# **Grade 11-12 Curriculum Handbook** IB Diploma Programme



**United Nations International School of Hanoi** 





### **VALUES & BELIEFS**

Because UNIS Hanoi values LEARNING, UNIS Hanoi believes that we:

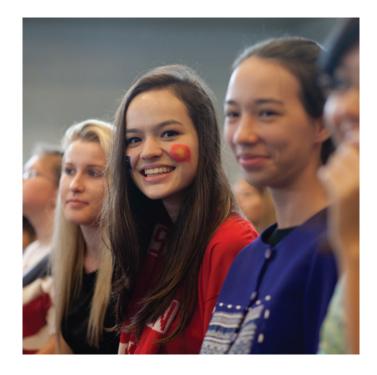
- Learn, think and reflect critically in an inspiring environment, using a dynamic curriculum that exceeds international standards;
- Use and apply knowledge in the classroom and beyond for life-long personal development, as we strive for happy, balanced lives;
- Question and research collaboratively to seek innovative solutions for local and global issues.

Because UNIS Hanoi values COMMUNITY, UNIS Hanoi believes that we:

- Pro-actively connect with others to make supportive, long-lasting and diverse friendships;
- Take action to create a safe, caring, and sustainable environment;
- Respect and appreciate diverse cultures, beliefs and languages to deepen our understanding of local and global issues.

Because UNIS Hanoi values RESPONSIBILITY, UNIS Hanoi believes that we:

- Act with integrity to make and defend reasoned decisions based on respect, compassion and fairness;
- Take ownership and are accountable for our thoughts, actions and their consequences;
- Face challenges with courage, resilience and an independent spirit, whilst remaining responsive and adaptable to change.



### **MISSION & GUIDING PRINCIPLES**

"Our mission is to encourage students to be independent, lifelong learners who strive for excellence and become responsible stewards of our global society and natural environment, achieved within a supportive community that values diversity and through a programme reflecting the ideals and principles of the United Nations."

The United Nations principles as applied to the school are to:

- Promote peaceful solutions to problems.
- Develop friendly relations among children and adults of different nationalities.
- Promote cooperation in problem solving in economic, social, cultural, and humanitarian matters.
- Encourage respect for fundamental freedoms and equality for all, without distinction as to race, sex, language or religion.

### VISION

"Our learning community will be an inspirational role model for a better world"

- The real little 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. The IB learner profile represents 10 attributes valued by the IB and UNIS Hanoi.



# 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

around us.

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

#### **RISK-TAKERS**

We approach uncertainty with fore thought 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 or ourselves and others. We recognize our interdependence with other people and with the world in which we live.

#### REFLECTIVE

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

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# Background



# INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME

The International Baccalaureate Diploma Programme (IBDP) is an academically and personally challenging two-year preuniversity course. It provides students of different linguistic, cultural and educational backgrounds with the self-awareness and the intellectual, social and critical perspectives that will be necessary for the adult world. The IBDP is a high-quality programme, designed and monitored by educationalists and drawn from the best practices of education systems in many countries. It is highly respected by schools and universities throughout the world

# IB DIPLOMA PROGRAMME SUBJECTS

The IBDP involves choosing three subjects to study in detail at Higher Level (HL) and three subjects at Standard Level (SL). Students must select six subjects by choosing one from each of the groups.

# IB DIPLOMA PROGRAMME CORE REQUIREMENTS

In addition, the programme has three core requirements that are included to broaden the educational experience and challenge students to apply their knowledge and understanding. They contribute to the unique nature of the IBDP, with compulsory participation required in:

1. Creativity, Action and Service (CAS).

2. The Extended Essay, which demands independent research under appropriate guidance.

3. Theory of Knowledge, which explores the relationship between the disciplines and ensures that students engage in critical reflection about knowledge and experience acquired both within and beyond the classroom.

All IBDP subjects have a balance of coursework that is externally assessed by examination and internally assessed work that is externally moderated. The proportion of the final grade determined by each varies amongst subjects.



# AWARD OF THE IB DIPLOMA

Below is a selection of some IBDP rules relating to the IB diploma.

- Performance in each of the six IB diploma subjects is graded on a scale of 1 point (minimum) to 7 points (maximum).
- A maximum of 3 points is awarded for combined performance in Theory of Knowledge and the Extended Essay. (see bonus points matrix)
- The maximum total Diploma Programme point score is therefore 45.
- Submission of an Extended Essay and the Theory of Knowledge components is compulsory for award of the diploma.

## Levels of award

#### From the May 2015 examination session

From the May 2015 session the following failing conditions and associated codes will replace those in current use.

- 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).

A maximum of three examination sessions is allowed in which to satisfy the requirements for the award of the IB Diploma.



# When planning an IBDP course, students should bear the following in mind:

- The same subject cannot be taken at both HL and SL
- The same language cannot be taken in both Group 1 and Group 2
- The IB, at its discretion, occasionally gives special permission for three sciences to be taken if the student concerned has no choice but to do this for university entrance. Documentary evidence of such a requirement must be given to the IBDP coordinator who will forward it to the IB Office and request permission. The IBDP will not allow three sciences to be taken without this written evidence
- A student who is bilingual may take two Language A courses
- SL subject availability is not guaranteed; if insufficient numbers of students opt for a subject it may not be offered or if the class is already full, students may not be able to choose the subject

### **IB Diploma recognition by universities**

International recognition of the IB Diploma Programme is outlined on the IB's website, www.ibo.org/diploma/ recognition.

We strongly encourage all students to check university IB recognition policies for individual countries on this website.

Students intending to study at Dutch, French, German, Italian, Swiss, or Asian universities must check country and university-specific requirements when selecting Diploma subjects, because these countries tend to have special requirements.

### IB Diploma Course candidates and IBDP Course Certificates

Instead of taking a full IB Diploma, students may opt to take IBDP examinations in any of the individual subject courses. They will receive IBDP course certificates.

Students who take IB Diploma Courses instead of the full IB Diploma Programme will graduate with a UNIS Hanoi High

School Diploma. These students may apply to universities as a US High School Diploma-holder and are often eligible for direct entry to Australian, Canadian, Dutch, Korean, UK, and US universities. Students will, however, often need to meet minimum grade and testing requirements (such as the SAT). Some universities may require that students first complete a foundation programme before being granted direct entry to certain courses.

# **GROUP 1- STUDIES IN LANGUAGE AND LITERATURE**

Group 1 courses meet the requirements of students whose Language A is their strongest language, while taking into account that many students have complex language profiles and maybe be bi- or tri-lingual. While the courses are different, they both develop understanding about language and literature and are designed to support future study by developing language skills.

### Language A-Literature

#### Course content: Language A - Literature Available in Vietnamese, Korean and English

#### Literature HL

This course is designed for the student with a definite inclination towards the study of literature and who may intend to continue such studies beyond the Diploma level. The course focuses on in-depth literary analysis and appreciation in both oral and written capacity. Students will be required to write essays, conduct independent research and participate in informal and formal orals for internal and external assessment. The total number of texts studied over the two years is 13, including 3 World Literature works, which are read in translation.

#### Literature SL

This course is designed for students who desire some enrichment in the study of literature, but who may not have such a definite inclination towards the study of literature, or who may be considering options for such study beyond the Diploma level. Most of the course is studied along with HL students to the same depth. The courses differ in the numbers of texts covered and the types of assessment. This course will appeal to those who enjoy literary study, but who also wish to pursue other subject areas at HL instead. The total number of texts studied is 10, including 3 World Literature works, which are read in translation.





Assessment SL		Assessment
Assessment Component	Weighting	Assessment Cor
External assessment (3 hours)	70%	External asse
Paper 1: Guided literary analysis (1 ½ hours) The paper consists of two passages: one prose and one poetry. Students choose one and write a guided literary analysis in response to two questions. (20 marks)	20%	Paper 1: Literar – 20% The paper cons prose and one p Students choose commentary. (20
Paper 2: Essay (1 ½ hours) The paper consists of three questions for each literary genre. In response to one question, students write an essay based on at least two works studied in Part 3. (25 marks)	25%	Paper 2: Essay ( The paper consi each literary ge question studer on at least two w marks)
Written Assignment Students submit a reflective statement and literary essay on one work studied in Part 1 (25 marks). The reflective statement must be 300-400 words in length. The essay must be 1,200-1,500 words in length.	25%	Written Assignr Students submit literary essay on (25 marks). The be 300-400 word be 1,200-1,500 w
Internal assessment	30%	Internal asse
This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.		This component the teacher and the IB at the end
ndividual oral commentary (10 minutes) Students give an oral commentary and answer subsequent questions on an extract from a work studied in Part 2. (poetry/ prose)(30 marks)	15%	Individual oral of discussion (20 n Formal oral com in Part 2 with s minutes) follower one of the other
<b>Individual oral presentation (10-15</b> <b>minutes)</b> The presentation is based on works studied in Part 4. It is internally assessed and externally moderated through the Part 2 internal assessment task. (30 marks)	15%	(30 marks) Individual ora minutes) The presentation in Part 4. It is externally mode internal assessm

Assessment Component	Weightin
External assessment (4 hours)	70%
Paper 1: Literary Commentary (2 hours) – 20% The paper consists of two passages: one prose and one poetry. Students choose one and write a literary commentary. (20 marks)	20%
<b>Paper 2: Essay (2 hours)</b> The paper consists of three questions for each literary genre. In response to one question students write an essay based on at least two works studied in Part 3. (25 marks)	25%
<b>Written Assignment</b> Students submit a reflective statement and literary essay on one work studied in Part 1 (25 marks). The reflective statement must be 300-400 words in length. The essay must be 1,200-1,500 words in length.	25%
Internal assessment	30%
This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.	
Individual oral commentary and discussion (20 minutes) Formal oral commentary on poetry studied in Part 2 with subsequent questions (10 minutes) followed by a discussion based on one of the other Part 2 works (10 minutes). (30 marks)	15%
<b>Individual oral presentation (10-15 minutes)</b> The presentation is based on works studied in Part 4. It is internally assessed and externally moderated through the Part 2 internal assessment task. (30 marks)	15%

# Language A - Language and Literature

# Course content: Language A - Language and Literature

#### **English A: Language and Literature HL**

This course requires students to be either native or very near native speakers of English in terms of both their oral and written skills, and will appeal to students who may be less inclined towards a course focused solely on literary study. Students study six literary works in addition to exploring various aspects of Language in Cultural Context and Language and Mass Communication. A range of oral, written and visual materials is studied from a variety of non-literary sources, genres and media. Students will be required to write essays for both internal and external assessment, conduct independent research and participate in informal and formal oral and written critiques.

#### **English A: Language and Literature SL**

This course requires students to be either native or very near native speakers of English in terms of both their oral and written skills and will appeal to students who may be less inclined towards a course focused solely on literary study. Students study four literary works in addition to exploring various aspects of Language in Cultural Context and Language and Mass Communication. A range of oral, written and visual materials is studied from a variety of non-literary sources, genres and media. Students will be required to write essays for both internal and external assessment, conduct independent research and participate in informal and formal oral and written critiques.

#### Skills developed

Ability to express ideas clearly and with fluency orally and in writing

Ability to substantiate and justify ideas with relevant examples

Ability to evaluate conflicting viewpoints

Understanding of the ways cultural values are expressed in texts

Understanding of text structures, style and the writer's technique

Ability to compare and contrast the form, style and content of texts

Understanding of individual literary works as representatives of genre and period.



Assessment SL	
Assessment Component	Weighting
External assessment (3 hours)	70%
<b>Paper 1: Textual analysis (1 ½ hours)</b> The paper consists of two unseen texts. Students write an analysis of one the these texts (20 marks).	25%
<b>Paper 2: Essay (1 ½ hours)</b> In response to one of six questions students write an essay based on both the literary texts studied in Part 3. The questions are the same at HL but the assessment criteria are different (25 marks).	25%
Written Task Students produce at least three written tasks based on material studied in the course. Students submit one written task for external assessment (20 marks). This task must be 800-1000 words in length plus the rationale of 200-300 words.	20%
Internal assessment	30%
This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.	
<b>Individual oral commentary</b> Students comment on an extract from a literary text studied in Part 4 of the course (30 marks). Students are given two guiding questions.	15%
<b>Further oral activity</b> Students complete at least two further oral activities, one based on Part 1 and one based on Part 2 of the course. The mark of one further oral activity is submitted for	15%
final assessment (30 marks)	

Assessment HL	
Assessment Component	Weighting
External assessment (4 hours)	70%
<b>Paper 1: Textual analysis (2 hours)</b> The paper consists of two pairs of unseen texts. Students write a comparative analysis of one pair of texts (20 marks).	25%
<b>Paper 2: Essay (2 hours)</b> In response to one of six questions students write an essay based on at least two of the literary texts studied in Part 3. The questions are the same at SL but the assessment criteria are different (25 marks).	25%
Written Task Students produce at least four written tasks based on material studied in the course. Students submit two of these tasks for external assessment (20 marks for each task). One of the tasks submitted must be a critical response to one of the prescribed questions for the HL additional study. This task must be 800-1,000 words in length plus the rationale of 200-300 words.	20%
Internal assessment	30%
This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.	
<b>Individual oral commentary</b> Students comment on an extract from a literary text studied in Part 4 of the course (30 marks). Students are given two guiding questions.	15%
<b>Further oral activity</b> Students complete at least two further oral activities, one based on Part 1 and one based on Part 2 of the course. The mark of one further oral activity is submitted for final assessment (30 marks).	15%

## Self-Taught Language A: Literature

To be eligible for the Bilingual Diploma, students may take a Language A: Literature course other than English as a selfsupported subject, even if no teacher of the language is available or the number of students is too small to warrant a separate class. This option is referred to as the 'self-taught' option by the IB. It is only available at SL. In past years, UNIS Hanoi students have studied Danish, Dutch, Italian, Malay, Polish, Portuguese, Russian, and Spanish.

#### **Additional support**

UNIS Hanoi mandates that parents need to hire a qualified Literature tutor so that the students can benefit from specialist feedback in the areas of language skills, academic writing and cultural content. Tutors also play a vital role in providing accurate feedback about students' abilities in the subject.

The school recommends an hour of tutoring per week, depending on the ability level of the student. If the student has not had any Language A tuition for an extended period of time, then more tuition time maybe necessary. Students are expected to be literate in the language upon starting the course as the main focus of the course is literature, not language acquisition. If both the tutor and the student(s) are available during the school day the school may provide a classroom for them to meet in person or online (e.g. via Skype).



#### **Collaboration with tutors**

After parents have identified the tutor, the self-taught coordinator will contact him/her to provide course documentation, deadlines, resources and advice. The tutor must provide the coordinator with information regarding the student's effort, progress and performance. The coordinator will incorporate the tutor's comments into the Language A academic report issued by the school.



#### **Skills developed**

Students develop the skills of literature analysis (commentary and essays) and are consequently able to express complex ideas in both their (other) Language A and in English. This has valuable intellectual benefits. Students also gain knowledge and insight into their community or origins, which supports their personal development and a possible (re)integration in a country where the Language A is used. Through the independent self-study of literary works in their own language, students also demonstrate an ability to work independently and to take responsibility for their studies, which is a quality sought by universities.



Assessment	
Assessment Component	Weighting
External assessment	70%
<ul> <li>Two written examination papers:</li> <li>Paper 1- Guided Literary Analysis</li> <li>Paper 2- Literature Essay Paper</li> <li>Written Assignment</li> <li>A reflective statement and literary essay on one work studied in Part 1.</li> </ul>	20% 25% 25%
Alternative oral examination	30%
<ul><li>Individual Oral Commentary</li><li>Individual Oral Presentation</li></ul>	15% 15%

#### **Bilingual Diploma**

The Bilingual Diploma will be awarded to any student who successfully completes a Language A course in any language other than English in conjuction with an English A course. Please note that this can be either a Literature or a Language and Literature course.

# **GROUP 2- LANGUAGE ACQUISITION**

### Language B

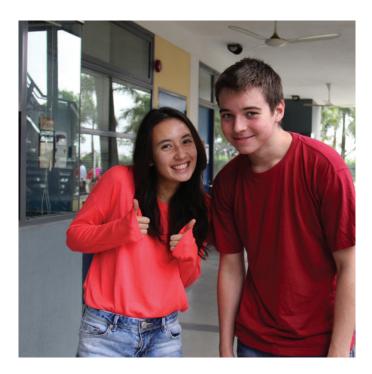
Language B courses provide students with a high degree of proficiency in their chosen language and further develop their understanding of different cultures and ways of life of the languages studied.

Options: English, French, Spanish

#### **Course content**

The course is designed for students with previous experiences of learning a foreign language (normally 3-5 years), and is suitable for those who have displayed both ability and interest in their previous foreign language classes. The syllabi for both HL and SL are similar in content, although HL courses also expect students to explore some literary texts.

The objective of the Language B course is for students to communicate clearly and effectively in different styles and contexts while studying the cultures associated with the language. Students gain a better understanding and use of grammatical structures and vocabulary through studying a variety of topics. These topics all offer a cultural perspective and enable students to take part in discussions on a wide variety of issues. Examples of topics include communication and media, global issues and social relationships. Students are encouraged to reflect upon their own perspectives, those of the school and those of the target language culture.



#### **Skills developed**

Students further develop the four main skills of listening, reading, writing and speaking through studying a variety of topic areas and carrying out a range of individual and group work activities. Examples include:

- listening: news bulletins, interviews, films, internet
- speaking: presentations, debates, discussions, role plays
- reading: news articles, letters, interviews, internet
- writing: letters to newspapers, film reviews, diary entries, essays.



Assessment SL	
Assessment Component	Weighting
External assessment	70%
<b>Paper 1 (1 ½ hours): Receptive skills</b> Text handling exercises on four written texts, based on the core.	25%
Paper 2 (1 ½ hours): Written productive skills One writing exercise of 250-400 words from a choice of five, based on the options.	25%
Internal assessment	30%
Internally assessed by the teacher and externally moderated by the IB.	
<b>Individual oral (8-10 minutes)</b> Based on the options: 15 minutes of preparation time and a 10-minute (maximum) presentation and discussion with the teacher.	
<b>Interactive oral activity</b> Based on the core: Three classroom activities assessed by the teacher.	10%

# Language ab initio (available at SL only)

The ab *initio* courses offer students the chance to take up a new language at IBDP and to reach a reasonable level of communication in only two years. This is a good course for students who are interested in learning how to communicate effectively in every situation and for students who have little or no previous experience of learning a foreign language.

All final decisions on the appropriateness of the course for which students are entered are taken by coordinators in liaison with teachers, using their experience and professional judgment to guide them. The most important consideration is that the language ab initio course should be a challenging educational experience for the student (IB Language ab initio Guide, 2011).

Options are French, Spanish and Mandarin.

#### **Course content**

The emphasis is on practical utility and communication. Students will acquire the vocabulary and grammatical structures they need to use in everyday social interactions and situations. The course aims to develop a variety of linguistic skills and basic awareness of cultures.

Students study three themes:

- 1. Individual and society
- 2. Leisure and work
- 3. Urban and rural environment

#### **Skills developed**

The Language ab initio course aims to develop the following skills:

- Listening: understanding straightforward conversations and the overall idea of a presentation
- Reading: understanding straightforward information and skimming to extract key points and ideas in texts
- Writing: conveying information clearly, organizing ideas, giving details and opinions and using language appropriate to purpose and audience
- Speaking: participating in spontaneous conversations, giving information and opinions clearly in brief structured presentations.

Assessment SL	
Assessment Component	Weighting
External assessment	75%
Paper 1 (1 ½ hours): Receptive skills Understanding of four written texts (40 marks). Text- handling exercises	30%
<ul> <li>Paper 2 (1 hour): Productive skills</li> <li>Two compulsory writing exercises (25 marks)</li> <li>Section A (7 marks): One question to be answered from a choice of two</li> <li>Section B (18 marks): One question to be answered from a choice of three</li> </ul>	25%
Written assignment (2 hours): Receptive and written productive skills A piece of writing, 200-300 words, in the target language carried out in class under teacher supervision. (20 marks)	20%
Internal assessment (10 minutes): Interactive skills Individual oral (25 marks) Three-part oral internally assessed by the teacher and externally moderated by the IB towards the end of the course. Part 1: Presentation of visual stimulus (from a choice of two) by the student. Part 2: Follow-up questions on the visual stimulus. Part 3: General conversation including at least two questions on the written assignment.	35%

Please note: Mandarin is currently offered as a Pamoja course which is online. There is an additional cost involved in taking this course





# **GROUP 3- INDIVIDUALS AND SOCIETIES**

All Group 3 IBDP courses are ab initio, which means you may start the course without having studied it before.

### **Economics**

Economics is essentially about the concept of scarcity and the problem of resource allocation. It is used to understand many real world problems, such as international trade and development. Throughout the course students will gain an understanding of the trade-offs between equity and efficiency while studying the role of the free market and government in today's mixed market economies. In addition to learning to understand and apply current economic theory and concepts, students will also develop the skills needed to evaluate the ability of economic theory to explain the complexities of economies and the outcomes of decisions made by consumers, producers, banks and governments.

#### **Course content**

- Introduction to Economics
- Microeconomics: markets, theory of the firm (HL only) and market failure
- Macroeconomics: measuring the economy, introduction to development, macro models and policies, unemployment, inflation and distribution of income
- International economics: reasons for trade, protectionism, economic integration, World Trade Organisation, balance of payments and exchange rates
- Development economics: sources, consequences, barriers and strategies for growth and/or development.



#### **Skills developed**

The course will:

- Provide students with a core knowledge of economics
- Encourage students to think critically
- Promote an awareness and understanding of internationalism
- Encourage students' development as independent learners
- enable students to recognize their own tendencies for bias.



Assessment SL		Assess
Assessment Component	Weighting	Assessm
External assessment (3 hours)	80%	Externa
<ul> <li>Paper 1 (1 ½ hours)</li> <li>An extended response paper (50 marks)</li> <li>Assessment objectives 1,2,3,4</li> <li>Section A: Syllabus content: section 1- microeconomics</li> <li>Students answer one question from a choice of two (25 marks)</li> <li>Section B: Syllabus content: section 2- macroeconomics</li> <li>Students answer one question from a choice of two (25 marks)</li> </ul>	40%	Paper 1 An exten Assessme • Secti micr Students choice of • Secti macr Students choice of
Paper 2 (1 ½ hours) A data response paper (40 marks) Assessment objectives 1,2,3,4 Section A: Syllabus content: section 3- international economics Students answer one question from a choice of two (20 marks) Section B: Syllabus content: section 4- development economics Students answer one question from a choice of two (20 marks)	40%	Paper 2 ( A data re Assessme • Secti inter Students choice of • Secti deve Students choice of Paper 3 ( HL exten
Internal assessment (20 teaching hours) This component is internally assessed by the teacher and externally moderated by the IB at the end of the course. Students produce a portfolio of three commentaries, based on different sections of the syllabus and on published extracts from the news media.	20%	Assessme Syllabus material: macroec developr two que marks pe <b>Interna</b> <b>hours)</b> This com the teac
Maximum 750 x 3 (45 marks)		the teach the IB at Students commen of the sy from the Maximur

Assessment HL	
Assessment Component	Weighting
External assessment (3 hours)	80%
<ul> <li>Paper 1 (1 ½ hours)</li> <li>An extended response paper (50 marks)</li> <li>Assessment objectives 1,2,3,4</li> <li>Section A: Syllabus content: section 1-microeconomics</li> <li>Students answer one question from a choice of two (25 marks)</li> <li>Section B: Syllabus content: section 2-macroeconomics</li> <li>Students answer one question from a choice of two (25 marks)</li> </ul>	30%
<ul> <li>Paper 2 (1 ½ hours)</li> <li>A data response paper (40 marks)</li> <li>Assessment objectives 1,2,3,4</li> <li>Section A: Syllabus content: section 3- international economics</li> <li>Students answer one question from a choice of two (20 marks)</li> <li>Section B: Syllabus content: section 4- development economics</li> <li>Students answer one question from a choice of two (20 marks)</li> </ul>	30%
Paper 3 (1 hour) HL extension paper (50 marks) Assessment objectives 1, 2, and 4 Syllabus content, including HL extension material: section 1-4- microeconomics, macroeconomics, international economics, development economics. Students answer two questions from a choice of three (25 marks per question)	20%
<b>Internal assessment (20 teaching hours)</b> This component is internally assessed by the teacher and externally moderated by the IB at the end of the course. Students produce a portfolio of three commentaries, based on different sections of the syllabus and on published extracts from the news media. Maximum 750 x 3 (45 marks)	20%



# **History**

History is vital component of any balanced education, placing considerable emphasis on source evaluation, which encourages students to critically analyse information put before them, and to make reasoned and balanced judgments with different perpectives. It has a subject matter which involves issues of credibility, plausibility and probability; and a method of disciplined study which deals in arguments and interpretations, not in certainties. History also helps students understand the foundations and beliefs of other civilizations stimulating respect and curiosity for cultures other than their own.

#### **Course content**

SL and HL courses share the same core syllabus.

Part 1: 20th century world history-prescribed subjects. HL and SL students study:

• Communism in crisis 1976-89

Part 2: 20th century world history topics. HL and SL students study :

- Origins and development of authoritarian and singleparty states
- The Cold War

HL options - HL students are required to undertake an indepth study of a period of history.

- Aspects of the history of Europe and the Middle East + Inter-war years: conflict and cooperation 1919-39
  - + The Soviet Union and Eastern Europe 1924-2000
    + The Second World War and post-war Western
    Europe 1939-2000

#### **Skills developed**

- Development of rigorous and cogent arguments
- Ability to make reasoned judgments
- Understanding the values and limitations of a range of sources of information
- Critical thinking
- Analysis, synthesis and interpretation of information
- Construction of substantiated analyses about the past
- Research and selection of material
- Communication and organization



Assessment SL	
Assessment Component	Weighting
External assessment (2 ½ hours)	75%
<b>Paper 1 (1 hour)</b> Route 2: One prescribed subject. Four short-answer/structured questions. Assessment objectives 1-3 (25 marks).	30%
Paper 2 (1 ½ hours) Route 2: Two topics. Two extended-response questions. Assessment objectives 1-4 (40 marks).	45%
<b>Internal assessment</b> Historical investigation on any area of the syllabus. Approximately 20 hours. Assessment objectives 1-4 (25 marks).	25%

Assessment HL	
Assessment Component	Weighting
External assessment (2 ½ hours)	80%
Paper 1 (1 hour) Route 1: Two prescribed subjects, Route 2: Three prescribed subjects. Four short-answer/structured questions. Assessment objectives 1-3 (25 marks).	20%
<b>Paper 2 (1 ½ hours)</b> Route 1 and 2: Five topics. Two extended- response questions. Assessment objectives 1-4 (40 marks).	25%
<b>Paper 3 (2 ½ hours)</b> Three extended-response questions. Assessment objectives 1-4 (60 marks).	35%
Internal assessment	20%
Historical investigation on any area of the syllabus. Approximately 20 hours. Assessment objectives 1-4 (25 marks).	

# **Psychology**

Psychology is the scientific study of human behaviour. One of the overriding purposes of the course is to deconstruct the notion of science and consider whether all human behaviour can be studied within a scientific paradigm. At Diploma level the subject is tightly focused around the following areas.

- In Grade 11 we study biological approaches (how the body and brain affect behaviour), Socio-cultural approaches (how society and culture affect behaviour) and Cognitive approaches (how mental processes affect behaviour). SL and HL study all three components in Grade 11.
- In Grade 12 we study the psychology of human development (which looks at the concept of change over the course of our lifetimes) and abnormal psychology (which introduces students to the concepts of mental illness and its treatment). HL Students complete both of these options. SL students complete one. The options can be changed at teacher's discretion. HL students also do an extra component on qualitative research methods. All students produce an internal assessment (which they are given class time to complete) and assessment is through research tasks and short and extended responses to questions.



#### **Course content**

SL and HL courses share the core syllabus. HL students study to a greater breadth.

Part 1: Core (SL/ HL)

- The biological level of analysis
- The cognitive level of analysis
- The sociocultural level of analysis.

Part 2: Options (SL-one option/HL-two options)

- Abnormal psychology
- Option 2, negotiated by teachers and students. Options include Developmental Psychology, Health Psychology, Sport Psychology and the Psychology of Human Relationships.

Part 3: Qualitative research methodology (HL only)

• Qualitative research in psychology.

Part 4: Simple experimental study (SL/ HL)

• Introduction to experimental research methodology.

#### **Skills developed**

To understand biological, social and cultural influences on human behaviour.

To interpret psychological research and apply the resulting knowledge for the benefit of human beings.

To be aware of how applications of psychology in everyday life are derived from psychological theories.

To understand diverse methods of psychological inquiry.



#### Assessment HL Assessment Component Weighting **External assessment (4 hours)** 80% 35% Paper 1 (2 hours) Section A: Three compulsory questions • on Part 1 of the syllabus. Section B: Three questions on Part 1 • of the syllabus. Students choose one question to answer in essay form. (46 marks) Paper 2 (1 hour) 25% Fifteen questions on Part 2 of the syllabus. Students choose two questions to answer in essay form. (44 marks) Paper 3 (1 hour) 20% Three compulsory questions based on an unseen text, covering Part 3 of the syllabus. (30 marks) Internal assessment 20% A report of a simple experimental study conducted by the student. (28 marks)

### **Business and Management**

Business and management is the rigorous and critical study of the ways in which individuals and groups interact in a dynamic business environment. It is an academic discipline that examines how business decisions are made and how these decisions make an impact on internal and external environments. Emphasis is placed on understanding technical innovation and day-to-day business functions of marketing, human resource management and finance. However, the teaching and learning is based on integrating and linking the various modules to give students, by the end of the course, a holistic overview. The ideals of international cooperation and responsible citizenship are at the heart of business and management. Students should also appreciate the ethical concerns and issues of social responsibility in the business environment. Finally, students should be able to make sense of the forces and circumstances that drive change in an interdependent and multicultural world. The course is assessed using a variety of exam questions and real-world case studies in which students must apply theory via analysis and evaluation. There is also an in-depth investigation into a real-world business issue to fulfil the internal assessment requirement of the course.

#### **Course content**

- Business Organisation and Environment
- Human Resource Management
- Finance and Accounts
- Marketing
- Operations Management

#### **Skills developed**

Enable students to develop the capacity to think critically Enhance the student's ability to make considered decisions Enable students to appreciate the pace, nature and significance of change.

Assessment SL	
Assessment Component	Weighting
External assessment	75%
• <b>Paper 1</b> – pre-issued case study	35%
• <b>Paper 2</b> – set of data response questions	40%
Internal assessment	25%
• 1,500 word commentary	

Assessment HL	
Assessment Component	Weighting
External assessment	75%
• Paper 1 – pre-issued case study	35%
• <b>Paper 2</b> – set of data response questions	40%
Internal assessment	25%
• 2,000 word business report	

#### University courses and careers

A background in business is helpful in a wide variety of disciplines. However, it is also very useful in the study of law, international studies, political sciences, a wide range of business-related courses, and certain engineering courses.



# **Environmental Systems and Societies** (ESS)

# Please note that ESS can count as both a Group 3 and Group 4 subject.

Environmental Systems and Societies is a transdisciplinary course that offers students the ability to meet the needs for both Groups 3 and 4. It places emphasis on human attitudes to the environment and on the interrelationships between the natural environment and human activities. The intent of this course is to provide students with a coherent perspective on the environment, one that enables them to adopt an informed and responsible stance on the wide range of pressing environmental issues that they will inevitably come to face. Students will develop an understanding of the environment, rooted firmly in the underlying principles of science, rather than a purely journalistic appreciation of environmental issues. The course consequently acknowledges the value of empirical, quantitative and objective data in describing and analysing environmental systems. This intent extends well beyond the academic. The course requires moral and political responses from the students.

#### **Course content**

- Systems and models
- The ecosystem
- Human population, carrying capacity and resource use
- Conservation and biodiversity
- Pollution management
- The issue of global warming
- Environmental value systems.

#### **Skills developed**

Planning primary data collection Conducting laboratory techniques and fieldwork skills Presenting and analyzing primary and secondary data in report form Oral and visual presentation skills

Secondary research skills.



Assessment	
Assessment Component	Weighting
External assessment (written papers, 3 hours)	80%
Paper 1 (1 hour)– (45 marks) Paper 2 (2 hours)– 65 marks)	30% 30%
Internal assessment (30 hours) – (42 marks)	20%





# **GROUP 4: EXPERIMENTAL SCIENCE**

# **Biology**

The biologist's realm is the Earth's surface and those thin layers above and below it in which organisms grow, reproduce and die.

People develop an interest in biology for all sorts of reasons. The workings of the human body are of immediate relevance and many biological matters are topical and receive media coverage. Environmental issues are always in the news, as are medical matters and biotechnology. Biologists are involved in the study of life at all levels, and the application of knowledge in a wide range of contexts.

This course covers a broad range of topics. The themes of structure and function, universality versus diversity, equilibrium within systems, and evolution underpin all topics. The first year includes cells, biochemistry, genetics, respiration, photosynthesis and plant science, ecology and evolution. The second year deals primarily with human health and physiology, including the reproductive, circulatory, respiratory, digestive, excretory, nervous and muscular systems. There is a large practical component involved in the programme.

#### **Course content**

#### SL and HL courses share the core syllabus:

- Statistical analysis
- Cells

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- The chemistry of life
- Genetics
- Ecology and evolution
- Human health and physiology.

#### Additional subjects:

- Nucleic acids and proteins
- Cell respiration and photosynthesis
- Plant science
- Genetics
- Human health and physiology.





#### Options

SL and HL students will study options to be chosen by the teacher from the following topics:

**Options SL** 

- Human nutrition and health
- Physiology of exercise
- Cells and energy.

Options SL and HL

- Evolution
- Neurobiology and behavior
- Microbes and biotechnology
- Ecology and conservation.

Options HL

• Further human physiology.

#### **Skills developed**

Practical skills (experimental design, data collection and processing, concluding and evaluating)

Data analysis

Internationalism and Theory of Knowledge aspect of Biology Presentation skills.

#### Assessment SL **Assessment Component** Weighting Paper 1 ( <sup>3</sup>/<sub>4</sub> hours) 20% 30 multiple-choice questions on the core Paper 2 (1 ¼ hours) 32% Section A: one data-based question 16% and several short answer questions on the core (all compulsory) 16% Section B: one extended-response question on the core (from a choice of three) Paper 3 (1hour) 24% Several short answer questions in each of the two options studied (all compulsory)

#### Assessment HL

Assessment Component	Weighting
Paper 1 ( 1 hour) 40 multiple-choice questions (+/- 15 common to SL plus about five more on the core and about 20 more on the AHL)	20%
Paper 2 (2 ¼ hours)	36%
<ul> <li>Section A: one data-based question and several short answer questions on the core (all compulsory)</li> </ul>	18%
• Section B: two extended-response questions on the core and the AHL (from a choice of four)	18%
Paper 3 (1 ¼ hours) Several short answer questions and one extended-response question in each of the two options (all compulsory). The internal assessment component comprises experimental work and fieldwork done during the course, the biology fieldtrip and the Group 4 Project. This constitutes a minimum time devoted to the practical course of 40 hours for SL and 60 hours for HL.	20%

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# Chemistry

In Chemistry, theoretical study is combined with the acquisition of practical, investigational, and communication technology skills. Moral, ethical, social, economic and environmental implications of using science and technology are also considered. The core topics of Chemistry include atomic structure, periodicity, bonding, quantitative chemistry, energetics, acids and bases, kinetics, equilibrium, oxidation and reduction, and organic chemistry. Two additional options based on student interest and teacher choice are likely to be Environmental Chemistry, Medicines and Drugs, or Biochemistry. Higher Level students study the same topics as Standard Level students but in greater depth.

#### **Course content**

#### SL and HL courses share the core syllabus:

- Quantitative chemistry
- Atomic structure
- Periodicity
- Bonding
- Energetics
- Kinetics
- Equilibrium
- Acids and bases
- Oxidation and reduction
- Organic chemistry
- Measurement and data processing.



#### Additional topics (HL students only)

- Atomic structure
- Periodicity
- Bonding
- Energetics
- Kinetics
- Equilibrium
- Acids and bases
- Oxidation and reduction
- Organic chemistry.

#### **Options SL and HL**

SL and HL students will study two options to be chosen by the teacher from the following topics:

- Modern analytical chemistry
- Human biochemistry
- Chemistry in industry and technology
- Medicines and drugs
- Environmental chemistry
- Food chemistry
- Further organic chemistry.

#### **Skills developed**

The subject trains students in abstract thinking. Starting with the basis of chemistry, an understanding of atomic structure, students build images in their minds that are used to predict and explain the properties of matter. Students gain an appreciation of the three-dimensional structure of molecules and learn to visualize models of reaction pathways and dynamic equilibria. It is a practical subject and students are trained to be disciplined scientists with respect to their recording, presentation and analysis of data. They are also encouraged to develop the ability to question the validity and reliability of data and appreciate the value of scientific method and reasoning.

#### Assessment SL

Assessment Component	Weighting
<b>Paper 1 ( ¾ hours)</b> 30 multiple-choice questions on the core	20%
Paper 2 (1 ¼ hours)	32%
<ul> <li>Section A: one data-based question and several short answer questions on the core (all compulsory)</li> </ul>	16%
• Section B: one extended-response question on the core (from a choice of three)	16%
<b>Paper 3 (1hour)</b> Several short answer questions in each of the two options studied (all compulsory)	24%

### Assessment HL

Assessment Component	Weighting
Paper 1 ( 1 hour) 40 multiple-choice questions (+/- 15 common to SL plus about five more on the core and about 20 more on the AHL)	20%
Paper 2 (2 ¼ hours)	36%
<ul> <li>Section A: one data-based question and several short answer questions on the core (all compulsory)</li> </ul>	18%
• Section B: two extended-response questions on the core and the AHL (from a choice of four)	18%
<b>Paper 3 (1 ¼ hours)</b> Several short answer questions and one extended-response question in each of the two options (all compulsory)	20%
The internal assessment component comprises experimental work done during the course and the Group 4 Project. This constitutes a minimum time devoted to the practical course of 40 hours for SL and 60 hours for HL.	

# **Physics**

The core topics include measurement, mechanics, thermal physics, waves, electricity, magnetism, energy, nuclear physics and digital technology. Two options are studied which can differ depending on the class and teacher. The topics are most likely relativity and astrophysics. In addition, there is a large amount of practical work and computer simulation that the students will do during the course. HL students study the same topics as the SL students but in greater depth.

#### **Course content**

#### SL and HL courses share the core syllabus:

- Physics and physical measurement
- Mechanics
- Thermal physics
- Oscillations and waves
- Electric currents
- Fields and forces
- Atomic and nuclear physics
- Energy, power and climate change

#### Additional topics (HL students only)

- Motion in fields
- Thermal physics
- Wave phenomena
- Electromagnetic induction
- Quantum physics and nuclear physics
- Digital technology

#### Options

SL and HL students will study two options to be chosen by the teacher from the following topics:

#### **Options SL**

- Sight and wave phenomena
- Quantum physics and nuclear physics
- Digital technology
- Relativity and particle physics

#### Options SL and HL

- Astrophysics
- Communications
- Electromagnetic waves

#### Options HL

- Relativity
- Medical physics
- Particle physics



#### **Skills developed**

As an experimental science, students learn to make meaning of physical phenomena by creating laws and mathematical relationships from the outcomes of experimental investigations. Starting with the fundamentals in classical physics, the students trace the path of scientific thought through time into modern physics and finally into developments in the world today. Physics enables students to appreciate the validity and reliability of gathered data and experience shifts in conceptual understanding. Ultimately the subject helps students to develop their logical and discriminative faculties and to move towards posing quality questions.



### Assessment SL

Assessment Component	Weighting
Paper 1 ( ¾ hours)	20%
30 multiple-choice questions on the core	
Paper 2 (1 ¼ hours)	32%
• Section A: one data-based question	16%
and several short answer questions on	
the core (all compulsory)	
• Section B: one extended-response	16%
question on the core (from a choice of	
three)	
	24%
Paper 3 (1hour)	
Several short answer questions in each of the two options studied (all compulsory)	

#### Assessment HL

Assessment Component	Weighting
Paper 1 ( 1 hour) 40 multiple-choice questions (+/- 15 common to SL plus about five more on the core and about 20 more on the AHL)	20%
<ul> <li>Paper 2 (2 ¼ hours)</li> <li>Section A: one data-based question and several short answer questions on the core (all compulsory)</li> </ul>	<b>36%</b> 18%
• Section B: two extended-response questions on the core and the AHL (from a choice of four)	18%
<b>Paper 3 (1 ¼ hours)</b> Several short answer questions and one extended-response question in each of the two options (all compulsory)	20%
The internal assessment component comprises experimental work done during the course and the Group 4 Project. This constitutes a minimum time devoted to the practical course of 40 hours for SL and 60 hours for HL.	

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### **Computer science**

Students with an interest in pursuing any kind of career with computers or in developing their analytical problem solving skills should consider Computer Science. It is a practical, yet academically rigorous subject offering students a detailed view of how computers work and how systems can be developed (programmed) to work on them. Successful computer systems result from a systematic approach to problem solving along with a sound technical understanding of how computers operate. The aim of the course is to develop both of these aspects of understanding. While learning to programme in Java is a significant element of the course, the primary purpose of this course is not to be a vocational programming course but to allow complex theoretical concepts to be explored practically and experimentally.

#### **Course content**

#### At both SL and HL the course includes units on:

- System fundamentals
- Planning and system installation
- System design basics
- Computer organisation
- Networks
- Computational thinking, problem-solving and programming
- Object oriented programming (option D)

#### In addition, HL students study units on:

- Abstract data structures and algorithms including: static data
- Structures, dynamic data structures, objects, recursion and algorithm evaluation
- Resource management
- Control.

During Grade 12 both HL and SL students undertake a significant project, using programming skills and theory studied in the course. By developing their own application in Java to solve a problem, students get a chance to demonstrate their creativity and programming skills.

#### **Skills developed**

Logical problem solving Project management Advanced Java programming.

Assessment SL	
Assessment Component	Weighting
<b>External assessment</b> two papers examining theory and algorithms through diagrams, pseudocode and Java	<b>70%</b>
<b>Internal assessment</b> 30% of total made up of a single piece of course work (85%), producing and documenting a Java application with significant programming aspects, and the Group 4 project (15%)	30%

Assessment HL	
Assessment Component	Weighting
<b>External assessment</b> three papers examining theory, algorithms through diagrams, pseudocode and Java, and application of concepts to a pre- studied case study	80%
<b>Internal assessment</b> 20% of total made up of a single piece of course work (85%), producing and documenting a Java application with significant programming aspects, and the Group 4 project (15%)	20%

# **Environmental Systems and Societies** (ESS)

# *Please note that ESS can count as both a Group 3 and Group 4 subject.*

Environmental Systems and Societies is a transdisciplinary course that offers students the ability to meet the needs for both Groups 3 and 4. It places emphasis on human attitudes to the environment and on the interrelationships between the natural environment and human activities. The intent of this course is to provide students with a coherent perspective on the environment, one that enables them to adopt an informed and responsible stance on the wide range of pressing environmental issues that they will inevitably come to face. Students will develop an understanding of the environment, rooted firmly in the underlying principles of science, rather than a purely journalistic appreciation of environmental issues. The course consequently acknowledges the value of empirical, quantitative and objective data in describing and analysing environmental systems. This intent extends well beyond the academic. The course requires moral and political responses from the students.

#### **Course content**

- Systems and models
- The ecosystem
- Human population, carrying capacity and resource use
- Conservation and biodiversity
- Pollution management
- The issue of global warming
- Environmental value systems.

#### **Skills developed**

Planning primary data collection Conducting laboratory techniques and fieldwork skills Presenting and analyzing primary and secondary data in report form Oral and visual presentation skills Secondary research skills.



Assessment	
Assessment Component	Weighting
External assessment (written papers, 3 hours)	80%
Paper 1 (1 hour)– (45 marks) Paper 2 (2 hours)– 65 marks)	30% 30%
Internal assessment (30 hours) – (42 marks)	20%



# **GROUP 5- MATHEMATICS**

There are three Mathematics courses being offered, designed to meet the needs of students with differing abilities and different requirements for higher education.

Parents are advised to consider the options carefully, along with their child. The most appropriate IBDP mathematics course will depend on which country, which university and which courses the student is contemplating. A number of countries, and some universities in certain countries, restrict entry to courses based on the level of mathematics studied in the IBDP.

### **Mathematics (HL)**

This is a course designed for students who have a strong background in mathematics and who want to pursue further study in fields such as business, economics, engineering, physics, technology or mathematics at the university level. Topics studied include algebra, functions and equations, circular functions and trigonometry, differential and integral calculus, vectors, statistics and probability, and one of the following options: further statistics and probability; Sets, relations and groups; Calculus; Discrete mathematics. An Exploration, an extended mathematical internal assessment task, will be completed over the course of the two years.

#### **Course content**

#### Core syllabus:

The following topics will be studied over the two-year course:

- Algebra
- Functions and equations
- Circular functions and trigonometry
- Vectors
- Statistics and probability
- Calculus.

#### **HL Options**

One of the following topics will also be studied as part of the HL syllabus:

- Statistics and probability
- Sets, relations and groups
- Calculus
- Discrete mathematics.

#### **Skills developed**

All mathematics courses seek to develop the following skills at the appropriate level for that course:

- Manipulative algebraic skills
- Facility with mathematical software and technology via the graphic display calculator
- Discrimination between methods of solution to a given problem in order to determine the most efficient
- Applicability of the subject to other disciplines.

Assessment Component	Weighting
External assessment (5 hours)	80%
<ul> <li>Paper 1 (2 hours). No calculator allowed (120 marks)</li> <li>Section A: Compulsory short-response questions based on the core syllabus.</li> <li>Section B: Compulsory extended-response questions based on the core syllabus.</li> </ul>	30%
<ul> <li>Paper 2 (2 hours). Graphic display calculator required (120 marks)</li> <li>Section A: Compulsory short-response questions based on the core syllabus.</li> <li>Section B: Compulsory extended-response questions based on the core syllabus.</li> </ul>	30%
Paper 3 (1 hour). Graphic display calculator required (60 marks) Compulsory extended-response questions based mainly on the syllabus options.	20%
Internal assessment: Mathematical exploration	20%
Internal assessment in Mathematics HL is an individual exploration. This is a piece of written work that involves investigating an area of mathematics. This component is internally assessed by the teacher and externally moderated by IB at the end of the course.	

# **Mathematics (SL)**

This course is designed to provide mathematical techniques and methods for those needing substantial mathematical skills in other subject areas. In order to gain success in this course a high level of mathematical ability is required as well as sustained effort and commitment. It is not an easy option, as the course content is a subset of the Mathematics HL course.

#### **Course content**

The following topics will be studied over the two-year course:

- Number and algebra
- Descriptive and statistic
- Logic, sets and probability
- Statistic applications
- Geometry and trigonometry
- Mathematics models
- Introduction to differential calculus.

#### **Skills developed**

All mathematics courses seek to develop the following skills at the appropriate level for that course:

- Manipulative algebraic skills
- Facility with mathematical software and technology via the graphic display calculator
- Discrimination between methods of solution to a given problem in order to determine the most efficient
- Applicability of the subject to other disciplines.

#### Assessment **Assessment Component** Weighting **External assessment (5 hours)** 80% 40% Paper 1 (1 <sup>1</sup>/<sub>2</sub> hours). No calculator allowed (90 marks) Section A: Compulsory short-response • questions based on the whole syllabus. Section B: Compulsory extended-• response questions based on the whole syllabus. 40% Paper 2 (1 <sup>1</sup>/<sub>2</sub> hours) . Graphic display calculator required (90 marks) Section A: Compulsory short-response guestions based on the whole syllabus. Section B: Compulsory extendedresponse questions based on the whole syllabus. Internal assessment: 20% Mathematical exploration Internal assessment in Mathematics SL is an individual exploration. This is a piece of written work that involves investigating an area of mathematics. This component is internally assessed by the teacher and externally moderated by IB at the end of

the course.





## **Mathematical Studies (SL)**

This is a course aimed at students whose interests lie in a field where no more than general mathematics and basic algebraic skills are needed. Topics covered in the first year include the use of the graphic display calculator, number and algebra, sets and logic, functions, statistics, geometry and trigonometry. Topics covered in the second year include probability, financial mathematics and differential calculus. In addition, students are required to complete a 20 hour project on a mathematical topic of their choice as a part of the internally assessed component of the programme.

#### **Course content**

The following topics will be studied over the two-year course:

- Number and algebra
- Descriptive and statistic
- Logic, sets and probability
- Statistic applications
- Geometry and trigonometry
- Mathematics models
- Introduction to differential calculus.

#### **Skills developed**

All mathematics courses seek to develop the following skills at the appropriate level for that course:

- Manipulative algebraic skills
- Facility with mathematical software and technology via the graphic display calculator
- Discrimination between methods of solution to a given problem in order to determine the most efficient
- Applicability of the subject to other disciplines.

Assessment		
Assessment Component	Weighting	
External assessment (3 hours)	80%	
<b>Paper 1 (1 ½ hours)</b> 15 compulsory short-response questions based on the whole syllabus (90 marks)	40%	
<b>Paper 2 (1</b> ½ <b>hours)</b> Six compulsory extended-response questions based on the whole syllabus (90 marks)	40%	
Internal assessment – Project	20%	
This component is internally assessed by the teacher and externally moderated by IB at the end of the course. 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 measurement.		

# **GROUP 6- THE ARTS**

### Theatre

This is a dynamic and stimulating course that looks at all aspects of theatre. It is essentially a practical subject in that all theory is investigated by practical engagement. This active nature of the course makes it both exciting and challenging. Theatre students soon develop a passion and an intense commitment to the course, a commitment that brings both academic rewards and a sense of achievement.

Through the course students develop their independent learning skills through research, critical thinking and analytical skills through a study of practitioners and theorists, collaboration, negotiation and confidence skills through group devising and presentations, cultural awareness empathy through study of world theatre.

#### **Skills developed**

During the course students:

- Perform before an audience
- Crew a production
- Experience what the chief artists and craftsmen in the theatre do
- Investigate performance theory and forms of theatre other than the Western model
- Work in an ensemble
- Write and direct a piece of theatre
- Research world theatre traditions
- Learn to communicate effectively using signs and symbols other than the spoken word
- See and review a number of live professional productions study the subject from an international perspective in terms of texts and traditions
- Learn presentation skills
- Learn collaboration and negotiation skills



#### Assessment **Assessment Component** Weighting External assessment 50% **Research investigation** 25% Practical performance proposal 25% Internal assessment 50% Theatre performance and produc-25% • tion presentation Individual project portfolio 25%



### Film

This course allows students to explore film as a powerful communication medium and an art form. The course aims to develop students' skills so that they become adept in both interpreting and making film texts. Through the study and analysis of film texts and exercises in filmmaking, the course explores film history, theory and language. To achieve an international understanding within the world of film, students are taught to consider film texts, theories and ideas from different individuals, nations and cultures. Throughout, students also learn and exercise the fundamentals of film production.

At the core lies a concern with clarity of understanding, critical thinking, reflective analysis, effective involvement and imaginative synthesis that is achieved through practical engagement in the art and craft of film.

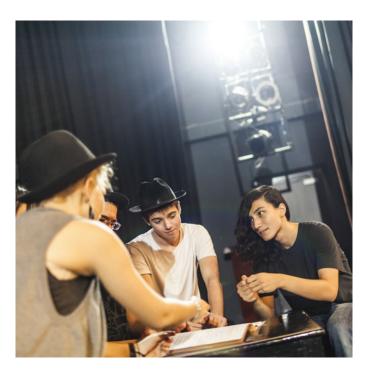
#### **Course content**

- Part 1 Textual analysis
- Part 2 Film theory and history

**Part 3** – Creative process: techniques and organisation of production. These three parts are taught concurrently so that students learn through both academic study and practical, creative film making.

#### **Skills developed**

Creative expression Media literacy, analysis and interpretation Interpersonal awareness Organisation and planning Problem solving Research Technical skills Visual and critical awareness Working to deadlines Reflection and evaluation.



#### Assessment (Standard and Higher Level)

Assessment Component		Weighting
•	Independent study documentary script on an aspect of film theory and/ or film history	25%
•	Oral presentation on a detailed textual analysis of film	25%
•	Film production one completed film production of 4–5 minutes (SL) or 6 –7 minutes (HL) with accompanying production portfolio	50%

### Music

The study of Music enables students to recognise and discuss musical elements found in a diverse range of musical genres thus developing greater sensitivity to and curiosity for the music that surrounds us. Students also develop an appreciation of the way in which music connects with other areas of knowledge.

#### **Course content**

The coursework components, performance and composition are developed continuously through Grades 11 and 12, culminating in the final submission of portfolios in February of Grade 12.

#### HL only

- Solo performance: vocal or instrumental (20 minutes)
- Composition: three compositions to be notated and recorded

#### SL only

Students select one of the following:

- Solo performance: vocal or instrumental (15 minutes)
- Composition: two compositions to be notated and recorded
- Group performance: membership of an ensemble including at least two public performances.



#### **Skills developed**

Instrumental/vocal skills through performing in a variety of contexts

Creativity through the study of composition

Knowledge and understanding of musical styles and composition

Aural analysis skills though the study of music from diverse cultures and traditions

An understanding of recording techniques

Ability to use music software and other music technology Research skills and musical interests through the musical investigation.



Assessment SL		Assessme
Assessment Component	Weighting	Assessment (
External assessment (75 teaching hours)	50%	External as hours)
<ul> <li>Listening Paper (2 ¼ hours)</li> <li>Five musical perception questions (100 marks)</li> <li>Section A: Students answer two questions Question 1 or question 2 (20 marks)</li> <li>Question 3 (20 marks)</li> <li>Section B: Students answer three questions Question 4 or question 5 (20 marks)</li> <li>Question 6 (20 marks)</li> <li>Question 7 (20 marks)</li> </ul>	30%	Listening Pap Seven musica marks) • Section A: Question 1 or Question 3 (20 • Section B: Question 4 (20 Question 5 (20 Question 6 (20 Question 7 (20
Musical links investigation	20%	Question 7 (2)
A written media script of no more than 2,000 words, investigating the significant musical links between two (or more) pieces from the distinct musical cultures (20 marks)		<b>Musical links</b> A written med words, investi links betweer the distinct m
Internal assessment (75 teaching hours)	50%	Internal as hours)
This component is internally assessed by the teacher and externally moderated by IB at the end of the course. Students choose one of the following options:		This component the teacher ar at the end of t
<ul> <li>Creating (SLC)</li> <li>Two pieces of coursework, with recording and written work (30 marks)</li> </ul>		Three pieces of and written w
<ul> <li>Solo Performing (SLS)</li> <li>A recording selected from pieces presented during one or more public performance(s), 15 minutes (20 marks)</li> </ul>		Solo Perform A recording se during one or 15 minutes (2)
<ul> <li>Group Performing (SLG)</li> <li>A recording selected from pieces presented during two or more public performance(s), 20-30 minutes (20 marks)</li> </ul>		

Assessment HL	
Assessment Component	Weighting
External assessment (90 teaching hours)	50%
<ul> <li>Listening Paper (3hours)</li> <li>Seven musical perception questions (140 marks)</li> <li>Section A: Students answer two questions Question 1 or question 2 (20 marks)</li> <li>Question 3 (20 marks)</li> <li>Section B: Students answer four questions Question 4 (20 marks)</li> <li>Question 5 (20 marks)</li> <li>Question 6 (20 marks)</li> <li>Question 7 (20 marks)</li> </ul>	30%
<b>Musical links investigation</b> A written media script of no more than 2,000 words, investigating the significant musical links between two (or more) pieces from the distinct musical cultures (20 marks)	20%
Internal assessment (150 teaching hours)	50%
This component is internally assessed by the teacher and externally moderated by IB at the end of the course.	
<b>Creating (75 marks)</b> Three pieces of coursework, with recording and written work (30 marks)	25%
<b>Solo Performing (75 marks)</b> A recording selected from pieces presented during one or more public performance(s), 15 minutes (20 marks)	25%

### **Visual Arts**

IB Visual Arts embraces a wide variety of expressive approaches. Students learn to investigate deeply and locate themselves within a historical/ cultural context and to extend their use of materials and concepts beyond traditional boundaries. Both intellectual and emotional learning are developed through the study of visual arts. While students are introduced to advanced processes and materials, the media they choose to use throughout the two years of the course is at their discretion. Through the investigation and experimental phases students discover the most appropriate media and approach. The course rapidly becomes very personal.

#### **Course content**

The course encompasses a wide range of activities designed to encourage students to explore and discover new possibilities in the visual arts.

Students develop ideas and themes for their studio work and refine their skills in the investigation workbook. New art processes and concepts, the use of media, and learning research techniques that yield many possibilities for studio works are the driving forces for work in the investigation workbook. Gallery visits, drawings, experiments, with materials and approaches, and historical and critical analysis are included. Divergent and convergent strategies are employed. In the studio, students develop a portfolio of work in preparation for their exam/show. The portfolio of work serves a second purpose for those who choose to attend postsecondary education in the visual arts: it is their university admissions portfolio.

#### **Skills developed**

Visual literacy and observation skills Visual research and in-depth investigation The ability to experiment with a range of visual solutions for communicating their intentions Critical analysis of artwork To consider the social, historical, geographical and cultural influences on art.

Assessment HL				
Assessment Component	Weighting			
Option A Studio				
<b>External assessment</b> The student prepares a selection of his or her studio work in the form of an exhibition. This selection is externally assessed by an examiner. Students will have the option of an interview or an extended Candidate Statement to support their examination material.	60%			
Investigation Internal assessment The student presents selected pages of his or her investigation workbooks assessed by the teacher and externally moderated by the IB at the end of the course.	40%			

Option B Investigation	
<b>External assessment</b> The student presents selected pages of his or her investigation workbooks assessed by the External examiner.	60%
<b>Internal assessment</b> The student prepares a selection of his or her studio work in the form of an exhibition. A selection of their work is internally assessed by the teacher and moderated by the IB.	40%



Assessment SL					
Assessment Component	Weighting				
Option A Studio					
<b>External assessment</b> The student prepares a selection of his or her studio work in the form of an exhibition. A selection of their work is externally assessed by an examiner. Students will have the option of an interview or an extended Candidate Statement to support their examination material.	60%				
Investigation Internal assessment The student presents selected pages of his or her investigation workbooks assessed by the teacher and externally moderated by the IB at the end of the course.	40%				

Option B Investigation External assessment The student presents selected pages of his or her investigation workbooks assessed by the external examiner.	60%
<b>Internal assessment</b> The student prepares a selection of his or her studio work in the form of an exhibition. This is internally assessed by a teacher and moderated by the IB.	40%

Both the studio work and the investigation workbook are assessed frequently throughout the course so that students can track their progress. At the end of the course the work of the student will be both externally and internally assessed for the purpose of assigning the final mark.

#### Studio work

The studio work is assessed by an external examiner (in Option A) according to the following criteria: self-direction and independent judgment while extending personal boundaries; sensitivity to materials chosen and ability to review work as it progresses; understanding the ideas and techniques that underpin artistic expression; technical skill; thoughtful development of ideas and strategies for expression; confidence and inventiveness; personally relevant artwork that show cultural and historical awareness.

#### The investigation workbook

The investigation workbook is where ideas are recorded and refined in preparation for the studio work. The investigation workbook is internally assessed (Option A) and includes evidence of: range of sources for inspiration including galleries, Internet, trips, other classes and popular media; critical observation and reflection in analyzing the work of others as well as our own work; looking into the art, art styles and artists from other times and cultures; uses of specialist art vocabulary to a progressively more advanced level; develop ideas through compositional studies, colour and value studies and the like; media experiments with a broad range of media from traditional to more non-traditional; practicing technical skills that will later help the studio work.

# CORE REQUIREMENTS : THEORY OF KNOWLEDGE, EXTENDED ESSAY AND CREATIVITY, ACTION AND SERVICE

# **Theory of Knowledge (TOK)**

The Theory of Knowledge (TOK) course invites students to reflect on their learning experience by considering ways of knowing and how we use them in the different areas of knowledge, so that they can address fundamental questions about themselves as knowers.

The TOK course looks at the ways in which we acquire knowledge and the knowledge problems involved in the IBDP subject areas, as well as in areas such as ethics, law, politics and religion. It also focuses on other influences on our understanding of the world such as the media or our different cultural backgrounds.

#### **Skills developed**

Students read about and discuss a wide variety of topics. This develops their presentation and debating skills, and enhances an appreciation of alternative points of view, providing a better understanding of complicated problems of knowledge. It aims to teach students how to acknowledge and analyse these problems rather than solve them once and for all.

## Award points for TOK and Extended Essay

The following new matrix will be adopted from the May 2015 session.

Assessment	
Assessment Component	Weighting
External assessment	67%
Essay of 1,200-1,600 words during Grade 12	
Internal assessment	33%
Presentation on a topic of the students' choice at the end of Grade 11	

## **Extended Essay**

In a 4,000 word essay each student has the opportunity to investigate a topic of special interest. The essay requirement acquaints IBDP students with the kind of independent research and writing skills expected by universities. The IB recommends that a student devotes a total of about 40 hours of private study and writing time to the essay. It may be written in one of 60 subjects, including many languages; however, it is advisable for students to choose a topic from a subject they are taking, preferably at Higher Level.

ToK/EE	А	В	с	D	E
A	3	3	2	2	
В	3	2	2	1	dition
с	2	2	1	0	con
D	2	1	0	0	Failing
E	E Failing condition				_

Up to three additional IBDP points are awarded according to the quality of the combined standard of a student's TOK and Extended Essay. TOK and Extended Essay are each awarded a grade from A to E, and additional points are calculated from the matrix above.

#### **Changes from the curent matrix**

B+C combination now results in 2 additional points (previously 1 point)

A+E combination now results in zero points and a failing condition (previously 1 point)

# Creativity, Action and Service (CAS)

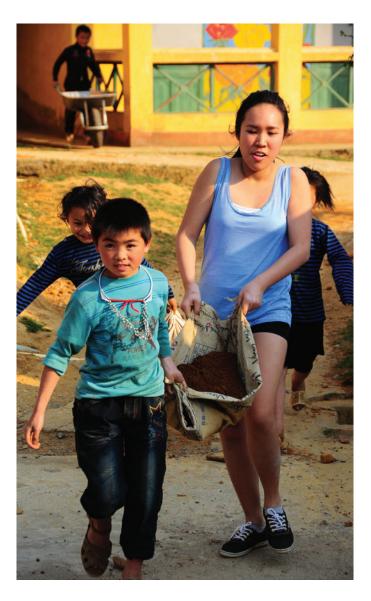
Creativity, Action, Service (CAS) is at the heart of the Diploma Programme (DP). It is one of the three essential elements in every student's DP experience. It involves students in a range of activities alongside their academic studies throughout the DP. The three strands of CAS are characterised as follows:

**Creativity:** arts and other experiences that involve creative thinking.

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

**Service:** an unpaid and voluntary exchange that has a learning benefit. In Grades 11 – 12, students must choose to participate in a minimum of one UNIS SERVICE LEARNING (SL) activity, one ACTION activity, and one CREATIVITY activity, and continue their activities for the duration of the CAS programme.

Students will complete the requirement for DP IB CAS by attending the meetings of their activity groups, participating in the visits, trips and major events associated with their activities during the CAS programme. To satisfy the requirements of the CAS programme, students are required to demonstrate that they have met 8 key learning outcomes. In order to demonstrate the outcomes, students are required to submit reflections as part of a CAS journal, complete a CAS project, and attend three compulsory interviews with the CAS Coordinator at UNIS during the CAS DP.





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