group	Subject choice	
Group 1 – Language A1	English A1 HL English A1 SL German A1 HL German A1 SL	Possible allowance of a self taught Language A1 SL under certain circumstances. English A1 or A2 is compulsory.
Group 2 – Second Language	English A2 HL English A2 SL German A2 HL German A2 SL German B HL German B SL German Ab Initio French B HL French B SL	German Ab Initio only offered to beginners. English B is not offered; students must be competent English speakers to be admitted to the IB programme. If French is chosen in Group 2, a Group 6 choice must be made.
Group 3 – Individuals and Societies	History HL History SL	
Group 4 – Experimental Sciences	Biology HL Biology SL Chemistry HL Chemistry SL Physics HL Physics SL	If Chemistry is chosen in Group 4 a Group 6 choice must be made
Group 5 – Mathematics and Computer Science	Mathematics SL Mathematical Studies SL*	There is no Mathematics HL course.
Group 6 – Arts and Electives	Visual Arts HLA Visual Arts SLA French B HL French B SL Chemistry HL Chemistry SL	

Students who follow A1 and A2 language courses and who successfully complete the Diploma Programme will be awarded a bilingual diploma.

The primary means of communication and instruction and a key to the study of other subject areas is the English language. Taking English A1 or English A2 is compulsory.

Higher level subjects usually receive 6 x 45 minutes per week. Standard level subjects usually receive 4 x 45 minutes per week. In addition the timetable has 2 periods of Theory of Knowledge, 1 period for CAS and 1 period “pastoral time” with the homeroom teacher.

Assessing Student Work

A variety of assessment methods are used to value both the content and process of academic achievement and to take into account different learning styles and cultural patterns. Conventional external examination techniques are chosen from a range of options: oral and written, long and short responses, data-based questions, essays, multiple choice questions. These are complemented by internal assessment of coursework by the teachers responsible for evaluating over a two-year period. Details of the specific assessment requirements for each course can be found under the subject headings.

Award of the Diploma

In the six subject groups, each examined subject is graded on the following scale of 1 (minimum) to 7 (maximum):

7	*Excellent*
6	*Very Good*
5	*Good*
4	*Satisfactory*
3	*Mediocre*
2	*Poor*
1	*Very Poor*

The award of the diploma requires students to meet defined standards and conditions including a minimum total of 24 points and the satisfactory completion of the Extended Essay, Theory of Knowledge course and CAS activities. The maximum score of 45 points includes the maximum of three additional points that can be awarded for the level of performance in the Extended Essay and Theory of Knowledge.

All LIS grade 11 and 12 students are normally engaged in the full diploma programme. Any students who are unable to satisfy all requirements, or who are advised to, or who choose to take examinations in fewer than six subjects, are awarded separate IB Certificates for the examinations completed.

University Admissions and Careers

The IB Diploma is recognised as a university entrance qualification throughout the UK and in many US universities. Since 2004 the IBO has an agreement with the German ministries of education to accept the IB as a foreign qualification. This means that German residents can use their IB diploma gain a *Hochschulzugangsberechtigung* which enables them to apply for study in Germany

We currently have graduates at German, British, US, Dutch and other universities, and here at LIS we offer assistance on how to get into the German, British and US university systems.

The United Kingdom

Admissions are done centrally through UCAS (www.ucas.com) and students have five choices. The IB subject choices are as important as the overall grade. Students thinking of studying medicine MUST opt for Chemistry and another science at Higher Level. Those interested in Business should opt for languages and History at Higher Level and so on. Students should speak to the university admissions officer for more advice. UK universities are also interested in CAS and Extended Essay so it helps to make them relevant to what you want to study.

The United States

Many US universities accept the IB diploma directly as a university entrance qualification but most still require SATs. If you do not have them you will need to sit them sometime in Grade 11 (nearest test centre is the JFK Schule in Berlin). US universities are also interested in particular subjects as well as CAS and Extended Essay. While language tests for non-native speakers are rare for the UK (A1/A2 English is seen as proof enough) some US universities will require proof of English (eg. TOEFL) to accompany their application. Study in the US is expensive: you should not consider applying unless you have the financial means to study there.

Germany

German universities require a Hochschulzugangsberechtigung (HZB) for admission to study and entry into courses is based on a numerus clausus (NC), an average grade. The HZB will only be issued to students with the IB diploma and HL maths or science. The HZB has more stringent pass requirements than the IB Diploma (more information on next page). German nationals must do A1/A2 German and non-natives are required to take a language test.

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The actual application process will take place in Grade 12 but Grade 11 students will be given in-depth introductions to the various university systems. They will also be given careers guidance both in the form of classroom presentations and one-on-one meetings.

Useful Websites

www.ibo.org/country/DE/index.cfm .
www.ucas.com
www.collegeboard.com
www.arbeitsagentur,de
www.zvs.de
www.studienwahl.de

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Additional information on German recognition of the IB Diploma

Resolution of the Conference of Ministers of Education, last amended on 18.11.2004.

1. An IB diploma shall be recognized as valid for university admission if it has been obtained after at least 12 years of full-time education, and if the following requirements are met:

- The group 1 and 2 languages are both studied at the A2 or A1 level.
- The group 3 subject must be History, Geography or Economics.
- The group 4 subject must be Biology, Chemistry or Physics.
- The group 5 subject must be Mathematics SL or HL (not Mathematical Studies).
- The group 6 subject can be any IB subject.
- One of the three Higher Level subjects must be Mathematics, Biology, Chemistry or Physics.
- All subjects must have been taken uninterruptedly for the full duration of the course.
- Candidates must earn a minimum grade of 4 in each of the six subjects. At most one grade 3 can be compensated for by at least a grade 5 in another subject, at the same level or higher. A grade 3 at HL can only be compensated by a grade 5 in another HL subject.
- If German is not one of the languages studied as part of the IB Diploma, command of the German language has to demonstrated otherwise (to be determined at the State level).

2. Failing the conditions under 1 the candidate may still obtain the HZB after passing an additional examination according to the “Rahmenordnung für den Hochschulzugang mit ausländischen Bildungsnachweisen, für die Ausbildung and den Studienkollegs und für die Feststellungsprüfung” (Beschluss der Kultusministerkonferenz vom 15.04.1994 in der jeweils geltenden Fassung).

The HZB may also be granted after successful completion of one year of university study in another country belonging to the European Union.

3. The average grade (important for subjects with limited entry) is determined as follows:

IB total points	*Durchschnittsnote*	*IB total points*	*Durchschnittsnote*
45	1.0	34	2.3
44	1.0	33	2.5
43	1.0	32	2.6
42	1.0	31	2.8
41	1.1	30	3.0
40	1.3	29	3.1
39	1.5	28	3.3
38	1.6	27	3.5
37	1.8	26	3.6
36	2.0	25	3.8
35	2.1	24	4.0

Core Diploma Requirements

Theory of Knowledge

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Extended Essay

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Creativity, Action and Service

Theory of Knowledge

In addition to the six subjects selected, Diploma candidates must also engage in a unique course known as Theory of Knowledge.

Introduction and Aims
Theory of Knowledge is all about examining the peculiar difficulties that we face as knowers in the different areas in which human beings make claims to having something they call "knowledge", and which they distinguish (with all the attendant difficulties!) from other notions such as guesses, hunches, opinions and so on.

ToK is the key element in the educational philosophy of the IBO. Its purpose is to stimulate critical reflection upon the knowledge and experiences acquired both inside and outside the classroom, to evaluate the bases of knowledge and experience, and to develop a personal mode of thought based on critical examination of evidence and argument.

Structure and Content
The course consists of analyses of:

- the knower
- ways of knowing: perception, emotion, reason and language
- areas of knowing: arts, humanities, sciences, mathematics and ethics
- knowledge, belief, opinion and propaganda

Assessment
Presentation – assessed internally by a panel of ToK teachers
Each candidate must make one or more individual and/or small group oral presentation to the class during the course (currently done in February of grade 12), and complete a self-evaluation report. The presentation topic is chosen by the student or small group and should be an integral part of the Theory of Knowledge course.

Essay – assessed externally
Each student must submit for assessment one essay of at least 1200 words, but not exceeding 1600 words. The essay must be on one of the ten titles prescribed by the IBO for the examination session. Essays are assessed against the original title, so students must not modify the title. If essays are submitted that are not on a prescribed title, they will receive no marks.

Student performance in the course is graded using the following IBO scale:

A	Excellent
B	Good
C	Satisfactory
D	Mediocre
E	Elementary

The Extended Essay

Introduction and Aims
Diploma candidates are required to undertake original research and write an essay of some 4000 words. This project offers the opportunity to investigate a topic of special interest and acquaints students with the kind of independent research and writing skills they will require in the worlds of higher education and work.

The subject chosen for the essay does not have to be one of the subjects being studied by the student for the diploma, but it should be a subject about which the student already has an interest or that they think can be relatively easily researched, given the resources to be found in and near the school. In practice it is usually the case that the large majority of subjects chosen are amongst those being studied for the diploma. Such choices are often easier to manage and have beneficial side effects in supporting the student's overall effort in the chosen subject.

Students will each have a teacher acting as supervisor, to ensure that they are remaining "on target" and it is expected that a total of about 40 hours be spent on the essay project. Supervisors are allocated on the basis of approaches from students who have come up with their basic idea. It is not practical for a given teacher to supervise more than a maximum of three extended essays in the same period and so it is occasionally necessary to turn down a student request and ask for an alternative topic to be chosen, in a subject area that still has supervision capacity.

Assessment
The extended essay is externally assessed.

Student performance in the essay is graded using the following IBO scale:

A	Excellent
B	Good
C	Satisfactory
D	Mediocre
E	Elementary

The stages in the development of a final draft of the essay are reached according to the following timetable (more specific deadlines will be published at a later date):

In grade 11:

November	Extended Essay begins
January	Subject and Topic focus decided
March	Research, Bibliography and Preliminary Outline
April/May	Rough draft of essay
June	First draft of essay

In grade 12:

August	Completed draft
December	Final draft

Creativity, Action and Service (CAS)

Introduction and Aims
All IB Diploma Programme candidates (including those who may be following a separate certificates programme) are required to participate in a variety of extra-curricular activities in the areas of Creativity, Action and Service. The aim of the CAS programme is to challenge the individual student, develop self-confidence and a spirit of self-reliance and above all, inspire a sense of responsibility towards the local and international communities.

The three elements of CAS

Creativity
All kinds of arts including music, art, creative writing, drama, photography, etc, designing and carrying out projects.

Action
Physical recreation and sports (both team and individual), service activities requiring a good deal of action and initiative on the part of the student.

Service
Community service (inside and outside the school), environmental and international projects.

Structure and Content
Students are expected to be involved for the equivalent of at least 3 to 4 hours per week over the two years of the Diploma Programme in a balanced range of activities. Some activities may occur within the school's normal schedule.

Students receive guidance in designing their own programme based on individual interests and needs. While there is an emphasis on service, creativity and action should play an equal part in the programme.

For students graduating from 2010 onwards, it is important that they initiated their own project, acted as its team leader and also got involved in global issues.

CAS should involve

- real, purposeful activities
- personal challenge
- thoughtful consideration, such as planning, reviewing process and reporting
- reflection on outcomes and personal learning

All proposed CAS activities need to meet these four criteria

Creativity, Action and Service (CAS)

8 Learning Outcomes

There should be evidence that students have

1. Increased their awareness of their own strengths and areas for growth
2. Undertaken new challenges
3. Planned and initiated activities (initiated by students themselves! Other activities may be initiated by the school)
4. Worked collaboratively with others (e.g. one project involving teamwork
5. Shown perseverance and commitment in their activities
6. Engaged with issues of global importance
7. Considered the ethical implications of their actions
8. Developed new skills

Recommendation
3-4 hours per week
150 hours minimum
Reasonable balance between creativity, action and service

Assessment
There is no actual grading but failure to fulfil the requirements will normally result in the IB Diploma not being awarded.

An evaluation by the activity supervisor and a self-evaluation by the student are required for each activity undertaken. The student's self-evaluation is in the form of comments made in a CAS journal. In addition, comments on progress in CAS are made in the student's school reports issued in grades 11 and 12.

A final reflective essay on the CAS experience must be submitted towards the end of Grade 12.

Comments on the student's CAS commitment, personal growth and development over the two years will be included in references and testimonials.

Theory of Knowledge and the Extended Essay - IB Diploma Bonus Points

The performance of student in both IB Diploma requirements, Theory of Knowledge and the Extended Essay, is determined according to the quality of work, based on the application of the IB assessment criteria. It is described by one of the band descriptors A-E (see below). Using the **two** performance levels and the Diploma Points Matrix (see below), a maximum of **three** Diploma points can be awarded for a student's combined performance.

Band Descriptors

A Work of an **excellent** standard
B Work of a **good** standard
C Work of a **satisfactory** standard
D Work of a **mediocre** standard
E Work of an **elementary** standard

The Diploma Points Matrix

	THEORY OF KNOWLEDGE						
EXTENDED ESSAY		Excellent A	Good B	Satisfactory C	Mediocre D	Elementary E	Not Submitted
	Excellent A	**+3**	**+3**	**+2**	**+2**	**+1 or F***	**N**
	Good B	**+3**	**+2**	**+1**	**+1**	**F**	**N**
	Satisfactory C	**+2**	**+1**	**+1**	**0**	**F**	**N**
	Mediocre D	**+2**	**+1**	**0**	**0**	**F**	**N**
	Elementary E	**+1 or F ***	**F**	**F**	**F**	**F**	**N**
	Not Submitted	**N**	**N**	**N**	**N**	**N**	**N**

F* From 2010 onwards 28 points overall will be required to be eligible for the diploma if a student attains 'E' grade in either the Extended Essay or Theory of Knowledge.

A grade 'A' in one of the requirements earns an extra point even if the other grade is a grade 'E'.

A student who, for example, writes a **satisfactory** Extended Essay and whose performance in Theory of Knowledge is judged to be **good** will be awarded 1 point, while a student who writes a **mediocre** Extended Essay and whose performance in Theory of Knowledge is judged to be **excellent** will be awarded 2 points.

A student who fails to submit an Extended Essay will be awarded N for Extended Essay and/or a student who fails to submit a ToK essay, or who fails to make a TOK presentation, will be awarded N for ToK, will score no bonus points, and will not be awarded an IB Diploma.

Performance in both Theory of Knowledge and the Extended Essay of an **elementary** standard is a failing condition for the award of the Diploma. In this situation a student will receive IB Certificates in the subjects where assessment objectives have been completed and attained.

Group 1
Language A1

English A1 HL

English A1 SL

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German A1 HL

German A1 SL

English A1 and German A1 HL and SL

Introduction
For the majority of LIS students either English or German will be their best language, in that they will have native or near-native command of the language. It is therefore possible for many students to follow A1 and A2 courses in these languages and, if successful, qualify for a bilingual IB Diploma.

Aims
The English and German A1 courses have the same structure and aims. These aims include promotion of appreciation of the wealth and subtleties of the language, facilitation of the clear expression of ideas, aiding precise presentation of argument and assisting in the understanding of oral and written discourse. With these aims in mind, the English and German programmes have been created to reflect the international aspirations of LIS, recognition of the school's host nation and provision of a balance between American, British, German and World Literature.

Structure and Content
A total of fifteen works of literature is studied at HL and eleven at SL.

- Part 1 World Literature
- Part 2 Detailed Study
- Part 3 Groups of Works
- Part 4 School's Free Choice

Assessment

Higher Level		
Part 1	Two written assignments (externally assessed)	20%
Parts 2 and 4	Oral assessment (internally assessed)	30%
Part 3	Paper 1: Unseen written commentary (externally assessed)	25%
	Paper 2: Essay paper (externally assessed)	25%
Standard Level		
Part 1	One written assignment (externally assessed)	20%
Parts 2 and 4	Oral assessment (internally assessed)	30%
Part 3	Paper 1: Unseen written commentary (externally assessed)	25%
	Paper 2: Essay paper (externally assessed)	25%

Group 2
Language
A2, B, ab initio

English A2 HL

English A2 SL

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German A2 HL

German A2 SL

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German B HL

German B SL

****

German ab initio SL

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French B HL

French B SL

English A2 and German A2 HL and SL

Introduction
The Language A2 courses are designed for students with a high level of competence in the target language. Such bilingual students are often capable of studying both their languages as language A1, but do not always wish to study two languages A1. The programme is based on the study of both literature and language.

Aims
The A2 courses aim to develop a variety of linguistic skills through the study of a wide range of texts, to promote an appreciation of the wealth and subtleties of the language and to facilitate the clear expression of ideas. The courses help high competence students to deepen their cultural understanding and the relationships between the student's languages.

Structure and Content
For both English A2 and German A2 the language syllabus consists of the study of four options in the Higher Level course and three options in the Standard Level course. The options are divided into two groups, Part 1 Topic Options and Part 2 Literary Text Options. Each literary option involves the study of three works. At both Higher and Standard Levels, at least one option must be taken from Part 1 and at least one from Part 2.

English A2
Two Topic Options (Media and Society; Language and Culture) and two Literary Options are studied at Higher Level. At Standard Level, two Topic Options (Media and Society; Language and Culture) and two Literary Options are studied. HL and SL are six periods per week.

German A2
Either one Topic Option (Sprache und Kultur) and three Literary Options or two Topic Options and two Literary Options are studied at Higher Level. At Standard Level, one Topic Option (Sprache und Kultur) and two Literary Options are studied. The literary works and topics are chosen according to the students' interests and strengths at the beginning of the school-year.

Assessment - HL and SL

Paper 1	Comparative commentary (externally assessed)	25%
Paper 2	Essay (externally assessed)	25%
Two written assignments	1500 words in total (externally assessed)	20%
Oral	HL and SL four activities (3 internally assessed and 1 externally assessed)	30%

German B HL and SL

Introduction
Whilst living in Germany, non-German students are presented with an ideal opportunity to learn the language. The social, academic and linguistic skills they develop during the course not only make their stay in Germany a more rewarding and pleasurable experience but are also of greater value after leaving school.

Aims
The language B course is a foreign language learning programme designed for study by students with previous experience of learning the language. The main focus of the programme is on language acquisition and development to prepare the learner to use the language appropriately in a range of situations and contexts and for a variety of purposes. At the end of the course German B-students should have reached the level C1 of the Common European Framework of Reference for Languages (CEFR) and will be well prepared to take part in German university admission tests (TestDaF/DSH) if they like.

Structure and Content
The course is based around three key aspects:

- Acquisition and development of general language (materials: “em neu – Hauptkurs”, “em neu –Aufbaukurs”), moving from level B1/B2 to C1
- Literature and Film: working creatively with authentic literary texts (plays, short stories, narratives etc.), intercultural training on the basis of German films
- Academic language use (academic types of texts, learning/reading/writing strategies, language production: presentations, describing graphs and statistics, debating etc.)

Assessment

Paper 1	Text-handling exercises based on a number of written texts (externally assessed)	40%
Paper 2	One writing task from a choice of titles (externally assessed)	30%
Oral component	This component consists of four activities:	
	Three interactive orals (internally assessed)	15%
	One individual oral (externally assessed)	15%

German ab initio SL

Introduction
The ab initio course is a foreign language programme designed for study over two years by students who have no previous experience of learning the target language.

Aims
The aims are to develop students' ability to communicate in speech and in writing in order to enable them to deal adequately with familiar and practical needs and to provide them with a foundation for further study of the target language. At the end of the course German AB-students should have reached the level B1 of the Common European Framework of Reference for Languages (CEFR).

Structure and Content
We are working basically with the challenging GSL-books "Begegnungen A1+", "Begegnungen A2+" and "Begegnungen B1+", but also with easy readers and authentic literary texts.

Assessment

Paper 1	Text-handling (externally assessed)	40%
Paper 2	Writing task (externally assessed)	30%
Oral component	This component consists of four activities:	
	Three interactive orals (internally assessed)	15%
	One individual oral (externally assessed)	15%

French B SL and HL

Introduction and Aims
The study of French comprises three objectives: social, academic and cultural. Students should be able to express their feelings, views and opinions on general issues, both orally and in written form.

Students should demonstrate accuracy and variety whilst understanding and responding appropriately to the spoken and written language.

Students should demonstrate an awareness and appreciation of the perspectives of people from French-speaking countries and understand how language embodies these differences.

The aim is to gain a critical approach through the study of a variety of texts.

Structure and Content
The following themes will be studied:

Grade 11	Grade 12
Youth	The Arts
Relationships	The Media
Education	Equal Opportunities
Social Issues	War
Tourism and Travel	Beliefs

Assessment

Paper 1	Text-handling exercises (externally assessed)	40%
Paper 2	Writing task (externally assessed)	30%
Oral component	Three interactive activities (internally assessed)	15%
	Individual Oral Presentation (externally assessed)	15%

Higher Level Only in addition to the above

At the end of the language B course **higher level** candidates are expected to demonstrate ability to;

- Communicate clearly in a **wide range** of situation
- Select a register and style that are appropriate to the situation
- Understand and **analyse moderately complex** written and spoken material
- Assess subtleties of the language in a **wide** range of forms, styles and registers.

The two extra hours per week will be spent studying literature.

Group 3 Individuals and Societies

History HL

History SL

History HL and SL

Introduction and Aims
History is concerned with individuals and societies in the widest possible context – political, social, economic, religious, technological and cultural. It is concerned with trends, developments and continuity and change.

The content of the course has been selected to enable the students to gain an understanding of the key happenings, trends and developments of the 20th century world. By making use of diverse sources, methods and interpretations, we hope that they will additionally gain an appreciation of, and a lasting interest in History.

Students studying History at IB Diploma level will learn how to offer a rational argument, make critical judgements, and write clearly. In other words, write a good essay, detect bias and omissions, and be able to appreciate more than one side to any question. The historian's skills of research, interpretation and communication are highly valued by employers, making history a course of study that is valuable to all.

Structure and Content Syllabus Component: Route Two
Standard Level

1. **The Arab – Israeli Conflict** 1945-75 (HL and SL) Paper 1
2. **Origin and Development of Authoritarian and Single Party States** (HL and SL) Stalin, Hitler, Castro/ Mao. Paper 2
3. **The Cold War :** Germany, Korea, Cuba, Vietnam and the Middle East/ (HL and SL) Paper

Higher Level Only in addition to the above

4. **Aspects of the History of the Americas** (HL) 2009-2011 USA 1880- 1929, The Mexican revolution, USA 1945-81, Civil Rights and Social movements (with BH) Paper 3
5. **Aspects of the History of Europe and the Middle East** (HL) 2008-10 War and Change in the Middle East, 1914-49, Interwar years, Post war developments in the Middle East, 1945-2000 (with JS) Paper 3

The Internal assessment

The Internal assessment is a Historical Investigation of 1,500-2000 words on a topic of the student's choice and is submitted by both Standard Level and Higher level students.

Assessment

Internal 20% HL: 25 % SL

- Work produced throughout the two year programme is assessed using the I.B. grading scale.
- The Internal Assessment is marked by teachers and moderated by the IBO

External 80% HL: 75% SL

- Examinations

Component		HL	SL
Internal Assessment	Historical Investigation	20%	25 %
Paper 1	Document based	20%	30%
Paper 2	Essay	25%	45%
Paper 3	Essay	35%	-

Group 4 Experimental Sciences

Biology HL and SL

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Chemistry HL and SL

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Physics HL and SL

Biology HL and SL

Introduction and Aims
Biology is one of the fastest changing sciences today, with, for example, new techniques being developed in the area of genetic engineering which challenge students' ethical standpoints and which encourage them to take an analytical viewpoint of the information with which they are provided. The study of Biology also provides links to other subjects such as the other sciences, mathematics and history. Students are advised to think carefully and seek advice before choosing Biology on the mistaken premise that it represents an "easy option". Each of the experimental sciences courses provide the student with a real challenge with Biology containing a demanding element of statistical analysis and in general requiring a good level of expression in written English.

Structure and Content
Both the HL and SL courses contain the list of topics referred to as the Subject Specific Core (SSC). The HL course includes in addition to the SSC, the Additional Higher Level (AHL) topics.

Subject Specific Core Topics (HL and SL)
1. Statistical analysis
2. Cells
3. The chemistry of life
4. Genetics
5. Ecology and evolution
6. Human health and physiology

Additional Higher Level Topics (HL only)
7. Nucleic acids and proteins
8. Cell respiration and photosynthesis
9. Plant science
10. Genetics
11. Human health and physiology

Both the HL and SL courses include the study of Option Topics.
The list of possible options is as follows:

SL only Options
A Human Nutrition and health
B Physiology of exercise
C Cells and energy

SL and HL Options
D Evolution
E Neurobiology and behaviour
F Microbes and biotechnology
G Ecology and conservation

HL only Option
H Further human physiology

SL candidates are required to study **two options from A-G.**
HL candidates are required to study **two options from D-H.**

In addition, HL and SL students are required to carry out Practical Investigations in all topic areas and in the chosen Options. A special requirement is participation of Biology, Chemistry and Physics students in the collaborative learning **Group 4 project**.

Assessment		**HL**	**SL**
Paper 1	Multiple Choice Questions (externally assessed)	20%	20%
Paper 2	Short-answer and extended response questions (externally assessed)	36%	32%
Paper 3	Options (externally assessed)	20%	24%
Experimental Investigations and Group 4 Project (internally assessed)		24%	24%

Chemistry HL and SL

Introduction and Aims
"Chemistry is the central science. Chemical principles underpin the physical environment in which we live, and all biological systems" (IBO Chemistry Subject guide). The study of chemistry is therefore important in its own right as well in aiding the understanding of other sciences. For students who do not intend to pursue the study of chemistry beyond secondary school, it provides valuable training in lateral thinking and it is an academic discipline in which theory and practical investigation closely support each other.

Structure and Content
Both the HL and SL courses contain the list of topics referred to as the Subject Specific Core (SSC). The HL course includes in addition to the SSC, the Additional Higher Level (AHL) topics.

Subject Specific Core Topics (HL and SL)

1. Quantitative Chemistry
2. Atomic Structure
3. Periodicity
4. Bonding
5. Energetics
6. Kinetics
7. Equilibrium
8. Acids and Bases
9. Oxidation and Reduction
10. Organic Chemistry
11. Measurement and Data Processing

Additional Higher Level Topics (HL only)

12. Atomic Structure
13. Periodicity
14. Bonding
15. Energetics
16. Kinetics
17. Equilibrium
18. Acids and Bases
19. Oxidation and Reduction
20. Organic Chemistry

Both the HL and SL courses include the study of Option Topics. The list of possible options is as follows:

SL and HL Options

A Modern analytical chemistry
B Human biochemistry
C Chemistry in industry and technology
D Medicines and drugs
E Environmental chemistry
F Food chemistry
G Further organic chemistry

SL candidates are required to study **two options from A-G. Duration of each option is 15 hours**
HL candidates are required to study **two options from A-G. Duration of each option is 22 hours**

In addition, HL and SL students are required to carry out Practical Investigations in all topic areas and in the chosen Options. A special requirement is participation of Biology, Chemistry and Physics students in the collaborative learning **Group 4 project**.

Assessment	**HL**	**SL**
Paper 1 Multiple Choice Questions (externally assessed)	20%	20%
Paper 2 Short-answer and extended response questions (externally assessed)	36%	32%
Paper 3 Options (externally assessed)	20%	24%
Experimental Investigations and Group 4 Project (internally assessed)	24%	24%

Physics HL and SL

Introduction and Aims

In common with other Group 4 courses, in studying physics you are given the opportunity to develop your scientific knowledge and understanding of concepts, principles and physical phenomena as well as you scientific skills associated with both conceptual and practical experimental investigation. Emphasis is also placed on increasing your awareness of the limitations of physics, its impacts on societies (past, present and future) and the responsibilities of practising physicists.

During the course you should become more aware of how physicists work and communicate with each other. You will come to know and understand more about technological applications of physics. You will see how theory and experiments complement one another. The higher level course provides a suitable preparation for higher education studies in physics and physics-related courses and for professional courses that require students to have knowledge of physics when admitted. The standard level course also greatly helps to prepare you for a wide range of other career paths in which knowledge of physics, as such, is not essential.

Structure and Content

Both the HL and SL courses contain the list of topics referred to as the Subject Specific Core (SSC). The HL course includes in addition to the SSC, the Additional Higher Level (AHL) topics.

SL and HL combined	**Teaching hours**
Topic 1: Physics and physical measurement	5
Topic 2: Mechanics	17
Topic 3: Thermal physics	7
Topic 4: Oscillations and waves	10
Topic 5: Electric currents	7
Topic 6: Fields and forces	7
Topic 7: Atomic and nuclear physics	9
Topic 8: Energy, power and climate change	18
Topic 11: Wave phenomena (SL option)	15
Topic 13: Quantum physics and nuclear physics (SL option)	15
Internal Assessment plus Group 4 Project	40
SL total	**150**
HL only	
Topic 9: Motion in fields	8
Topic 10: Thermal physics	6
Topic 12: Electromagnetic induction	6
Topic 14: Digital technology	8
Option E: Astrophysics	22
Option J: Particle physics	22
Additional HL Internal Assessment	18
Subtotal additional HL material	90
HL total	**240**

HL and SL students are required to carry out Practical Investigations in all topic areas and in the chosen Options. A special requirement is participation of Biology, Chemistry and Physics students in the collaborative learning **Group 4 project**.

Assessment	**HL**	**SL**
Paper 1 Multiple Choice Questions (externally assessed)	20%	20%
Paper 2 Short-answer and extended response questions (externally assessed)	36%	32%
Paper 3 Options (externally assessed)	20%	24%
Experimental Investigations and Group 4 Project (internally assessed)	24%	24%

Group 5 Mathematics and Computer Science

Mathematics SL

Mathematical Studies SL

Mathematics SL

Introduction and Aims

The nature of mathematics can be summarised in a number of different ways; for example, as a well-defined body of knowledge, an abstract system of ideas or as a useful tool. For many people it is probably a combination of these, but there is no doubt that mathematical knowledge provides an important key in understanding the world in which we live.

The IBO provides three mathematics courses, two Standard Level courses and a Higher Level course. The SL course offered gives students the opportunity to further develop their mathematical skills, knowledge and understanding without requiring the depth of study demanded by the HL course. It also allows students who plan to use mathematics in their further studies to meet the basic requirements for entry into such courses in a wide variety of college and university systems.

Structure and Content

The course is structured to focus on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way, rather than insisting on mathematical rigour.

Students embarking on the course are expected to already possess knowledge of basic concepts and to be equipped with the skills needed to apply simple mathematical techniques correctly. A broad range of core topics is covered:

Number and Algebra
Functions and Equations
Circular Functions and Trigonometry
Matrices and Vector Geometry
Statistics and Probability
Calculus (Differentiation and Integration)

Assessment

Paper 1	Non-calculator Paper: Short and extended-response questions on whole syllabus (externally assessed)	40%
Paper 2	Calculator-based Paper: Short and extended-response questions on whole syllabus (externally assessed)	40%
Portfolio	Two pieces of work based on different areas of the course, representing the activities of mathematical investigation, and mathematical modelling. (internally assessed)	20%

Mathematical Studies SL

This course is available at standard level (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.

The course concentrates on mathematics that can be applied to contexts related as far as possible to other subjects being studied, to common real-world occurrences and to topics that relate to home, work and leisure situations. The course includes project work, a feature unique within this group of courses: students must produce a project, a piece of written work based on personal research, guided and supervised by the teacher. The project provides an opportunity for students to carry out a mathematical investigation in the context of another course being studied, a hobby or interest of their choice using skills learned before and during the course. This process allows students to ask their own questions about mathematics and to take responsibility for a part of their own course of studies in mathematics.

The students most likely to select this course are those whose main interests lie outside the field of mathematics, and for many students this course will be their final experience of being taught formal mathematics. All parts of the syllabus have therefore been carefully selected to ensure that an approach starting with first principles can be used. As a consequence, students can use their own remembered formulae. Students likely to need mathematics for the achievement of further qualifications should be advised to consider an alternative mathematics course.

Syllabus Outline

Topic 1—Introduction to the graphic display calculator 3 hrs
Topic 2—Number and algebra 14 hrs
Topic 3—Sets, logic and probability 20 hrs
Topic 4—Functions 24 hrs
Topic 5—Geometry and trigonometry 20 hrs
Topic 6—Statistics 24 hrs
Topic 7—Introductory differential calculus 15 hrs
Topic 8—Financial mathematics

External assessment

Paper 1 40%
15 compulsory short-response questions based on the whole syllabus

Paper 2 40%
5 compulsory extended-response questions based on the whole syllabus

Internal assessment 20%
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.

Group 6
Arts and Electives

Visual Arts HL and SL

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French B HL and SL (see Group 2)

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Chemistry HL and SL (see Group 4)

Visual Arts HLA and SLA

Introduction and Aims
The aims of the Visual arts course at HLA and SLA are to enable students to:

- Investigate past, present and emerging forms of visual arts and engage in producing, appreciating and evaluating these.
- develop an understanding of visual arts from a local, national and international perspective.
- build confidence in responding visually and creatively to personal and cultural experiences.
- develop skills in, and sensitivity to, the creation of works that reflect active and individual involvement.
- take responsibility for the direction of their learning through the acquisition of effective working practices.

Structure and Content
LIS offers two IB courses. They are Visual Arts Standard Level: Option A and Visual Arts Higher Level: Option A. Option A is designed for students who wish to concentrate on studio practice in visual arts. Students will produce investigation workbooks to support, inform, develop and refine studio work through sustained contextual, visual and critical investigation.

At both HLA and SLA, the investigation workbooks are integral to studio practice and should reflect the student's critical **visual and written** investigation.

Except for time requirements and level of expectations, the two courses are the same. SLA and HLA students meet together for two double lessons per week. HL students meet for an additional double lesson each week.

Studio Work is devoted to practical exploration and artistic production. The student is expected to create high quality, mature works of art with imagination and creativity through individual and, where appropriate, collaborative work. Students should develop a theme that is explored in order to produce a strong body of work.

The Investigation Workbooks will contain visual and written independent critical research and analysis in more than one culture. They are journals that should display a personal approach. They are not sketchbooks or scrapbooks. They must emphasise the relationship between artistic production and research strategies in order to complement the studio work.

The IB Visual Arts syllabus does not have units or modules to construct a course of study, but instead provides a framework that allows a course to be created which suits the cultural and personal needs of the student, and which takes advantage of the local surroundings and culture.

Assessment
The examination, in Spring of Grade 12, involves the assessment of the Studio Work and the Investigation Workbooks.

Assessment of Studio Work

External assessment: an Art Exhibition and a 30 minute interview	60%

Assessment of Investigation Workbooks

Internal assessment of the Investigation Workbooks	40%