



东北师范大学附属中学

HIGH SCHOOL ATTACHED TO
NORTHEAST NORMAL UNIVERSITY



International Baccalaureate®
Baccalauréat International
Bachillerato Internacional

Diploma Programme

IBDP Guide

Congratulations!

You are about to embark on a journey. By selecting to 'travel' with the High School Attached to Northeast Normal University (HSANNU) in its International Division you will be going 'first class' on the International Baccalaureate Diploma Program.

Who are the IBO and what is the IBDP?

The International Baccalaureate Organisation (IBO) is an independent body which started life in 1968. It is a non-profit educational foundation motivated by its mission, focused on the student.

IBO MISSION STATEMENT

"The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

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

At the heart of its work the IBO runs four educational programmes which are being delivered to over a million students worldwide! The IBDP is the International Baccalaureate Diploma Programme. It is designed for 16-19 year-olds.

The Diploma Programme is its university entrance programme course. It is a rigorous and demanding course. It is currently being delivered in over 140 countries worldwide (and this is still growing) within approaching 2500 schools. It is widely recognised and highly respected by employers and universities around the world.

But the IBDP is not just a set of examinations, it is a course of study built around an educational philosophy. It is designed to develop you as a person not just your academic skills. In this way it prepares you for your university study and for life as a valued member of society. I hope that you will see study of the IBDP as a series of opportunities.

Beyond the subject specific syllabi, the IBDP aims to develop you as learners and as people. To this end it has developed a 'Learner Profile' - a set of attributes or characteristics of the type of learner which the programmes hope to develop. They underpin the programme. It is what our students (and their teachers!) should strive for! It is reproduced on the next page.

I firmly believe that IBDP really stands for *Infinitely Better Developed Person!*

I know that many universities and employers recognise this too!

The IB learner profile



The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.

As IB learners we strive to be:

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

Knowledgeable We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

Thinkers We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

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

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

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

Caring We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us. They show empathy, compassion and respect towards the needs and feelings of others. They have a personal commitment to service, and act to make a positive difference to the lives of others and to the environment.

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

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

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

Reproduced from The IB Learner Profile Guide

<http://www.ibo.org/programmes/profile/documents/Learnerprofileguide.pdf>

What does the IBDP consist of?

The IBDP is a broad course which is built The IBDP encourages diversity. The diagram below reflects the basis of the programme and the six broad subject areas.



You must study a subject from each of the six areas or 'groups' (although the final subject may be an additional option from Individuals and Societies or the Sciences as an alternative to one from the Arts). Three of these must be at Higher Level (HL) and three at Standard Level (SL).*

Group 1	Studies in Language and Literature
Group 2	Language Acquisition
Group 3	Individuals and Societies
Group 4	Sciences
Group 5	Mathematics
Group 6	The Arts

HL courses consist of 240 hours of directed study. They are delivered in 6 forty minute periods per week. SL courses consist of 150 hours of directed study. They are delivered in 4 forty minute periods per week. (Some of our courses may be offered in combined SL/HL classes as this allows us to offer a more diverse programme. This is not unusual in smaller schools or for less popular subject choices.)

* Exceptional candidates may be allowed to study 4 HL classes, though this is not generally encouraged as it can compromise the number of points achieved by candidates

All IBDP candidates are required to study a core programme made up of a course in Theory of Knowledge (TOK), an independent research project called the Extended Essay (EE), and a programme of Creativity, Action and Service (CAS).

Theory of Knowledge (TOK).

This component, assessed by an essay and presentations, offers you and you teachers the opportunity to:

- reflect critically on diverse ways of knowing and on areas of knowledge
- consider the role and nature of knowledge in diverse cultures across the wider world.

In addition, it prompts you to:

- be aware of yourselves as thinkers, encouraging your awareness of the complexity of knowledge
- recognize the need to act responsibly in an increasingly interconnected but uncertain world.

Extended Essay

The extended essay offers the opportunity for you to investigate, under the guidance of a supervisor, a topic of special interest (usually one of your six DP subjects), and allows you to develop and demonstrate the independent research and writing skills expected at university. It is intended to promote high-level research and writing skills, intellectual discovery and creativity.

Creativity, Action, Service (CAS)

The IB CAS guide rightly describes the programme as '*a personal journey of self-discovery*'. We hope that your CAS activity will make you a more rounded person and help you develop new skills and interests. These will help define you as a person and contribute to making you more 'marketable' to universities and employers. Your CAS experiences can generate great purpose and provide a focus for university application to help you 'stand out from the crowd'.

How is the IBDP scored?

The IB Diploma is awarded based on a points tally. Each of your six subject choices, whether at Standard Level or Higher Level, is assessed on a 1 to 7 scale (with 1 lowest). Each has a set of level descriptors directly related to the course aims, and linked to the generic set of descriptors below:

GRADE	SUMMARY	DESCRIPTOR
Grade 1	Very Poor	Minimal achievement in terms of the objectives.
Grade 2	Poor	Very limited achievement against all the objectives. The student has difficulty in understanding the required knowledge and skills and is unable to apply them fully in normal situations, even with support .
Grade 3	Mediocre	Limited achievement against most of the objectives, or clear difficulties in some areas. The student demonstrates a limited understanding of the required knowledge and skills and is only able to apply them fully in normal situations with support .
Grade 4	Satisfactory	A good general understanding of the required knowledge and skills, and the ability to apply them effectively in normal situations. There is occasional evidence of the skills of analysis, synthesis and evaluation.
Grade 5	Good	A consistent and thorough understanding of the required knowledge and skills, and the ability to apply them in a variety of situations. The student generally shows evidence of analysis, synthesis and evaluation where appropriate and occasionally demonstrates originality and insight.
Grade 6	Very Good	A consistent and thorough understanding of the required knowledge and skills, and the ability to apply them in a wide variety of situations. Consistent evidence of analysis, synthesis and evaluation is shown where appropriate. The student generally demonstrates originality and insight.
Grade 7	Excellent	A consistent and thorough understanding of the required knowledge and skills, and the ability to apply them almost faultlessly in a wide variety of situations. Consistent evidence of analysis, synthesis and evaluation is shown where appropriate. The student consistently demonstrates originality and insight and always produces work of high quality .

Furthermore, a grade of N signifies failure to meet the requirements of the subjects Internal Assessment including work rejected as a result of Academic Misconduct.

In addition, the Extended Essay and Theory of Knowledge components (each assessed on an A to E scale) combine to contribute up to 3 additional points (see table below).

ToK/EE	A	B	C	D	E
A	3	3	2	2	Failing condition
B	3	2	2	1	
C	2	2	1	0	
D	2	1	0	0	
E	Failing condition				

Thus a maximum of 45 points is available. Candidates must achieve a minimum of 24 points to pass the Diploma (though a further set of conditions also apply - see next page for details). Candidates studying at HSANNU will additionally be eligible for the Bilingual Diploma as they will have studied in a language outside their mother tongue.

What do I need to achieve in order to pass my diploma?

It's complicated but basically you need to achieve 24 points or more, plus satisfy the CAS requirements.

With effect from May 2015, there are revised failure codes as follows

1. CAS requirements have not been met.
2. Candidate's total points are fewer than 24.
3. An N has been given for theory of knowledge, extended essay or for a contributing subject.
4. A grade E has been awarded for one or both of theory of knowledge and the extended essay.
5. There is a grade 1 awarded in a subject/level.
6. Grade 2 has been awarded three or more times (HL or SL).
7. Grade 3 or below has been awarded four or more times (HL or SL).
8. Candidate has gained fewer than 12 points on HL subjects (for candidates who register for four HL subjects, the three highest grades count).
9. Candidate has gained fewer than 9 points on SL subjects (candidates who register for two SL subjects must gain at least 5 points at SL).

What is a good score on the IBDP?

Whilst figures vary from year to year and from subject to subject, the following set of data (May 2014) gives an accurate indication of the proportion of candidates achieving each grade in a given subject:

Grade	1	2	3	4	5	6	7
% of candidates	<1	5	12	24	29	21	7

Cumulative scores for the full Diploma range from below 24 (failure) to 45 and are distributed as below:

Total score	<24	24-26	27-29	30-32	33-35	36-38	39-41	42-45
Within band	15	4	18	18	15	11	6	3
Cumulative	15	30	47	65	80	91	97	100
At or above	/	85	71	53	35	20	9	3

Note: Although 85% of candidates achieved 24 or more points, only 79% of candidates passed their IB Diploma (see full regulations on preceding page).

What are the requirements for College or University entry?

These will vary significantly dependent upon the country and the institution. Some institutions will require the full IB Diploma whilst others may be satisfied just by certain subject scores.

In the U.S.A. most offers for college places will be based on your performance to date in your courses and will be unconditional (i.e. no formal requirements of the number of points scored in your IB Diploma) but is dependent upon you continuing to produce similar results. However in the U.K. you will be given a conditional offer with a minimum points total and possibly further conditions on your individual subject scores. The more prestigious the university and course, the higher the requirements will be.

You counsellor will be able to give you a more accurate indication related to the courses and universities you plan to apply to.

MAKING YOUR CHOICES

Read the information carefully. You are making important choices that can affect your future. Once you have started your studies, it will be damaging to try to change. Once you are underway with your studies, we discourage change of courses and levels and we will only sanction changes if they are deemed both necessary and unavoidable.

This year, we will be inviting those who want to make changes to contribute to the CAS charity fund. The first person to change course will be asked for a donation of 1RMB, the second person 2RMB, the third person 4RMB and so on....

Entry to the IBDP requires you to have demonstrated the necessary background knowledge and skills in order to effectively manage the programme successfully. As it will be delivered and studied in English (as part of a bilingual diploma), the ability to cope with this is our first requirement. You will need to cope with learning in this environment from day 1. In addition, you will need to have good IGCSE grades which will demonstrate a strong background for further study in your chosen course.

What should influence your subject choices?

YOUR FUTURE: Although the IBDP maintains breadth of study through the hexagon, you must still keep an eye on where you want to go. Good subject choices will keep your options for later study open, but bad ones will close doors! Your future career aspirations may require certain subjects or combinations of subjects. Likewise, many university courses will require evidence of suitable prior study and skills. Different countries may have different perspectives on suitable prior study. Guidance Counsellors can advise you on what you may require. Needless to say, if you apply for an Engineering degree, for example, most universities will expect you to have studied Mathematics at HL. Whilst some universities may not require prior study of Economics for a course in Business, having studied it demonstrates your interest in this area and could be beneficial.

YOUR INTERESTS: Study is always easier when you enjoy your classes! There should always be room in your studies for subjects taken for intrinsic pleasure rather than just because they are useful. Whilst CAS aims to foster this wider interest and development, it should not stop there. If you want to be an economist, you need to study economics! However why should this stop you studying geography if you have a passion for it? Art might not directly help get you into medical school but why shouldn't it contribute to your IBDP? Demonstrating passion for a subject and for learning in general through diverse subject choices will clearly help your application for a university place.

YOUR ABILITIES: Clearly one aim of your studies is to get you into a university of your choice. The application process is competitive. Good qualifications will help you to get there. For the IBDP this means points! More points (in combination with suitable subject choices) will give you access to better universities and better courses. So it makes sense that studying subjects which you have a natural ability in will help you to achieve these goals.

Who should NOT influence your subject choices?

YOUR PARENTS: We aspire to develop you as independent individuals. You must make your own choices in life. Do not be constrained by what your parents might see as your life path.

YOUR FRIENDS: We aspire to develop you as independent individuals. What is right for others may not be right for you. You are sure to be spending some time in classes with your friends

YOUR TEACHERS: Subject choices remain, but teachers come and go. There is no guarantee that the teacher you have now will be taking the class that you opt for. Rational decisions are based on personal engagement with the course content.

Why study Chinese?

IB 中文 A_文学课程是为了满足那些打算在大学里继续学习文学或做相关研究的学生，以及那些在学完了该课程之后，将不继续正规学习文学的学生的需求而设立的，从根本上说，它是一门大学预科性质的文学课程。

What can you do after studying Chinese?

需要扩充阅读量，除了课程所选择的作品外，还需选择中国现当代小小说、散文、诗歌来阅读赏析，多看一些评论性文字，提升自己的书面和口头评论能力以及论文写作水平。

What will you cover in the IB courses?

模块	内容	课时 HL 6 课时/周/班 SL 4 课时/周/班
1、翻译作品	HL3 部，SL2 部。 课堂讨论、交流，撰写反思，确定论题，完成论文初稿。	40-45 课时
2、精读作品	HL3 部，SL2 部。 围绕问题展开讨论、辩论，从而加深对作品主题、艺术手法、创作风格等问题的理解。同时配合口头评论和讨论的训练，明确该部分评估要求和重点。	40-50 课时
3、同体裁作品	HL4 部，SL3 部。 围绕问题展开讨论、辩论，对几部作品进行比较分析，从而加深对作品主题、艺术手法、创作风格等问题共性和差异的理解。配合 Paper2 论文的训练。	50 课时
4、自选作品	HL3 部，SL3 部。 围绕问题展开讨论、辩论或改编作品，表演舞台剧等，同时配合训练口头表达，明确该部分评估的要求和重点。	40 课时

What prior performance is recommended?

对文学感兴趣，擅长分析品评作品，语言表达能力强，写作基础扎实。

How is the course assessed?**校内评估:**

口头表达 SL: 10-15mins15% HL: 10-15mins15%

口头评论 SL: 10mins15% HL: 20mins15%

校外评估:

试卷 1 SL: 1 ½ hours 20% HL: 2 hours 20%

试卷 2 SL: 1 ½ hours 25% HL: 2 hours 25%

书面作业反思陈述 360-480 字，书面作业 1440-1800 字；SL: 25% HL: 25%

HL 与 SL 区别: HL 作品数量 13 部，SL 作品数量 10 部；HL 评分标准稍严格；难易程度上没有本质区别。

注: SL 高一高二两年完成课程，于 2016 年 5 月参加测试；HL 三年完成。

Who should you see for more information?

李囡囡、朱欣、邱宇强

Why study English Language B?

English Language B is designed to give you the necessary skills and intercultural understanding to help you communicate successfully in an environment where English is studied and spoken. This helps you go beyond the classroom, expand your awareness of the world, and foster respect for cultural diversity. The language course also focuses on the study of the language, literature and cultures of the world. The course gives you the chance to reach a high degree of competence in an additional language while exploring the culture(s) where that language is spoken. The course aims to develop your linguistic competence and intercultural understanding. There is a common syllabus at SL and HL (plus a literature component on the HL course). The difference between levels is determined by the assessment objectives, the depth and breadth of syllabus coverage, the assessment details, the assessment criteria, and literature coverage.

What can you do after studying English?

The most obvious achievement that can be made is being able to attend university in an international environment; however, the ability to communicate with human beings in over 75 countries in the world today is also a positive.

What will you cover in the IB courses?

The core – with topics common to both levels – is divided into three areas and is a required area of study.

* Communication & media * Global issues * Social relationships

In addition, at both SL and HL, teachers select two from the following five options.

* Cultural diversity * Customs and traditions * Health

* Leisure * Science & Technology

Also, at HL, students read at least two works of literature.

How is the course assessed?

There are six assessment objectives for the language B course. You will be assessed on your ability to:

1. communicate clearly and effectively in a range of situations, demonstrating linguistic competence and intercultural understanding
2. use language appropriate to a range of interpersonal and/or cultural contexts
3. understand and use language to express and respond to a range of ideas with accuracy and fluency
4. organize ideas on a range of topics, in a clear, coherent and convincing manner
5. understand, analyse and respond to a range of written and spoken texts
6. understand and use works of literature written in the target language of study (HL only).

➤ *Paper 1* (1 ½ hours): Receptive skills 25%

For both SL and HL: Text-handling exercises on four written texts, based on the core

➤ *Paper 2* (1 ½ hours): Written productive skills 25%

For SL: One writing exercise of 250–400 words from a choice of five, based on the options

For HL: 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.

➤ *Written assignment*: Receptive and written productive skills 20%

For SL: Intertextual reading followed by a written exercise of 300–400 words plus a 150-200 word rationale, based on the core

For HL: Creative writing of 500–600 words plus a 150-250 word rationale, based on one or both of the literary texts read

➤ *Oral Assessments*: 20%

Internal assessment: Individual oral (8–10 minutes)

Internally assessed by the teacher and externally moderated by the IB

Based on the options: 15 min preparation time and a 10-minute (maximum) presentation and discussion with the teacher

Interactive oral activity: *Based on the Core*: Three classroom activities assessed by the teacher 10%

Who should you see for more information? *Mr. Lee*

Why study Business and Management?

“Money is **not** everything, but the lack of it **is**.” *Tim Mateega*.

True wealth comes from business, and regardless of what career or profession you are in you need some business skills.

What can you do after studying Business and Management?

Study of Business and Management can launch you into careers such as Management, Accounting, Marketing, Purchasing and Logistics among others.

What undergraduate or graduate courses will require Business?

Business and Management will put you on very solid ground for any undergraduate business or management related course such as Business Administration or Bachelor of Commerce. However, Business and Management is not only a step towards undergraduate studies, it can also give you a good foundation for future graduate courses such as a Masters in Business Administration (MBA).

What will you cover in the IB courses?*HL and SL core*

Unit 1: Business organization and environment	SL: 40 hours	HL: 50 hours
Unit 2: Human resource management	SL: 15 hours	HL: 30 hours
Unit 3: Finance and accounts	SL: 35 hours	HL: 50 hours
Unit 4: Marketing	SL: 35 hours	HL: 50 hours
Unit 5: Operations management	SL: 10 hours	HL: 30 hours
Internal Assessment	SL: 15 hours	HL: 30 hours

What prior study performance is recommended?

Business & Management does not require you to have prior business or economics studies - only being organized and having enough discipline to follow your plans.

How is the course assessed?

Higher Level	Time	Total Marks	Weighting
Paper 1 (Syllabus content: Units 1 to 5) Compulsory structured questions *	2hrs 15 min	70 marks	40%
Paper 2 (All five topic) Compulsory structured questions and chosen extended response	2hrs 15min	80 marks	35%
Internal Assessment(2000 words)	30 hours	25 marks	25%

Standard Level	Time	Total Marks	Weighting
Paper 1 (Syllabus content: Units 1 to 5) Compulsory structured questions *	1hr 15 min	50	35%
Paper 2 (All five topic) Compulsory structured questions and chosen extended response	1hr 45 min	60	40%
Internal Assessment (1500 words)	15 hours	25	25%

* Includes aspects based on a Case-Study issued in advance

Who should you see for more information? *Mr. Mateega*

Why study economics?

Economics is a dynamic social science and its study is essentially about dealing with scarcity, resource allocation and the methods and processes by which choices are made in the satisfaction of human wants. As a social science, economics uses scientific methodologies that include quantitative and qualitative elements. The course emphasizes the economic theories of microeconomics (which deal with economic variables affecting individuals, firms and markets) and of macroeconomics (which deal with economic variables affecting countries, governments and societies) applied to real-world issues. The ethical dimensions involved in the application of economic theories and policies permeate throughout the economics course as students are required to consider and reflect on human end-goals and values.

The economics course encourages students to develop international perspectives, fosters a concern for global issues, and raises students' awareness of their own responsibilities at a local, national and international level. The course also seeks to develop values and attitudes that will enable students to achieve a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interdependent world.

What can you do after studying Economics?

Economics allows students to enter any occupation within the sphere of business. It allows students to discover occupations that deal with the handling of money and resources. Banking, insurance, accounting, business management and government agencies are all areas of the business community that use economists extensively.

What undergraduate courses will require Economics?

Any undergraduate courses in the humanities, social sciences or business will accept Economics as a useful subject area. It would be especially useful to someone who is very interested in pursuing a career in business management.

What will you cover in the IB courses?

Section 1:	Microeconomics	SL 35 hours	HL 95 hours
Section 2:	Macroeconomics	SL 40 hours	HL 50 hours
Section 3:	International economics	SL 25 hours	HL 45 hours
Section 4:	Development economics	SL 30 hours	HL 30 hours

What prior performance is recommended?

The economics course requires no specific prior learning. No particular background in terms of specific subjects studied for national or international qualifications is expected or required. The specific skills of the economics course are developed within the context of the course itself. The ability to understand and explain abstract concepts and the ability to write in a logically structured manner are distinct advantages in economics.

How is the course assessed?

Paper 1 SL: 1 ½ hours 40% HL: 1 ½ hours 30%

- Section A: Microeconomics, Section B: Macroeconomics.

Paper 2 SL: 1 ½ hours 40% HL: 1 ½ hours 30%

- A data response paper. Section A: International economics, Section B: Development economics

Paper 3 HL only: 1 hour 20%

- HL extension paper covering all sections, including HL extension material

Internal Assessment: SL: 20% HL: 20%

A portfolio of three commentaries based on different sections of the syllabus and on published extracts from the news media.

Who should you see for more information?

Ms. Murphy

Why study geography?

The geography course embodies global and international awareness in several distinct ways. It examines key global issues, such as poverty, sustainability and climate change. It considers examples and detailed case studies at a variety of scales, from local to regional to national and international. Throughout the course, teachers have considerable flexibility in their choice of examples and case studies independent of their precise geographical location. Inherent in the syllabus is a consideration of different perspectives, economic circumstances and social and cultural diversity.

What can you do after studying geography?

Study of Geography broadens knowledge and develops better understanding of its applications in a range of situations which is valuable in the development of life skills and relevant for a variety of careers. Students who wish to develop an in-depth knowledge of the subject may wish to pursue a career in Geography or an associated field. The career opportunities are broad and varied, including areas such as Town and Country Planning, Environmental Planning, Development, Geology, Hydrology, Meteorology, Teaching, Cartography, Tourism, to name a few.

What undergraduate courses will require geography?

Geography seeks to develop international understanding and foster a concern for global issues as well as to raise students' awareness of their own responsibility at a local level. Geography also aims to develop values and attitudes that will help students reach a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interconnected world. As such, the discipline can be applied to almost all undergraduate programs in the humanities or the sciences.

What will you cover in the IB courses?

Part 1: Core theme - patterns and change SL: 70 hours HL: 70 hours

Populations in transition; Disparities in wealth and development; Patterns in environmental quality and sustainability; Patterns in resource consumption.

Part 2: Optional themes (SL/HL) SL: 60 hours HL: 90 hours

Two optional themes are required at SL and three optional themes are required at HL, selected from: Freshwater—issues and conflicts, Oceans and their coastal margins, Extreme environments, Hazards and disasters—risk assessment and response, Leisure, sport and tourism, The geography of food and health, Urban environments.

Part 3: HL extension—global interactions (HL only) HL: 60 hours

There are seven compulsory topics in the HL extension.

Measuring global interactions; Changing space—the shrinking world; Economic interactions and flows; Environmental change; Socio-cultural exchanges; Political outcomes; Global interactions at the local level.

Fieldwork SL: 20 hours HL: 20 hours

Leading to one written report on a fieldwork question, information collection and analysis with evaluation.

What prior performance is recommended?

No particular background in terms of specific subjects studied for national or international qualifications is expected or required. The skills needed for the geography course are developed within the course itself.

How is the course assessed?

Paper 1: Core theme (common to both SL and HL) 1 ½ hours SL: 40% HL: 25%

- Section A: Compulsory short-answer questions. Section B: Extended response question.

Paper 2: Two optional themes (common to SL and HL) SL: 1 hr 20 min 35% HL: 2 hours 35%

- Two-structured questions based on stimulus material, each selected from a different optional theme.

Paper 3: Higher level extension HL only: 1 hour 20%

- Students answer one of three essay questions.

Internal assessment: Written report based on fieldwork. (<2,500 words) SL and HL: 20 hours 20%

Who should you see for more information?

Mr. Heipel

Why study history?

History is more than the study of the past. It is the process of recording, reconstructing and interpreting the past through the investigation of a variety of sources. It is a discipline that gives people an understanding of themselves and others in relation to the world, both past and present. The study of History broadens world knowledge and develops better understanding of the world around us helping us to put current affairs into context.

What can you do after studying history?

The study of history develops skills which are useful in many areas. History builds skills which will provide career opportunities in Research, International Relations, Education, Law, Communication, Political Science, and Government.

What undergraduate courses will require history?

History aims to develop skills that help students reach a degree of personal commitment and develop synthesis of information and critical analysis. As such, the discipline can be applied to almost all undergraduate programs in the humanities or the sciences. It also supports studies in related fields since the study of History provides useful background for courses such as Political Science, International Relations, Philosophy, Psychology and Sociology, English, and Language Studies.

What will you cover in the IB courses?

- **One prescribed subject is chosen for both SL & HL**

Prescribed subject 3: The move to global war

This prescribed subject focuses on the military expansion of Germany and Japan. The first case study explores Japanese expansionism from 1931 to 1941, and the second case study explores German and Italian expansionism from 1933 to 1940. The focus of this prescribed subject is on the causes of expansion, key events, and international responses to that expansion.

- **Two topics are chosen for both SL & HL**

World history topic 11: Causes and effects of 20th century wars

This topic focuses on the causes, practice and effects of war in the 20th century. The topic explores the causes of wars, as well as the way in which warfare was conducted, including types of war, the use of technology, and the impact these factors had upon the outcome.

World history topic 12: The Cold War: Superpower tensions and Rivalries (20th century)

The Cold War dominated global affairs from the end of the Second World War to the early 1990s. This topic focuses on how superpower rivalries did not remain static but changed according to styles of leadership, strength of ideological beliefs, economic factors and crises involving client states. The topic aims to promote an international perspective on the Cold War by requiring the study of Cold War leaders, countries and crises from more than one region of the world.

- **HL option 4: History of Europe; three sections must be chosen for study**

14: European states in the inter-war years (1918–1939);

15: Versailles to Berlin: Diplomacy in Europe (1919–1945);

17: Post-war western and northern Europe (1945–2000);

How is the course assessed?

Paper 1:	Prescribed subjects	1 hour	SL: 30%	HL: 20%
Paper 2:	Topics	1 ½ hour	SL: 45%	HL: 25%
Paper 3	HL	2 ½ hour	SL: 25%	HL: 20%
Internal Assessment: Historical Investigation		20 hours work	SL: 25%	HL: 20%

Who should you see for more information?

Mr. Kenyon

Why study Biology?

Biological knowledge has the power to transform societies. It has the potential to produce great universal benefits for people and the environment. This knowledge must also be used with care so as not to cause harm. The IB Biology course will equip you to become aware of these moral responsibilities as you build up your Biological knowledge. Biology is one of the experimental sciences that can meet the requirement of the IBDP programme.

What can you do after studying Biology?

At higher level, the course is designed for students who enjoy the rigour of Biology as a science discipline or who may be considering a career in medicine, veterinary medicine, dentistry, applied or pure Biology, microbiology, biochemistry, genetics, agriculture, environmental studies or biotechnology. At standard Level, the course will benefit students with an interest in Biology and environmental issues but who do not necessarily intend to pursue a career in the subject.

What undergraduate courses will require Biology?

Higher level Biology would be an ideal choice for those wanting to pursue a career in any of the areas listed above, particularly the health sciences.

What will you cover in the IB Biology course?

<u>Core</u> : Standard AND Higher Level	Hours	<u>Additional Higher Level</u> (HL only)	Hours
Topic 1: Cell Biology	15	Topic 7: Nucleic acids	9
Topic 2: Molecular Biology	21	Topic 8: Metabolism, Cell respiration & Photosynthesis	14
Topic 3: Genetics	15	Topic 9: Plant Biology	13
Topic 4: Ecology	12	Topic 10: Genetics & Evolution	8
Topic 5: Evolution and Biodiversity	12	Topic 11: Animal Physiology	16
Topic 6: Human Physiology	20	1 Option: *one out of four choices	25
1 Option: *one out of four choices	15		
Theory Hours:	110	(Core + additional) Theory Hours:	180
Practical Laboratory work	20	Practical Laboratory work	40
Individual Investigation (IA)	10	Individual Investigation (IA)	10
Group 4 project	10	Group 4 project	10
Practical Hours:	40	Practical Hours:	60

(* to be chosen by the teacher after consultation with the group)

What prior performance is recommended?

IGCSE Science (combined) offers a basic preparation, touching on many of the topics for study in IB Biology. An A* or A grade range would indicate the potential to succeed at HL, whilst a grade range from D or above may indicate that an SL course could be more suitable.

How is the course assessed?

	Standard Level		Higher Level	
	Hours	%	Hours	%
External:				
Paper 1 Multiple choice	¾	20%	1	20%
Paper 2 A data based question, short + extended response questions	1 ¼	40%	2 ¼	36%
Paper 3 Short answer questions on option (& extended response HL)	1	20%	1 ¼	24%
Internal:				
Labs throughout the course	20		40	
1 Practical report	10	20%	10	20%
Group 4 project	10		10	
		100%		100%

Who should you see for more information? *Mr. Humphreys or Mr. Chitty*

Why study Chemistry?

Chemistry is about the study of “matter” and how “matter” interacts and its effect on the universe. During this course you will study about chemical reactions through a combination of theoretical and practical work. Chemistry is not only a hands-on practical science, but a science that will allow you to analyze and problem solve. In addition, you will learn about how to carry out chemical reactions in the laboratory with due consideration to personal and environmental safety issues. This approach will help you to gain a thorough understanding of the nature of this fascinating subject.

What can you do after studying Chemistry?

After completing the IB DP in Chemistry you will be equipped for:

Further study:

- Degree in chemistry
- Dentistry
- Pharmaceutical sciences
- Medicine
- Veterinary sciences
- Engineering

Career possibilities:

- Chemist/chemical research
- Pharmacist
- Teaching/Education
- Medicine/animal medicine
- Management/Business

What will you cover in the IB course?

<u>Core</u> : Standard AND Higher Level		Hours	<u>Additional Higher Level</u> (HL only)		Hours
Topic 1:	Stoichiometric relationships	13.5	Topic 12:	Atomic structure	2
Topic 2:	Atomic structure	6	Topic 13:	The periodic table - the transition metals	4
Topic 3:	Periodicity	6	Topic 14:	Chemical bonding & structure	7
Topic 4:	Chemical bonding & structure	13.5	Topic 15:	Energetics/thermochemistry	7
Topic 5:	Energetics/thermochemistry	9	Topic 16:	Chemical kinetics	6
Topic 6:	Chemical kinetics	7	Topic 17:	Equilibrium	4
Topic 7:	Equilibrium	4.5	Topic 18:	Acids and bases	10
Topic 8:	Acids and bases	6.5	Topic 19:	Redox processes	6
Topic 9:	Redox processes	8	Topic 20:	Organic chemistry	12
Topic 10:	Organic chemistry	11	Topic 21:	Measurement & analysis	2
Topic 11:	Measurement & data processing	10	1 Option:	<i>chosen by the teacher (1 of 4)</i>	25
1 Option:	<i>chosen by the teacher (1 of 4)</i>	15			
	Theory Hours:	110		(Core + additional) Theory Hours:	180
Practical	Laboratory work	20	Practical	Laboratory work	40
	Individual Investigation (IA)	10		Individual Investigation (IA)	10
	Group 4 project	10		Group 4 project	10
	Practical Hours:	40		Practical Hours:	60

What prior performance is recommended?

IGCSE combined science gives you a good foundation, introducing many of the topics for study at IB. An A* or A grade would indicate the potential to succeed at HL whilst grades of B or C would indicate that an SL course may be more suitable¹. Additionally, a good foundation knowledge in mathematics is important.

¹*Individual scores in the three sciences will be considered.*

How is the course assessed?

		Standard Level		Higher Level	
		Hours	%	Hours	%
External:	Paper 1 Multiple choice	¾	20%	1	20%
	Paper 2 A data based, short + extended response questions	1 ¼	40%	2 ¼	36%
	Paper 3 Short answer questions (and extended response HL)	1	20%	1 ¼	24%
Internal:	Labs throughout the course	20		40	
	1 Practical report	10	20%	10	20%
	Group 4 project	10		10	
			100%		100%

Who should you see for more information? *Mr. Miller*

Why study Physics?

Because it seeks to investigate and explain the Universe from the smallest particle (quark) to the largest quantity (galactic distances), Physics is the most fundamental of all the experimental subjects. Physics is vital to our understanding of the natural world. To be able to decipher rules that govern nature and be able to harness that to our advantage, we need Physics.

What can you do after studying Physics?

After completing the IB DP in Physics you will be well prepared for college level work in:

- Physics
- Dentistry
- Astronomy
- Medicine
- Veterinary sciences
- Computer Science
- Engineering
- Architecture
- Business

Career possibilities include:

- Physicist: Industry/Research
- Teaching : Secondary/University teaching
- Engineer
- Architect
- Medicine/Medical Physicist
- Management/Business
- Computer Scientist
- Geophysicist

Syllabus details:

<u>Core:</u>	Standard AND Higher Level	Hours	<u>Additional Higher Level (HL only)</u>	Hours	
Topic 1:	Measurements & uncertainties	5	Topic 9: Wave phenomena	16	
Topic 2:	Mechanics	22	Topic 10: Fields	11	
Topic 3:	Thermal physics	11	Topic 11: Electromagnetic induction	16	
Topic 4:	Waves	15	Topic 12: Quantum & nuclear physics	16	
Topic 5:	Electricity and magnetism	15			
Topic 6:	Circular motion and gravitation	5			
Topic 7:	Atomic, nuclear & particle physics	14			
Topic 8:	Energy production	8			
1 Option:	*one out of four choices	15	1 Option: *one out of four choices	25	
	Theory Hours:	110	(Core + additional) Theory Hours:	180	
Practical	Laboratory work	20	Practical	Laboratory work	40
	Individual Investigation (IA)	10		Individual Investigation (IA)	10
	Group 4 project	10		Group 4 project	10
	Practical Hours:	40	Practical Hours:	60	

(* to be chosen by the teacher)

What prior performance is recommended?

It is assumed that you will have done prior work in Science, based on a curriculum such as the IGCSE. Grades of A* - C are required for IB work in Physics.

How is the course assessed?

	Standard Level		Higher Level		
	Hours	%	Hours	%	
External:					
Paper 1	Multiple choice	$\frac{3}{4}$	20%	1	20%
Paper 2	Short + extended response questions	$1\frac{1}{4}$	40%	$2\frac{1}{4}$	36%
Paper 3	A data based question, Short answer questions (and extended response HL)	1	20%	$1\frac{1}{4}$	24%
Internal:					
Labs throughout the course	20		40		
1 Practical report	10	20%	10	20%	
Group 4 project	10		10		
		100%		100%	

Who should you see for more information? *Mr. Luyombya.*

MATHEMATICS COURSES

[Group 5: Mathematics]

Note: Mathematics is unusual in that the IB offers four different courses to cater for the differing abilities and needs of candidates. They are (in order of complexity):

Mathematical Studies SL, Mathematics SL, Mathematics HL, Further Mathematics HL

A Graphical Display Calculator (GDC) is required by all students regardless of the course they study. The school will advise students of the model required.

Why study Mathematics

As an academic pursuit Mathematics demonstrates logical thinking (essential skills in everyday life and valued in all areas of employment). Valuable in its own right, it is also a tool for the sciences and engineering as well as for a diverse range of other subjects from economics to psychology.

The study of a mathematics subject is a requirement of the IBDP programme.

What can you do after studying Mathematics?

If you want a career in scientific fields, finance, accounting, economics, business, engineering, operational research, logistics or medicine then Mathematics will almost certainly be required.

What undergraduate courses will require Mathematics?

The study of a Mathematics HL would be essential for undergraduate study in Mathematics, Statistics or related fields, Engineering and hard sciences. Many Medicine courses would require it. For the best universities, Further Mathematics would be a strong additional qualification.

For less intensive mathematically related courses such as Business, Finance, Economics, soft sciences and social sciences, Mathematics SL would be a minimum requirement.

For other courses, Mathematical Studies SL would be sufficient.

Subject: **MATHEMATICS SL and HL**

[Group 5: Mathematics]

What will you cover in the IB Mathematics SL and HL courses?

Topic 1:	Algebra	SL: 9 hours	HL: 30 hours
Topic 2:	Functions	SL: 24 hours	HL: 22 hours
Topic 3:	Circular functions	SL: 16 hours	HL: 22 hours
Topic 4:	Vectors	SL: 16 hours	HL: 24 hours
Topic 5:	Statistics and Probability	SL: 35 hours	HL: 36 hours
Topic 6:	Calculus	SL: 43 hours	HL: 48 hours

In addition HL will study an Option Topic* (40 hours)

(* to be chosen by the teacher after consultation with the group)

What prior performance is recommended?

IGCSE Additional Mathematics is very thorough preparation, introducing many of the topics for study. An A* or A grade would indicate the potential to succeed at HL whilst grades of B or C would indicate that an SL course may be more suitable. Below this, Mathematical Studies SL is the only realistic option.

How is the course assessed?

Paper 1: Non-calculator paper SL: 1 ½ hours 40% HL: 2 hours 30%

- A mix of short and extended questions covering the whole core syllabus

Paper 2: Calculator (GDC) paper SL: 1 ½ hours 40% HL: 2 hours 30%

- A mix of short and extended questions covering the whole core syllabus

Paper 3: HL Option Topic HL only: 2 hours 20%

Internal Assessment: One 10 hour 'exploration' (a short research essay). [SL and HL: {20%}]

Who should you see for more information? Mr. Schiller or Mr. Marthews

Subject: **MATHEMATICAL STUDIES SL**

[Group 5: Mathematics]

What will you cover in the IB Mathematical Studies SL course?

Topic 1:	Number and Algebra	20 hours
Topic 2:	Descriptive Statistics	12 hours
Topic 3:	Logic, Sets and Probability	20 hours
Topic 4:	Statistical applications	17 hours
Topic 5:	Geometry and trigonometry	18 hours
Topic 6:	Mathematical Models	20 hours
Topic 7:	Intro. to differential calculus	18 hours
Project		25 hours

What prior performance is recommended?

This course is designed for those with a limited background in mathematics, i.e. those who have not achieved a C grade or above in IGCSE Additional Mathematics.

How is the course assessed?

Paper 1 (1 hour 30 minutes):	15 compulsory short-response questions (with a GDC)	40%
Paper 2 (1 hour 30 minutes):	6 compulsory extended-response questions (with a GDC)	40%
Internal Assessment:	One project involving the collection of information or generation of measurements, and the analysis and evaluation of these.	20%

Who should you see for more information? *Mr. Marthews*

Subject: **FURTHER MATHEMATICS HL** *

[Group 5: Mathematics]

What will you cover in the IB Mathematical Studies SL course?

Topic 1:	Linear Algebra	48 hours
Topic 2:	Geometry	48 hours
Topic 3:	Statistics and Probability	48 hours
Topic 4:	Sets, Relations and Groups	48 hours
Topic 5:	Calculus	48 hours
Topic 6:	Discrete Mathematics	48 hours

[The topic covered in Mathematics HL as the Option will not be assessed again]

What prior performance is recommended?

This course could be available as an online study course for a small number of outstanding mathematicians who wish to pursue further study of the subject at university.

How is the course assessed?

Paper 1 (2 hours 30 minutes):	Short-to-medium response questions (with a GDC)	50%
Paper 2 (2 hours 30 minutes):	Medium-to-extended-response questions (with a GDC)	50%

Who should you see for more information? *Mr. Marthews*

* *We are not able to offer Further Mathematics HL on the timetable. However for exceptional students who intend to pursue the study of Mathematics at college/university it may be a possibility as a self-study option in group 6 (by negotiation).*

Why study Art?

Art provides an opportunity to interpret and communicate in a variety of ways that are personal and expressive. The IB Art program will teach you to think and behave like an artist. Students in this program develop their ability to express their ideas and emotions metaphorically, make new connections between different cultures, artworks and themselves, improve their analytical thinking skills, and find a deeper appreciation and understanding of art, culture, media, and the visual world. The IB visual arts course is challenging and time consuming, but promises to be very rewarding for dedicated students. If you are a risk taker (or want to become one!) are an independent learner, and have a passion for art - then go for it!

What can you do after studying Visual Art?

If you want a career in fashion, architecture, fine art, product design, graphic design, website design, art history, art education, advertising, film, photography, interior design, illustration, arts administration, or in art gallery/museum curation, then taking visual art would be beneficial for you.

Which undergraduate courses will require visual art?

Visual art would not be a requirement for any undergraduate course unless you would like to attend an art school. If you are considering going to an art school, you will be required to submit a visual portfolio of your work.

What will you cover in the IB courses?

The semester of this program will be a comprehensive, teacher led course that serves as a foundation to prepare students for independent study. Around the beginning of the second year students will begin to focus on themes, subjects, and media of interest to them personally. The teacher is there to provide feedback and support to students as they develop their own independent body of work. Students will have the freedom to choose their own subjects and media. The second year will culminate in a visual portfolio and an art exhibition.

What prior performance is recommended?

An A* or A grade in pre IB Art would indicate the potential to succeed at HL. A grade of B would indicate that an SL course may be more suitable. SL and HL will be taught together. The primary difference between SL and HL is that HL students will be expected to have completed a larger body of work than the SL students. Also the marking scale for SL begins at a lower level than that of HL.

What will you cover in the IB Visual Arts course?

You will compile an arts journal as a record of your study. Additionally, you will produce art works in a variety of forms (at least 2 for SL and 3 for HL – in both cases from at least two of the columns below).

<i>Two-dimensional forms</i>	<i>Three-dimensional forms</i>	<i>Lens-based, electronic & screen-based forms</i>
<ul style="list-style-type: none"> • <i>Drawing</i> • <i>Painting</i> • <i>Printmaking</i> • <i>Graphics</i> 	<ul style="list-style-type: none"> • <i>Sculpture</i> • <i>Designed objects</i> • <i>Site-specific</i> • <i>Instillation</i> • <i>Textiles</i> 	<ul style="list-style-type: none"> • <i>Time-based and sequential art</i> • <i>Lens media</i> • <i>Digital/Screen based</i> • <i>Performance art</i>

How is the course assessed?

Part 1: Comparative Study 20% Students analyse and compare different artworks by different artists.

Part 2: Process Portfolio 40% A submission of carefully selected materials evidencing experimentation, exploration, manipulation and refinement from a variety of art-making forms.

Part 3: Exhibition 40%

A submission of a selection of resolved artworks showing evidence of technical accomplishment, along with a curatorial rationale.

Who should you see for more information? Mrs. Webb

Further guidance and some possible combinations

As previously stated, your abilities, interests and future study and career choices will have an impact on your IB Options.

You may choose to study a Group 6 subject (The Arts). Alternatively you may choose a further subject from Group 3 (Individuals and Societies) or Group 4 (Sciences). There is little sense opting to study two subjects from one of these groups if they are both at standard level.

The following templates may assist you when considering your choices based on future study and career aspirations. These are only suggestions and of course other combinations of options may be equally appropriate.

<i>The Media Person</i>	<i>Subject</i>	<i>Level</i>
Group 1: Studies In Language & Literature	Chinese Language & Literature	HL
Group 2: Language Acquisition	English B	SL
Group 3: Individuals & Societies	Business & Management	HL
Group 4: The Sciences	Biology or Chemistry	SL
Group 5: Mathematics	Mathematics	SL
Group 6: The Arts / Elective	Visual Art	HL

<i>The Scientist or Medical Practitioner</i>	<i>Subject</i>	<i>Level</i>
Group 1: Studies In Language & Literature	Chinese Language & Literature	SL
Group 2: Language Acquisition	English B	SL
Group 3: Individuals & Societies	Business or Economics	SL
Group 4: The Sciences	Biology or Physics	HL
Group 5: Mathematics	Mathematics	HL
Group 6: The Arts / Elective	Chemistry	HL

<i>The Business Person or Economist</i>	<i>Subject</i>	<i>Level</i>
Group 1: Studies In Language & Literature	Chinese Language & Literature	HL
Group 2: Language Acquisition	English B	SL
Group 3: Individuals & Societies	Business & Management	HL
Group 4: The Sciences	Physics or Chemistry	SL
Group 5: Mathematics	Mathematics	HL
Group 6: The Arts / Elective	Economics	SL

<i>The Mathematician or Engineer</i>	<i>Subject</i>	<i>Level</i>
Group 1: Studies In Language & Literature	Chinese Language & Literature	SL
Group 2: Language Acquisition	English B	SL
Group 3: Individuals & Societies	Business & Management	SL
Group 4: The Sciences	Physics or Chemistry	HL
Group 5: Mathematics	Mathematics	HL
Group 6: The Arts / Elective	Further Maths	HL

<i>The Artist</i>	<i>Subject</i>	<i>Level</i>
Group 1: Studies In Language & Literature	Chinese Language & Literature	HL
Group 2: Language Acquisition	English B	SL
Group 3: Individuals & Societies	Business & Management	HL
Group 4: The Sciences	Biology or Chemistry	SL
Group 5: Mathematics	Mathematics	SL
Group 6: The Arts / Elective	Visual Arts	HL

The Options Process

Stage 1: January PIB year.

- IB Options Handbook issued to students and process launched through an assembly.

Stage 2: Early in PIB Semester 2

- Counsellors will work with students and ask them to consider their first draft subject choices based on a list devised by the Centre Director (CD) and Centre Principal (CP).
- CD to collate data. CP to liaise with HR to seek staffing for proposed courses.

Stage 3: After IGCSE Exams

- Diploma Programme Options Guide issued to students. Subject introductions and 'taster' lessons delivered. Review, consultation and revision of student provisional IB Subject Options by CP and IB DP Coordinator (IBCO). Students complete a final draft poll on IB Options.

Stage 4: After Final Draft Poll

- Following the final draft poll of student subject study preferences, a viable and workable timetable block structure will be created with the aim of accommodating the needs of the majority of students. This will limit options to some extent with some minority combinations of subjects no longer available.
Note: given the constraints of timetables and staffing levels we cannot guarantee that everybody's options can be met.

Stage 5: Following timetable blocking

- Students to make provisional IB Options Choices on Options form. CP and IBCO review these options and counsel students.

Stage 6: End of school year.

- Timetable construction and grouping formulated.

Stage 7: Following publication of IGCSE results at Start of Semester 1 IB1

- Individual student option reviewed in light of results
- Offer of confirmed places in IB1 with possible revision of IB Subject Options as required by CP/IBCO.

Draft Poll on IB Options

Chinese Name:

Known As:

You are required to select one subject from each of Groups 1 to 5.

You should then select either one subject from Group 6 or an additional different subject (elective) from Group 3, 4 or 5.

Within these six subjects, 3 should be at Standard Level (SL) and 3 at Higher Level (HL)

Identify your selection by placing a tick (✓) in the appropriate box.

Group 1: Studies in Language and Literature

Chinese Literature SL []

Chinese Literature HL []

Group 2: Language Acquisition

English B SL []

English B HL []

Group 3: Individuals and Societies

Business Mangt SL []

Business Mangt HL []

Economic SL []

Economics HL []

Geography SL []

Geography HL []

History SL []

History HL []

Group 4: Sciences

Biology SL []

Biology HL []

Chemistry SL []

Chemistry HL []

Physics SL []

Physics HL []

Group 5: Mathematics

Mathematical Studies SL []

Mathematics SL []

Mathematics HL []

Group 6: The Arts

Visual Arts SL []

Visual Arts HL []

or

Elective

Business Mangt SL []

Business Mangt HL []

Economic SL []

Economics HL []

Geography SL []

Geography HL []

History SL []

History HL []

Biology SL []

Biology HL []

Chemistry SL []

Chemistry HL []

Physics SL []

Physics HL []

Further Mathematics HL []

Notes